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Abstracts

Systematic Review of Literature

Intergenerational impact of homelessness on maternal mental health and child outcomes: A narrative review

The impact of homelessness on families can be severe and long lasting. One way that homelessness may affect children is through the negative impact of insecure housing on maternal mental health. However, studies regarding the association between maternal mental health and child outcomes in homeless families have not yet been synthesised. Therefore, this systematic review explores the prevalence of this association in research literature, the quality and strength of the evidence, and whether the Family Stress Model helps to explain the relationship between parental distress and child outcomes in the context of homelessness.

Five databases were searched resulting in 17 papers included in this study. The research findings were collated and analysed using narrative synthesis. The analysis found that homelessness caused parental distress which affected child outcomes. This was both a direct effect and mediated through parenting behaviour, as suggested by the Family Stress Model. However, the review found that low-income housed families also experienced a similar trajectory, suggesting that the precarity of poverty and housing insecurity creates distress for many vulnerable families regardless of current housing status. Further research is needed to explore the similar challenges faced by at-risk families. The findings of this study highlight the impact of homelessness on children, and advocate for secure, stable housing for families to reduce maternal distress and improve child outcomes.

Keywords: Homelessness; Housing Insecurity; Maternal Mental Health; Child Outcomes; Parenting

Service Improvement Project

Social Workers' Perceptions of Facilitators and Barriers to Matching Children with Additional Needs with Adoptive Families: A Service Improvement Project

Many children entering the adoption system require support for 'additional needs' - an umbrella term including social, emotional and physical health characteristics. However, research suggests that it is hard to find adopters for children with such needs. The Family Finding service within the Adopt Thames Valley organisation was developed to improve matching between adopters and children with additional needs. The Multi-Disciplinary Matching Hub, a new team which supports the matching process, aimed to understand the strengths and challenges of matching children with additional needs. This project explored social workers' perspectives on facilitators and barriers to the matching process to develop this understanding.

Nine social workers completed questionnaires and interviews. The data were analysed using Reflexive Thematic Analysis, resulting in seven themes and 14 subthemes. The themes 'Adopters' cautiousness', 'Contextual factors' and 'Limitations in social workers' confidence' described social workers' perceptions of barriers to matching. Facilitators were described through the themes 'Adopters' openness', 'Support for social workers', 'Helping adopters increase openness' and 'How social workers make matches'. Recommendations are outlined.

Key Words: Adoption; Additional Needs; Decision-Making; Social Workers

Theory Driven Research Project

Investigating Self-stigma in Parents of Young People with a Diagnosis of Functional Neurological Disorder

Abstract

Young people diagnosed with Functional Neurological Disorders (FND) are known to experience stigma. However, no research has yet explored the stigma experiences of their parents. This study examined the impact of stigma on parents of young people diagnosed with FND in comparison to parents of young people with asthma. Mann-Whitney U tests demonstrated significantly higher levels of Stigma Awareness, Self-Stigma, and Distress among parents of young people with FND. For these parents, Stigma Awareness predicted Distress, but Self-Stigma did not mediate this relationship, nor did it independently predict Distress. Reflexive thematic analysis developed four themes which helped illuminate these results: Judgement of Parents, Distress, Internalisation of Stigma and Defiance. These qualitative findings deepened understanding of the statistical outcomes and helped explain relationships between stigma and distress. Limitations and future research directions are discussed.

Key Words: Stigma; Self-stigma; Distress; Functional Neurological Disorder; Parents

Highlights

- Parents of children with FND experience public stigma, self-stigma and distress
- For these parents, awareness of stigma predicts self-stigma and distress
- Self-Stigma does not predict distress for parents of children with FND
- Qualitative findings demonstrate heterogeneity in parents response to stigma

Systematic Review of the Literature

Intergenerational impact of homelessness on maternal mental health and child outcomes: A narrative review

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Proposed Journal: *Community Mental Health Journal.* This journal accepts papers exploring socio-structural elements of mental health, and topics related to social justice and health equity. This systematic review examines the impact of homelessness on families and advocates for secure, stable housing for families, thus aligning with the remit of this journal.

Abstract

The impact of homelessness on families can be severe and long lasting. One way that homelessness may affect children is through the negative impact of insecure housing on maternal mental health. However, studies regarding the association between maternal mental health and child outcomes in homeless families have not yet been synthesised. Therefore, this systematic review explores the prevalence of this association in research literature, the quality and strength of the evidence, and whether the Family Stress Model helps to explain the relationship between parental distress and child outcomes in the context of homelessness.

Five databases were searched resulting in 17 papers included in this study. The research findings were collated and analysed using narrative synthesis. The analysis found that homelessness caused parental distress which affected child outcomes. This was both a direct effect and mediated through parenting behaviour, as suggested by the Family Stress Model. However, the review found that low-income housed families also experienced a similar trajectory, suggesting that the precarity of poverty and housing insecurity creates distress for many vulnerable families regardless of current housing status. Further research is needed to explore the similar challenges faced by at-risk families. The findings of this study highlight the impact of homelessness on children, and advocate for secure, stable housing for families to reduce maternal distress and improve child outcomes.

Keywords: Homelessness; Housing Insecurity; Maternal Mental Health; Child Outcomes; Parenting

Introduction

Definition and prevalence of homelessness

The European Typology of Homelessness and Housing Exclusion (ETHOS), defines homelessness as experiencing rooflessness or houselessness (Fazel et al., 2014). There are many different conceptualisations of homelessness, including housing insecurity and instability. The Children's Society defines housing insecurity as 'multiple moves' with those moves being 'involuntary, forced or reactive' and 'related to poverty.' Definitions of housing instability include 'difficulty paying rent, having frequent moves, living in overcrowded conditions, or doubling up with friends and relatives' (Hock et al., 2024). Additionally, waiting for permanent residence whilst living in temporary council accommodation or 'sofa surfing' with family and friends is recognised as a state of homelessness (Children's Commissioner, 2019).

In April 2025, the Ministry of Housing, Communities and Local Government Committee reported that over 164,000 children in England were living in temporary accommodation - a 15.7% rise between the years 2023 to 2024, and the highest number on record. The ongoing cost-of-living crisis is a key factor cited as driving this trend (Harkins & Lugo-Ocando, 20025; Heston, 2023). Concern continues for the future of homeless children, as current financial hardships show no sign of abating (Dorling, 2024).

Research demonstrates the detrimental impact of homelessness on children. Studies show high prevalence of anxiety, depression and behavioural problems experienced by children who are homeless (Rafferty & Shinn, 1991). In a study of 86 children experiencing homelessness and 81 children who were stably housed but financially deprived, Bassuk &

Rosenberg (1990) found that children experiencing homelessness scored lower on Children's Depression Inventory, Children's Manifest Anxiety Scale, and the Child Behaviour Checklist in comparison to housed children, with anxiety scores demonstrating significant difference.

These findings led researchers to suggest a 'continuum of risk' exists among children living in poverty (Brumley et al., 2015), with homeless children the most likely to suffer poor outcomes. A recent systematic review supports these findings, demonstrating that school-aged homeless children are more likely to experience mental health problems than housed children (Bassuk et al., 2015). Research suggests this trend in poorer outcomes exists across multiple domains including language and communication (Haskett et al., 2015), education participation (Keogh et al., 2006) and neurodevelopment (DeCandia et a., 2023).

Adults who face homelessness are also more likely to experience mental health problems (Fazel et al., 2008; Downing et al., 2016). Homeless Link (2022) analysed data from 2,776 homeless people in the UK which showed 82% had a mental health diagnosis, a prevalence which has been replicated in multiple countries (Folsom et al., 2005; Längle et al., 2005). Although mental health disorders may be a risk factor for adult homelessness, evidence demonstrates that homelessness causes and exacerbates mental health challenges, suggesting a bi-directional relationship (Ul Hassan et al., 2019). Johnson and Chamberlain (2016) analysed data from 4,291 homeless people in Australia and found that 15% had mental health problems before they became homeless, but 16% developed mental health problems after losing secure housing. This argues against a more neo-liberal viewpoint which locates the cause of homelessness solely within the individual, rather than recognising this as a societal issue which exacerbates challenges (Belcher & DeForge, 2012).

Homeless parents, particularly mothers, are especially vulnerable within this population (Roll et al., 1999). In 2021, 90% of homeless parents were women (Children's Commissioner, 2022), supporting longitudinal data from 385 US families which demonstrated most homeless families were headed by single mothers (Rog et al., 2017). Parents are in a uniquely challenging position as they must simultaneously manage their own experiences of homelessness, and care for vulnerable children (Smith et al., 2015). Within this, mothers face additional burden from societal stereotypes of what it means to be a 'good mother' and the inflated blame that is attributed to mothers in precarious situations in comparison to other parents (Reppond & Bullock, 2020).

Suglia et al.'s (2011) study of 2,104 mothers found that those experiencing 'housing disarray' were more likely to meet depression criteria, and those experiencing 'housing instability' were more likely to meet criteria for Generalised Anxiety Disorder, even after adjusting for factors such as domestic violence and economic hardship, which are often causes of maternal homelessness. As the majority of primary caregivers of homeless children are women (Welch-Lazoritz, 2014), understanding these experiences and supporting maternal mental health is vital to improving outcomes for families.

Associations between maternal mental health and child outcomes

Maternal mental health has been shown to impact child outcomes. A longitudinal study of 92 children whose mothers experienced chronic depression were significantly more likely to be rated as having problematic internalising and externalising difficulties (Trapolini et al., 2007). This is also demonstrated in homeless families; linear regression on data from

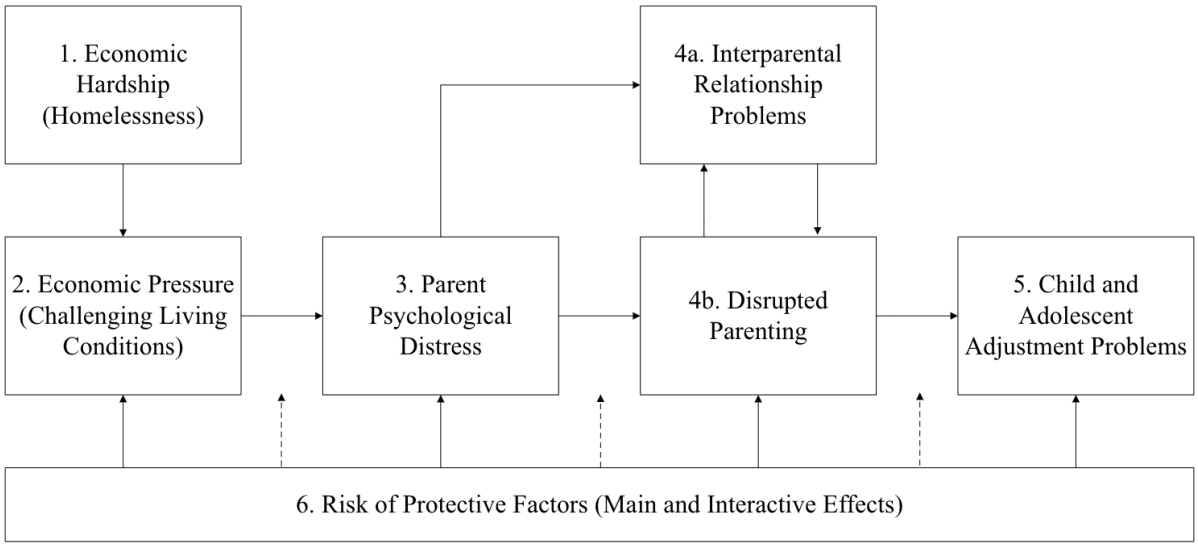
167 children from homeless and low-income families found mothers' emotional status was one of the strongest predictors of child behavioural outcomes (Bassuk et al., 1997).

The Family Stress Model proposes that the impact of adversity on children is mediated through their parents (Conger, 2010). Economic hardship causes economic pressure, conceptualised as 'day to day strain', which consequently heightens distress in parents. This in turn disrupts parenting e.g. through reduced sensitivity and supportiveness (Newland et al., 2014), which negatively impacts child development and outcomes.

(Masarik and Conger, 2017) reviewed this model and evidenced the order of the constructs, represented by arrows (Figure 1), through longitudinal studies (Masarik and Conger, 2017). The updated model also describes a possible bi-directional relationship between parent relationships and disrupted parenting. Risk and protective factors are proposed to impact at each stage of the model, through main effects (solid arrows) and interactive effects (broken arrows).

Fig. 1

Family Stress Model (Adapted from Masarik & Conger, 2017)



Researchers have conceptualised the association between maternal mental health and child outcomes in a variety of ways including analyses of longitudinal cohort data, cross-sectional associations and case comparisons (Conrad., 1998; Geurrero et al., 2020; Masten et al., 1993). However, no current systematic reviews synthesise and assess the quality of this research. As multiple complex factors influence outcomes in homeless children (Marcal et al., 2017), synthesising research specifically related to parental mental health may help create a cohesive narrative of the specific role this plays in child development within homeless families.

The current study

The current study aims to synthesise research examining the association between homelessness, maternal mental health and child outcomes, evaluate the quality of this

research and apply the Family Stress Model framework to help understand the intergenerational impact of homelessness.

The Family Stress Model will be used as it is evident that homelessness is represented at Stage 1 of the model, and the challenging living situations caused by this are represented at Stage 2 (Marsarik & Conger, 2017) (Fig. 1).

To this end, we endeavoured to explore existing literature to answer the following questions:

1) Is there an association between maternal mental health and child outcomes in families experiencing homelessness?

2) How are associations between maternal mental health and child outcomes conceptualised and measured and what is the strength of that evidence?

3) Does the Family Stress Model framework provide a helpful conceptualisation through which to understand this association?

Method

The current systematic review was completed according to The Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) framework (Page et al., 2021; Appendix A). The protocol for this review was registered with the International Prospective Register of Systematic reviews (PROSPERO) in November 2023 (Registration number: CRD42023487596).

Literature Search

Initially, a scoping search was conducted in November 2023 to determine feasibility. This search resulted in 13 eligible papers, establishing scope to proceed. The papers retrieved during scoping were used to define search terms (Table 2). A librarian at the University of Oxford was consulted to ensure search terms and strategy were appropriate.

Full searches of Pubmed, Psychinfo, Medline, CINAHL and SCOPUS databases were conducted in January 2025. Full-text screening identified additional terminology for parents (caregivers) and homelessness (residential mobility) not identified in initial scoping. To ensure thoroughness, the searches were re-run using these terms in April 2025 (Table 1). Both handsearching and forward and backward citation searching were also completed.

To reduce bias towards published literature, grey literature sources were searched including theses databases e.g. BASE, and networks such as Google/Google Scholar. Correspondence was undertaken with the Centre for Homeless Research and Practice to request any unpublished grey literature; however, this did not result in additional papers.

Table 1

Search Terms

Parent	Mental Health	Homelessness	Child	Outcomes
maternal	"mental health"	homeless*	child*	outcome*
mother*	"mental illness"	"housing insecur*"	adolescen*	Impact
parent*	"mental wellbeing"	"housing quality"	youth*	develop*
caregiv*	"emotional wellbeing"	"housing instab*"	"young person"	progress
	"emotional health"	"unstable housing"	"young people"	school*
	"mental disorder"	"residential		education*
	stress	mobility"		attainment
	distress			cognitive
				ability
				behav*
				mood
				"mental health"

Eligibility Criteria

Papers were included in abstract screening if they reported original, quantitative research which included reference to maternal mental health, child outcomes, and empirical association between these variables within the context of homelessness.

Mental health was defined as a '*person's condition with regard to their psychological and emotional well-being'* (The Oxford Dictionary). 'Maternal mental health' included

mental health disorders e.g. anxiety, depression, bipolar disorder, psychosis etc., or distress or poor mental wellbeing in parents over the age of 18. These were measured through psychometric screening, self-reported data or questionnaires.

Children were defined as young people between the ages of 0-18. 'Child outcomes' pertained to cognitive, educational, academic, behaviour, or mental health domains. Outcomes could be measured through cognitive screenings, school reported data, parent reported data, behavioural observations, psychometric screening and relevant questionnaires. Solely physical health concerns, or external risk towards children were not included as outcomes.

'Homelessness' was defined as any experience of housing instability, housing insecurity, temporary accommodation, unsuitable housing, and previous homelessness, following the definitions identified above (Children's Commissioner, 2019; Children's Society, 2020; Hock et al., 2024). Studies of 'runaway' adolescents and children in care were not included as these young people were not experiencing homelessness alongside their families. People living in 'public housing' in American studies were not included as this refers to secure, subsidised housing.

Screening criteria were refined for full text screening (Appendix B). This stipulated that papers reporting a sole measure of 'parental stress' rather than mental health were not eligible, as this referred to stress directly related to being a parent, rather than overall mental wellbeing. Maternal mental health measures could not be composite measures of other factors. Additionally, definitions of homelessness could not solely be overcrowding or poor conditions.

Measures were required to be taken whilst participants were experiencing homelessness if using cross-sectional data. Families living specifically in domestic violence shelters were not included, as this may have created bias in these papers regarding maternal mental health. Finally, papers needed to have a substantial focus on the association between maternal mental health and child outcomes to be eligible.

Data Extraction

Key data was then extracted from studies (Table 2). This included demographic information relevant for understanding families experiences e.g. age, gender and ethnicity and number of children in the family. The role of caregivers and gender of parents were recorded separately. This was to reflect the fact that the term 'woman' and 'mother' may not be interchangeable or the preferred terms for people who may be non-binary or from the trans community (Bower-Brown, 2022) Many papers did not explicitly reference gender or parental role separately, therefore this was inferred.

Homeless status was recorded to reflect different definitions used by papers. Aims, design, sample size, measures, analysis and findings were extracted to show information regarding outcome and quality of the studies. Data extraction was led by the first author who completed extraction for all texts. The second rater independently extracted data for 50% of the texts (n=9). All discrepancies were resolved following discussion.

Quality Appraisal

The review included studies with a range of designs. Consequently, the Quality Assessment with Diverse Studies (QuADS) appraisal tool was used as it has been specifically designed to appraise multi-method studies (Harrison et al., 2021). QuADS has been found to demonstrate good face and content validity and inter-rater reliability (k=0.66).

The first author assessed the quality of the studies by rating them on 13 items with scores ranging from 0 - 3. 30% (n=5) of papers were independently assessed by the second rater. The quality assessment resulted in a total score for each paper ranging from 0 – 39. Although QuADS has no specific thresholds, studies were deemed high quality if they scored 29 or above (75%), medium quality if scored 19.5 and above (50%) and low if they scored below this. The QuADS tool was amended with specific examples to enhance robustness of appraisal. (Appendix C).

Narrative Synthesis

The studies were analysed using narrative synthesis, demonstrated as an appropriate methodology to synthesise quantitative studies that do not fit criteria for meta-analysis (Campbell et al., 2020). This review followed narrative synthesis guidance developed by the Economic and Social Research Council to ensure transparency and methodological rigour (Popay et al., 2006).

Preliminary Synthesis

A preliminary synthesis of the studies was conducted by writing a summary of each paper to distil the key elements and observe patterns across the data (Popay et al., 2006; p.13). Initial connections were drawn into a mind map to begin the process of synthesis. Next, the papers were tabulated to record key information relating to the research questions (p. 16). First this involved recording key findings, colour-coding papers according to whether they had found a significant result and recording the strength of association (Appendix D). Papers were then tabulated and colour-coded by the additional areas of focus for each study to visually inspect variation and pattern (Appendix E).

In line with the guidance, initial thematic analysis was then undertaken. A deductive approach was used as the analysis was informed by the theoretical Family Stress Model. Key elements of each paper were treated as 'codes' (Braun & Clarke, 2021). Codes were labelled and clustered into candidate themes, refined and then finally named as themes and presented diagrammatically (Appendix F).

Exploring Relationships in the Data

Preliminary findings were interrogated to develop understanding of why these associations might have been observed (Popay et al., 2006; p.14). This first involved examining the quality of the studies to discern the weight attributed to each finding. Studies were grouped by design, and patterns were explored within these groupings (Appendix G). Patterns were then explored between groups to explore similarities and differences in approaches and the strengths and limitations of these. This data was then coded and clustered

to explore whether it mapped onto previous themes. As these codes pertained more to methodological patterns, these elements were used as a lens through which to view the initial themes. This created a more nuanced understanding of why relationships between maternal mental health and child outcomes may exist.

Assessing the Robustness of the Synthesis

Finally, the poorest quality studies were excluded to establish whether the themes still held (Popay et al., 2006; p.15).

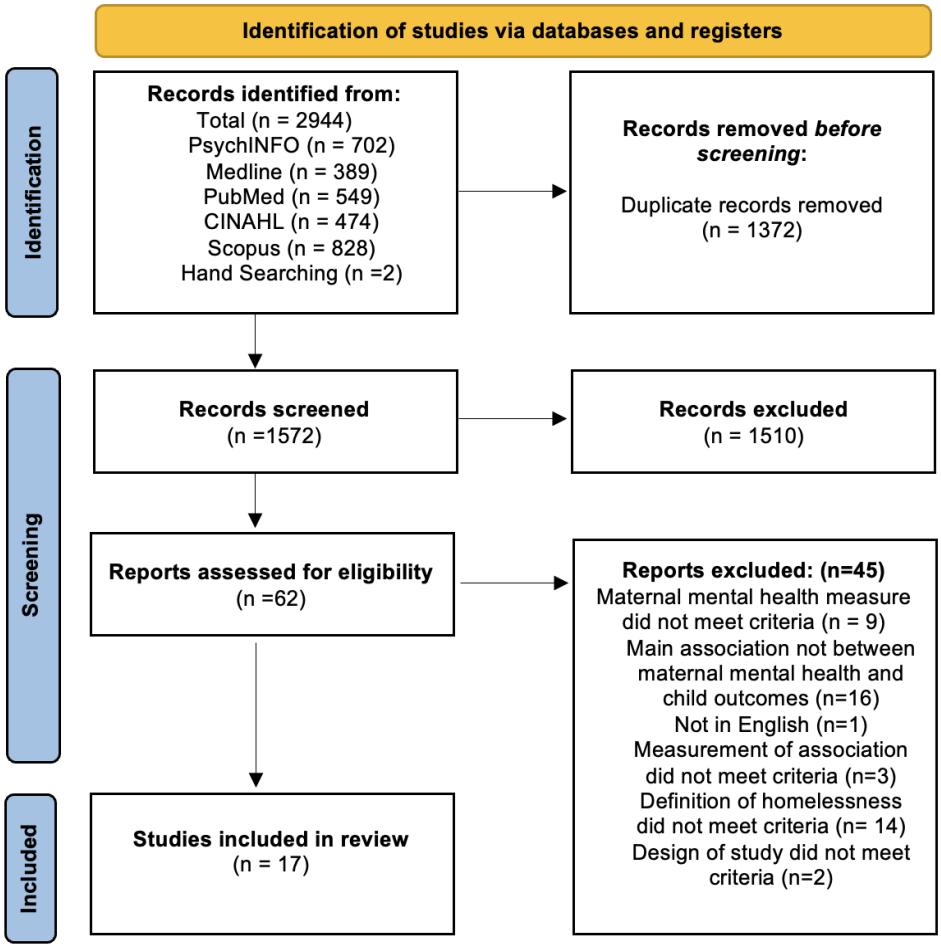
Results

Study Selection

2,944 papers were identified through systematic searches, and 1,372 duplicate papers were excluded. Abstracts were screened in full by the first author, and 20% were screened by the second rater (n=314); interrater reliability demonstrated strong agreement (k=0.83). 62 full texts were screened, resulting in 17 papers included in the final analysis (Fig. 2). 25% of full texts were screened by the second rater (n=16): (k = 0.86).

Fig. 2

PRISMA flowchart outlining study selection procedure



Study Description

The 17 studies addressed the research questions in a variety of ways. Seven papers took a cross-sectional design, five analysed longitudinal data and five compared outcomes between homeless and housed groups. Seven studies looked exclusively at mothers; the remaining studies included some other parental figures e.g. fathers. The proportion of mothers ranged from 78% to 98.5% across papers. Researchers defined homelessness as residing in homeless shelters (n=10) or experiencing housing insecurity (n=7). Consistent with definitions from the Children's Society and Hock et al., 2024, this included experiencing multiple moves in a short period of time (residential mobility), experiencing eviction due to financial insecurity, residing in abandoned buildings or living 'doubled up' (living with others due to economic hardship). Children's ages ranged from 2.32 to 18 years old. Numbers of male and female children were approximately equal across samples. Five studies reported the total number of children in the family. All studies were conducted in the United States and the majority of families across studies were defined as African American. Study characteristics are presented in Table 2.

Table 2

Data Extraction

Author (s) and Year	Study Design	Relevant Study Aims/Research Questions	Sample Size - parents and children	Role of Caregivers	Gender of parents and children	Age of parents and children	Ethnicity of parents and children (wording and capitalization copied directly from text)
Abenavoli, R., Amadon, S., & Briggs, S. (2025)	Longitudinal cohort study	To examine how moving predicts mental health via direct pathways (e.g., from residential mobility to mothers' mental health) as well as via bidirectional or interdependent processes (e.g., from residential mobility to children's mental health via mothers' mental health and vice versa).	Mothers: 4,301 Children: 4,301	Mothers	Parent: Not reported, assumed 100% female Children: 51.75% male	Mothers: Not reported Children: Measures taken at 1, 3, 5, 9 and 15 years old	Mothers: White non-Hispanic 21.23%, Black non-Hispanic 47.66%, Hispanic or Latino 27.15% Children: Not reported
Boddapati, S. (2018)	Cross-sectional analytic case comparison?	To examine the relationship between caregiver depressive symptoms, parenting practices and classroom quality and children's academic and social-emotional functioning in children who are unstably and stably housed.	Housed Group: Caregivers: 1,126 Children: 1,179 Unstably Housed Group: Caregivers: 365 Children: 375	Housed Group: Mothers: 86% Fathers: 8% Grandparent: 5% Other: 2% Unstably Housed Group: Mothers: 90% Fathers: 7% Grandparent: 3% Other: <.5%	Housed Group: Caregivers: Assumed to be 86% female Children: 50% male Unstably Housed Group: Caregivers: Assumed to be 90% female Children: 49% male	Housed Group: Caregivers: Not reported Children: Cohort of three- and four-year-olds Unstably Housed Group: Caregivers: Not reported Children: Cohort of three- and four-year-olds	Housed Group: Mothers: 24% White/Caucasian, 34% African American, 37% Hispanic/Latino, 2% Asian, 3% Multi-Racial, 1% Other Children: 20% White/Caucasian, 34% African American, 39% Hispanic/Latino, 2% Asian, 5% Multi-Racial, 1% Other Unstably Housed Group: Mothers: 32% White/Caucasian, 26% African American, 39% Hispanic/Latino, 2% Asian, 1% Multi-Racial, 1% Other Children: 25% White/Caucasian, 26% African American, 41% Hispanic/Latino, 1% Asian, 7% Multi-Racial, 1% Other
Conrad, B.S. (1998)	Cross-sectional analytic	To explore the relationships among maternal depressive symptoms and child mental health outcomes in a sample of homeless mothers and their children.	30 parents 30 children	Mothers	Parents: Assumed 100% female Children: Not reported	Mothers: Mean age = 28.8 years old (SD 6.3, range 19-45) Children: mean age 4.2 (SD 1.1, range 3-6)	Parents: Ethnicity identified as White, 40%, Black, 33%; Hispanic, 20%; Other, 7% Children: Not reported

Author (s) and Year	Study Design	Relevant Study Aims/Research Questions	Sample Size - parents and children	Role of Caregivers	Gender of parents and children	Age of parents and children	Ethnicity of parents and children (wording and capitalization copied directly from text)
Du, X. (2022).	Longitudinal cohort study	To explore the change trajectories from early childhood to adolescence in housing instability, primary caregiver's mental health, parenting skills, and children internalizing and externalizing behaviour problems and examine the associations between these variables.	Parents: 783 Children: 783	Parents (including adoptive parent and stepparent): 90.9% Grandparent: 4.3% Other: 4.8%	Parents: 98.5% Female Children: 52.6% Male	Primary Caregivers: Mean age = 32.86, SD = 6.86 Children: Mean age = 4.79, SD = 1.32	Parents: Not reported Children: White 47.1%, Black 40.4%, Hispanic 7.9%, Asian/Pacific Islander 1.1, American Indian/Alaskan Native 0.3%, Others 2.8%
Du, X., & Kim, Y. K. (2021)	Longitudinal cohort study	To examine whether caregiver depression would mediate the association between residential mobility and both adolescent internalizing problems and adolescent externalizing problems.	Primary caregivers: 425 Children: 425	Not reported	Primary Caregivers: 96.7% female Children: 51.2% male	Primary Caregivers: 31.4 years old (SD = 9.9) at initial interview when children were aged 4 Children: Measures taken at 12, 14, 16, and 18 years old	Primary caregivers: Not reported Children: African American 54.1%, European American 27.3%, Multiracial people 18.0%, Others 0.6%
Graham-Bermann, S. A., Coupet, S., Egler, L., Mattis, J., & Banyard, V. (1996)	Cross-sectional analytic case comparison?	To test whether a child's social and emotional adjustment are affected by income, stress, mother's depression, and/or by the quality of relationships in the child's social network for children in two kinds of distressed families.	Homeless Group Mothers: 60 Children: 60 Housed Group Mothers: 61 Children: 61	Mothers	Homeless Group: Parents: 100% assumed to be women Children: 55% male Housed Group: Parents: 100% assumed to be women Children: 48% male	Homeless Group: Mothers: Mean age = 31.78 years (SD = 4.21) Children: Mean age = 9.63 years (SD = 2.01 years), ranging from 7 to 12 years old Housed Group: Mothers: Mean age = 31.69 years (SD = 5.05) Children: Mean age = 8.44 years (SD = 2.56 years), ranging from 7 to 12 years old	Homeless Group: Mothers: 73% African American, 2% American Indian, 2% Hispanic. Children: Not reported Housed Group: Mothers: 51% African American, 3% Hispanic, 2% Biracial

Author (s) and Year	Study Design	Relevant Study Aims/Research Questions	Sample Size - parents and children	Role of Caregivers	Gender of parents and children	Age of parents and children	Ethnicity of parents and children (wording and capitalization copied directly from text)
Guerrero, N., Wagner, K. M., Gangnon, R., Valdez, C. R., Curtis, M. A., Ehrenthal, D. B., Jacobs, E. A. (2020)	Longitudinal cohort study	To examine the role of material hardship in the form of housing instability and food insecurity, and their effect on the association between maternal depression and child problem behaviours.	3630 primary caregivers 3630 children	At Year 9, 92% of primary caregivers were biological mothers.	Parents: Assumed 92% female Children: Total not reported	Parents: Not reported Children: Measures taken at age 3, 5 and 9 years old	Parents: Total not reported Children: Not reported
Hatem, C., Lee, C. Y., Zhao, X., Reesor-Oyer, L., Lopez, T., Hernandez, D. C. (2020)	Longitudinal cohort study	To examine how food insecurity and housing instability experiences during early childhood influence anxiety and depressive symptoms during adolescence while accounting for maternal depression and parenting stress as mediators.	2626 parents 2626 children	Mothers	Parents: Assumed 100% female Children: 51% male	Mothers: Mean age = 28 Children: Measures taken at 1, 3, 5, 9 and 15 years old	Mothers: Not reported Children: 49% black
Herbers, J. E., DeCandia, C. J., Volk, K. T., Unick, G. J. (2023)	Correlational cross-section design	To examine whether children with a resilient neurodevelopmental profile would be more likely to have parents with fewer mental health problems, less overreactive parenting and fewer adverse childhood experiences.	Parents: 231 Children: 231	Mothers: 93% Fathers: 5% Other: 2%	Parents: Assumed 93% female Children: 51.6% male	Parents: Mean age = 30.65, SD = 6.86 Children: Aged between 3 and 5 years old. Mean age = 4.37 years (SD = 0.86).	Parents: African American 50%, White 21%, Hispanic/Latinx 20%, Native American/Hawaiian/Other 8% Children: African American 43%, White 16%, Hispanic/Latinx 31%, Native American/Hawaiian/Other 8%
Labella, M. H., Narayan, A. J., Masten, A. S. (2016)	Cross-sectional analytic	To evaluate relations among parent internalizing distress, emotional climate, child affect, and multiple dimensions of socioemotional adjustment in the context of homelessness.	Primary caregivers: 138 Children: Not reported	Biological mothers: 93% Biological fathers: 4% Stepparents: 3%	Parents: Assumed 93% female Children: 43.5% male	Primary Caregivers: Mean age = 30.8 years, SD = 6.3, range = 20.5–57.3 Children: Aged between 4 and 6 years old. Mean age = M = 4.8, SD = .6, range = 4.8–6.9	Primary caregivers: African-American 64%, white 12%, multiracial 11%, American Indian 7%, and other 6% Children: African-American 67%, multiracial 16%, American Indian 7%, white 4%, 6 percent other 6%

Author (s) and Year	Study Design	Relevant Study Aims/Research Questions	Sample Size - parents and children	Role of Caregivers	Gender of parents and children	Age of parents and children	Ethnicity of parents and children (wording and capitalization copied directly from text)
Masten, A. S., Miliotis, D., Graham-Bermann, S. A., Ramirez, M., Neemann, J. (1993)	Cross-sectional analytic case comparison?	To examine whether distress levels of parents was related to the behavioural and emotional problems of children as well as to the exposure of children to recent and chronic life events.	Homeless Group: Parents: 93 Children: 159 Low income housed Group: Parents: 53 Children: 62	Homeless Group: Mothers: N = 73 Other parent roles not reported Low-Income Housed Group: Mothers: N = 46 Other parent role not reported	Homeless Group: Parents: Assumed 78% female Children: 49% male Low-Income Housed Group: Parents: Assumed 87% female Children: 58% male	Homeless Group: Average age of mothers = 32 Children: 83 under age 12 and 76 adolescents. Mean age = 11.58 years Low-Income Housed Group: Average age of mothers: 35 children: 29 under age 12 and 33 adolescents. Mean age = 11.89	Homeless Group: Parents: Not reported Children: African American 81%. Low-Income Housed Group: Parents: Not reported Children: African America 89%.
McNeil Smith, S., Holtrop, K., Reynolds, J. (2015)	Cross-sectional analytic	To explore whether positive parenting practices mitigate the effects of poor parental mental health on child externalising behaviours in homeless population.	52 parents/primary caregivers 52 children	Parent or primary caregiver. Assumed 79.6% mothers	Parents: 79.6% female Children: 50% male	Parents: Not reported for final sample Children: aged between 2 and 18. Mean age = 6.09 years old (SD = 3.81); 50% were in early childhood (ages 2–5), and 43.2%were in middle childhood (ages 6–12)	Parents: 68.5% self-identified as Black/African American. Children: Not reported
Monn, A. (2015)	Cross-sectional analytic	To examine whether parenting stress will moderate the relationship between harsh parenting and children's cool executive functioning.	Primary caregivers: 105 Children: 105	Biological mothers: 94.5%. Sample also included biological fathers, grandparents and other relatives e.g. (stepparent, aunt).	Caregivers: Assumed 94.5% women Children: 54.3% Male	Caregivers: Mean age = 30.53 years, SD = 6.35, range = 19-49 years Children: Mean age = M = 5.88, SD = .64, range = 4.17-6.99 years	Caregivers: 63.6% African-American, 12.1% Caucasian, 8.4% Biracial/Multiracial, and 15.9% other Children: 65.7% African-American, 4.8% Caucasian, 22.9% Biracial/Multiracial, 6.8% other

Author (s) and Year	Study Design	Relevant Study Aims/Research Questions	Sample Size - parents and children	Role of Caregivers	Gender of parents and children	Age of parents and children	Ethnicity of parents and children (wording and capitalization copied directly from text)
Schteingart, J. S., Molnar, J., Klein, T. P., Lowe, C. B., & Hartmann, A. E. (1995)	Cross-sectional analytic case comparison?	To examine the effect of homelessness on children's psychological and developmental functioning.	Homeless Group Mothers: 82 Children: 82 Housed Group Mothers: 62 Children: 62	Mothers	Homeless Group: Parents: 100% assumed to be women Children: 54% male Housed Group: Parents: 100% assumed to be women Children: 56% male	Homeless Group Mothers: Range = 17- 45. Aged 17-25 = 24%; Aged 26-30 = 32%, Aged 31-45 =44%. Children: Aged 3 - 5 years old Domiciled Group Mothers: Range 17 - 45. Aged 17-25 = 46%; Aged 26-30 = 22%, Aged 31-45 =32%. Children: Aged 3 - 5 years old	Homeless Group: Mothers: 72% African American, 28% Hispanic Children: Not reported Housed Group: Mothers: 61% African American, 309% Hispanic Children: Not reported
Torrance, A. F. M. (1997)	Cross-sectional analytic case comparison?	To explore the relationship between homelessness, maternal distress, and Conduct Disorder.	Homeless Group Mothers: 77 Children: 77 Domiciled Group Mothers: 119 Children: 119	Mothers	Homeless Group Mothers: Assumed to be 100% female Children: 58% male Domiciled Group Mothers: Assumed to be 100% female Children: 46% male	Homeless Group Mothers: Mean age = 31 years Children: Mean age = 7.8 years Domiciled Group Mothers: Mean age = 35 years Children: Mean age = 8.2 years	Homeless Group Mothers: Self-identified - 48% Latino, 48% Black, non-Latino; and 4% other. Children: Not reported Domiciled Group Mothers: Self-identified - 63% Latino; 34% Black, non-Latino; and 3% other Children: Not reported

Author (s) and Year	Study Design	Relevant Study Aims/Research Questions	Sample Size - parents and children	Role of Caregivers	Gender of parents and children	Age of parents and children	Ethnicity of parents and children (wording and capitalization copied directly from text)
Wu, Q., Slesnick, N., Murnan, A. (2018)	Cross-sectional analytic	To specify the mechanisms underlying maternal depressive symptoms, emotion regulation, and child problems by considering parenting stress as a potential mediator.	Mothers: 119 Children: Not reported	Only mothers reported	Parents: 100% assumed to be female Children: 66 boys. Unclear if any girls.	Mothers: Mean age = 21.61, SD = 1.81, ranging from 18-24 years old Children: Mean age = 2.32, SD = 1.61, ranging from 0-6 years old	Mothers: African American 84.0%; White, non-Hispanic, or other races 16.0% Children: Not reported
Zima, B. T., Wells, K. B., Benjamin, B., Duan, N. (1996)	Cross-sectional analytic	To explore whether mental health problems amongst homeless mothers are related to serious emotional problems and academic delays in their children, controlling for sociodemographic characteristics, history of homelessness, social support, and family structure variables.	Parents: 110 Children: 157	Only mothers reported	Parents: 100% female Children: 50% male	Mean age of mothers: 34 years Children: Mean age = 9.2 years, SD = 2.0. 55% of children were between the ages of 6 and 9 years old, and 45% were between the ages of 10-12	Parents: 84% of women reported to be from minority backgrounds Children: African American 44%, Latino 35%, White 14%, and Other 7%

Author (s) and Year	Total Number of Children in Family	Homeless status	Parental Measures	Measure of child outcomes	Analysis	Study findings relating to association between maternal mental health and child outcome	Quality Rating
Abenavoli, R., Amadon, S., & Briggs, S. (2025)	Not reported	Mothers were asked whether they had moved since the previous survey wave, and if so, how many times.	Composite International Diagnostic Interview–Short Form (Kessler et al., 1998)	Child Behaviour Checklist (Parent reported) (Achenbach, 1991)	Path analysis model	Maternal depression in middle childhood predicted internalising in adolescence (β = .10). Maternal depression in early childhood predicted internalising in middle childhood (β = .09), which predicted internalising (β = .31) and maternal depression in adolescence. Maternal depression in middle childhood did not significantly predict externalising in adolescence. Maternal depression in early childhood predicted middle childhood externalising (β = .08), which predicted externalising (β = .45) and maternal depression in adolescence.	27 (Medium)
Boddapati, S. (2018)	Not reported	Families that reported two or more moves during the twelve months prior to data collection time points or those that identified as living doubled up or in transitional housing at any point during Head Start.	The short form of the Centre for Epidemiological Studies-Depression Scale (Radloff, 1977) Child Rearing Practices Report Parental engagement with Head Start Questionnaire Parent/Child activities Questionnaire Parent engagement with out of home parenting-child activities Questionnaire	Letter-Word Identification subtest from Woodcock Johnson-III Tests of Achievement (2001) or Spanish equivalent Peabody One-Word Picture Vocabulary Test (Dunn, 1965) 21 parent rated, and 26 teacher rated items using a combination of items adapted from e.g. Social Skills Rating System 21 items from the Early Childhood Environmental Rating Scale, (Harms, 1998) Classroom Assessment Scoring System (Pianta et al, 2008)	Multi-group Structural Equational Modelling	For the full sample, parental approaches partially mediated the relation between parental depression and children's pre-kindergarten social-emotional functioning and language and literacy functioning. However, there were no significant differences between the two groups.	31 (High)

Author (s) and Year	Total Number of Children in Family	Homeless status	Parental Measures	Measure of child outcomes	Analysis	Study findings relating to association between maternal mental health and child outcome	Quality Rating
Conrad, B.S. (1998)	2.8 (SD 1.0, range 1-5)	Participants were families residing in a homeless shelter.	Centre for Epidemiologic Studies - Depression Scale (Radloff, 1977)	Kohn Social Competence Scale (Teacher rated) Kohn Problem Checklist (Teacher rated)	Mann Whitney U	The level of children's social competence and behaviour problems did not differ by maternal depressive symptoms category.	21 (Medium)
Du, X. (2022).	Not reported	Participants were families who had experienced unaffordable housing, overcrowding, doubled-up housing, forced move due to outside events, or forced move for contraction of housing. Housing instability further operationalized as *Housing instability = (total number of actual housing issues / total number of potential housing issues across waves within a specific child development stage) × 100*	Kessler-6 Mental Health Scale (Kessler et al., 2003) Rosenberg self-esteem scale (Rosenberg, 1965) Self-Efficacy Scale Aggravation in Parenting Scale Items from National Survey of Families and Households and the National Longitudinal Survey of Youth	Behaviour Problems Index (Parent reported)	Latent Growth Model	That is, housing instability did not directly relate to child internalizing behaviour problems and parenting skills, but greater housing instability was directly associated with a higher level of primary caregiver's mental health ($B = 0.59$, $\beta = 0.38$, $p < .001$). A higher level of primary caregiver's mental health problems were directly related to more child internalizing behaviour problems ($B = 0.18$, $\beta = 0.41$, $p < .001$) and a lower level of parenting skills ($B = -0.20$, $\beta = -0.29$, $p < .001$). Higher level of parenting skills was directly related to less child internalizing behaviour problems ($B = -0.10$, $\beta = -0.15$, $p = .010$). There was a significant indirect effect between greater housing instability which heightened the initial level of primary caregiver's mental health problems, which, in turn, increased the initial level of child internalizing behaviour problems t ($B = 0.11$, $\beta = 0.16$, $p < .001$).	33 (High)

Author (s) and Year	Total Number of Children in Family	Homeless status	Parental Measures	Measure of child outcomes	Analysis	Study findings relating to association between maternal mental health and child outcome	Quality Rating
Du, X., & Kim, Y. K. (2021)	4.4 members SD (1.7)	Residential mobility captured by asking "How many different homes or apartments did you live in before you started the first grade?" and "How many different homes or apartments did you live in from first grade through 11 years of age?"	Centre for Epidemiologic Studies Depression Scale (Radloff, 1977) The Social Provisions Scale (SPS)	Child Behaviour Checklist (Parent reported) (Achenbach, 1991) Self-Report Family Inventory	Structural Equation Modelling	Residential mobility had a direct impact on adolescent externalizing problems ($\beta = 0.098$, $p < 0.05$) but did not directly relate to adolescent internalizing problems. The direct path from residential mobility to caregiver depression was positively significant ($\beta = 0.143$, $p < 0.01$). The direct path from caregiver depression to adolescent mental problems was positively significant ($\beta = 0.280$, $p < 0.001$); the direct path from caregiver depression to adolescent behavioural problems was positively significant ($\beta = 0.232$, $p < 0.01$. Caregiver depression mediated the relationship between residential mobility and internalizing problems ($\beta = 0.038$, $p < 0.01$); the relationship between residential mobility and externalizing problems ($\beta = 0.030$, $p < 0.05$); the relationship between caregiver social support and internalizing problems ($\beta = -0.099$, $p < 0.01$); and the relationship between caregiver social support and externalizing problems ($\beta = -0.078$, $p < 0.01$)	32 (High)
Graham-Bermann, S. A., Coupet, S., Egler, L., Mattis, J., & Banyard, V. (1996)	Not reported	Homeless Group: Participants were families living in homeless shelters.	Centre for Epidemiological Studies Depression Scale (Radloff, 1977) African American Women's Stress Scale (Watts-Jones, 1990)	Child Behaviour Checklist (parent reported) (Achenbach, 1991) Perceived Global Self-Worth subscale of the Perceived Competence Scales for Children (child reported) (Harter, 1985) The Networks of Relationships Inventories (child reported)	Latent variable structural equation models	Homeless Group: Stress was associated with mother's depressed mood. Mother's depressed mood significantly related to total CBCL score. Variance was accounted for by Support in social relationships but not by Conflict. Mother's depression did not significantly contribution to self-worth. However, there was a strong relationship between Support and self-worth in children. Housed Group: Maternal depression was not significantly associated with child's adjustment. There was a trend for conflict in relationships to be associated with negative adjustment for the child, but support in relationships did not contribute. Income did not contribute to the self-worth outcome, but family stress was directly and negatively associated with self-worth. Maternal mental health was not related, but supportive relationships contributor to the child's self-worth.	30 (High)

Author (s) and Year	Total Number of Children in Family	Homeless status	Parental Measures	Measure of child outcomes	Analysis	Study findings relating to association between maternal mental health and child outcome	Quality Rating
Guerrero, N., Wagner, K. M., Gangnon, R., Valdez, C. R., Curtis, M. A., Ehrenthal, D. B., Jacobs, E. A. (2020)	Not reported	Participants were considered 'housing unstable' if family had been evicted in the past 12 months from their home or apartment for not paying rent or mortgage, whether they had moved three or more times since the Year 3 survey, or whether they had been living with friends or family without paying rent or living with an adult other than a spouse or partner 'doubled up'.	Composite International Diagnostic Interview Short Form (Kessler et al., 1998)	Child Behaviour Checklist (Parent reported) (Achenbach, 1991) The Children's Food Security Scale (CFSS) (Nord & Bickel, 2002)	Just-identified path analysis	There was a significant indirect effect of depression at Year 3 on externalizing problem behaviours at Year 9 through food insecurity and housing instability at Year 5 ($\beta = .03$, $SE = .01$, $z = 2.04$, $p < .042$).There was no significant indirect effect of depression at Year 3 on internalising or overall problem behaviour at Year 9 through housing instability, but there was a significant indirect effect through food insecurity.	21 (Medium)
Hatem, C., Lee, C. Y., Zhao, X., Reesor-Oyer, L., Lopez, T., Hernandez, D. C. (2020)	Not reported	Participants were considered "housing unstable" if family had experienced any of either "not being able to pay rent or mortgage," "getting evicted," "being delinquent on housing-related bills," "borrowing money from friends or family to pay for bills," "moving in with others," and "staying at a shelter, abandoned building, or in a car due to financial problems."	Composite International Diagnostic Interview–Short Form (Kessler et al., 1998) Parenting Stress Inventory (Abidin, 1995)	Centres for Epidemiologic Studies Depression Scale (Self-reported) (Radloff, 1977) Brief Symptom Inventory Anxiety Scale (Self-reported) (Derogatis, 1993) The Children's Food Security Scale (CFSS) (Nord & Bickel, 2002)	One-way analysis of variance, chi-squared tests, covariate-adjusted structural equation models	There was a significant indirect effect from housing instability only (specific indirect: B=0.006, CI: 0.002, 0.013) and both food insecurity and housing instability (specific indirect: B=0.008, CI: 0.002, 0.016) at year 5 to adolescent depressive symptom at year 15 through maternal depression to parenting stress. There was significant indirect effect from housing instability only (specific indirect: B=0.009, CI: 0.001, 0.021) and both food insecurity and housing instability (specific indirect: B=0.012, CI: 0.002, 0.026) at year 5 to adolescent anxiety symptom at year 15 through maternal depression to parenting stress at year 9.	26 (Medium)

Author (s) and Year	Total Number of Children in Family	Homeless status	Parental Measures	Measure of child outcomes	Analysis	Study findings relating to association between maternal mental health and child outcome	Quality Rating
Herbers, J. E., DeCandia, C. J., Volk, K. T., Unick, G. J. (2023)	Not reported	Participants were families who were staying in family homeless shelters either currently or within the past 30 days	Patient Health Questionnaire (Kroenke et al., 2001) Abbreviated PTSD Checklist-Civilian version (Lang et al., 2012) Overreactive parenting screener adapted from the Arnold Parenting Scale	Neurodevelopmental Ecological Screening Tool (NEST) assessing five areas of neurodevelopmental functioning: Motor Skills, Functional Communication, Adaptability and Coping, Executive Functioning, and Social-Emotional skills (parent reported) Measure of adverse childhood experiences of the child based on those used by Blodgett (2012)	Latent profile analysis; Multinomial logistic regression model	Higher scores of parental mental health challenges significantly predicted membership of Profile C (Multi-domain with motor challenges) OR = 2.84, p = 0.006), Profile D (Social-emotional challenges) OR = 1.86, p = 0.010, and Profile E (Multi-domain with social challenges) OR = 3.34, p = 0.005, when compared with Profile A (Resilient Functioning). Higher scores for overactive parenting risk significantly predicted greater likelihood of being classified in Profile D (OR= 1.34, p = 0.033)	27 (Medium)
Labella, M. H., Narayan, A. J., Masten, A. S. (2016)	Not reported	Participants were families who had lived in an emergency housing shelter for at least three days.	Hopkins Symptom Checklist (Derogatis, 2000) Risk score Five Minute Speech Sample	Scores of affect were rated from videotaped dyad interactions Teacher-completed subscales from the Health and Behaviour Questionnaire	Path analysis model	Parent internalizing distress was associated with higher levels of parent negativity ($\beta = .44$, $p < .01$) but not lower levels of parent warmth. Parent warmth predicted positive affect and negativity predicted negative child affect and less prosocial behaviour. Total indirect effects from parent internalizing distress were significant ($\beta = -.06$, $p < .05$), no specific pathway met a $p < .05$ criterion.	30 (High)

Author (s) and Year	Total Number of Children in Family	Homeless status	Parental Measures	Measure of child outcomes	Analysis	Study findings relating to association between maternal mental health and child outcome	Quality Rating
Masten, A. S., Miliotis, D., Graham-Bermann, S. A., Ramirez, M., Neemann, J. (1993)	Homeless Group: Mean number of children = 3.3 Low-Income Housed Group: Mean number of children = 3.5	Participants were families who resided in an emergency shelter	Symptom Checklist 90—Revised (Derogatis, 1993) Global Severity Index, the average of all item scores, was used to index parents' distress	Child Behaviour Checklist (Achenbach, 1991) Children's Depression Inventory (Self-reported) (Achenbach, 1991) Self-Perception Profile for Children (Harter, 1985) A self-reported questionnaire about experiences and opinions	Hierarchical regression	Parent distress was significantly associated with externalising (*R2 =.17*, *F* = (7,183) = 40.02, *p* < .001) internalising (R2 =.17, F = (7,183) = 40.06, p < .001) and total problems (R2 =.16, F = (7,183) = 32.25, p < .001) across the full sample. Risk and recent life events were significantly associated with all child symptoms across the full sample. Housing status was not significantly associated with child symptoms.	32 (High)
McNeil Smith, S., Holtrop, K., Reynolds, J. (2015)	Not reported for final sample	Participants were families residing in a transitional housing community	Centre for Epidemiologic Studies - Depression Scale (Radloff, 1977) Parent Distress subscale of the Parenting Stress Index—Short Form (Abidin, 1995) Parenting Practices Interview	Eyberg Child Behaviour Inventory (Parent reported) (Eyberg & Ross, 1978)	Linear regression and moderation analysis	Parental psychological distress was a significant predictor of child externalizing behaviour (β = .45, p < .001). There was no relationship between parenting stress and child externalizing behaviour. There was a significant positive relationship between psychological distress and externalising behaviour when parents transmitted low levels of praise and incentives. This relationship was null when they transmitted high levels of praise and incentive. Children of parents with low levels of parenting stress had the same outcomes regardless of parenting praise and incentives. Child externalising problems were lowest when parents had high stress from parenting, but used high levels of praise and incentives.	28 (Medium)

Author (s) and Year	Total Number of Children in Family	Homeless status	Parental Measures	Measure of child outcomes	Analysis	Study findings relating to association between maternal mental health and child outcome	Quality Rating
Monn, A. (2015)	45.8 % of parents had more than 4 children living with them	Participants were families residing in emergency homeless shelters for at least 3 nights.	Perceived Stress Scale (Cohen et al., 1983) Family Interaction Task The Peabody Picture Vocabulary Test (Dunn & Dunn, 1965) Matrix Reasoning subtest of the Wechsler Adult Intelligence Scale – III (Weschler, 1955) Digit Span subtest of the Wechsler Adult Intelligence Scale – III The Tower of London task Go-NoGo task	Wechsler Preschool & Primary Scales of Intelligence - III Forward Backward Word Span Peg Tapping task Pointing Stroop task Dimensional Change Card Sort Dinky Toys task Toy Prohibition task Gift Delay task	Hierarchical regression analysis	There was a significant relationship between reduced performance on the Tower of London task and increased harsh parenting, but only for parents experiencing high stress (B = -.05, p = .01). Higher rates of harsh parenting were related to lower child cool EF, but only when parents reported medium or high levels of stress (β = -.24, p = .03 and β = -.41 p = .01). Parents who performed better on the TOL task tended to have children with better EF skills, with the relationship mediated through lower levels of harsh parenting, but only when parents reported experiencing high rates of perceived stress (B = .02*, 95% CI: .01 - .05).	32 (High)
Schteingart, J. S., Molnar, J., Klein, T. P., Lowe, C. B., & Hartmann, A. E. (1995).	"Homeless Group: 1 - 5% 2 - 35% 3 - 27% 4 or more - 33% Housed Group: 1 - 11% 2 - 37% 3 - 32 4 or more - 20% "	Homeless Group: Participants were families living in homeless shelters Housed Group: Families living in homes, but who experienced economic deprivation	Centre for Epidemiologic Studies - Depression Scale (Radloff, 1977) Norbeck Social Support Questionnaire (Norbeck, Lindsey & Carrieri, 1981)	Child Behaviour Checklist (Parent reported) Early Screening Inventory	Hierarchical regression	No difference was found between housed and homeless children in behavioural problems. Significant difference was found between homeless and non-clinical normative sample - Externalising scores $t(605)$ = 2.46, $p < .05$ for boys, $t(641) = 3.22$, $p = < .05$ for girls and Total Problem Scores $t(605) = 2.87$ $p < .05$ for boys $t(641) = 3.132$ $p < .01$ for girls There were no significant differences observed between homeless and housed children's developmental status, but they both differed significantly from normative data. No significant difference in maternal depression were found between both groups Maternal depression significantly predicted internalising problems β = .33, t (137) = 4.12, $p < 0.01$, but homeless status did not.	31 (High)

Author (s) and Year	Total Number of Children in Family	Homeless status	Parental Measures	Measure of child outcomes	Analysis	Study findings relating to association between maternal mental health and child outcome	Quality Rating
Torrance, A. F. M. (1997)	Not reported	Families that had been homeless for at least 90 days and had been at the shelter for at least 15 days.	The Taylor Manifest Anxiety Scale (Taylor, 1953) The Beck Depression Inventory (Beck et al., 1996) Two Factor Index of Social Position (Hollingshead, 1965) Raven's Standard Progressive Matrices (Raven, 2003) The Peabody Picture Vocabulary Test-Revised (Dunn & Dunn, 1965)	Raven's Progressive Matrices (Raven, 2003) The Peabody Picture Vocabulary Test-Revised (Dunn & Dunn) The Wide Range Achievement Test-Revised The Self-Reported Antisocial Behaviour Scale (Loeber et al., 1989)	Structural Analysis	Homelessness predicted increased maternal distress (SRW = .316), which in turn predicted increased child Conduct Disorder (SRW = .265).	32 (High)
Wu, Q., Slesnick, N., Murnan, A. (2018)	Not reported	Participants were families who met the criteria for homelessness as defined by the McKinney-Vento Homeless Assistance Act, Re-Authorized (2002). Assumed from researching the Act this means individuals who lack a fixed, regular, and adequate nighttime residence (defined for homeless children and youths)	Beck Depression Inventory (Beck et al., 1996) Parenting Stress Inventory Short Form (Abidin, 1995) Emotion Regulation Questionnaire (Gross & John, 2012)	Child Behaviour Checklist for Ages 1.5–5 (parent reported) (Achenbach, 1991)	Path analysis model	Maternal parenting stress was significantly correlated with elevated child externalising and internalising problems ($r = .43$, $p < .001$; $r = .41$, $p < .001$) Maternal depression was positively associated with externalising problems ($r = .18$, $p = .05$). Maternal expressive suppression was negatively associated with externalising problems ($B = -.44$, $SE = .17$, $t = -2.57$, $p = .01$). Maternal parenting stress mediated the link between maternal depressive symptoms and child externalising and internalising problems ($B = .10$, $SE = .04$, CI.90 [.03, .19]; $B = .08$, $SE = .03$, CI.90 [.02, .15]). Maternal depression did not significantly mediate links between maternal parenting stress, emotion regulation and child behaviour problems.	29 (High)

Author (s) and Year	Total Number of Children in Family	Homeless status	Parental Measures	Measure of child outcomes	Analysis	Study findings relating to association between maternal mental health and child outcome	Quality Rating
Zima, B. T., Wells, K. B., Benjamin, B., Duan, N. (1996)	Mean = 3.6, ranging from 1-10	Participants were families were families who had stayed at an emergency shelter overnight	Mental Health Inventory Diagnostic Interview Schedule RAND Course of Homelessness Survey 24 items from RAND Medical Outcomes Study (Stewart, 1988) 4 items from National Health Interview Survey	Children's Depression Inventory (child reported) Child Behaviour Checklist (parent reported) (Achenbach, 1991) Peabody Picture Vocabulary Test (Dunn & Dunn, 1965) Reading subtest of the Woodcock-Johnson Language Proficiency Battery (Woodcock, 2001)	Multiple regression analysis	School-aged homeless children were four times more likely to require a psychiatric evaluation for depression if their mothers reported chronic psychotic symptoms OR = 4.42, p = <.001 Homeless children were three times more likely to have an internalizing behaviour problem if their mothers had a history of depressive symptoms OR = 3.27, p = .01 . Homeless children were almost four times more likely to have an externalizing behaviour problem if their mothers screened positive for lifetime major depression OR = 3.76, p = .02. Academic skill delays were not associated with maternal mental disorders.	27 (Medium)

Quality Ratings

Quality of studies was relatively consistent with notable outliers. The second rater rated 30% of the papers (k=0.84). The majority (n=15) of study scores ranged between 26-33 out of a possible total of 39, with two studies scoring 21. Ten studies were rated 'High' quality and seven 'Medium' quality. Strengths of studies included clear aims, theoretical rationale and appropriate methodology. Studies were limited in quality by their lack of consultation with experts by experience across all research. Additionally, many studies did not report key demographic information such as number of children in the family or ethnicity, thus limiting quality.

Themes and Findings

Thematic analysis developed four key themes to conceptualise the findings: 1) Environmental stress increases parental distress; 2) Parental distress increases negative parental behaviour and approaches 3) Children are significantly impacted by their parents' behaviour and wellbeing; 4) Pervasiveness of precarity. Relationships between themes are outlined in Fig. 3. These themes were mapped onto the research questions and are presented alongside the key findings in the table below.

Fig. 3

Themes

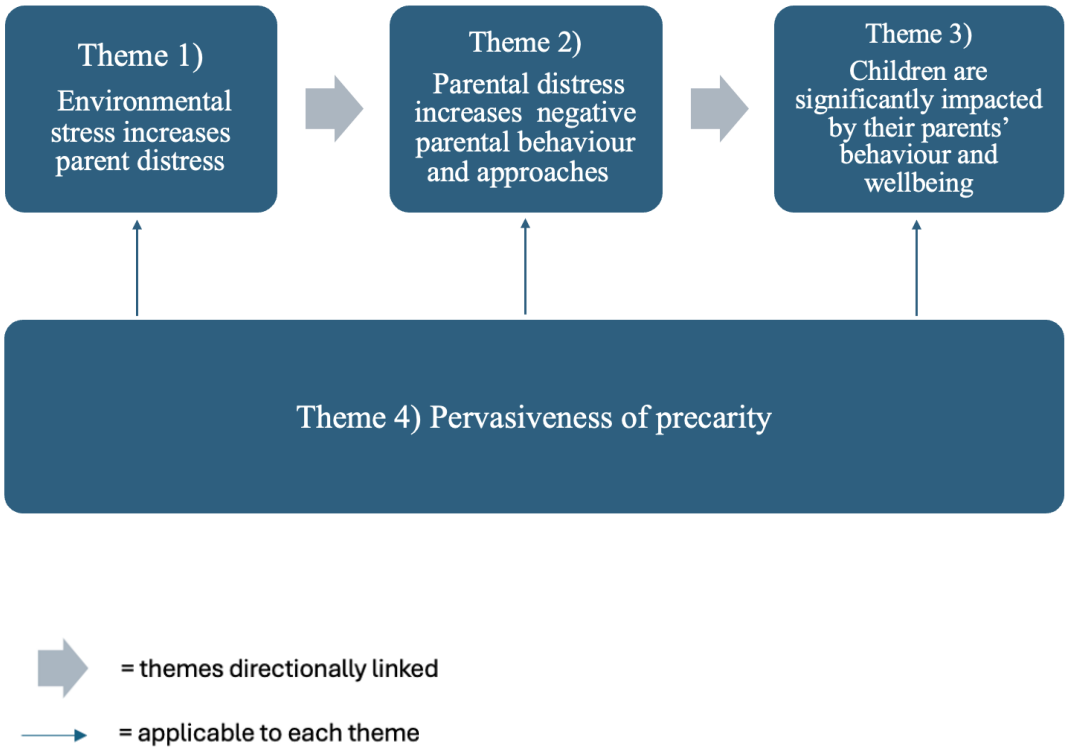

Theme 1)
Environmental stress increases parent distress
Theme 2)
Parental distress increases negative parental behaviour and approaches
Theme 3)
Children are significantly impacted by their parents' behaviour and wellbeing
Theme 4) Pervasiveness of precarity
= themes directionally linked
= applicable to each theme

Table 3

Results and themes in relation to research questions

Research Question	Results	Themes
Is there an association between maternal mental health and child outcomes in families experiencing homelessness?	- 80% of papers reported a significant association between MMH (maternal mental health) and child outcomes - Direct associations showed increased MMH problems led to increased child internalising and externalising behaviour problems - Indirect associations showed the relationship between MMH and child behaviour was mediated by parenting and parent stress. - MMH also mediated relationships between homelessness and child outcomes	Theme 2) Parental distress increases negative parental behaviour and approaches Theme 3) Children are significantly impacted by their parents' wellbeing
How are associations between maternal mental health and child outcomes conceptualised and	- Three study designs included: longitudinal cohort studies (N=5), case comparison studies (N=5), cross sectional studies (N=7) - Quality ratings ranged from 21 – 33	Theme 4) Pervasiveness of precarity

measured and what is the strength of that evidence?	- Sample sizes varied from 28 – 3630 - Six studies included parents other than mothers - Effect sizes could not be compared across studies due to heterogeneity but generally showed small effects - Age of children ranged from 2.32 – 18 - Majority of behaviour outcomes were parent rated (n=10)	
Does the Family Stress Model framework (Masarik and Conger, 2017) provide a helpful conceptualisation through which to understand this association?	In accordance with the model: - Homelessness significantly increased MMH challenges - Parenting was found to be a key factor in understanding the impact of MMH on child outcomes - MMH worsened parenting stress which negatively impacted child outcomes - Risk factors e.g. adverse experiences, life events and poverty negatively impacted parent and child outcomes - 'Resilience' in parenting reduced the association between MMH and child outcomes - However, interparental relationship problems were not noted	Theme 1) Environmental stress increases parental distress Theme 2) Parental distress increases negative parental behaviour and approaches Theme 3) Children are significantly impacted by their parents' wellbeing

Themes:

The key content of themes is summarised below.

Theme 1) Environmental stress increases parent distress

The research demonstrated that environmental factors negatively impacted maternal mental health. In multiple studies, housing instability directly predicted poor mental health in mothers (Hatem et al., 2020; Du & Kim, 2021; Du, 2022; Torrance, 1997); additionally, mental health problems amongst homeless mothers were greater in comparison to other groups (Zima et al., 1998; Graham-Bermann et al, 1996; Monn, 2015). However, it was not solely housing instability that was associated with maternal distress. Socio-demographic risk including food insecurity and lack of education (Labella et al., 2016), and environmental risk such as living in neighbourhoods with high crime and drug use (Graham-Bermann et al., 1996) also increased distress. This suggests multiple environmental factors impact on the mental health of homeless mothers, adding to the understanding of risk factors highlighted in the Family Stress Model.

Theme 2) Parental distress increases negative parental behaviour and approaches

When parents experienced distress, they were more likely to demonstrate negative parenting behaviours. Labella et al. (2016) showed higher levels of internalised parental distress were associated with greater negativity when speaking about children. As well as mental health challenges, several studies measured parenting stress, meaning stress directly related to being a parent, such as feeling trapped by parental responsibilities. Wu et al. (2018)

found that parental stress mediated the link between maternal depressive symptoms and child behaviour, suggesting maternal distress worsened the stress associated with being a parent. However, depression did not mediate the link between parent stress and child outcomes in this study. This suggested a directional relationship where distress predicts negative parent approaches. Additionally, Monn (2015) found that the relationship between harsh parenting and decreased executive functioning in children only existed when parents experienced distress, providing further evidence that parental distress increases negative parenting behaviour.

Theme 3) Children are significantly impacted by their parents' behaviour and wellbeing

Across the studies, there was a clear association between parents' wellbeing and behaviour, and the outcomes of children in homeless families. Parental psychological distress directly predicted externalising and internalizing behaviour difficulties in children (Abenavoli et al., 2025; Du, 2022; Du & Kim, 2021; Graham-Bermann et al., 1996 Herbers et al., 2023; McNeil Smith et al., 2015; Torrance, 1997; Wu et al., 2018; Zima, 1996). Additionally, studies demonstrated indirect effects of housing instability on child outcomes: housing instability increased parental distress, which in turn increased child behavioural problems (Du & Kim, 2021; Du, 2022; Hatem et al., 2020).

Some papers provided further detail about this relationship. Hatem et al., (2020) found that the relationship between housing instability and child outcomes was mediated by maternal depression which in turn impacted parenting stress, highlighting the role of parenting behaviours in understanding this association. Similarly, Herbers et al., (2023) demonstrated that children were more likely to experience social-emotional problems if their

parents were high risk for 'overactive' parenting. Labella et al.'s finding support this – parental negativity predicted negative child affect and less prosocial behaviour.

Positive parenting practices further highlighted the relationship between depression, parenting and child outcomes. McNeil Smith et al., (2015) found that the relationship between psychological distress and externalising behaviour was not significant when parents transmitted high levels of praise and incentives. In fact, children experienced lowest externalising behaviours when parents had the highest stress, but used high levels of positive parenting. This suggests that parents were able to attenuate the effect of their distress through their parenting. Additionally, Wu et al. (2018) found that when parents suppressed their expression of negative affect, children showed fewer externalising problems, further highlighting the role of parent behaviour in mediating the association between distress and outcomes.

Theme 4) Pervasiveness of precarity

The research showed that the relationship between maternal mental health, housing instability and child outcomes existed across all age groups and at multiple time points (e.g. Du, 2021; Herbers et al., 2023). Additionally, longitudinal studies showed the significant effect of housing instability in early childhood on adolescent anxiety symptoms, mediated by maternal depression and stress (Hatem, 2020). This suggests that this impact is not only felt during the immediate crisis, but throughout a child's life.

Although some studies found housing instability mediated the relationship between maternal depression and child outcomes (Guerrero et al., 2022) and there were significant

differences between distress in homeless and housed women (Graham-Bermann et al., 1996), additional research found no difference in psychological distress between homeless mothers and housed, but financially distressed, mothers (Masten, 1998). Similarly, few differences in outcomes were experienced in homeless vs housed families when accounting for economic risk (Boddapati, 2018). Schteingart et al. (1995) found maternal depression was a predictive factor for child internalising symptoms, but homelessness compared to economic distress was not. Additionally, behavioural problems between homeless and economically distressed children did not differ significantly, although homeless children scored significantly worse than normed samples. Furthermore, environmental risk and recent life events were also found to be associated with child symptoms in both housed and homeless families (Masten et al., 1993). This suggests that economically distressed families also experience high psychological burden. An explanation may be that homeless and economically distressed families experience similarity in the precarity of their living situations related to poverty, regardless of housing status (Schteingart, 1995).

Exploring Relationships Across Papers

Exploring patterns both across and within studies helped develop a deeper understanding of the strengths and weaknesses of the data. Studies did not address differences between gender and sex or variety of parental roles outside of heterosexual Western norms. Additionally, studies did not record ethnicity or consider this as a variable in their understanding of intersections of identity and homelessness. Many papers did not record the number of children in the family, which would be expected to impact on parent experiences (Nye et al., 1970). Eight studies used the Child Behaviour Checklist measures to rate children's behaviour, which is normed on a sample of predominantly white, and entirely

housed, group of children; this may not be an appropriate measure for the children in these studies (Schteingart et al., 1995). Finally, longitudinal studies examined housing instability, whereas cross sectional studies tended to examine families in shelters. This may limit conclusions which can be drawn across data.

Robustness

To assess robustness, the studies with the lowest quality ratings were removed from the synthesis to assess impact on results. The quality of these studies was rated as 21 and they were the only two studies ranked below 25. This lower quality rating was due to limitations in sample size and methodology, although their scores still fell within the 'Medium' quality range. Guerrero et al., (2022) did not find that housing instability significantly predicted maternal depression, which contradicted the remaining studies. Additionally, Conrad did not find an association between maternal mental health and child outcomes. Therefore, excluding these results strengthened the cohesion of the narrative.

Discussion

Key Findings

The review synthesised findings of 17 papers exploring associations between maternal mental health and child outcomes in families experiencing homelessness. Three themes were identified describing the increase in parental distress due to environmental stress, consequent impact on parenting behaviour and beliefs, and subsequent child and adolescent outcomes. A fourth theme conceptualised the pervasiveness of precarity across both homeless and low-income families and across all ages.

Association between maternal mental health and child outcomes

The analysis showed poorer maternal mental health negatively impacted child outcomes. The reported outcomes predominantly included externalising behaviours such as aggression and rule breaking, and internalising behaviours such as anxiety and depression. This is consistent with literature demonstrating that maternal depression is positively associated with emotional and behavioural symptoms (Sutherland et al., 2022). However, the majority of behavioural outcomes in the studies were reported by parents. This may bias results as mothers experiencing depression have been shown to be more likely to perceive their children's behaviours as problematic (Webster-Stratton & Hammond, 1998).

Previous research has suggested various routes of transmission of parental mental health problems to children, including an inherited genetic risk (Gotlib et al., 2020). However, with a lack of definitive evidence for purely genetic explanations (Harold et al., 2011), recent studies have focused on the complex interaction between maternal mental

health, child outcomes and environmental factors. A recent systematic review highlighted parenting as a significant mediator of this association, despite small effect sizes (Goodman et al., 2020). The studies reviewed here add weight to this finding, as they demonstrated parenting behaviour and approaches were key mechanisms underpinning associations between parental distress and child symptoms. Depression may directly impact the quality of parenting through reduced energy levels, higher irritability, less positive, contingent and frequent responses within parent-child interactions, thus negatively affecting child development (Downey & Coyne, 1990).

Interestingly, the current review noted positive parenting attenuated the relationship between parental distress and child internalising and externalising symptoms (McNeil Smith et al., 2015; Wu et al., 2018). These studies highlighted that parents were able to reduce the impact of distress on children through suppression of negative affect and increase in positive parenting strategies. Although emotional suppression has been associated with more aggressive parenting in previous studies (Lorber et al., 2016), there may be a function to reducing expression of negative affect in an environment which is characterised by high stress, such as homelessness.

It is clear there is an association between maternal depression and child outcomes, and that this relationship is particularly evident for at-risk families studied in this review. Notably, housing instability alone did not appear to cause negative child outcomes; the impact of this environment was mediated through worsened maternal mental health. This is supported by findings that homelessness contributes to poor adult mental health (Johnson and Chamberlain, 2016), and high levels of anxiety in mothers (Suglia et al.'s, 2011). Additionally, mothers who are homeless may be at significant risk of poor mental health due

to additional factors contributing to homelessness, particularly domestic abuse (Bassuk et al., 2001). However, Suglia et al. (2011) demonstrated that housing instability impacted maternal mental health even when controlling for domestic violence. Two studies reviewed in the current study found little difference in the association between parental distress and children symptoms when comparing housed but economically distressed, and homeless groups (Boddapati, 2018; Masten et al., 1993). Additionally, Schteingart et al., (1995) found significant differences in internalising symptoms between homeless children and normed data, but not with economically distressed families. This suggests that risk for maternal depression and child problems may exist across many families who are struggling.

Conceptualisation of findings and strength of evidence

The relationships between maternal mental health and child outcomes were conceptualised both at a single point in time using cross-sectional data, and as a predictor of future challenges through longitudinal data. Additionally, groups of homeless families were compared to housed families living in poverty to identify similarities and differences.

Both cross-sectional and longitudinal studies found significant associations between maternal mental health and child outcomes, which supports previous research showing that homelessness causes both immediate distress and poorer long-term outcomes (Caton et al., 2007; Rowley, 2024) However, it is important to note that longitudinal studies measured general housing instability, and cross-sectional data examined families living in homeless shelters. There may be specific experiences of living in a shelter e.g. adherence to shelter rules (Tischler et al., 2006) which may be different to experiences such as living ‘doubled up’

with extended family, which may reduce generalisation across studies. Nevertheless, the consistency in findings suggests that the element of insecurity in living situations across a variety of contexts negatively impacts families (Hock et al., 2024).

The heterogeneity of studies also meant direct effect sizes could not be directly compared across studies, making it harder to assess disparities in strengths of findings. However, generally small but significant effects were found across the research. This may reflect the high level of variance contributing to child outcomes other than housing instability and maternal mental health (Roze et al., 2016).

Notably, the predominant ethnicity of participants across studies was defined as African American. However, most studies did not consider ethnicity in their analysis in a meaningful way. When ethnicity was considered, it was only examined in relation to child outcomes (e.g. Conrad, 1998). As there is a clear intersection between poverty, racism, gender and mental health (Rosenfield, 2012), the lack of exploration of this intersectionality significantly limits the quality of studies. Additionally, gender was not explored vigorously in studies – either as an interaction with caregiver role or in the experiences of children, other than to note some significant differences in types of behaviour recorded in boys and girls (e.g. Masten et al., 1993).

Lack of interrogation of ethnicity and gender in families suggested the studies conceptualised associations through the lens of a White, western, cis-gender, heterosexual viewpoint, thus limiting the capacity to capture nuanced experiences (de Oliveira & Baggs, 2023). Furthermore, some studies included parents other than mothers. Mothers have been shown to be particularly vulnerable members of the homeless population and face unique

struggles due to their position in society (Reppond & Bullock, 2020). Consequently, this reduces the conclusions that can be drawn across studies.

The Family Stress Model

This review found a directional association between homelessness, disrupted parenting and child and adolescent adjustment problems. This mapped directly onto the pathway in the Family Stress Model, suggesting this framework is a helpful way to conceptualise the relationship between economic hardship and child outcomes (Conger et al, 2010). Additionally, the reviewed studies highlighted risk factors including life experiences, adverse events and poverty impacted this association, as indicated by the model (Masarik & Conger, 2017). However, the studies did not highlight interparental relationship problems as a significant factor in the pathway. This may be because the majority of homeless mothers are single, with many fleeing domestic violence (Rog et al., 2017; Bimpson et al., 2020), therefore, the role of an additional parent was not discussed.

Instead, some studies highlighted the role of other people within the system such as teachers (Boddapati, 2018), friends (Graham-Berman et al., 1996) and parental support systems (Du & Kim, 2012). This suggests the model could be expanded to recognise the role of other relationships in the system. Studies also found both an association from maternal mental health to child outcomes through impact on parenting behaviour, as suggested by the model, but also direct associations. This may suggest there is also a direct pathway from negative affect to child outcomes, without specific impact on parenting behaviour.

Crucially, this review found maternal mental health impacted child outcomes in both homeless and financially distressed families. This suggests that it is not solely the difference in housing status that is relevant to understanding this relationship. Poverty is a direct predictor of homelessness, and Masarik and Conger (2017) suggest more theoretical development is needed to understand which risks moderate the key pathways between such economic hardship and child outcomes. This review proposes similarities in precarity of living situations, experienced by both homeless and financially distressed families as a result of poverty, (Johnsen & Watts, 2014) may help understand this association, and calls for further research to explore this.

Implications

This review highlights how insecure housing significantly impacts maternal mental health, which in turn impacts child development. Despite living in such difficult circumstances, parents are able to negate the impact on their children through strength in parenting. However, mediating the impact of mental health on child outcomes may require mechanisms such as emotional suppression which has negative long-term effects on health and wellbeing (Compare et al., 2014).

The research highlights the socio-economic causes of distress in families and the intergenerational impact of insecure housing. Therefore, this review adds weight to movements advocating for secure and stable housing for vulnerable families. Additionally, it is clear that mental health support is needed for homeless parents, and that parenting support may be vital in weakening the association between mental health and child outcomes. Additionally, the review found evidence to support the Family Stress Model, suggesting it

could be a helpful conceptualisation in clinical work with families to help understand systemic factors of child mental health challenges.

Limitations and Future Directions

There are several limitations to this systematic review. First, all the studies were conducted in the United States, reducing generalisability to other populations. Second, although the majority of studies examined mothers, some included other parents. The samples of two of the studies which did not find a significant difference between groups contained low percentages of mothers in comparison to other studies (Boddapati, 2018; Masten et al., 1993). This suggests a need to directly compare studies of mothers and other caregivers in future research for a more nuanced understanding of different parents' experiences.

Third, the role of domestic violence in maternal mental health was not examined across the included papers. Due to the high association with interpersonal violence and maternal homelessness (Bassuk et al., 2010), future reviews should include this to compare the contribution of housing instability to maternal health alongside experiences of abuse. Additionally, previous trauma in the lives of homeless parents should be considered more closely due to the impact on adult mental health (Stermac et al., 2001).

Fourth, the chronicity and severity of maternal depression was not considered. Previous research has demonstrated the link between these factors and problematic child behavioural outcomes (Brennan et al., 2000). Therefore, future research should consider the differences in the relationship between mental health and outcomes in the context of these different experiences.

Fifth, as previously discussed these studies suggested the role of relationships outside of parental dyads are important factors in understanding the experiences of homeless families. Future research should examine the role of additional figures in the system, moving away from a White, western view of family. The intersection of ethnicity, gender and socio-economic deprivation should be further explored to develop a deeper understanding of families' experiences.

Finally, this review suggests examining the experience of precarity across groups of vulnerable families may help explain a significant risk factor moderating the relationship between economic hardship, parental distress and child outcomes. Future qualitative research is needed to understand the lived experience of parents living in precarious situations and how this impacts on their mental health and outcomes of their children.

Conclusion

This narrative synthesis of 17 studies highlighted the negative impact of homelessness on parental mental health. This association was seen to detrimentally affect child outcomes, particularly mental health and behaviour. Parenting was found to be a key mechanism underpinning this relationship, supporting the Family Stress Model. However, the review also suggests additional relationships outside of parent-child dyads may be important to consider, and suggested precarity of living situations may be an important moderator in the relationship between economic hardship and child outcomes. Despite limitations in the quality of some studies, significant associations across a range of cross-sectional, longitudinal and case comparison designs highlighted the prevalence of this association and the vulnerability of families living in precarious contexts. These findings advocate for long-term stability in housing for families to reduce the intergenerational transmission of distress.

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Service Improvement Project

Social Workers' Perceptions of Facilitators and Barriers to Matching Children with Additional Needs with Adoptive Families: A Service Improvement Project

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Proposed Journal: *Social Work Research.* This journal publishes research pertaining to social work, including practice-based research, which contributes to understanding of challenges in social work. This is particularly relevant for this Service Improvement Project.

Abstract

Many children entering the adoption system require support for 'additional needs' - an umbrella term including social, emotional and physical health characteristics. However, research suggests that it is hard to find adopters for children with such needs. The Family Finding service within the Adopt Thames Valley organisation was developed to improve matching between adopters and children with additional needs. The Multi-Disciplinary Matching Hub, a new team which supports the matching process, aimed to understand the strengths and challenges of matching children with additional needs. This project explored social workers' perspectives on facilitators and barriers to the matching process to develop this understanding.

Nine social workers completed questionnaires and interviews. The data were analysed using Reflexive Thematic Analysis, resulting in seven themes and 14 subthemes. The themes 'Adopters' cautiousness', 'Contextual factors' and 'Limitations in social workers' confidence' described social workers' perceptions of barriers to matching. Facilitators were described through the themes 'Adopters' openness', 'Support for social workers', 'Helping adopters increase openness' and 'How social workers make matches'. Recommendations are outlined.

Key Words: Adoption; Additional Needs; Decision-Making; Social Workers

Introduction

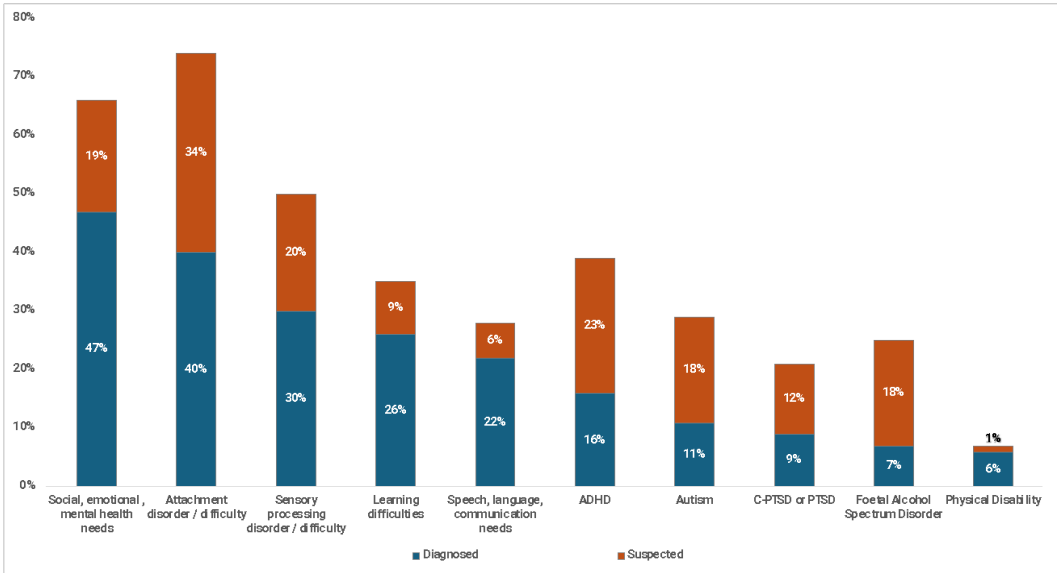
Adoption Context

Following legalisation of adoption in the UK in 1926, the majority of adopted children were 'illegitimate' babies (Keating, 2009). Children with additional needs were not considered eligible for adoption (Mather, 1999). However, changing social norms and legal frameworks in this century have shifted the focus of adoption to providing permanent placements for children who are unable to be safely cared for by their birth families (Hamblin, 2018).

Consequently, most children adopted in England have experienced the care system. Studies show that adopted children have often been subjected to neglect or abuse (Hamblin, 2018) and research by Adoption UK (2023) of 2,470 families demonstrated high prevalence of both mental, physical and emotional needs of adopted children (Figure 1).

Figure 1

Rates of needs among adopted children (Reproduced from Adoption UK, 2023)



Statutory guidance (Department of Education (DofE) 2013) indicates local authorities must take responsibility for the process of establishing permanent homes for children. When supporting young people who have special education needs or disabilities (SEND), local authorities must adhere to the SEND Code of Practice (DofE, 2015), which refers to Part 3 of the Children and Families Act (DofE, 2014) promoting the imperative to identify and respond to children's needs as early as possible.

Additional Needs

The term 'additional needs' encompasses any characteristics or circumstances that may lead to a child requiring a higher level of support (Department for Education and Skills 2006, as cited in Marrable, 2012). This includes children aged five or over, children with a disability or acute medical need, children with neurodevelopmental needs, children who have previously experienced adoption disruption (adoption which ends after the child is placed in a home (Farmer & Dance, 2016)), children with parents with a history of mental illness, children of global majority or mixed ethnicity or sibling group etc.

Services have adopted the term 'additional needs' to move away from the language 'harder to place' within an adoption context. However, it is important to note that the language of 'additional needs' is inadequate in capturing the nuances of these characteristics or circumstances, particularly when they relate to aspects of identity such as ethnicity. The term 'additional needs' will be used in this report as this is the term used in services, but it must be recognised that 'need' is not a 'deficit' located within the child, but a recognition of vulnerability and the need for greater support.

Matching

Matching children with adoptive families is a crucial part of the adoption process (Coram, 2016). Although critics argue that unpredictable factors impact placement stability and that extensive matching processes create delay (DofE, 2016), there is also evidence for the importance of matching. A study by Farmer and Dance (2016) examined 149 adoptions and found that 63% of matches rated 'poor' (both retrospectively and in 'real-time') resulted in disruption or significant instability, in comparison to only 5% of matches rated 'good' or 'fair'.

Additionally, research has demonstrated that children with 'additional needs' are less likely to be placed with adopters (Selwyn et al., 2006). However, The Coram Report (2016) demonstrated that additional matching support (including reviewing and editing profiles, and attending events to profile children to a larger group) for 17 'hard to place' children resulted in five being matched, suggesting that enhanced matching for vulnerable children may be beneficial.

Decision Making

The matching process involves multifaceted decision-making for both the social worker, regarding which individuals to match, and the adopter, regarding which child to adopt. Tallman and Gray (1990) describe decision making as the choices actors make to maximise expected experiences, which may involve attempting to reduce uncertainty of future events. Conversely, Simon (1955) argues that rather than maximising outcomes, people generally accept 'good enough' alternatives. This study will define decision-making

as described by Tallman and Gray (1990): conscious and deliberate acts employed following deliberation in non-routine situations where there are elements of uncertainty or risk.

Social Workers Decisions

Matching adoptive parents and children with additional needs is a complex task (Dance et al., 2010) in which a child's needs must be balanced with adopters' skills (Department for Education, 2013). Farmer et al.'s (2010) survey of 74 local authorities and 16 voluntary adoption agencies identified that social workers are expected to consider multiple factors when deciding which matches to propose: e.g. adopters' attitudes, understanding of the child and their expectations.

Adopters Decisions

Alongside social workers' decision-making in the matching process, adoptive families themselves must make decisions. Burge and Jamieson (2009) analysed the experiences of 15 adoption applicants to better understand this decision-making process. The authors described how adopters evaluate and re-evaluate many aspects of themselves and others throughout the matching process, including their competency as future parents, information about potential adoptees and characteristics of a preferred child.

Burge and Jamieson described how adopters thought about their 'fantasized' child and whether the proposed child would fit with that image. When considering adopting children with additional needs, adopters' flexibility increased when they 're-balanced' their previous

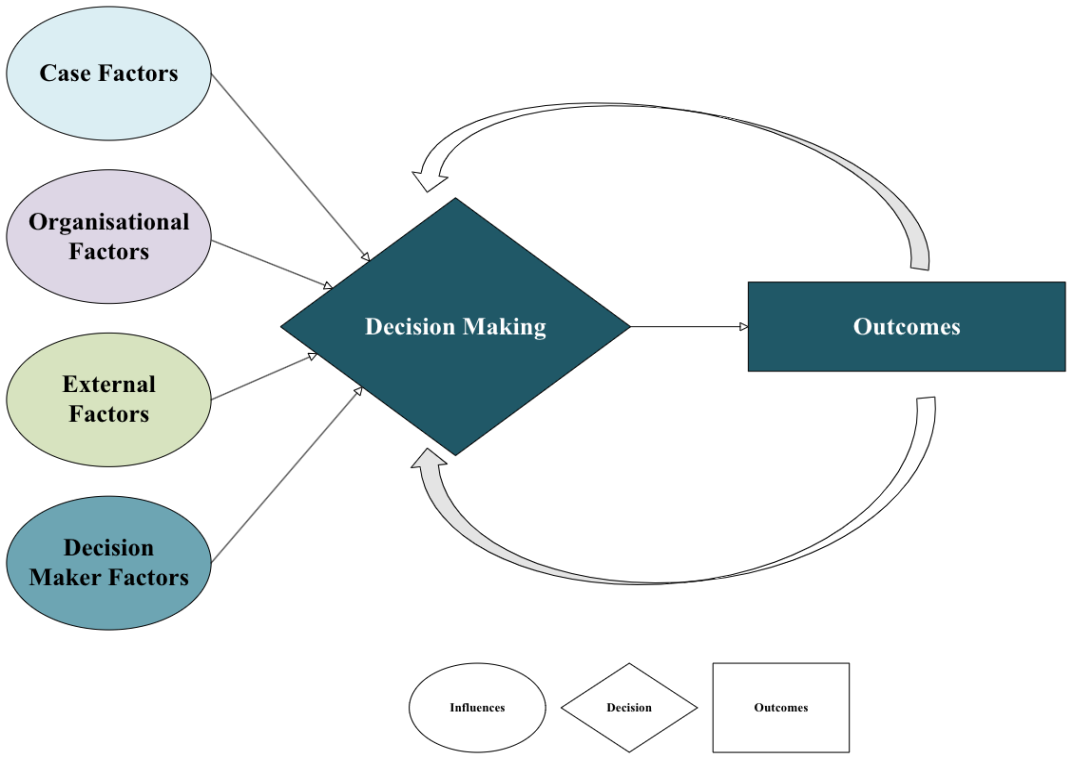
expectations. Adopters were more likely to consider a specific child when they were able to find out more information about them and their needs.

Theoretical Model of Decision Making

Bauman et al. (2014) developed the Decision-Making Ecology Model to understand how people make decisions about children's welfare (Figure 2). This model recognises that influences and constraints impact decision making and consequent outcomes for children. The authors use this model to understand how welfare assessments are conducted, but explain it can be used to understand other decisions related to children's care. In this study, the 'decision-making' element of the model will refer to the matching process.

Figure 2

Decision-Making Ecology Model (Reproduced from Bauman et al., 2014)



Service Context

The Family Finding service within Adopt Thames Valley (ATV) was developed to improve matching for children with additional needs. The Multi-Disciplinary Matching Hub was implemented as a new specialist assessment and support team to strengthen this matching process. The Matching Hub identified it would benefit from an examination of matching to help optimise outcomes for children.

This project aimed to collect professionals' perspectives on facilitators and barriers to matching children with additional needs and provide recommendations to the Matching Hub. Both Family Finders (adoption social workers who find families for children) and Link Workers (social workers who support parents throughout the adoption process) were asked to participate as they are extensively involved in matching.

The study aimed to answer the following questions:

1. What challenges and barriers exist in the process of matching children with additional needs and adoptive families within ATV?
2. What currently helps in this matching process?
3. What support could be given to improve this process?

Methods

Ethics

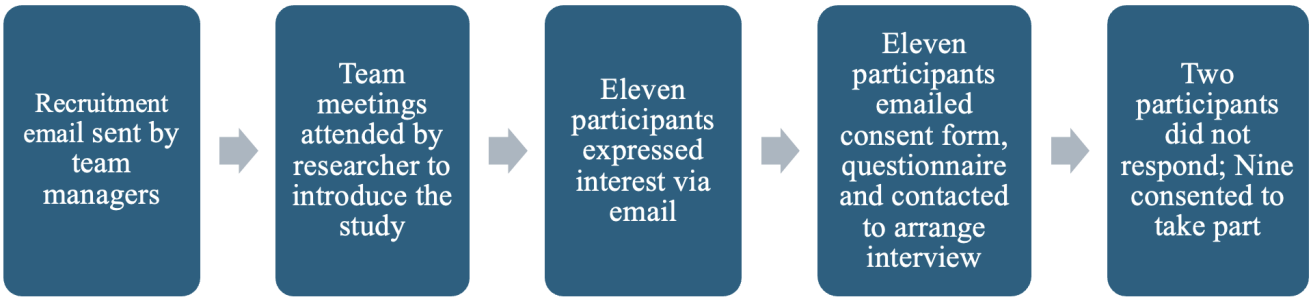
Ethical approval to carry out this Service Improvement Project was granted by Oxfordshire County Council (OCC). All interviews were audio-recorded on an OCC laptop and stored securely on OCC Teams OneDrive account. All identifiable information was removed from transcripts, and these were stored securely on the OneDrive account. Questionnaires and consent forms were completed on Microsoft Forms.

Participants

Social workers employed by OCC as Family Finders, Link Workers, or both from ATV were recruited. Participants were recruited via email and through the researcher presenting the project at team meetings (Figure 3).

Figure 3

Recruitment Flowchart



Design

Participants completed questionnaires which collected demographic information (Table 1) and asked participants about their use of specific theories, supervision and policies and guidelines (Appendix J). This information was collected prior to the interview to help inform the questions. Semi-structured interviews were then conducted to explore social workers' perspectives. These were transcribed and analysed using Reflexive Thematic Analysis (RTA) (Braun & Clarke, 2021). NVivo 14 software (Lumivero, 2023) was used to collate codes.

Table 1

Participant Characteristics

Demographic variable	Number of participants	Percentage
Age		
25-34	1	11%
35-44	2	22%
45-54	4	44%
55-64	1	11%
65+	1	11%
Ethnicity		
White	9	100%

Gender		
Female (Including trans women)	9	100%
Role		
Family Finder	2	22%
Link Worker	1	11%
Both Family Finder and Link Worker	6	66%
Seniority		
Senior Practitioner	6	66%
Social Worker	3	33%
Time In Role		
Less than one year	1	11%
1-2 Years	3	33%
3-4 Years	1	11%
7-8 Years	2	22%
10-15 Years	1	11%
20+ years	1	11%

Procedure

Adopting a self-reflexive position helped the researcher consider how a lack of experience of adoption services may limit project development. Therefore, the procedure of designing the study aimed to develop the researcher's knowledge about the service and wider context of adopting children with additional needs before conducting interviews, outlined below.

Table 2

Procedure Steps

Step	Description
Step 1: Meeting with Social Workers	The researcher met with the social work managers to develop a better understanding of the service, the process of adoption and their views on the main areas of focus for service development.
Step 2: Developing the Schedule and Questionnaire	Having gathered this information, the researcher developed a proposed interview schedule and questionnaire.
Step 3: Feedback from Matching Hub	The interview schedule and questionnaire were then presented to the Matching Hub for feedback, and amended accordingly (Appendix K).

Step 4: Recruitment	Participants were recruited via email and presentations at Team Meetings (see Figure 3).
Step 5: Data collection	Participants who took part completed the consent form and questionnaire online via the Microsoft Forms platform. The questionnaire was conducted before the interview, as some written answers informed the interview questions. An online Teams meeting was then conducted which was audio recorded. This took between 45 minutes to 1 hour.
Step 6: Data analysis and Write Up	The interviews were transcribed using 'intelligent verbatim' which encouraged focus on the meaning of the participants' speech, allowing for removal of utterances which impeded clarity (McMullin, 2021). The transcripts were then analysed using Reflexive Thematic Analysis (RTA) (Braun & Clarke, 2021). These results were then written up in the report.
Step 7: Dissemination	Preliminary themes and recommendations were reported to the Matching Hub for feedback on feasibility of implementation. Feedback was incorporated into the final recommendations. Final

	recommendations were disseminated to the Matching Hub and ATV managers.

Theoretical Assumptions

The study took a critical-realist perspective within an experiential framework. This allowed for 'ontological realism' which assumes a knowable reality, whilst recognising individuals' perspectives and interpretations (Braun & Clarke, 2021). This is in keeping with the epistemological relativist approach (Sieciel, 2011).

Reflexive Thematic Analysis

The data was analysed using RTA (Braun & Clarke, 2021). An inductive orientation was employed during the analysis, as the research questions and subsequent coding were developed through a theory-driven approach. Primarily, semantic coding was used to capture 'explicitly-expressed' meaning, although more latent codes were developed to capture some implicit meaning (Braun & Clarke, 2021). Additionally, a reflexive log was kept throughout to explore the researchers' positionality.

Table 3

Data Analysis Using Braun and Clarke's (2021) Six-Phase Approach

Phase	Description
1) Familiarising with the Dataset	Each transcript was read through, and familiarisation notes were made on the general ideas and themes of each interview. General familiarisation notes were then made which considered the initial ideas emerging across the complete dataset.
2) Coding	Transcripts were read and sections of text highlighted and labelled as codes if relevant to research questions. Codes were refined through two more rounds: first by reviewing the transcripts in reverse order, and then by reviewing the text coded to each label, one at a time. Through this process, codes were expanded and collapsed and code labels evolved to capture the distinct elements of information (Appendix L)
3) Generating Initial Themes	Through exploring meaningful patterns across data, codes were clustered around centrally organised concepts which generated initial candidate themes (Appendix M). These candidate themes were then

	developed using visual thematic maps to explore the distinct concepts of each theme and how they might relate to each other.
4) Developing and Reviewing Themes	Multiple iterations of visual maps were created, and themes were developed and reviewed through a recursive process of re-immersion in code data and refinement of central thematic concepts.
5) Refining, Defining and Naming Themes	Themes were refined to ensure representation of overarching concepts and defined to ensure distinction from each other. Themes were then named.
6) Writing Up	The themes were then reported in the results section with initial interpretations to illustrate key points. These points were then developed in the discussion section and related to relevant theory.

Results

Questionnaire Responses

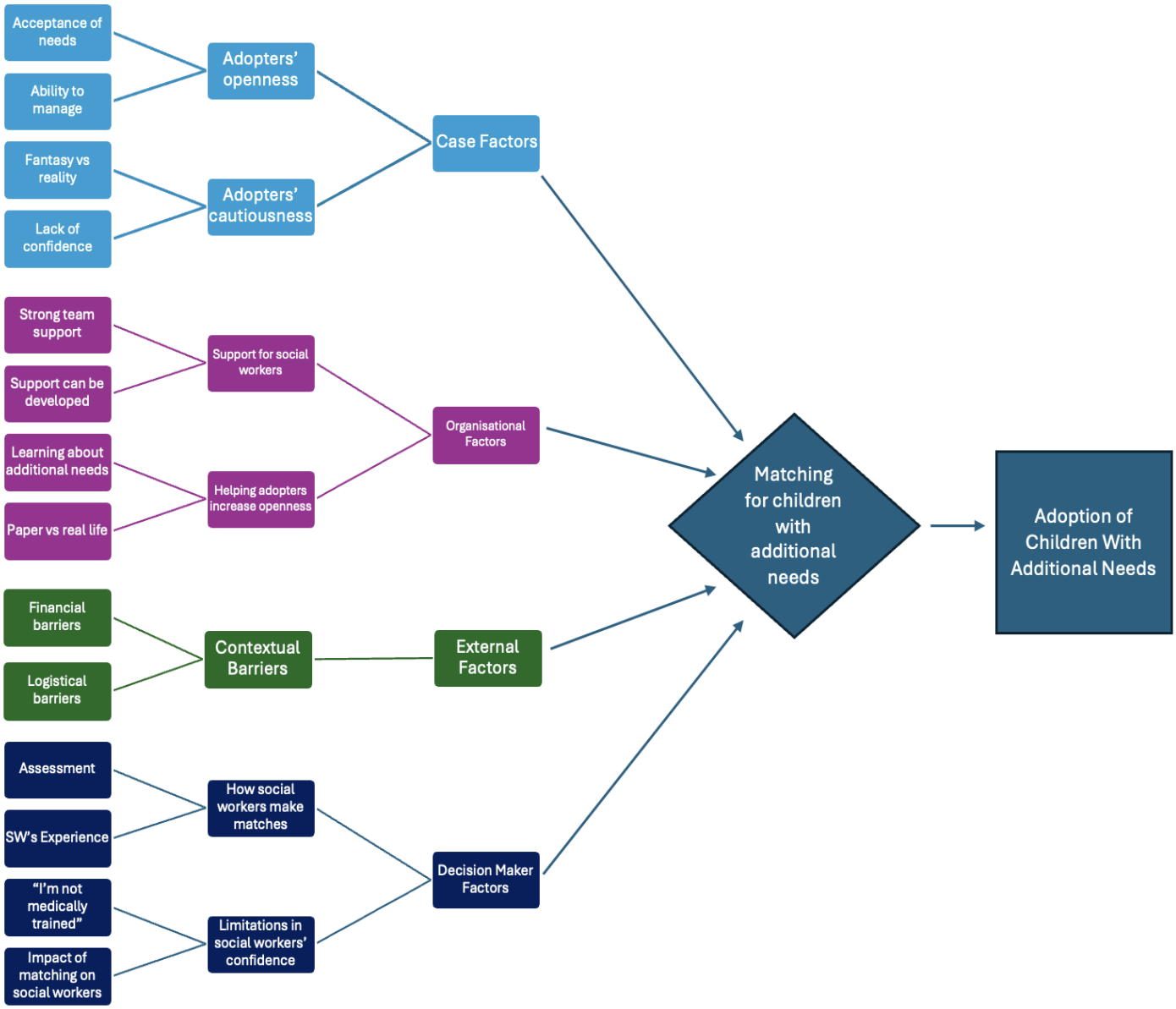
Eight of nine participants reported they had not received specific training around matching children with additional needs. All participants reported using attachment theory. Other theories mentioned included ‘systems theory’, ‘secure base model’ and ‘medical/social model’. All participants reported using individual and peer supervision. Four participants reported they did not use specific policies and documents to help make decisions when matching children with additional needs. Five participants reported using ATV policies, the Children Act 1989 and 2004, Adoption and Children Act 2002, Matching Criteria Grids and Professional Reports. Some participants noted these documents were not specific to children with additional needs.

Reflexive Thematic Analysis

Seven themes and 14 subthemes were identified which mapped onto the four influences outlined in the Decision-Making Ecology Model (Baumann et al. 2014) (Figure 4)

Figure 4.

Adapted Decision-Making Ecology Model



Adopters' Openness (Case Factors)

Social workers identified that some adopters demonstrated openness to adopting children with additional needs. This appeared to be influenced particularly by adopters' ***acceptance*** of the impact of needs:

'...if they can really see past whatever medical issue it is for example, then they really just accept the child for who they are and are really committed.' (P7).

Such acceptance was influenced by adopters' lived experience of interactions with people with additional needs:

'If they have their own lived experiences or within their family of additional needs then they're probably more accepting of children that may have complex needs' (P1)

Social workers described how some adopters appeared to have an ***ability to manage*** the impact of additional needs on children. Tolerance of uncertainty was a significant factor in facilitating this ability:

'Because they're of that kind of particular mindset anyway, that they're able to manage uncertainty'. (P7)

Additionally, social workers described the presentations that adopters felt more prepared to manage. These were often needs they '*expected'* children to experience: Autism

Spectrum Disorder (ASD) (P11), Attention Deficit and Hyperactivity Disorder (ADHD) and parental history of depression (P10),

parental drug use (P2).

Adopters' cautiousness (Case Factors)

Conversely, social workers described the cautiousness some adopters felt in considering adopting a child with additional needs:

'The greatest barrier? I think it's the reluctance of adopters to embrace a child's background at times.' (P11)

Social workers noted that the ***fantasy*** idea of a child meant that adopters were less open to consider children with additional needs:

'I just think that sometimes they have this idealistic picture of a child that they want. And we have to bring them back down to reality and say that these children have come through the care system. They are going to come with issues.' (P2).

Part of this idealised version appeared to be the desire to reduce uncertainty associated with adoption:

'... I think that's one of the challenges, [...] the fear of the unknown is big. And these are people in general, over half are [here] because of infertility and they're terrified it won't work out. So why do you take the risk?' (P10)

Compounding this fear were perceptions of adopters' ***lack of confidence*** in their ability to care for children with additional needs. This appeared to be impacted by perception of a child's diagnosis.

'... if there's a certain diagnosis that a child has, well, certain needs, so things like developmental delay, global developmental delay particularly, they'll feel a bit like, oh gosh, that's not, [...] that feels too much for them because they don't necessarily understand that.' (P10).

Social workers identified a range of additional needs that concerned adopters, particularly, Foetal Alcohol Syndrome (FAS):

'But FAS seems scarier I think to people when I talk about it because it's such a massive spectrum'. (P10)

Physical disabilities which impacted children's mobility:

'... physical disabilities or mobility needs that would mean that their lifestyle would be drastically change.' (P11)

And a parental history of mental health challenges, particularly diagnoses of schizophrenia and bipolar disorder:

'So when looking at children, lots of people if they see things like schizophrenia or bipolar, they would steer away from that as well because they're worried about it being passed down.' (P1)

Support for Social Workers (Organisational Factors)

Social workers identified that ***strong team support*** was key in facilitating the matching process, particularly seeking advice from experienced peers:

'So it is very much just speaking to other people in the team and saying 'Oh I've got the situation like this, have you done anything similar? Where did you look? What did you find?' (P3)

The support of flexible, caring managers appeared to be vital in facilitating social workers' matching work:

'... wonderful managers. They let us get on with our work, we're not micromanaged, but they're there for us and I think knowing your managers have your back, it makes a huge difference, and it makes you feel that actually you are working in a safe environment and that you're not alone.' (P4)

All social workers identified that the Matching Hub was a key support around the matching process. Social workers reported they particularly valued the multidisciplinary approach which appeared to help develop different perspectives on complex cases:

'It really helps to keep the child at the centre of the matching process because sometimes you can get sidetracked by different complexities and my experience with the Matching Hub is really being child centred and child focused and being able to bring professionals around the table to really dig deep into what children need.' (P1)

Of the aforementioned areas of strength, social workers identified areas where ***support could be developed***. Participants identified that support from team members was a significant resource, and several mentioned peer support groups had been helpful. However, many social workers identified that remote working had reduced opportunities to learn from each other.

'... I think this is as a result of not being in the office together, so you don't overhear conversations, you don't catch up with people in the same way because we're all working virtually. So you don't hear about what's being successful with other families, with other children.' (P3)

Additionally, social workers expressed a need for training which focused on specific presentations:

'It would be helpful if we had more specialist training'. (P11)

Helping adopters become more open (Organisational Factors)

An important step in helping adopters become more open appeared to be ***learning about additional needs***. Social workers described how support, including meeting medical advisors (P1), attending training (P6), accessing reports and internet resources (P7), helped with this process by *'demystifying health conditions or developmental conditions' (P3)*.

However, although adopters accessed training and resources, they were also encouraged by social workers to do their own research into conditions. This could sometimes increase adopters' anxiety:

*'They'll go away, they'll google it [*genetic condition*], they'll have a look, and then they'll feel overwhelmed with it' (P3)*

Therefore, social workers identified that adopters meeting children in ***real life vs reading about them on pape*r** was a significant factor in increasing openness. In particular, attending 'activity days' allowed adopters to connect with children and helped *'remove the fear'* (P11).

'... Because I think some people read something on paper and are just like no, and that's often why we end up matching more children, the complex children at activity days because they see past what's on the paper' (P7)

This may be particularly helpful due to challenges in expressing children's personalities in reports: *'Not everyone's able to write a child permanence report that brings a child alive.' (P2)*

Social workers acknowledged practical limitations of increasing activity days and the importance of not exposing children to multiple matching events. However, if these concerns could be addressed, social workers felt more activity days would be beneficial in matching children with additional needs:

'And if we could do that more often, I think that would help' (P10)

Contextual Barriers (External Factors)

Wider contextual factors were identified as barriers to matching children with additional needs. Social workers described how adopters could be concerned about a lack of support from wider agencies. It appeared that ***financial barriers*** reduced confidence in support:

'None of the local authorities have got any money… So being able to access support, I think, is important for people and a possible barrier, 'cause they're not confident that they'll get it. And they're right not to be confident as well.' (P1)

Consequently, some social workers identified that having a clear support plan early in the process helped increase confidence in accessing future support.

'What's the support package around that child and in terms of their health and development? If people can see that, I think that's reassuring.' (P3)

Alongside these constraints, ***logistical barriers*** comprised factors including not having enough adopters to meet children's needs:

'...in the world we're in at the moment because we've got so few adopters, it's harder and harder to find those people that can accept those children.' (P2)

Additionally, social workers identified that delays, e.g. in court processes, posed a barrier.

'... but they can have an impact and [...]that's, you know, that's a shame'. (P6)

Time pressures to complete assessments also sometimes meant social workers weren't able to spend longer exploring adopters' ability to adopt children with additional needs:

'...obviously we're also being pushed that we need to get [...] your assessment and the people approved within a set time frame…' (P7).

How social workers make matches (Decision maker factors)

Social workers detailed what enables them to conduct the process of matching children with additional needs. They described how their ***assessment*** of adopters and children was paramount to making successful matches. This involved assessing adopters' vulnerabilities, strengths, openness to adoption and ability to manage needs. This assessment

process gave social workers opportunities to explore flexibility within adopters' thinking around additional needs:

'...I'm just curious and if it's a flat no, then that's ok. But if there's any wiggle room, I tend to try and explore it as much as I can.' (P10)

Social workers described how attachment theory underpinned much of their work, but that theory was not necessarily used '*explicitly'* (P10). Rather, ***social workers' experience*** appeared to facilitate complex analysis and decision-making.

'... but sometimes it is literally just based on a gut feeling about what people are saying.' (P4)

Reduced confidence for social workers (Decision-maker factors)

Social workers clearly expressed that they were not ***'medically trained'*** *(P4)*.

'We're social workers, we're not health trained. We're not specialists in knowing about the needs of children with additional needs.' (P1)

This reduced their ability to understand children's presentations and support adopters to make sense of these.

Some social workers explained that both they and the adopters could access medical advisors to answer questions. However, most social workers described limited resources outside their own online research to understand different conditions:

'Just nothing really, other than Google. You know, having to look things up myself really. So yeah, just researching things myself, trying to find out what's out there.' (P3)

Additionally, social workers shared how the process of matching children with additional needs impacted them and their work. Despite identifying that the strong team network helped hold responsibility for matches, many social workers still expressed feeling responsibility for matches:

'... we want to get the best out of this for the child and when that sadly hasn't happened, you know, you do beat yourself up. There's absolutely no doubt about it.' (P6)

Participants described the emotional impact both of matches disrupting and not finding matches for children with additional needs.

'... it can be really disheartening because you can go along to a 'Marvellous Matching Meeting' and there really are no adopters to meet the child's needs' (P8)

These negative experiences led some social workers to feel more cautious about making future matches:

'...some are more risk averse than others. And I understand why.' (P10)

Discussion

Nine social workers were interviewed about their perspectives on facilitators and barriers to matching children with additional needs. This discussion reports the outcomes through the lens of the Decision-Making Ecology Model and wider literature. Service recommendations are outlined alongside strengths and limitations.

Barriers

Social workers described how the characteristics of prospective adopters were both facilitators and barriers at an individual case level. When adopters were less accepting of a child's needs or felt unconfident in their ability to manage needs, this presented a significant barrier. In keeping with Burge and Jamieson (2006)'s description of parents' comparison of 'a real available child to an imagined biological child' (p. 590), it appeared that at times adopters strove for matching with a 'fantasy' child, which reduced openness to adopting children with additional needs.

Adopters reportedly felt particularly unconfident to manage additional needs including FAS, severe parental mental health diagnoses and physical disabilities. The lack of certainty around future presentation of needs was cited as a significant factor; this chimes with the recognition within decision-making theory that people attempt to reduce uncertainty to maximise expected positive outcome (Tallman & Gray, 1990). However, a nuanced understanding of needs may not be accessible for all adopters, suggesting more education from supportive and reliable sources is needed.

The role of ethnicity in matching was not mentioned by any participant, despite government reports (HMG, 2024) showing that children from Black, Asian and 'Other' ethnic groups were the least likely to leave care due to adoption. The fact that the participants and the researcher were White British may have created a 'white normativity' which discouraged discussion of ethnicity - an issue often seen in 'white-on-white' qualitative research (Phillippo & Nolan, 2022). Or perhaps, participants took the stance noted in the introduction that ethnicity should not be conceptualised as an 'additional need' and therefore excluded this from discussion. In both cases, the lack of discussion of the experiences of children of colour suggests a need to further explore the role of ethnicity in the matching process.

At an external support level beyond ATV, social workers felt adopters were concerned about future support to manage additional needs. This was particularly due to financial barriers in the public sector, which is even more prevalent following years of austerity (Broadbent et al., 2023). Creating earlier support plans may help to mitigate some fears of the future related to a lack of resources.

Examining social workers decision-making factors, it was clear that experience facilitated 'gut decisions' throughout matching. However, social workers felt less confident in their understanding of specific additional needs. This lack of specialist knowledge meant they were learning through the same pathways as adopters, often online. Considering that research has shown that adopters look to social workers as 'mentors' through the process (Denby et al., 2011), increased knowledge of needs may help support adopters in their understanding (Coram, 2025).

Facilitators

Social workers highlighted individual case factors which facilitated matching – namely adopters' ability to accept the background of a child and the uncertainty this may bring. Matching was easier when adopters had previous lived experience of additional needs, and when those additional needs were as expected when going into the process.

Significant facilitators to the matching process were organisational-level opportunities to support adopters in becoming open to adopting children with additional needs. Burge and Jamieson (2009) describe how adopters re-evaluate themselves throughout the process, and that increased knowledge of children and needs allows greater flexibility. This study supports such findings, as social workers detailed how opportunities for learning about additional needs, combined with meeting children in person, helped adopters consider children they previously had been unsure about.

As described by Farmer et al., (2010), social workers were able to use complex assessment skills to evaluate adopters' openness and potential flexibility. These decision-making abilities were facilitated by strong team support, particularly drawing on peer experiences. However, the move to remote working had reduced the opportunity to develop this information sharing.

Good management was deemed key to supporting social workers in this complex work (Lambley, 2010). Additionally, the Matching Hub appeared to be a particularly important resource as social workers identified that discussing cases with multiple professionals developed perspectives on complex matching processes. These three elements

of team support meant that social workers were able to support adopters in matching with children with additional needs.

Recommendations

Following preliminary analysis, themes and proposed recommendations were discussed with the Matching Hub to ensure feasibility. Resulting service recommendations are outlined below.

Table 4

Recommendations

Recommendation	Rationale
Specialist training to be implemented for social workers around specific additional needs	Social workers highlighted a lack of confidence in their knowledge of specific needs. As it was identified that FAS, the impact of parental mental health, and physical disabilities were of particular concern for adopters, it is recommended that training addresses each of these areas. As social workers play a vital role in supporting and preparing adopters for adoption, greater professional understanding of needs may help adopters have a more in depth understanding of such additional needs and the implications of these as they move through the matching process. Following the dissemination of this recommendation, the Matching Hub is offering informal training around specific needs through a consultation

	model. It would be beneficial for the next step to include formal training from specialists in each highlighted area of need.
Bi-weekly online drop in space for peer discussion	Social workers identified that peer discussion and reflection was a significant support in developing their work. However, since moving to working online, opportunities for such discussions have become limited. Although formal peer support groups were reported to be timetabled, it appeared that a more informal space was needed for more ad hoc conversations. As such, facilitating a bi-weekly drop in space on Teams would allow social workers a place to seek support from peers as when it was needed, without placing mandatory demands on their time.
Continuation of funding for the Matching Hub	Social workers were unanimous in reporting that the Matching Hub was an important resource in supporting them in more complex matching cases. As the Matching Hub is a new service, it is recommended that this service continues to provide support for social workers. This recommendation has begun to be implemented as evidence from this report has been submitted to the Department for Education to secure future funding.

Matching Hub to support with developing early support plans for children with additional needs.	One process which helped mitigate adopters' concerns about future lack of support was the development of early support plans. This helped to build adopters' confidence in being able to manage children's additional needs. The Matching Hub supports social workers early in the matching process to develop a comprehensive support plan for children with additional needs drawing on their multi-disciplinary approach. It is recommended that the Matching Hub carries out an audit in collaboration with the Post-Adoption Team to assess the effectiveness of enacting these plans following adoption, and whether developing support plans early in the matching process translates to more effective support post-adoption, in comparison with support plans that are developed later. It is recommended feedback is obtained from adopters about the helpfulness of the support plans as part of this audit.
Increasing ATV Activity Days to three a year	It was clear from the interviews that when adopters had the opportunity to meet children in person, they were able to build connections and develop flexibility in their openness to adopting children with additional needs. Therefore, it is recommended that the number of Activity Days increases from two to three a year. However, it is recommended that different children attend each Activity Day, as repeated attendance may cause distress. Giving adopters more

	opportunities to meet children in person may help mitigate the tendency to dismiss children with additional needs based on their written profile.
Use of videos in children's online profiles	As social workers identified that seeing children in person significantly increased opportunity for matching, it is recommended that videos of children are included in their profiles, alongside photographs. This may help bring children 'to life' in a way that is not captured through static images, and have a similar effect to meeting children in person. The Matching Hub regularly recommends this to social workers; however, it does not appear that has become standard practice. It may help social workers to create videos if specific guidelines are shared around video-making. For example, guidance on whether to create candid videos or interview children answering a standardised set of questions, which devices to make videos on, where and how to store and share these on systems and in meetings.
Ethnicity	There was no mention of ethnicity in the matching process, which was surprising considering national research suggests children from a global majority wait longer to be adopted. This suggests further exploration of the role of ethnicity in matching is needed. It is recommended that an audit is carried out on the number of

	children of colour waiting to be adopted and how this compares to their white peers. If there is a discrepancy, it is recommended that reflective team discussion is facilitated by the Matching Hub to explore reasons for this, and create an action plan to tackle any inequity in matching children based on ethnicity.
Language	The term 'additional needs' is used to encompass a wide range of social, emotional and physical characteristics. It has been highlighted that this term aims to move away from the language 'harder to place', yet 'additional needs' remains inadequate as this considers needs e.g. physical disabilities alongside personal characteristics such as gender, age, ethnicity, or being part of a sibling group. Therefore, it is recommended that the language is reviewed, and additional terms are proposed to reflect the differences in these characteristics.

Strengths and Limitations

The study interviewed both Family Finders and Link Workers, aiming to include a breadth of perspectives. The cohesion across interviews suggests the recommendations may be effective across both roles. However, it was beyond the scope of the project to hear adopters' perspectives; future research should aim to capture adopters' perspectives.

Additionally, the project considers outcomes for children with additional needs, yet the researcher does not experience additional needs herself. This may have limited understanding of the process. Moreover, there was homogeneity across the participants and researcher, particularly in gender and ethnicity, which may have narrowed perspectives. However, the researcher taking an RTA approach and keeping a reflective log allowed reflection on their positionality within the work.

Conclusion

RTA illuminated significant strengths and areas for improvement in the matching process for children with additional needs. Barriers included adopters' cautiousness, lack of social workers' specialist knowledge and contextual barriers. However, support for social workers enabled them to make complex decisions and help adopters to become more open. This openness was enhanced by adopters' accessing learning and meeting children in person. Recommendations include more specialist training for social workers, increasing activity days and use of video profiles, greater opportunity for peer learning and the continuation of the Matching Hub.

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Theory Driven Research Project

Investigating Self-stigma in Parents of Young People with a Diagnosis of Functional Neurological Disorder

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Proposed Journal: *Social Sciences and Medicine – Mental Health.* One of the key focuses of this journal is social determinants of mental health and exploring the disparities within this. This research study examining perception of stigma and the impact on mental health supports this aim. Additionally, this journal welcomes mixed-method research.

Abstract

Young people diagnosed with Functional Neurological Disorders (FND) are known to experience stigma. However, no research has yet explored the stigma experiences of their parents. This study examined the impact of stigma on parents of young people diagnosed with FND in comparison to parents of young people with asthma. Mann-Whitney U tests demonstrated significantly higher levels of Stigma Awareness, Self-Stigma, and Distress among parents of young people with FND. For these parents, Stigma Awareness predicted Distress, but Self-Stigma did not mediate this relationship, nor did it independently predict Distress. Reflexive thematic analysis developed four themes which helped illuminate these results: Judgement of Parents, Distress, Internalisation of Stigma and Defiance. These qualitative findings developed understanding of results from the statistical analysis and helped explain relationships between stigma and distress. Limitations and future research directions are discussed.

Key Words: Stigma; Self-stigma: Distress; Functional Neurological Disorder; Parents

Highlights

- Parents of children with FND experience public stigma, self-stigma and distress
- For these parents, stigma awareness predicts self-stigma and distress
- Self-Stigma does not predict distress for parents of children with FND
- Qualitative findings demonstrated heterogeneity in parents response to stigma

1. Introduction

1.1 Stigmatisation of health disorders

Goffman (1963) defined stigma as an attribute, both actual and inferred, that is discrediting and leads to a person becoming 'tainted' or 'discounted' (p.3) (cited in Brohan et al., 2010). Early theories of stigma considered 'micro-level' interactions between individuals (Oliver, 1990); however, critics argued stigma must be understood in the context of power (Link & Phelan, 2001) and socio-cultural environment (Mukolo et al., 2010).

Consequently, research recognised that stigma encompassed multiple dynamic facets, rooted in social processes (Pescosolido & Martin, 2015). These include public stigma – 'the stereotype, prejudice and discrimination endorsed by the general population' (p.92), and self-stigma - the internalisation of these components which negatively impacts self-esteem and self-efficacy (Brohan et al, 2010).

Stigma has been associated with a multitude of physical and mental health conditions, causing distress and poorer outcomes (Van Brakel, 2006). However, research suggests stigma differs depending on whether a person experiences physical or psychological difficulties. Kowalski & Peipert (2018) demonstrated in a study of 243 participants that both individuals with physical and psychological disabilities experienced public and self-stigma. However, significantly higher levels were related to psychological disabilities. Research suggests people with mental health challenges are perceived as dangerous and held more responsible for their experiences than those with physical conditions, leading to greater rejection and discrimination (Corrigan et al., 2002; Feldman & Crandall, 2007). However, this distinction

varies greatly depending on the specific condition, co-morbidity of physical and psychological experiences, intersectionality, and cultural context (Jackson-Best et al., 2018).

1.2 Parent Stigma

Research also demonstrates that caregivers are stigmatised. In a study of caregivers of 461 people with mental health disorders, 43% felt families experienced stigma (Struening et al., 2001). Similarly, qualitative research with 17 parents of children with cystic fibrosis demonstrated experiences of stigma within both families and wider society (Su et al., 2024). Brooks et al. (2020) reported 23% of 3,398 children in a national survey experienced long-term conditions or disabilities. Therefore, parents are a prevalent group of caregivers to those experiencing poor health. Studies of children with physical health conditions have highlighted parents' fear of stigma for their child and distress experienced as a result (Kerr & Haas, 2014; Rani & Thomas, 2019; Su et al. 2024). Additionally, 'courtesy stigma' is described in some studies: caregivers may experience stigma due to proximity to a stigmatised individual (Maldonado et al., 2023).

However, research with parents of children diagnosed with mental health or neurodevelopmental disorders has highlighted stigma regarding caregivers' role as parents, particularly being blamed for their children's experiences (Corrigan & Miller, 2009; Eaton et al., 2016; Fernandez & Arcia, 2004; Kinnear et al., 2016). This blame relates to negative stereotypes of parents relating to genetics (inheriting 'bad genes' from parents); not caring adequately for children; or not meeting the 'idealised' standards of parenting (Serchuk et al., 2021). However, there is significantly more research regarding parents of children with

psychological difficulties than physical difficulties, which may impact understanding of differences in parental stigma.

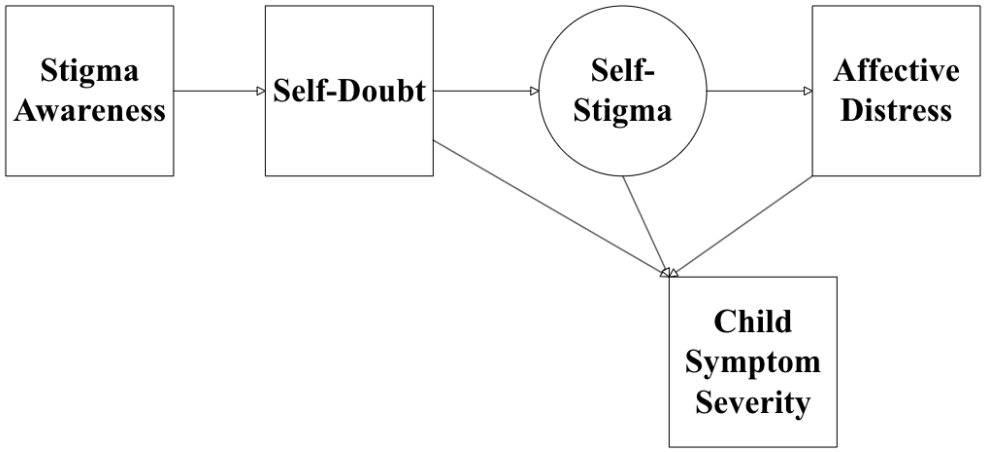
1.3 Parent Self-Stigma

Self-stigma refers to the internalisation of stigmatising public perception (Corrigan & Watson, 2002). Parents of children with mental health disorders can experience self-stigma by internalising negative perceptions e.g. of being a 'bad parent' and endorsing stigmatising stereotypes (Zisman-Ilani et al., 2013), leading to emotional distress and self-blame (Francis, 2012; Moses, 2010).

In 2019, Eaton et al. proposed self-shame, self-blame and bad-parent self-beliefs defined the construct of self-stigma in parents of children with mental health disorders. This led to the development of the Parent Self-Stigma Scale (Measures). Eaton et al. (2020) then developed a model capturing parents' experiences of stigma, shown below. The model was empirically tested; significant parameter estimates indicated direct pathways between model components.

Figure 1

Stigma Pathway - Reproduced from Eaton et al. (2020).



1.4 Stigmatization of children with FND

Functional Neurological Disorder (FND) is an umbrella term which describes a variety of neurological symptoms including seizures, tics and loss of movement (Espay et al., 2018), in which the 'primary pathophysiological processes are alterations in functioning of brain networks rather than abnormalities of brain structures' (Hallet et al., 2022, p.537). Children experiencing FND regularly present in neurology and epilepsy clinics (Vassilopoulos, 2022); however, FND is often categorised as 'psychological' as the underlying cause is not detected by medical tests (Brown & Reuber, 2016). As such, FND occupies a complex place at the 'intersection of neurology and psychiatry' (Mavroudis et al., 2024).

People diagnosed with FND face stigma, perhaps due to difficulty categorising the condition within health services which often endorse the Cartesian dualism of separate mind

and body disorders (Aybeck & Perez, 2022). As the disorder is often misunderstood as not 'real' (Kozlowska et al., 2021), stigma is prevalent among both the public and health professionals. Iatrogenic harm stems from professionals' belief that patients 'fake' symptoms and dismiss FND as less significant than 'organic' disorders (Mcloughlin et al., 2025).

1.5 Stigmatisation of parents of children with FND

As outlined, most research into parent experiences of stigma focuses on parents of children with mental health disorders, with some studies examining courtesy stigma in parents of children with physical disabilities. However, experiences of parents of children with FND have not yet been explored. These parents may occupy a unique position regarding their stigma experiences, due to the way FND has been related to both neurology and psychiatry.

1.6 Aims

This research investigated stigma experiences of parents of children with FND compared with parents of children with asthma, to establish whether experiences differ when children have a physical health diagnosis, asthma, versus an FND diagnosis which straddles both physical and mental domains. The study examined whether in comparison to parents of children with asthma, parents of children with FND experience a) greater stigma awareness; b) greater levels of self- stigma; and c) higher levels of affective distress. The secondary aims were to explore a) predictive relationships between these variables; and b) whether self-stigma mediates the relationship between stigma awareness and distress in parents of children with FND.

2. Method

2.1 Design

A mixed-methods cross-sectional design was used. A between-groups analysis compared levels of stigma awareness, self-stigma and affective distress between parents of young people diagnosed with FND ('FND parents') and parents of young people diagnosed with asthma ('asthma parents'). FND parents completed optional written responses regarding stigma experiences, which aimed to capture a more nuanced understanding of stigma and the relationship to distress.

The Central University of Oxford Research Ethics Committee granted ethical approval (R95257/RE001).

2.2 Participants

Participants were recruited through social media e.g. Facebook and Instagram; charity platforms e.g. FND Hope, FND Action, Tourette's Action and Asthma and Lung UK; and adverts in school newsletters. Snowball sampling was employed. Inclusion criteria were parents of young people diagnosed with FND or asthma and aged between 11 and 17 years. Parents had to be aged 18 years or older, be able to read and write in English and live in the UK. Parents were excluded if they had a significant mental health condition resulting in a hospital stay in the last five years, a diagnosed learning or intellectual disability, or their child had both FND and asthma.

2.3 Procedure

Participants accessed the study via the link or QR code on recruitment materials. Participants read the information sheet, consented to take part and completed the eligibility questionnaire before accessing measures (See appendices). If participants were not eligible, they were shown a debrief sheet with links to support and information resources. The debrief sheet was available following study completion.

2.4 Measures

Demographic questionnaires recorded parental age, gender, ethnicity, and physical and mental health. Parents also reported child characteristics: age, gender, ethnicity, age when diagnosed, time since diagnosis, neurodiversity diagnoses, learning disability diagnoses, additional mental health and physical health diagnoses. These questions were chosen as these characteristics may impact stigma experiences (Kapadia, 2023; Khudiakova et al., 2024).

Table 1

Questionnaire Measures

Measure Used	Description
Parent's Stigma Awareness Scale (PSAS; Eaton et al., 2020)	The PSAS measured parent's awareness of bad-parent, courtesy and blame stigma on a Likert scale. This scale 11-item measure was developed by Eaton et al. (2020) but is unpublished. Permission to use the measure was

granted by the authors. This scale has been chosen, despite lack of use by other researchers, as it measures key constructs of parental stigma awareness (Appendix R). High internal reliability has been demonstrated (α= 0.89, M = 4.05, SD = 0.58). The wording in the measure was adapted from 'emotional and/or behavioural problems' to 'physical and mental health conditions' in accordance with feedback from experts by experience. Both PSAS and PSSS were adapted to name FND and asthma specifically rather than a 'problem'.

Parent's Self-Stigma Scale (PSSS; Eaton et al., 2018)

The PSSS was used to capture parental self-stigma (Eaton et al., 2019) The questionnaire consists of 11 questions e.g. 'I'm the best parent I can be' answered on a Likert Scale (Appendix S). Three subscales are included, self-blame, self-shame, and bad-parent self-beliefs, developed through factor analysis. Convergent validity was demonstrated by the negative correlation between the PSSS and self-esteem and empowerment, which are thought to be the obverse of self-stigma (Corrigan et al., 2012). There is no current data available on test-retest reliability.

Kessler Psychological Distress Scale (K10; Kessler et al., 2002)	The Kessler Psychological Distress scale (K10) was used to measure parental distress levels. This measure consists of 10 items which assess symptoms of anxiety and depression using a 5-point Likert Scale. The scale was designed to provide screens for non-specific psychological distress and has been shown to have good psychometric properties and internal reliability (Catalogue of Mental Health Measures, 2023; Hoffman et al., 2022).

2.5 Qualitative Questions:

FND parents were given the option to answer two open-ended questions about their stigma experiences (Appendix T).

2.6 Experts-by-Experience

Three experts-by-experience were consulted. They provided feedback on study objectives, recruitment materials, communications, measures, qualitative questions and language, ensuring appropriateness and sensitivity.

2.7 Statistical Analysis

A priori power analysis was conducted using G*Power 3 software (Fual et al., 2009) to determine sample size for primary hypotheses. As no published research states effect size in studies of parental self-stigma, Cohen's medium effect size (0.5) was used. The analysis identified 128 participants (64 in each group) were required to detect an effect size of 0.5 at a power of 0.8.

Descriptive analyses explored correlations between variables and differences between demographics. Mann-Whitney U tests were conducted to examine Stigma Awareness, Self-Stigma and Distress between groups. Linear regressions and mediation analysis were then conducted.

2.8 Qualitative analysis

Reflexive thematic analysis (RTA) was used to explore relationships between variables, using a deductive approach (Table 2; Braun & Clarke, 2021). Spelling and grammar errors were corrected for clarity.

Table 2

Braun and Clarke's Six Step Approach

Phase	Description
1) Familiarising with the Dataset	Answers to the free text questions were read and notes were made of overall ideas and concepts. A summary of the dataset was written to capture the initial understanding of the information.
2) Coding	During the first analysis session, the dataset was labelled with codes. The second session involved refining wording of codes and collapsing or expanding codes. Both semantic coding of explicit meaning and latent coding of implicit assumptions was used. (Appendix U).
3) Generating Initial Themes	Codes were clustered around key concepts to form ten initial candidate themes. (Appendix V).
4) Developing and Reviewing Themes	Visual maps of candidate themes were created to explore relationships between them.
5) Refining, Defining and Naming Themes	Candidate themes were then refined by collapsing them into three main themes and six sub-themes. These were then named.

6) Writing Up	Results were written into a cohesive narrative, using quotes from participants to illustrate key points.

3. Results

3.1 Quantitative Analysis

3.1.1 *Descriptives*

Initially, 134 responses to the survey were recorded. Four sets of data were excluded due to children's age (n=2); a child diagnosed with both asthma and FND (n=1); and a dataset being flagged as a bot response (n=1). 130 respondents remained with 65 participants in each group.

The mean age of FND parents was 45.70 years old (SD=5.94). One data entry for parent age was a significant outlier; it was assumed to be erroneous, and therefore excluded (Appendix W). FND children were aged from 11 to 17 with a mean age of 14.92 years (SD=1.65). On average, children had experienced FND for 2.28 years (SD=2.02) and had been diagnosed at 12.94 years old (SD = 2.32).

Asthma parents had a mean age of 46.09 years (SD=5.26), and their children ranged from 11–17 years old (M=13.66, SD=2.13). On average, children with asthma had experienced symptoms for 9.34 years (SD=4.18) and had been diagnosed in early childhood (M=4.62 years, SD=3.08). See table for further demographics. Parents also reported physical and mental health conditions of themselves and their children (Appendix X).

Table 3

Demographic Data

Baseline Characteristic	FND		Asthma	
	n	*%*	*n*	*%*
Total	65	100	65	100
Parent Gender				
Male	0	0%	2	3.1%
Female	65	100%	63	96.9%
Parent Ethnicity				
White	62	95.4%	54	83.1%
Black or Black British	0	0%	2	3.1%
Asian or Asian British	0	0%	7	10.8%
Mixed Ethnic Background	1	1.5%	2	3.1%
Other	2	3.1%	0	0%
Parent Mental Health Condition [a]	16	24.6%	8	12.3%
Parent Physical Health Condition [a]	23	35.4%	30	46.2%
Child Gender				
Male	17	26.2%	40	61.5%
Female	45	69.2%	25	38.5%
Non-Binary	1	1.5%	0	0%
Other	2	3.1%	0	0%
Child Ethnicity				
White	59	90.8%	52	80.0%
Black or Black British	0	0%	2	3.1%

Asian or Asian British	0	0%	6	9.2%
Mixed Ethnic Background	4	6.2%	4	6.25
Other	2	3.1%	1	1.5%
Autism Diagnosis [a]	32	49.2%	10	15.4%
ADHD Diagnosis [a]	13	20.0%	10	15.4%
Learning Disability Diagnosis [a]	6	9.2%	3	4.6%
Child Chronic Physical Health Condition [a]	17	26.2%	15	23.1%
Child Mental Health Condition [a]	27	41.5%	3	4.6%

[a] *Reflects the number and percentage of participants answering "yes" to this question.*

Note – if responses were 0 in both groups, data was not reported

3.1.2 *Missing Data*

Due to a technical error, responses to a question in the PSAS scale were not recorded for either group. ("People think parents of children with FND/Asthma are bad parents"). However, Cronbach's Alpha analysis demonstrated excellent internal scale consistency for both groups (α=.91). This provided confidence that the scale measured the construct of stigma awareness, despite missing data. Mean scores were calculated for each respondent and imputed into the missing item (Huisman, 2000) (Appendix Y).

3.1.3 *Preliminary Analysis*

3.1.3.1 Independence of groups

Demographic variables were compared between groups. Mann Whitney U tests established FND children were significantly older $U = 1385$, $z = -3.423$, $p = <.001$, were diagnosed significantly later $U = 126$, $z = -9.276$, and had experienced FND for less time than children with asthma $U = 3916$, $z = 8.482$, $p = <.001$.

Chi-square tests of association demonstrated significant differences between groups regarding parent ethnicity $\chi^2(1) = 5.123$, $p = .024$, with more FND parents identifying as White, and child gender, with more girls diagnosed with FND than asthma $\chi^2(1) = 16.527$, $p = <.001$. Additionally significant differences were found in diagnosis of autism $\chi^2(1) = 17.024$, $p = <.001$ and additional mental health conditions $\chi^2(1) = 24.960$, $p = <.001$ with more children with FND receiving these diagnoses. Of the 27 FND children experiencing co-morbid mental health diagnoses, anxiety and depression were most prevalent (Appendix X).

3.1.3.2 Correlations

Pearson correlation analyses were conducted between demographic covariates and independent variables (Appendix Z). FND analysis showed correlation between Stigma Awareness and Self-Stigma $r(63) = .54$, $p < .001$ and Stigma awareness and Distress $r(63) = .23$, $p = .046$. A child's diagnosis of autism positively correlated with parent stigma awareness $r(63) = .31$, $p = .013$ and diagnoses of additional mental health conditions

positively correlated with Stigma Awareness $r(63) = .32$, $p < .001$ and Self-Stigma $r(63) = .25$, $p=.43$.

The asthma analysis did not show correlations between Stigma Awareness, Self-Stigma or Distress. Parental mental health diagnosis positively correlated with Distress $r(63) = .59$, $p < .001$. Autism diagnosis positively correlated with stigma awareness $r(63) = .271$, $p= .029$, and ADHD diagnosis positively correlated with parent distress $r(63) = .27$, $p = .028$.

3.1.4 *Main Analyses*

The primary hypotheses examined whether Stigma Awareness, Self-Stigma and Distress were greater in FND parents compared to asthma parents. A Shapiro-Wilk's test of normality determined that data for each variable were not normally distributed ($p > .05$). Therefore, non-parametric Mann-Whitney U tests were conducted. This showed that Stigma Awareness was statistically significantly higher for FND parents $U = 766$, $z = -6.276$, $p = .001$; Self Stigma was statistically significantly higher for FND parents $U = 1531$, $z = -2.713$, $p = .007$; and there were significantly higher rates of distress within FND parents compared to asthma parents. $U = 905$, $z = -5.628$, $p = <.001$. The median score for Distress in FND parents fell in the 'moderate mental disorder range' and asthma parents' score fell in the 'likely to be well range' (Kessler et al., 2002).

Table 4

Comparison Data

Group	FND Parents	Asthma Parents
Stigma Awareness	Mdn = 34.19	Mdn =23.10
	IQR = 16	IQR = 11
Self-Stigma	Mdn =21.00	Mdn = 18.00
	IQR = 13	IQR = 7
Distress	Mdn = 26.00	Mdn =17
	IQR = 12	IQR = 9

Mdn = median

IQR = Interquartile Range

Differences in sub-scales across the Parent Self-Stigma Scale were analysed. FND parents scored significantly higher in the 'Self-Blame' and 'Self-Shame' subscales than asthma parents $U = 1555.50$, $z = -2.603$, $p = <.009$; $U = 1300.50$, $z = -4.025$, $p = <.001$. There was no significant difference in 'Bad Parent' subscale.

3.1.5 Secondary Analyses

Secondary analyses explored relationships between Stigma Awareness, Self-Stigma and Distress in each group. First, a linear regression was conducted to establish the impact of Stigma Awareness on Distress. For FND parents, a Durbin-Watson statistic of 1.928 demonstrated independence of residuals. The regression analysis established greater levels of Stigma Awareness predicted greater levels of Distress $F(1, 63) = 4.14$, $p < .046$. However, effect size was low $R^2 = .062$.

Linear regression analysed whether Stigma Awareness predicted Self-Stigma in FND parents. Durbin Watson statistic was 2.393, and regression demonstrated a statistically significant relationship $F(1, 63) = 26.442$, $p < .001$ with 29% of the variance in Self-Stigma explained by Stigma Awareness.

A non-significant linear regression demonstrated Self-Stigma did not predict Distress in FND parents. None of these three pathways were statistically significant amongst asthma parents.

A mediation analysis was conducted (Hayes, 2017). PROCESS macro was used to assess whether Self-Stigma mediated the relationship between Stigma Awareness and Distress. The analysis confirmed Stigma Awareness predicted Self-Stigma (*B*= .430, *SE*= .084, *β*= .544, *t(63)*= 5.142, *p* = <. 001), and a total effect of Stigma Awareness on Distress (*B*= .208, *SE*= .102, *t(63)*= 2.035, *p* =. 046). However, the indirect effect was non-significant, indicating Self-Stigma did not mediate the relationship. Additionally, the direct effect from Stigma Awareness to Distress only was non-significant, suggesting additional variables may influence this relationship.

3.2 Qualitative Analysis

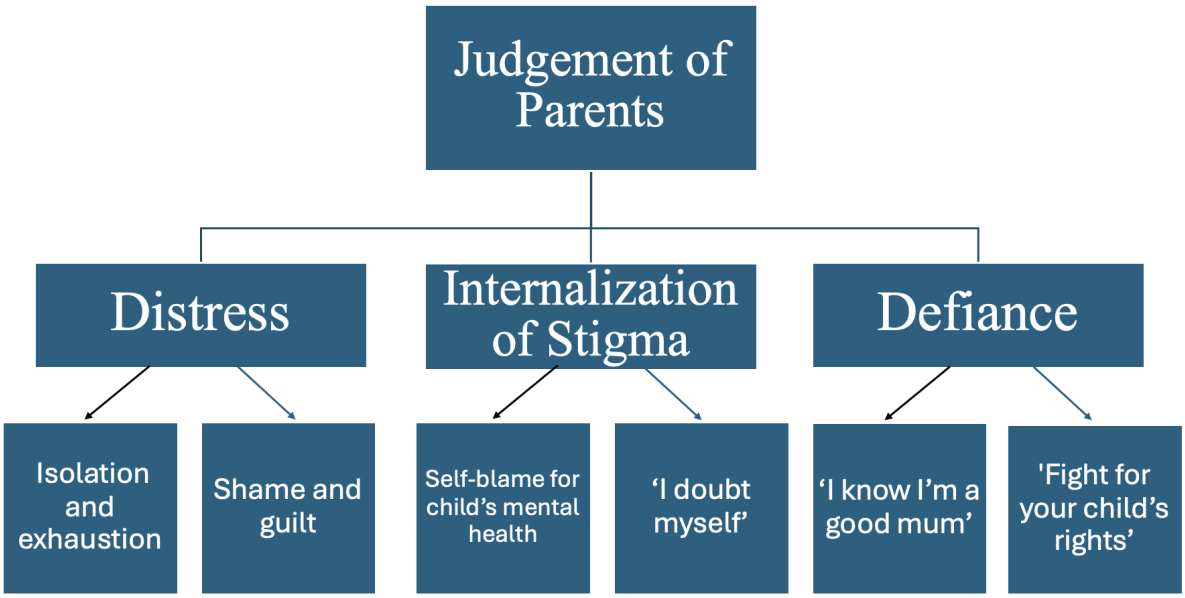
RTA was conducted on 34 responses from FND parents. Analysis generated an overarching theme 'Judgement of Parents', three further themes 'Distress', 'Internalisation of Stigma', 'Defiance', and additional sub-themes (Figure 2).

Parent responses ranged from single-word answers to paragraphs over 200 words. Most parents wrote a few sentences. Five respondents reported they had not experienced stigma; one parent elaborated this was because friends and family had been supportive.

The theme 'Judgement of Parents' was supported by the majority of remaining responses. 'Distress' represented codes from around half the sample, and 'Internalisation of Stigma' around a third. The theme 'Defiance' was developed from answers from approximately a quarter of the group.

Figure 2

Themes and Sub-Themes



3.2.1 Judgement of Parents

Parents were clear that stigma significantly impacted their experiences of parenting a child with FND. Several participants had been told their child was *'making it up'* and many described being dismissed or judged by medical professionals. This appeared particularly related to FND not being treated as a 'physical' concern: '*They need to realise that a mental health condition is still a health condition'(P26).*

Parents detailed the judgement and blame they perceived for their children's condition: *'...the hospital doctor who saw her treated me like I had caused a trauma to my child…'* However, this perception dissipated when the causes of the condition were thought to be neurological: *'her manner towards us completely changed'(P8),* suggesting parents were held responsible for FND, but not 'medical' disorders.

Parents described public judgement of the management of their child's symptoms e.g. not calling an ambulance for non-epileptic seizures: *'...they think they know more about my child than I do!'(P7)* This judgement also came from parents: *'You get this sense that other parents are looking at you sideways and thinking "you've clearly done something wrong, else the child wouldn't be this broken."'(P28)* This parental judgement appeared to invite direct comparison with other families who did not experience such challenges.

3.2.2 Distress

Parents detailed negative emotions they experienced as a result of stigma.

3.2.2.1 Isolation and Exhaustion

Parents described how judgement and lack of support negatively impacted families*: 'It's very lonely, scary and exhausting….'(P26).* Additionally, parents described the isolation caused by not being understood by others: *'On a good day you can't see the physical problems and not many people see the mental so unless they know our story definitely don't understand and even if they do don't really understand'(P16).*

3.2.2.2 Shame and Guilt

Distress was compounded by feelings of shame in response to treatment by others: *'It is mortifying'(P29).* This was linked both to experiences with medical professionals and whilst in public, particularly when accessing services, due to perceptions that children with FND *'don't look disabled'(P31).* Public judgement of parenting directly caused distress *'...it makes me feel like they view me as a bad/hard hearted mother. It always makes me feel a little guilty, worthless and useless'(P7).*

3.3.3 Internalisation of Stigma

The experience of stigmatisation from others was internalised by some participants, impacting their view of themselves as parents.

3.3.3.1 Self-Blame for child's mental health

Some parents felt they played a role in their children's mental health, and therefore FND, and took responsibility for this: *'I blame myself for her conditions'(P16).* This manifested both in worry about not preventing the condition: *'You can't help but feel your child's FND is at least partly your failure to protect them from mental ill health'(P8),* and blame for transmitting poor mental health to their children. *'...I do feel guilty for my anxious ways clearly got passed down'(P15).*

3.3.3.2 'I doubt myself'

Stigma caused parents to question themselves, both about past actions: *'I wonder if I could have done more or done things differently'(P10),* and their current response to the condition: *'Am I doing all I can to help my child [?]'(P21)* These questions appeared to impact parents' confidence in themselves and increase vulnerability to internalising stigma.

3.3.4 Defiance

Despite some parents experiencing negative self-beliefs, a sub-section of parents did not respond to stigma in this way.

3.3.4.1 'I know I'm a good mum'

Some parents described rejecting self-stigma and externalising blame to others. For example, Participant 15 expressed guilt for their child's conditions, but also rejected stigma

by attributing responsibility to the school environment: *'Her poor mental health isn't from my being a shit parent. It's from crap school support/lack of pastoral care and refusal to see her SEN needs'(P15).*

3.3.4.2 Fight for your child's rights'

Others described how stigma caused negative emotions towards others, rather than themselves. *'It made me angry, when professionals didn't believe it or blamed the fact the sister/ brother also had FND so they was just asking for attention.'(P6)* This motivated parents to advocate for children. *'It makes me more defiant to protect my child and advocate for them.'(P31).*

Table 5

Sample Quotes

Theme	Examples of Quotes
Judgement of parents	People think because it is not epilepsy then it is not real. (P9) My child often has fits (non-epileptic) and I feel when she has one everyone is watching me to see what I'm going to do. (P13) I have had family members stating that me talking about it leads to his seizures. That I just need to be more positive for him. (P18) Health professionals seem to not bother, they make you feel as if you are a pain wasting time … (P19) From school as they said it was my fault she was like this, all because they didn't understand the condition. [P15] People have stared when my child has seizures in public. I think they are judging because I'm not seeking help because I know it will pass, and my child will be fine. (P31)
Distress	It was humiliating and unfair… (P8) …our story is exhausting (16) Yes because I feel as though I'm letting myself down as well as my child. (p13) I know I was deeply upset by the way medical staff treated me and my daughter in hospital. (P26) Spend time over explaining her condition… (P12)
Self-Stigma	I wonder if I could have done more or done things differently. Why does my child have this condition and what could I have done to prevent it. (P10) Yes as I feel it is my fault. (P25)

	I feel like I've failed somehow. (P28)
	Make me feel as though we haven't done enough to get the right help. (P4)
	I doubt myself and how I handle the tics and seizures. (P9)
Defiance	Trying to fight for your child's rights and wellbeing… (P14)
	Not often [in response to question about whether stigma impacts self-view]. It generally impacts my view of other people - particularly of medical staff. (P26)
	I do compare myself to others but really when I do I come back to [I] am a good mum… (P15)
	'It's been a year's fight for her loss of vision in left eye, blind episodes and then fits/seizures. (P16)
	I get very defensive when people give me advice or call an ambulance despite me advising them it's not necessary… (P7)

4. Discussion

This study explored differences between parents of children with FND or asthma. More FND families identified as White compared to asthma families. This replicates studies showing higher prevalence of FND in White individuals (Underwood et al., 2024) and may reflect high prevalence of asthma in children from minoritised backgrounds (Cumella & Haque, 2018). However, higher rates of somatisation disorders have also been noted in minoritized families; as FND relates to stigma, it may be that families from minoritised groups are less likely to seek and receive care due to discrimination (McLoughlin et al., 2024; Young et al., 2015).

The FND sample contained more girls compared to the asthma sample, which correlates with previous FND studies (Yong et al., 2023), but differs from studies showing higher asthma rates for adolescent girls than boys (Almqvist et al., 2007). A striking difference between groups was the prevalence of autism and mental health disorders in the FND group compared to the asthma group. However, research demonstrates high co-morbidity between FND and autism and mental health disorders (Patron et al., 2023; Vickers et al., 2025).

4.1 Stigma awareness

FND parents were significantly more aware of stigma than asthma parents. Qualitative data highlighted parents' experiences of judgement. As literature demonstrates, stigma often came from medical professionals, schools and other parents (Mcloughlin et al., 2025). Stigma related to lack of understanding of FND, particularly beliefs it was 'made up' (Kozlowska et al., 2021). Parents noted FND was associated with mental health, leading to

dismissal of physical health concerns. This binary approach may reflect the separation of physical and mental health services, and further highlights the complexity of FND existing at the intersection of psychiatry and neurology (Mavroudis et al., 2024).

As with research with parents of children with mental health disorders, parents in this study experienced blame for their child's condition (Corrigan & Miller, 2009; Eaton et al., 2016). Blame centred around parenting, with actions of parents seen to cause or exacerbate FND. Parents elaborated that judgement reduced when children experienced non-functional neurological disorders, suggesting parents are held more responsible for children's mental health, which many conflated with FND, rather than physical health (Serchuk et al., 2021).

4.2 Self-Stigma

Compared to asthma parents, FND parents experienced statistically higher levels of self-stigma. Qualitative findings showed some FND parents internalised blame and endorsed responsibility attributed to them for their children's condition. These findings mapped clearly onto previous research demonstrating parental self-blame for transmitting 'bad genes' or not getting help sooner (Moses, 2010). Additionally, self-doubt appeared to be a key mechanism in explaining elevated levels of self-stigma, as demonstrated by Eaton et al., (2020). Qualitative findings supported statistical analysis of Self-Stigma subscales which showed FND parents experienced higher 'Self-Blame' and 'Self-Shame' beliefs than asthma parents.

Both asthma and FND groups showed correlations between child autism and parental stigma awareness, as highlighted by Kinnear et al. (2016). However, neither group showed a correlation between self-stigma and autism. This may be explained by recent shifts from

‘mother-blaming’ to ‘brain-blaming’ to explain autistic presentations (Courcy & des Rivières, 2017).

There were correlations between additional child mental health problems and both stigma awareness and self-stigma in the FND group. This is not surprising due to high co-morbidity with FND (Patron et al., 2023). Children’s additional mental health problems may account for some of the stigma experienced by FND parents. However, qualitative findings highlighted experiences specific to FND that caused stigma.

It appeared part of FND parental stigma followed a similar trajectory to mental health disorders: internalisation of stigma and blame (Eaton et al., 2016). However, a key element related to physical manifestations of FND: e.g. how parents responded to symptoms such as seizures in public. This speaks to the unique experience of FND as a condition of both physical and mental health domains (Mavroudis et al., 2024).

4.3 Distress

FND parents experienced statistically higher levels of distress than asthma parents. Qualitative results demonstrated experiences of isolation and exhaustion, and shame and guilt as a direct response to judgement (Moses (2010). For asthma parents, ADHD correlated with Distress, but not Stigma. This may reflect the added responsibility of caring for a child with this additional need (Peasgood et al., 2021).

4.4 Relationships between constructs

Pathways between Stigma Awareness, Self-Stigma and Distress were non-significant in asthma parents. This may reflect overall low levels of stigma and distress, suggesting children's asthma may not significantly contribute to parents' experiences. For FND parents, Stigma Awareness predicted Self-Stigma and Distress as anticipated by Eaton et al.'s model, but Self-Stigma did not predict Distress, or mediate the relationship between Awareness and Distress.

This finding was illuminated through thematic analysis which demonstrated heterogeneity in parents' experiences. Some parents experienced stigma and internalised this, causing distress, as predicted by the Stigma Pathway. However, other parents' experiences did not follow this trajectory.

Some parents experienced stigma, but this did not lead to self-stigma. For some parents, stigma motivated advocacy, which may have been protective against distress (Wright & Taylor, 2014). Other parents externalised blame, expressed through anger towards professionals. This may have been protective, but additionally could represent another form of distress not captured by the K-10 (Cassiello-Robbins & Barlow, 2016).

Some experienced self-stigma but tempered this feeling by focusing on their strengths as a parent. This replicates Eaton et al.'s (2016) research: parents were able to 'refute' self-stigma and meet their own good-parent standard. This supports findings here that there was no difference in Bad-Parent self-belief between the two groups: some FND parents may feel self-blame, but this may not always translate to elevated feelings of being a bad parent.

4.5 Limitations

The study was powered to examine statistical differences between groups and linear regressions. However, mediation analysis required higher power to confidently detect relationships between variables. Consequently, generalisations are limited.

FND parents were homogenous in gender and ethnicity, therefore experiences of parents in different demographics were not captured. Research should explore intersections of ethnicity and stigma in the context of FND.

Stigma Awareness significantly predicted Distress, but the effect size was small. The study did not explore additional reasons for distress for FND parents unrelated to stigma. Future research should explore other causes of parents' negative experiences.

Finally, despite actions taken to maintain confidence in the Stigma Awareness scale, the missing question may have impacted results. Future research should include the full scale.

4.6 Future Directions

The analysis demonstrated that some parents rejected stigma. However, little is known about what supports a parent to refute stigma in a positive way. Future studies should explore protective factors which enable parents to do this. Some parents rejected stigma through anger. Research should explore the impact of this emotion expression on parents.

High co-morbidity between FND and mental health and autism diagnoses has been demonstrated (Vickers et al., 2025; Patron et al., 2023). Future quantitative and qualitative research should examine whether these diagnoses contribute to stigma associated with FND.

5. Conclusion

Parents of children with FND experienced higher levels of Stigma Awareness, Self-Stigma and Distress compared with parents of children with asthma. Quantitative analysis showed Stigma awareness predicted Self-Stigma and Distress for FND parents, but Self-Stigma did not predict Distress. Qualitative data highlighted heterogeneity in parents' experiences. Some parents internalised stigma which led to distress, as predicted by the Stigma Pathway. However, some parents rejected stigma. Future research should explore this additional pathway from stigma awareness to rejection.

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Executive Summary

Investigating Self-stigma in Parents of Young People with a Diagnosis of Functional Neurological Disorder

Rationale for the Study

Functional Neurological Disorders (FND) are conditions which result in significant physical symptoms such as seizures and tics, but have no underlying pathological cause. FND is often misunderstood, and we know from previous research that young people diagnosed with FND experience high levels of stigma, particularly in regard to false perception that FND is 'made up'. What we don't yet know is how this stigma may affect the parents who are raising children experiencing this condition.

Research models have demonstrated that parents of young people with mental health disorders experience an awareness of stigmatisation by others, which then causes self-doubt in themselves as parents and a subsequent internalisation of this stigma. This internalisation then leads to distress. Children experiencing FND have physical symptoms, but the condition is often viewed as 'psychological'. We wanted to explore the experiences of parents of young people with FND to understand how stigma may impact them, and whether this is similar or different to other groups of parents.

Aims for the Study

In order to understand more about parent's stigma experiences, we compared parents of children with FND to parents of children with asthma. We were interested to see whether

these experiences of stigma would be different, as asthma is a chronic physical condition whereas FND straddles both physical and mental health domains. The primary aim of the study was to examine whether there was a difference between the two groups in levels of Stigma Awareness, Self-Stigma and Distress. Secondary aims were to explore whether a) Stigma Awareness predicted Self-Stigma and Distress; b) Self-Stigma predicted Distress; and c) Self-Stigma mediated the relationship between Stigma Awareness and Distress in the FND group.

What We Did

In collaboration with experts-by-experience, we designed an online questionnaire in which participants first answered demographic questions about themselves and their children, including their gender, ethnicity and additional physical and mental health diagnoses. This was followed by Stigma Awareness, Self-Stigma and Distress questionnaires. Additionally, the FND group then had the option of answering open-ended written questions.

Following data collection, demographic information was analysed to explore differences between groups and correlations were explored between demographic variables and stigma and distress. Statistical analysis then examined differences in Self-Stigma, Stigma Awareness and Distress between the groups. Finally, we explored the predictive and mediating relationships between these variables.

What We Found

130 participants took part in the study analysis, with 65 in each group. We found significant differences between the demographics of each group, with more girls in the FND group, fewer children diagnosed with autism and additional mental health disorders in the asthma group, and greater numbers of parents identifying as White in the FND group.

For FND parents, Stigma Awareness, Self-Stigma and Distress were correlated, but this correlation was not seen in the asthma group. Autism diagnoses were correlated with Stigma Awareness in both groups and additional mental health diagnoses were correlated with Stigma Awareness and Self-Stigma in the FND group. Additionally, ADHD was correlated with Distress in the asthma group.

Parents in the FND group showed statistically significantly higher levels of Stigma Awareness, Self-Stigma and Distress than parents in the asthma group. In the FND group, Stigma Awareness significantly predicted Self-Stigma and Distress, but Self-Stigma did not predict Distress or influence the relationship between Stigma Awareness or Distress. None of the variables were related to each other for the asthma group.

Qualitative analysis highlighted four themes from FND parents' written responses: Judgement of Parents, Distress, Internalisation of Stigma, and Defiance. The majority of parents felt judged by others, particularly medical professionals, as well as schools and other parents. This judgement included being told FND was not 'real' and being stigmatised for the way parents managed physical symptoms such as seizures. For some parents, this judgement was internalised as they questioned their parenting and blamed themselves for their children's

FND, either by believing they had passed down mental health problems, or had failed to protect their children from poor mental health. Stigma caused distress for these parents, as parents felt isolated by not being understood, exhausted from having to explain the condition, and guilt and shame for their perceived responsibility for their child's experiences. However, a small group of parents appeared to reject stigma. This was particularly seen when parents attributed responsibility to external sources e.g. school, and anger towards medical professionals. Additionally, some parents felt motivated by stigma to advocate for their child's care.

Relevance for Clinicians

The study showed that parents of young people with FND experience higher levels of stigma than parents of young people with asthma. Stigma was internalised when parents doubted their parenting and blamed themselves for their children's condition. This was due to both an association with FND and mental health, as well as stigma towards the physical care of their children. Therefore, it is vital when working with families experiencing FND that NHS professionals endeavour to reduce stigma through thoughtful psychoeducation about FND, and validation and support for the experiences and responses to challenging symptoms. Advocating for children and rejecting stigma appeared to temper parental distress, therefore empowering and supporting parents to help their children and develop self-confidence should be a focus of work with families.

Connecting Narrative

SRL

Before training, I worked as a primary school teacher in areas of London which served communities experiencing high levels of deprivation. Many children I taught experienced homelessness and housing insecurity which greatly impacted their mental health. Often, I would notice their behaviour deteriorating before learning about families' housing situations and the pattern between these events and children's psychological distress was stark. These experiences initially motivated me to research the topic of homelessness and children, and my systemic work and training developed my interest in the impact of adversity on family systems. This systematic review gave me the opportunity to explore this in depth.

One ethical concern I had about this topic was potential of the research to contribute to an unjust narrative of blame towards parents for the impact of their mental health and poverty on children. However, learning about the Family Stress Model and using this as a theoretical framework helped keep focus on contextual factors impacting parental mental health, rather than seeing parent's experiences in isolation.

The review found that homelessness negatively impacted maternal mental health and subsequent child outcomes. It was a fascinating experience seeing what I had seen in the classroom coming to light through academic research. Having not done a systematic review before, I really saw the strength of being able to synthesise multiple studies to add depth to our understanding. Working with my second rater enabled this further, as being able to discuss the research in depth and challenge each other's thinking helped develop my understanding further.

Throughout the work, I reflected on conducting this research from my position of privilege as a person who has secure housing and financial stability. This felt uncomfortable at times, as I thought about the power wielded by researchers to carry out research about situations of which they have no lived understanding. However, conducting this review reinforced my commitment to carry out research which helps shine a light on the impact of adversity on families and advocates for better living conditions for those who are vulnerable. This is a position I wish to take into future clinical and academic work.

SIP

It was quite daunting starting the SIP because I felt acutely aware of coming into a service of which I was not part of. However, having my external supervisor, a former Oxford trainee as the link between myself and the team helped put me at ease. In particular, her support in helping me liaise with the OCC ethics panel and wider team members meant I felt more confident in approaching the work. There were many stages to this project, and although at times this felt like it slowed down the work, I'm glad that we took this approach as it meant I had the opportunity to become more familiar with the service which helped me approach the work from a place of curiosity rather than assumption.

Above all, I really wanted the SIP to feel helpful. Of course, that is always the aim, but I didn't want it just to feel like a tick box for the course. The project found that there were key areas for development, particularly in training for staff, as well as demonstrations of great practice and teamwork. Being able to feedback the findings and recommendations to both the Matching Hub and the social work managers felt like a real achievement as they were keen to implement the steps. The Matching Hub used evidence from the project to support their

application for permanent funding which they have now been granted, and I felt proud to have helped to evidence the great work that they do.

TDRP

I think one of benefits of training on a course that has a strong research component is that you have the opportunity to be involved in a multitude of fascinating areas of study. I had no previous lived or professional experience of FND, but I was deeply interested in the subject and feel grateful I've had the opportunity to work with families and researchers who have helped me understand this more. Consulting with experts-by-experience was such an important part of this process as it gave me the opportunity to hear first-hand how parents experience their child's condition and re-affirm my commitment to conducting research in an area that is often misunderstood. I knew I wanted the research focus to be on parents, as their experiences are often overlooked despite being vitally important for their children's outcomes, and meeting parents who gave up their time to consult on this was a real privilege.

What I hadn't anticipated was quite how hard the recruitment process would be for the study. I thought perhaps it would be hard to access communities of families with FND, but social media was a helpful way to make connections. It was the parents of young people with asthma which proved harder to recruit, which may be because there was less reason for them to take part. Recruiting challenges meant that I had to develop a whole new set of skills in communication, both on social media and through professional, charity and education networks which I found challenging, but equally rewarding when we finally reached our target number.

I was so glad that I decided to do a mixed methods study as it was the qualitative responses that really deepened my understanding of parents' experiences of stigma. This reinforced the importance of hearing about people's lived experiences and how these cannot always be captured by statistical analysis alone. The findings that parents of young people with FND experience stigma in many different forms felt important to highlight and I was glad to have been part of work that did this.

Conclusion

Overall, these projects were linked by their exploration of children and families' experiences. It was such a privilege to hear the stories of these families, and I will endeavour to take forward the learning from these projects to further inform my clinical work, particularly in supporting those experiencing adversity and stigma.

Acknowledgements

First and foremost, I would like to thank the families and professionals who took part in these research projects. It has been a real privilege to learn about the experiences of all those involved, and I am deeply grateful to every participant for giving their time to share their stories.

Thank you next to my parents for absolutely everything they have done to support me throughout this education journey. I can't believe how lucky I am to have been able to study a subject I am so passionate about, and I owe that entirely to opportunities they have given me, not to mention the emotional support alongside this. And to my sister Alyssa for always being there to support me.

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My friends, from both before the course and those I've made over the past three years – I am so thankful for you. I don't know where I would be without you all and I am so lucky to have you in my life.

Finally, to Tariq. Thank you for being the most incredible partner who has supported me through every moment on this journey. I can't imagine this experience without you, and I am so grateful I get to share this, and all the next chapters, with such a wonderful, compassionate and caring person.

Appendices

Appendix A

PRISMA Checklist (Page et al., 2021)

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	P8
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	P8
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	P13
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	P14
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	P16
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.	P15
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	P16
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.	P18
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.	P22
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.	P17
	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.	P18
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.	P19
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.	P25

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)).	P20
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	NA
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	P20
	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.	P20
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	P20
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	P21
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	NA
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	P20
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.	P22
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	P22
Study characteristics	17	Cite each included study and present its characteristics.	P22
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	P30
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.	P30
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	P39
	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.	P40
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	P46
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	P47
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	P19
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	47

Section and Topic	Item #	Checklist item	Location where item is reported
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	P48
	23b	Discuss any limitations of the evidence included in the review.	P54
	23c	Discuss any limitations of the review processes used.	P54
	23d	Discuss implications of the results for practice, policy, and future research.	P55
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.	P15
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	P15
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	NA
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	NA
Competing interests	26	Declare any competing interests of review authors.	NA
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.	NA

Appendix B

Refined screening criteria for full text screening

Full Text Screening Questions

1. Does the **full text** use English?
    a. Yes: continue screening
    b. No: stop screening

4. Does the **full text** indicate that this is NOT a correction or erratum?
    a. Yes: continue screening
    b. No: stop screening

4. Does the **full text** indicate that this is an article reporting original research, published in a peer reviewed journal?
    a. Yes: continue screening
    b. No: stop screening
    - e.g. a book, systematic review etc

2. Does the **full text** indicate this is a quantitative research study?
    Yes, or Unsure/Unclear: continue screening
        -E.g. regression, covariate, structural equation modeling, correlation,
    b. No: stop screening
        - E.g. qualitative only: thematic analysis, interview data, ethnography, action research, social observation, focus groups, case study research

5. Does the **full text** indicate that a measure of maternal mental health is reported?
    a. Yes or Unsure/Unclear: continue screening
        - Mothers aged 18+. Mental health defined as a *person's condition with regard to their psychological and emotional well-being* – Oxford Languages Dictionary). Including experience of mental health disorders e.g. anxiety, depression, bipolar disorder, psychosis etc; Or reported distress, poor mental wellbeing, levels of stress. Measured through psychometric screening, self-reported data and questionnaires.

- If reports ‘parental’ rather than ‘maternal’ include for screening
- Not if it reports ‘parental stress’ rather than stress reported by parents. E.g. stress only caused by role as a parent. Fine to include both, but can’t just be stress related only to parenting

b. No: stop screening
- Solely physical health measures
- Measures of mental health which include other heath aspects e.g. physical health

6. Does the **full text** indicate that a measure of child outcomes is reported?

a. Yes or Unsure/Unclear: continue screening
- Child (aged 0-18) outcomes – e.g. cognitive development, educational attainment, behaviour, mental health (Hock et al., 2024). Measured through cognitive screenings, school reported data, parent reported data, behavioural observations, psychometric screening, relevant questionnaires.

b. No: stop screening
- Soley physical health outcomes (including obesity)
- - Not impact on parent behaviour (e.g. abuse towards children)

6. Does the **full text** indicate that there is an empirically measured association between maternal mental health and child outcomes?

a. Yes or Unsure/Unclear: continue screening

b. No: stop screening
- Not enough to just report impact of maternal mental health on parenting – needs to report on outcome for child. Similarly reporting ‘parent child relations’ is not the same as reporting on impact of maternal mental health
- Focus of paper is on relationship between maternal mental health and child outcomes. Ok if it also reports other parts of the model as part of this, e.g. parenting, or impact on parenting stress, or if they report a few other variables e.g. classroom quality etc but not if main focus is another factor, e.g. exposure to violence
- Not when it’s looking at maternal mental health as one of many factors that predict child outcomes. (Doesn’t further our understanding)

6. Does the **full text** indicate that measures were taken when mothers and children were experiencing homelessness?

a. Yes or Unsure/Unclear: continue screening

- The concept of 'homelessness' will be defined as an experience of housing instability, housing insecurity, temporary accommodation or unsuitable housing, Texts will not be included if they report solely overcrowding or poor quality. Needs to be an element of having housing insecurity.

- Housing instability – 'Having difficulty paying rent, having frequent moves, living in overcrowded conditions, or doubling up with friends and relatives' (Hock et al., 2024)

- Housing insecurity – 'with reference to multiple moves, to those moves being - involuntary, forced or reactive, and to those moves being related to poverty.' (Children Society, 2020)

- Temporary accommodation – accommodation provided by the council whilst waiting for more permanent housing (Shelter) Additionally, using accommodation of friends and family as temporary home - 'sofa surfing' (Children's Commissioner, 2019).

- Unsuitable housing – E.g. housing which is cold and damp, overcrowded (Hock et al., 2024)

b. No: stop screening

- Mothers and children without experience of homelessness
    - Children living outside a family unit e.g. children looked after by local authority or living independently
    - 'Public housing' in American studies
    - 'Runaway' adolescents

- All children in the sample have to have experienced homelessness (fine to be control vs experimental, but not general population where some experience homelessness and some don't, so that homelessness is one factor. Not taking a general population study and then looking at maternal mental health and homelessness as separate variables)
- When measures are taken at a different time point to the time of homelessness
- Families in specific domestic violence shelters
- Homelessness as one aspect in an aggregate of deprivation rather than a distinct variable

Decision: **Should this article be included?**

a. **Yes**, all 9 screening questions answered Yes or Unclear

b. **No**, at least one answers definitely "No"

Appendix C
Adapted QUADS

QuADS Criteria	0	1	2	3
1. Theoretical or conceptual underpinning to the research	No mention at all.	General reference to broad theories or concepts that frame the study. e.g. key concepts were identified in the introduction section.	Identification of specific theories or concepts that frame the study and how these informed the work undertaken. e.g. key concepts were identified in the introduction section and applied to the study.	Explicit discussion of the theories or concepts that inform the study, with application of the theory or concept evident through the design, materials and outcomes explored. e.g. key concepts were identified in the introduction section and the application apparent in each element of the study design.
2. Statement of research aim/s	No mention at all.	Reference to what the sought to achieve embedded within the report but no explicit aims statement.	Aims statement made but may only appear in the abstract or be lacking detail.	Explicit and detailed statement of aim/s in the main body of report. **Mention hypotheses.**
3. Clear description of research setting and target population	No mention at all.	General description of research area but not of the specific research environment e.g. 'in primary care.'	Description of research setting is made but is lacking detail e.g. 'in primary care practices in region [x]'.	Specific description of the research setting and target population of study e.g. 'nurses and doctors from GP practices in [x] part of [x] city in [x] country.'
4. The study design is appropriate to address the stated research aim/s **How to qualify appropriate? E.g. in cross sectional analyses of questionnaires data about both mothers' mental health and child**	No research aim/s stated or the design is entirely unsuitable e.g. a Y/N item survey for a study seeking to undertake exploratory work of lived experiences. .	The study design can only address some aspects of the stated research aim/s e.g. use of focus groups to capture data regarding the frequency and experience of a disease.	The study design can address the stated research aim/s but there is a more suitable alternative that could have been used or used in addition e.g. addition of a qualitative or quantitative component could strengthen the design.	The study design selected appears to be the most suitable approach to attempt to answer the stated research aim/s.

outcomes at specific point in time, and longitudinal studies using cohort data to answer questions about change over time				
5. Appropriate sampling to address the research aim/s How to qualify appropriate?	No mention of the sampling approach.	Evidence of consideration of the sample required e.g. the sample characteristics are described and appear appropriate to address the research aim/s.	Evidence of consideration of sample required to address the aim. e.g. the sample characteristics are described with reference to the aim/s.	Detailed evidence of consideration of the sample required to address the research aim/s. e.g. sample size calculation or discussion of an iterative sampling process with reference to the research aims or the case selected for study. **Discussion of missing data, attrition, weighting (if appropriate) and clear description of all relevant sample characteristics including ethnicity and gender.**

6. Rationale for choice of data collection tool/s **How to qualify a clear rationale?**	No mention of rationale for data collection tool used.	Very limited explanation for choice of data collection tool/s. e.g. based on availability of tool.	Basic explanation of rationale for choice of data collection tool/s. e.g. based on use in a prior similar study.	Detailed explanation of rationale for choice of data collection tool/s. e.g. relevance to the study aim/s, co-designed with the target population or assessments of tool quality. **Not enough to describe collection tools in detail – needs to explain why they were chosen.**
7. The format and content of data collection tool is appropriate to address the stated research aim/s **How to qualify appropriate?**	No research aim/s stated and/or data collection tool not detailed.	Structure and/or content of tool/s suitable to address some aspects of the research aim/s or to address the aim/s superficially e.g. single item response that is very general or an open-response item to capture content which requires probing. **E.g. Yes/No answer to question about maternal suicidal ideation**	Structure and/or content of tool/s allow for data to be gathered broadly addressing the stated aim/s but could benefit from refinement. e.g. the framing of survey or interview questions are too broad or focused to one element of the research aim/s.	Structure and content of tool/s allow for detailed data to be gathered around all relevant issues required to address the stated research aim/s.
8. Description of data collection procedure	No mention of the data collection procedure.	Basic and brief outline of data collection procedure e.g. 'using a questionnaire distributed to staff'.	States each stage of data collection procedure but with limited detail or states some stages in detail but	Detailed description of each stage of the data collection procedure, including when, where and how

			omits others e.g. the recruitment process is mentioned but lacks important details.	data was gathered such that the procedure could be replicated.
9. Recruitment data provided	No mention of recruitment data.	Minimal and basic recruitment data **e.g. number of people who took part**	Some recruitment data but not a complete account e.g. number of people who were invited and agreed.	Complete data allowing for full picture of recruitment outcomes e.g. number of people approached, recruited, and who completed with attrition data explained where relevant.
10. Justification for analytic method selected **What are examples of justification?**	No mention of the rationale for the analytic method chosen.	Very limited justification for choice of analytic method selected. e.g. previous use by the research team.	Basic justification for choice of analytic method selected e.g. method used in prior similar research.	Detailed justification for choice of analytic method selected e.g. relevance to the study aim/s or comment around of the strengths of the method selected. **E.g. 'A latent variable SEM approach was selected in the proposed study to parsimoniously and simultaneously test a number of observed variables as latent constructs through the specification of both direct and indirect paths'**

11. The method of analysis was appropriate to answer the research aim/s **How to qualify appropriate?**	No mention at all.	Method of analysis can only address the research aim/s basically or broadly.	Method of analysis can address the research aim/s but there is a more suitable alternative that could have been used or used in addition to offer a stronger analysis.	Method of analysis selected is the most suitable approach to attempt answer the research aim/s in detail e.g. for qualitative interpretative phenomenological analysis might be considered preferable for experiences vs. content analysis to elicit frequency of occurrence of events. **E.g. Hierarchical regression for cross-sectional data, structural equation modelling/path analysis/latent growth model for longitudinal and case comparisons**
12. Evidence that the research stakeholders have been considered in research design or conduct.	No mention at all.	Consideration of some the research stakeholders e.g. use of pilot study with target sample but no stakeholder involvement in planning stages of study design.	Evidence of stakeholder input informing the research. e.g. use of pilot study with feedback influencing the study design/conduct or reference to a project reference group established to guide the research.	Substantial consultation with stakeholders identifiable in planning of study design and in preliminary work e.g. consultation in the conceptualization of the research, a project advisory group or evidence of stakeholder input informing the work.

13. Strengths and limitations critically discussed	No mention at all.	Very limited mention of strengths and limitations with omissions of many key issues. e.g. one or two strengths/limitations mentioned with limited detail.	Discussion of some of the key strengths and weaknesses of the study but not complete. e.g. several strengths/limitations explored but with notable omissions or lack of depth of explanation.	Thorough discussion of strengths and limitations of all aspects of study including design, methods, data collection tools, sample & analytic approach.

Appendix D

Tabulation of key study information regarding associations and strength of effect

First Author and Year	Child Outcome	Type of Association	Strength of Association
McNeil Smith (2015)	Level of externalizing behaviour	Direct (Predictive) Indirect (mediated by parenting)	β = .45
Conrad (1998)	Social Competence Behaviour problems	Difference between groups (MMH and not)	
Guerrero (2020)	Level of externalising behaviour	Indirect (mediated by housing instability)	β = .03
Hatem (2020)	Rate of Depression Rate of Anxiety	Indirect (MMH mediated relationship housing instability and outcomes)	B=0.008 B=0.009
Herbers (2023)	Social-emotional challenges	Odds ratio	OR = 1.86
Labella (2016)	Negative affect Less prosocial behaviour	Indirect (mediated by parent negativity)	β = .44
Masten (1993)	Levels of externalising behaviour Levels of internalising behaviour Total behavioural problems	Difference between groups (homeless vs housed)	
Abenavoli (2025)	Externalizing behaviour Internalizing behaviour	Direct (predictive) Direct (predictive)	β = .08 β = .10

Wu (2018)	Externalising behaviour Externalising behaviour Internalising behaviour	Direct correlation Indirect (mediated by parent stress)	r = .18 B = .10 B = .08
Zima (1996)	Depression Externalising behaviour Internalising behaviour	Odds ratio	OR = 4.42 OR = 3.76 OR = 3.27
Graham-Bermann (1996)	Total problem behaviour	Association	Unclear
Monn (2016)	Child executive function	Indirect (MMH mediated relationship between parenting and EF)	β = -.24
Boddapati, S (2018)	Social emotional functioning Language Literacy	Differences between groups (homeless vs housed)	
Torrance (1997)	Conduct disorder	Direct (predictive)	SRW = .265
Du (2022)	Internalizing behaviour	Direct Indirect (mediated via housing instability)	B =0.18 B = 0.11
Du (2021)	Behavioural problems Mental health problems Externalizing behaviour Internalizing behaviour	Direct (predictive) Direct (predictive) Indirect (MMH mediated relationship between housing instability and outcomes)	β = . .232 β = .280 β =. 030 β = .038
Schteingart (1995)	Internalising behaviour problems	Direct (predictive)	

MMH = maternal mental health. EF = executive function β = standardized coefficient; B = unstandardized regression coefficient; OR = odds ration; SRW = standardized regression weight

Significant association between poor maternal mental health and negative child outcomes in homeless families

Non-significant association between poor mental health and negative child outcomes in homeless families

Appendix E

Tabulation of additional areas of reporting for each paper

	Additional Focus							
First Author and Year	Parenting/ Parent behaviour	Gender	Ethnicity	Food insecurity	Parenting Stress	Measures of Risk (either parent or child)	Substance Abuse	Social Relationships
McNeil Smith (2015)								
Conrad (1998)								
Guerrero (2020)								
Hatem (2020)								
Herbers (2023)								
Labella (2016)								
Masten (1993)								
Wu (2018)								
Zima (1996)								
Graham-Bermann (1996)								
Monn (2016)								
Boddapati (2018)								
Torrance (1997)								
Du (2022)								
Abenavoli (2025)								
Du (2021)								
Schteingart (1995)								

Appendix F

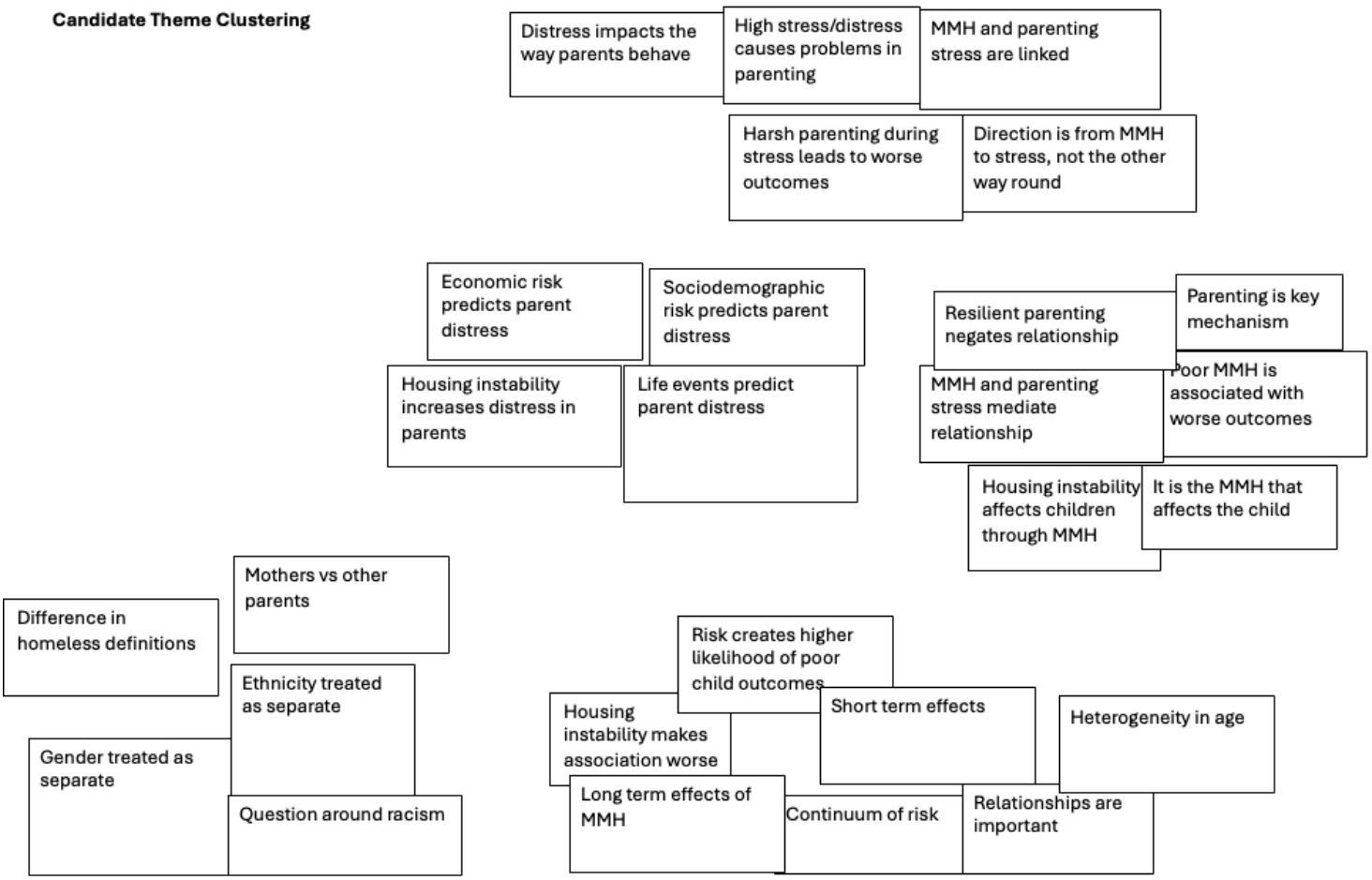
Coding Process

Data	Codes
Mediated by parenting	Parenting is key mechanism
Mediated by parent negativity	Parenting is key mechanism
Mediated by parenting stress	Parenting is key mechanism
Mediated by housing instability	Housing instability makes association worse
Mediated by housing instability	Housing instability makes association worse
MMH predicted outcomes	Poor MMH is associated with worse outcomes
MMH predicted outcomes	Poor MMH is associated with worse outcomes
MMH predicted outcomes	Poor MMH is associated with worse outcomes
MMH predicted outcomes	Poor MMH is associated with worse outcomes
MMH predicted outcomes	Poor MMH is associated with worse outcomes
MMH mediated relationship between housing instability and outcomes	Housing instability affects children through MMH
MMH mediated relationship between housing instability and outcomes	Housing instability affects children through MMH
No significant differences between homeless and poor housed	Continuum of risk
No significant differences between homeless and poor housed	Continuum of risk
Significant positive relationship between MMH and externalising when parents transmitted low levels of praise and incentives. Null when high	Parenting is key mechanism
Child externalising problems lowest when parents were stressed from parenting but used low levels	Resilient parenting negates relationship
Significant effect from housing instability to depression/anxiety through MMH and parenting stress	MMH and parenting stress mediate relationship
Significant effect from housing instability to depression/anxiety through MMH and parenting stress	MMH and parenting stress are linked
Significant effect from housing instability to depression/anxiety through MMH and parenting stress	MMH and parenting stress mediate relationship
Parent internalizing distress associated with negativity. Negatively predicted child neg affect and antisocial behaviour	Distress impacts the way parents behave

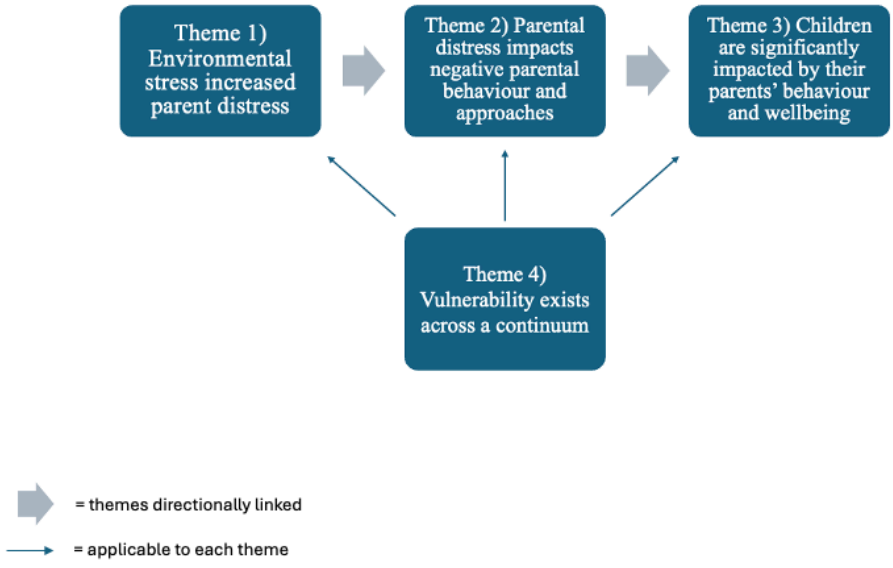
Parenting stress mediated link between MMH and externalizing, but maternal depression did not significantly mediate link between stress, emotion regulation and behaviour	Direction is from MMH to stress, not the other way round
Maternal expressive suppression negatively associated with externalizing problems.	Resilient parenting negates relationship
School age homeless children four times more likely to have depression/internalising/externalizing	Poor MMH is associated with worse outcomes
Supportive social relationships improved child behaviour in homeless group	Relationships are important
Harsh parenting related to lower cool EF but only when parents reported medium or high levels of stress	High stress/distress causes problems in parenting
Harsh parenting related to lower cool EF but only when parents reported medium or high levels of stress	Harsh parenting during stress leads to worse outcomes
Homelessness predicted increased maternal distress which in turn predicted increased child conduct disorder	Housing instability increases distress in parents
Housing instability did not directly relate to child internalizing behaviour problems and parenting skills but made MMH worse which then made parenting worse and behaviour worse	It is the MMH that affects the child
Maternal depression in childhood predicted adolescent mental health problems	Long term effects of MMH
Path from residential mobility to caregiver depression was positively significant. Direct path from MMH to adolescent problems was sig	Housing instability increases distress in parents
MMH mediated relationship between residential mobility and internalizing and externalizing	It is the MMH that affects the child
9 studies sample were residents in shelter	Difference in homelessness definitions
Not all parents were mothers	Mothers vs other parents
Ranges in age	Heterogeneity in age
Samples were predominantly African American	Homogenous ethnicity
Longitudinal data shows effects over time	Long term effects
Cross sectional data shows immediate effects	Short term effects
Case comparison shows less effect	Continuum of risk
Risk included ACES e.g. witnessing DV, death of caregiver. Fewer adverse experiences predicted more resilient functioning	Risk creates higher likelihood of poor child outcomes
Sociodemographic risk e.g. education, employment etc predicted parent distress	Sociodemographic risk predicts parent distress
Stressful life events e.g. death of parent significantly contributed to child problems	Life events predict parent distress

Stressful life events contributed to parents distress	Life events predict parent distress
Economic risk related to parent depression	Economic risk predicts parent distress
Gender not related to relationship	Gender treated as separate
Boys rated lower on socioemotional	Gender treated as separate
Boys showed more anger	Gender treated as separate
White children showed more behaviour problems	Ethnicity treated as separate
No significant differences via gender. No interactions with relationship to MMH housing, outcomes etc	Gender treated as separate
White adolescents more likely to experience secure housing	Ethnicity treated as separate
Being male = greater likelihood to have motor and social emotional challenges	Gender treated as separate
Being from African American and Hispanic background= greater likelihood to have motor and social emotional challenges	Gender and ethnicity treated as separate
Being male = greater likelihood to have motor and social emotional challenges	Gender treated as separate
Boy = more externalising	Gender treated as separate
African American girls more likely to have internalising than boys	Gender and ethnicity treated as separate
Younger homeless girls had higher internalizing	Age treated as separate
Mothers who moved three or more times in the early childhood period had higher rates of depression in the early childhood period	Housing instability increases distress in parents
Children of black mothers reported more conduct problems than children of Latino mothers – spurious proxy for another variable	Question around racism
Higher scores for overactive parenting risk significantly predicted greater likelihood of	Parenting is key mechanism
Greater housing instability in homeless group vs normed data	Housing instability increases distress in parents
Greater housing instability in homeless group vs normed data	Housing instability increases distress in parents
Direct pathway from housing instability to maternal mental health	Housing instability increases distress in parents
No significant difference between homeless and housed group on outcomes, but homeless group significantly different to normed data	Continuum of risk

Candidate Theme Clustering



Final Themes



Appendix G

Studies grouped and analysed by design

First Author and Year	Design	Analysis	Sample Size	Quality Rating	Homeless Status	% Mothers	No. Other children?	Mean Age of children	Predominant Ethnicity
McNeil Smith (2015)	Cross-sectional analytic	Linear regression and moderation analysis	52 Parents 52 children	28	Residents in shelter	79.6	Not reported	6.09	Parents: 68.5% Black/African American
Conrad (1998)	Cross-sectional analytic	Mann Whitney U	28 parents 28 children	19	Residents in shelter	100%	2.8	4.2	Parents: 40% White
Herbers (2023)	Cross-section analytic	Latent profile analysis; Multinomial logistic regression model	Children 231	27	Residents in shelter	93%	Not reported	4.37	Parents: 50% African American Children: 43% African American
Labella (2016)	Cross-sectional analytic	Path analysis model	Primary caregivers: 138	30	Residents in shelter	93%	Not reported	4.8	Parents: African American 64% Children: African American 67%

Wu (2018)	Cross-sectional analytic	Path analysis model	Mothers: 119	29	Housing insecure	100%	Not reported	2.32	Parents: African American 84%
Zima (1996)	Cross-sectional analytic	Multiple regression analysis	Parents: 110 Children: 157	29	Residents in shelter	93%	3.6	9.2	Parents: Minority background 84% Children: African American 44%
Monn (2016)	Cross-sectional analytic	Hierarchical regression analysis	Primary caregivers: 105 Children: 105	29	Residents in shelter	94.5%	45.8% of parents had more than 4 children living with them	5.88	Parents: 63.6% African American Children: 65.7%

Graham-Bermann (1996)	Cross-sectional analytic case comparison	Latent variable structural equation models	Homeless Group Mothers: 60 Children: 60 Housed Group Mothers: 61 Children: 61	30	Residents in shelter	100%	Not reported	9.63	Parents: 73% African American
Masten (1993)	Cross-sectional analytic case comparison	Hierarchical regression	Homeless Group: Parents: 93 Children: 159 Low income housed Group: Parents: 53 Children: 62	32	Residents in shelter	78%	3.3	11.58	Children: 81% African American

Boddapati, S (2018)	Cross-sectional analytic case comparison	Multi-group Structural Equational Modeling	Housed Group: Caregivers: 1,126 Children: 1,179 Unstably Housed Group: Caregivers: 365 Children: 375	31	Housing insecure	86%	Not reported	3-4	Parents: African American 34% Children: African American 34%
Schteingart (1995)	Cross-sectional analytic case comparison	Hierarchical Regression	Homeless Group Mothers: 82 Children: 82 Housed Group Mothers: 62 Children: 62	31	Residents in shelter	100%	Not reported	3-5	Mothers: 72% African American, 28% Hispanic Children: Not reported
Torrance (1997)	Cross-sectional analytic case comparison	Structural Analysis	Homeless Group Mothers: 77 Children: 77	29	Residents in shelter	100%	Not reported	7.8	Parents: 48% Latino, 48% Black

			Domiciled Group Mothers: 119 Children: 119						
Guerrero (2020)	Longitudinal cohort study	Just-identified path analysis	Primary caregivers: 3630 Children: 3630	21	Housing insecure	92%	Not reported	3, 5, 9	Not reported
Du (2022)	Longitudinal cohort study	Latent Growth Model	Parents: 783 Children: 783	33	Housing insecure	98.5%		4.79	Children: White
Abenavoli (2025)	Longitudinal cohort study	Path analysis model	Parents: 4,301 Children: 4,3301	27	Housing insecure (Residential Mobility)	100%	Not reported		Parents: Black non-Hispanic 47.66%
Du (2021)	Longitudinal cohort study	Structural Equation Modelling	Primary caregivers: 425 Children: 425	33	Housing insecure (Residential) Mobility	96.7%	Not reported	12, 14, 16, 18	

Hatem (2020)	Longitudinal cohort study	One-way analysis of variance, chi-squared tests, covariate-adjusted structural equation models	Parents: 2626 Children: 2626	27	Housing insecure	100%	Not reported	1, 3, 5, 9, 15	Children: 49% Black

Non-significant association between poor mental health and negative child outcomes in homeless families

Studies using cross-sectional data

Studies using case comparison control group

Studies using longitudinal cohort data

Appendix H
Submission Guidelines for Community Mental Health Journal

Instructions for Authors
Title Page
Please make sure your title page contains the following information.
Title
The title should be concise and informative.
Author information
The name(s) of the author(s)
The affiliation(s) of the author(s), i.e. institution, (department), city, (state), country
A clear indication and an active e-mail address of the corresponding author
If available, the 16-digit ORCID of the author(s)
If address information is provided with the affiliation(s) it will also be published.
For authors that are (temporarily) unaffiliated we will only capture their city and country of residence, not their e-mail address unless specifically requested.
Large Language Models (LLMs), such as ChatGPT, do not currently satisfy our authorship criteria. Notably an attribution of authorship carries with it accountability for the work, which cannot be effectively applied to LLMs. Use of an LLM should be properly documented in the Methods section (and if a Methods section is not available, in a suitable alternative part) of the manuscript. The use of an LLM (or other AI-tool) for "AI assisted copy editing" purposes does not need to be declared. In this context, we define the term "AI assisted copy editing" as AI-assisted improvements to human-generated texts for readability and style, and to ensure that the texts are free of errors in grammar, spelling, punctuation and tone. These AI-assisted improvements may include wording and formatting changes to the texts, but do not include generative editorial work and autonomous content creation. In all cases, there must be human accountability for the final version of the text and agreement from the authors that the edits reflect their original work.
Abstract
Please provide an abstract of 150 to 250 words. The abstract should not contain any undefined abbreviations or unspecified references.
Please note: For some articles (particularly, systematic reviews and original research articles), 250 words may not be sufficient to provide all necessary information in the abstract. Therefore, the abstract length can be increased from the 250-word limit (to up to 450 words) if the topic dictates, and to allow full compliance with the relevant reporting guidelines.
For life science journals only (when applicable)
Trial registration number and date of registration for prospectively registered trials
Trial registration number and date of registration, followed by “retrospectively registered”, for retrospectively registered trials
Keywords
Please provide 4 to 6 keywords which can be used for indexing purposes.
Acknowledgements
An Acknowledgment section may be included to acknowledge, for example, people who have assisted with aspects of the work (but who do not qualify as authors), disclaimers, collaborations, etc.

Statements and Declarations

The following statements should be included under the heading "Statements and Declarations" for inclusion in the published paper. Please note that submissions that do not include relevant declarations will be returned as incomplete.

Competing Interests: Authors are required to disclose financial or non-financial interests that are directly or indirectly related to the work submitted for publication. Please refer to “Competing Interests and Funding” below for more information on how to complete this section.

Text

Text Formatting

Manuscripts should be submitted in Word.

Use a normal, plain font (e.g., 10-point Times Roman) for text.

Use italics for emphasis.

Use the automatic page numbering function to number the pages.

Do not use field functions.

Use tab stops or other commands for indents, not the space bar.

Use the table function, not spreadsheets, to make tables.

Use the equation editor or MathType for equations.

Save your file in docx format (Word 2007 or higher) or doc format (older Word versions).

Headings

Please use no more than three levels of displayed headings.

Abbreviations

Abbreviations should be defined at first mention and used consistently thereafter.

Footnotes

Footnotes can be used to give additional information, which may include the citation of a reference included in the reference list. They should not consist solely of a reference citation, and they should never include the bibliographic details of a reference. They should also not contain any figures or tables.

Footnotes to the text are numbered consecutively; those to tables should be indicated by superscript lower-case letters (or asterisks for significance values and other statistical data). Footnotes to the title or the authors of the article are not given reference symbols.

Always use footnotes instead of endnotes.

Acknowledgments

Acknowledgments of people, grants, funds, etc. should be placed in a separate section on the title page. The names of funding organizations should be written in full.

References

Citation

Cite references in the text by name and year in parentheses. Some examples:

Negotiation research spans many disciplines (Thompson, 1990).

This result was later contradicted by Becker and Seligman (1996).

This effect has been widely studied (Abbott, 1991; Barakat et al., 1995; Kelso & Smith, 1998; Medvec et al., 1999).

Authors are encouraged to follow official APA version 7 guidelines on the number of authors included in reference list entries (i.e., include all authors up to 20; for larger groups, give the first 19 names followed by an ellipsis and the final author’s name). However, if authors shorten the author group by using et al., this will be retained.

Reference list
The list of references should only include works that are cited in the text and that have been published or accepted for publication. Personal communications and unpublished works should only be mentioned in the text.
Reference list entries should be alphabetized by the last names of the first author of each work.
Journal names and book titles should be *italicized*.
If available, please always include DOIs as full DOI links in your reference list (e.g. “https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/abc”).
Journal article Grady, J. S., Her, M., Moreno, G., Perez, C., & Yelinek, J. (2019). Emotions in storybooks: A comparison of storybooks that represent ethnic and racial groups in the United States. *Psychology of Popular Media Culture, 8*(3), 207–217. https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1037/ppm0000185
Article by DOI Hong, I., Knox, S., Pryor, L., Mroz, T. M., Graham, J., Shields, M. F., & Reistetter, T. A. (2020). Is referral to home health rehabilitation following inpatient rehabilitation facility associated with 90-day hospital readmission for adult patients with stroke? *American Journal of Physical Medicine & Rehabilitation*. Advance online publication. https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1097/PHM.0000000000001435
Book Sapolsky, R. M. (2017). *Behave: The biology of humans at our best and worst*. Penguin Books.
Book chapter Dillard, J. P. (2020). Currents in the study of persuasion. In M. B. Oliver, A. A. Raney, & J. Bryant (Eds.), *Media effects: Advances in theory and research* (4th ed., pp. 115–129). Routledge.
Online document Fagan, J. (2019, March 25). *Nursing clinical brain*. OER Commons. Retrieved January 7, 2020, from https://www.oercommons.org/authoring/53029-nursing-clinical-brain/view
Tables
All tables are to be numbered using Arabic numerals.
Tables should always be cited in text in consecutive numerical order.
For each table, please supply a table caption (title) explaining the components of the table.
Identify any previously published material by giving the original source in the form of a reference at the end of the table caption.
Footnotes to tables should be indicated by superscript lower-case letters (or asterisks for significance values and other statistical data) and included beneath the table body.
Artwork and Illustrations Guidelines
Electronic Figure Submission
Supply all figures electronically.
Indicate what graphics program was used to create the artwork.
For vector graphics, the preferred format is EPS; for halftones, please use TIFF format. MSOffice files are also acceptable.
Vector graphics containing fonts must have the fonts embedded in the files.
Name your figure files with "Fig" and the figure number, e.g., Fig1.eps.
Line Art
Definition: Black and white graphic with no shading.

Do not use faint lines and/or lettering and check that all lines and lettering within the figures are legible at final size.
All lines should be at least 0.1 mm (0.3 pt) wide.
Scanned line drawings and line drawings in bitmap format should have a minimum resolution of 1200 dpi.
Vector graphics containing fonts must have the fonts embedded in the files.

Halftone Art

Definition: Photographs, drawings, or paintings with fine shading, etc.
If any magnification is used in the photographs, indicate this by using scale bars within the figures themselves.
Halftones should have a minimum resolution of 300 dpi.

Combination Art

Definition: a combination of halftone and line art, e.g., halftones containing line drawing, extensive lettering, color diagrams, etc.
Combination artwork should have a minimum resolution of 600 dpi.

Color Art

Color art is free of charge for online publication.
If black and white will be shown in the print version, make sure that the main information will still be visible. Many colors are not distinguishable from one another when converted to black and white. A simple way to check this is to make a xerographic copy to see if the necessary distinctions between the different colors are still apparent.
If the figures will be printed in black and white, do not refer to color in the captions.
Color illustrations should be submitted as RGB (8 bits per channel).

Figure Lettering

To add lettering, it is best to use Helvetica or Arial (sans serif fonts).
Keep lettering consistently sized throughout your final-sized artwork, usually about 2–3 mm (8–12 pt).
Variance of type size within an illustration should be minimal, e.g., do not use 8-pt type on an axis and 20-pt type for the axis label.
Avoid effects such as shading, outline letters, etc.
Do not include titles or captions within your illustrations.

Figure Numbering

All figures are to be numbered using Arabic numerals.
Figures should always be cited in text in consecutive numerical order.
Figure parts should be denoted by lowercase letters (a, b, c, etc.).
If an appendix appears in your article and it contains one or more figures, continue the consecutive numbering of the main text. Do not number the appendix figures,"A1, A2, A3, etc." Figures in online appendices [Supplementary Information (SI)] should, however, be numbered separately.

Figure Captions

Each figure should have a concise caption describing accurately what the figure depicts. Include the captions in the text file of the manuscript, not in the figure file.
Figure captions begin with the term Fig. in bold type, followed by the figure number, also in bold type.
No punctuation is to be included after the number, nor is any punctuation to be placed at the end of the caption.

Identify all elements found in the figure in the figure caption; and use boxes, circles, etc., as coordinate points in graphs.
Identify previously published material by giving the original source in the form of a reference citation at the end of the figure caption.

Figure Placement and Size

Figures should be submitted within the body of the text. Only if the file size of the manuscript causes problems in uploading it, the large figures should be submitted separately from the text.
When preparing your figures, size figures to fit in the column width.
For large-sized journals the figures should be 84 mm (for double-column text areas), or 174 mm (for single-column text areas) wide and not higher than 234 mm.
For small-sized journals, the figures should be 119 mm wide and not higher than 195 mm.

Permissions

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All figures have descriptive captions (blind users could then use a text-to-speech software or a text-to-Braille hardware)
Patterns are used instead of or in addition to colors for conveying information (colorblind users would then be able to distinguish the visual elements)
Any figure lettering has a contrast ratio of at least 4.5:1

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Authors should refrain from misrepresenting research results which could damage the trust in the journal, the professionalism of scientific authorship, and ultimately the entire scientific endeavour. Maintaining integrity of the research and its presentation is helped by following the rules of good scientific practice, which include*:
The manuscript should not be submitted to more than one journal for simultaneous consideration.
The submitted work should be original and should not have been published elsewhere in any form or language (partially or in full), unless the new work concerns an expansion of previous work. (Please provide transparency on the re-use of material to avoid the concerns about text-recycling ('self-plagiarism').
A single study should not be split up into several parts to increase the quantity of submissions and submitted to various journals or to one journal over time (i.e. 'salami-slicing/publishing').

Concurrent or secondary publication is sometimes justifiable, provided certain conditions are met. Examples include translations or a manuscript that is intended for a different group of readers.
Results should be presented clearly, honestly, and without fabrication, falsification or inappropriate data manipulation (including image based manipulation). Authors should adhere to discipline-specific rules for acquiring, selecting and processing data.
No data, text, or theories by others are presented as if they were the author's own ('plagiarism'). Proper acknowledgements to other works must be given (this includes material that is closely copied (near verbatim), summarized and/or paraphrased), quotation marks (to indicate words taken from another source) are used for verbatim copying of material, and permissions secured for material that is copyrighted.

Important note: the journal may use software to screen for plagiarism.
Authors should make sure they have permissions for the use of software, questionnaires/(web) surveys and scales in their studies (if appropriate).
Research articles and non-research articles (e.g. Opinion, Review, and Commentary articles) must cite appropriate and relevant literature in support of the claims made. Excessive and inappropriate self-citation or coordinated efforts among several authors to collectively self-cite is strongly discouraged.
Authors should avoid untrue statements about an entity (who can be an individual person or a company) or descriptions of their behavior or actions that could potentially be seen as personal attacks or allegations about that person.
Research that may be misapplied to pose a threat to public health or national security should be clearly identified in the manuscript (e.g. dual use of research). Examples include creation of harmful consequences of biological agents or toxins, disruption of immunity of vaccines, unusual hazards in the use of chemicals, weaponization of research/technology (amongst others).
Authors are strongly advised to ensure the author group, the Corresponding Author, and the order of authors are all correct at submission. Adding and/or deleting authors during the revision stages is generally not permitted, but in some cases may be warranted. Reasons for changes in authorship should be explained in detail. Please note that changes to authorship cannot be made after acceptance of a manuscript.
*All of the above are guidelines and authors need to make sure to respect third parties rights such as copyright and/or moral rights.
Upon request authors should be prepared to send relevant documentation or data in order to verify the validity of the results presented. This could be in the form of raw data, samples, records, etc. Sensitive information in the form of confidential or proprietary data is excluded.
If there is suspicion of misbehavior or alleged fraud the Journal and/or Publisher will carry out an investigation following COPE guidelines. If, after investigation, there are valid concerns, the author(s) concerned will be contacted under their given e-mail address and given an opportunity to address the issue. Depending on the situation, this may result in the Journal's and/or Publisher's implementation of the following measures, including, but not limited to:
If the manuscript is still under consideration, it may be rejected and returned to the author.

If the article has already been published online, depending on the nature and severity of the infraction:
- an erratum/correction may be placed with the article
- an expression of concern may be placed with the article
- or in severe cases retraction of the article may occur.

The reason will be given in the published erratum/correction, expression of concern or retraction note. Please note that retraction means that the article is **maintained on the platform**, watermarked “retracted” and the explanation for the retraction is provided in a note linked to the watermarked article.

The author’s institution may be informed

A notice of suspected transgression of ethical standards in the peer review system may be included as part of the author’s and article’s bibliographic record.

Appendix I
Ethical Approval for Service Improvement Project

Subject: RE: Application for ethics

Hello Alice and Saskia,

Thank you for the submission, the panel has reviewed the action plan and are happy for you to proceed with the work.

Please could you inform us when you have completed the work and give us an update.

Kind regards,

Fiona Havord
Principal Social Worker
Oxfordshire County Council
County Hall
New Road
Oxford

Appendix J
Pre-Interview Questionnaire

Questions
What is your age?

18 – 24
25 – 34
35 – 44
45 – 54
55 – 64
65 and over

What gender do you identify with?

Male (including Trans Man)
Female (including Trans Woman)
Non-Binary
Other (not listed)

What ethnicity do you identify with?

White
Asian or Asian British
Black or Black British
Mixed or Multiple Ethnic Background
Other

What is your role in the service?

How long have you been working as a social worker in adoption services?

Less than one year
1-2 years
3-4 years
5-6 years
7-8 years
9-10 years
10 – 15 years
15 – 20 years
More than 20 years

What professional resources do you use to help you make decisions when matching children with additional needs and adoptive families:

Specific training on adopting children with additional needs – Yes/No (If yes, please specify below)
Specific theories – Yes/No (If yes, please specify below e.g., attachment, systemic etc)
Supervision – Yes/No (If yes, please specify below e.g. peer, reflective supervision etc)
Policies and documents – Yes/No (If yes, please specify below).

Appendix K
Final Interview Schedule

Introduction

Good afternoon/morning ____?

Before we start can I check that it is ok to call you _____?

Great and can I just check you can see and hear me ok?

Great. Are you ok to for me to start the recording and then I'll introduce myself and the study

Start Recording

My name is Saskia and I'm completing my Doctorate in Clinical Psychology at the University of Oxford. The aim of the interview today is to explore your experiences of the matching process between children with additional needs and adoptive families. The interview will ask you about your experiences of this process and your ideas about the facilitators and barriers to this process.

There are no right or wrong answers and if there are any questions which you do not wish to answer that is absolutely fine. The interview will last around half an hour to an hour, so I also wanted to say that if you need to take a break at any point just let me know.

In terms of confidentiality, the study has been approved by the Oxfordshire County Council ethics committee and the data will be stored securely and pseudoanonymised in the write up. Also just to say the questions ask you to talk about examples from your work, so just a reminder if you are talking about families and children to maintain their confidentiality so they can't be identified.

Do you have any questions before we begin? Please feel free to ask any questions during the interview.

Topic 1 – Identifying the needs and challenges

What is your current role in the matching process?

Prompt:
Have you previously had a different role in the process?

You mentioned in the questionnaire you used X (training, theories, supervision, resources etc) to help match children. Could you tell me more about how this helps guide you in the matching process?

Prompt:
Are there any resources you listed you find particularly helpful?
Are there any resources you are using you find less helpful?

We know matching children whose needs or circumstances contribute to them being harder to place can be challenging. What do you find are the greatest barriers to making these matches?

Prompt:

What are your views about why this matching can take a long time?

We're interested in what child characteristics or circumstances you think create the greatest challenge in making matches. Could you tell me about your views on this?

Prompt:
What is it about those things that you think make matching particularly difficult?
If there are queries or uncertainties about a child's circumstances or needs does that bring any additional challenges?
Are there any factors in individual cases that make it easier to navigate these challenges?

(If needed clarify - might include characteristics or circumstances identified by the Matching Hub 'Child aged 5 or over, Child of global majority or mixed ethnicity, Sibling group, Child with a disability or acute medical need, Child has previously experienced adoption disruption' or identified by Social Work managers - Parents with history of mental illness, sexual abuse, queried autism, or any other characteristics not identified here.)

Topic 2 – Risks and Responsibilities

When you're matching a child with additional needs what are the main risks or concerns you have to think about?

Prompt:
What helps to assess any risk or concerns?
Do you feel supported to understand the potential impact of specific needs on children and the consequent support a family will need to provide?
What helps you feel that any risk or concerns will be managed?
During the matching process do you plan specific strategies of how to help families manage additional needs?

Have any of the families you have been involved with been at risk of breakdown, or broken down during the matching process (specify that this includes any time from identifying a family to the final order).

Prompt:
What impact did that have on you?
What helped or helps to hold this responsibility?
Did anything make it harder for you to hold this responsibility?

There must be an emotional impact of this job in matching children with families, both positive and negative. Do you notice any difference in the emotional impact on you of matching children with additional needs?
How does this impact the matching process?

Topic 3 – Evaluating support needs of social workers and how they are met

What support do you think social workers need to be able to match these children and help with challenges mentioned previously?

Prompt:
What does this support look like within the service? (e.g. training, supervision, peer support, guidelines?)
Which of these things are available to you?
Are you able to access this support?
How could this support be improved?
What additional support do you wish you had?

What do you think helps social workers to support adopters to overcome some of the barriers to adopting children with additional needs?
What works well in being able to give this support?
What gets in the way of being able to give this support?

Is there anything on a wider policy level that helps or hinders matching for these children?

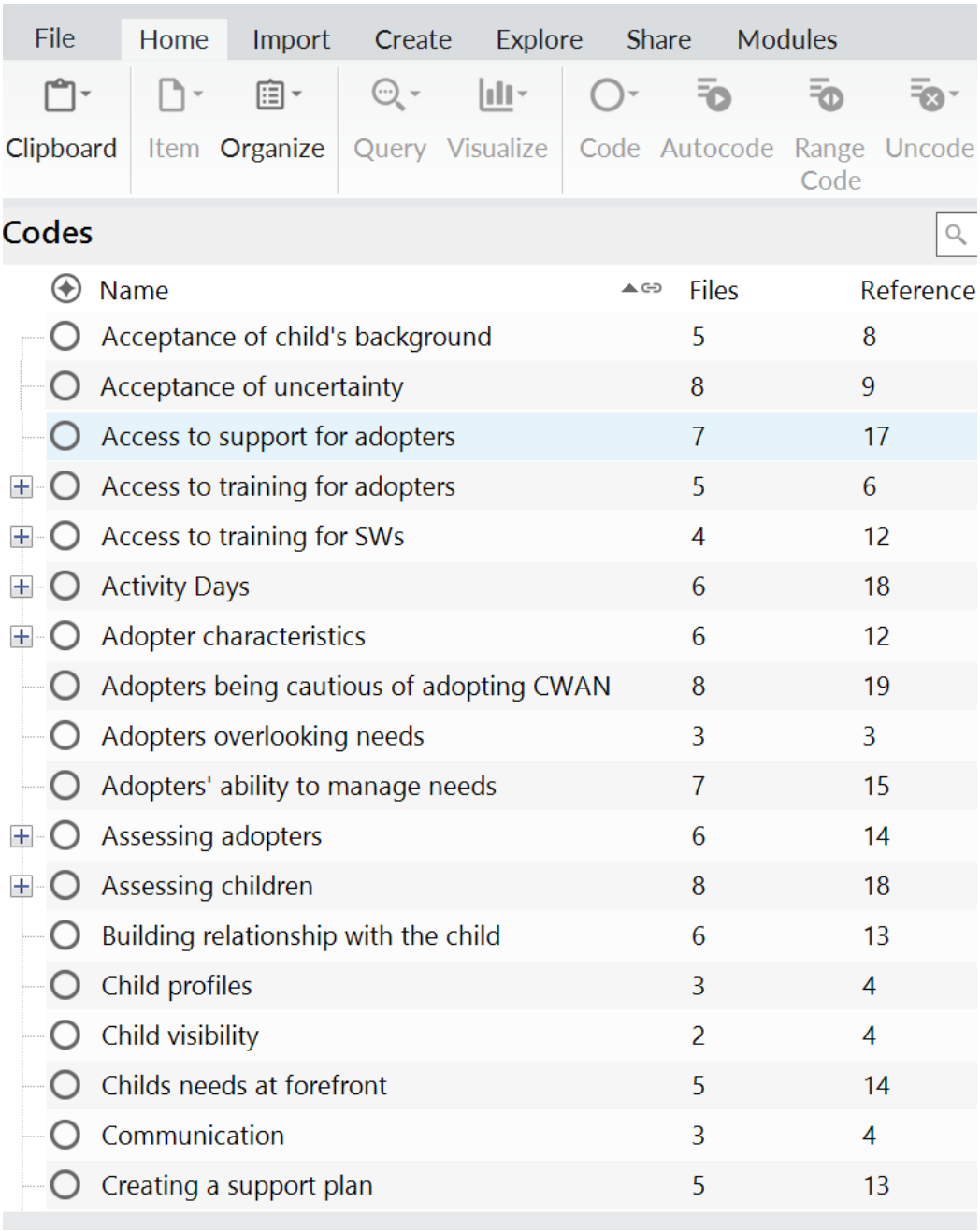
Prompt:
Has anything changed in the way systems work that is helpful or unhelpful?
Is there research in areas of additional needs that is helpful or unhelpful in making decisions?
Are there any changes that could be made to wider level factors that you think would help in this process?

Is there anything else, either on an individual level or organisational level, you feel would help you to feel supported in the matching process?

End

Appendix L

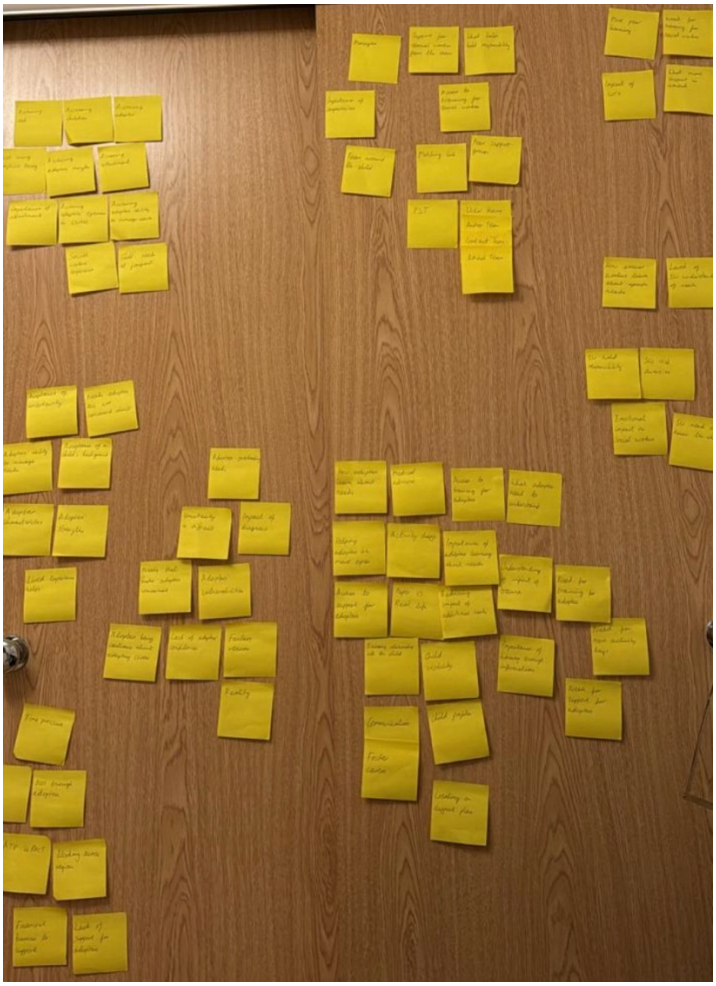
Coding process using NVivo



Name	Files	Reference
Acceptance of child's background	5	8
Acceptance of uncertainty	8	9
Access to support for adopters	7	17
Access to training for adopters	5	6
Access to training for SWs	4	12
Activity Days	6	18
Adopter characteristics	6	12
Adopters being cautious of adopting CWAN	8	19
Adopters overlooking needs	3	3
Adopters' ability to manage needs	7	15
Assessing adopters	6	14
Assessing children	8	18
Building relationship with the child	6	13
Child profiles	3	4
Child visibility	2	4
Childs needs at forefront	5	14
Communication	3	4
Creating a support plan	5	13

Appendix M

Process of generating candidate themes



Appendix N

Lay summary of project

Matching of children with adoptive families is a complex process. Some children have additional needs which means they more support from their carers. Children with additional needs often wait a long time to be matched with an adoptive family. The Multi-Disciplinary Matching Hub (MMH) is a specialist team that specifically supports with the matching process within the Adopt Thames Valle organisation.

The MMH wanted to understand more about the matching process and what could help to improve this. This project aimed to understand more about how social workers in the organisation make decisions about matching children, what makes this easier and harder to do and what support would be helpful in this work.

Nine social workers who are involved in the matching process completed an online questionnaire about themselves and their experiences and then completed an online video interview. They were asked questions about what they felt got in the way of matching, what they thought was going well in the matching process and what could be improved. The interviews were recorded and transcribed, and then analysed to develop themes.

The results of the questionnaire and the analysis showed several factors that made matching children with additional needs harder, and several that helped. Social workers explained that matching was less successful when adopters were cautious, when social workers felt unconfident in their knowledge of additional needs and when there were financial and logistical difficulties. However, the matching process was helped when adopters

were open minded, by social workers having good support from their team, through social workers using their experience and knowledge, and their ability to support social workers to become more open.

These results helped develop recommendations to give to the team. These recommendations were that the Matching Hub continues as it was seen as very helpful, that social workers have more training on additional needs, that they have more time to learn from their colleagues and use videos in children's profiles to help bring them to life. Additionally, it was recommended that early support plans are put in place, that there is an audit of how ethnicity is considered in matching, and a reflection on the best language to use when describing additional needs.

Appendix O

Submission guidelines for Social Work Research Journal

MANUSCRIPT ESSENTIALS

TITLE PAGE

Please do not include any identifying information on the title page because it will be circulated for review with the manuscript. An effective title expresses the essence of a manuscript in as few words as possible. Conciseness and precision are the hallmarks of good writing and are particularly important for titles. Use key words, but do not resort to jargon. The title should attract readers and provide an accurate picture of the article without attempting to communicate its full content. NASW Press reserves the right to edit the title for marketing or space purposes.

ABSTRACT

A journal abstract should be written as a single paragraph of between 150 and 200 words. The abstract provides a distillation of the key concepts in the manuscript, including theoretical concepts, major hypotheses, and conclusions reached. Abstracts for research papers should include the purpose of the research, the study sample size and characteristics, the measurement instruments used, and the conclusions. You should present the value of the contribution without exaggerating the results. A comprehensive but concise abstract is important because readers and researchers often decide whether to read an article on the basis of the abstract.

Edit your abstract for specific, concrete language. Eliminate statistical data, jargon, clichés, slang, and needless words, as well as all reference citations, tables, or figures. For "this paper" or "this manuscript" write "this article" or "the present article."

If your manuscript is accepted, the abstract will be published at the beginning of the article. Following publication of the full article, the abstract will be entered into the NASW Press *Social Work Abstracts* database and will appear in the *Social Work Abstracts* journal in print as well as in *Social Work Abstracts PLUS (SWAB+)* online.

KEY WORDS

Key words describe the topic of an article and the population discussed in its contents. Typically, an article should be accompanied by three to five key words, carefully selected on the basis of how well they describe its content. Remember that abstracting services (and, for articles posted online, many Internet "indexing spiders") will use these terms, so they should contain as few words as possible. In general, avoid using adjectives; change these to noun form.

Example:

The Economic Status of Vulnerable Older Women

Although the economic condition of elderly people in the United States has improved greatly in recent decades, concern for income security for certain segments of the elderly population black women and Hispanic women, particularly if they are unmarried. Their economic status remains extremely low. This article discusses the income status and work experience of black and Hispanic older women.

Key words: elderly people; income; racial–ethnic groups; women; work

NASW Press uses key words designated by authors to develop data on manuscript submissions. In addition, if the article is accepted, the key words will appear in the journal with the abstract and in the *Social Work Abstracts* database. They may also be used in the "Search" function of NASW Press online journals. Key words are not necessarily used for indexing.

TEXT

Reviewers look for new work that extends the knowledge base and builds on the contribution of others. However, there is no formula for a successful article. You may want to keep the following suggestions in mind as you prepare your manuscript for submission.

State Your Purpose

State your purpose clearly within the first few paragraphs of the article. If the reader cannot easily recognize what you hoped to accomplish in writing your manuscript, it is likely to be rejected.

Organize

Establish a clear framework for the article, and organize the manuscript so that it flows coherently. Use subheadings judiciously to help the reader track the flow of the article. If the article is organized properly, it will proceed logically and directly from the opening statements to your conclusions.

Relate Your Work to Existing Knowledge

You must relate your work to existing knowledge on the subject. However, you should not run voluminous electronic searches and incorporate every related reference you find. Instead, use those references that demonstrate best how the new information will fill gaps in the knowledge base.

Review and rewrite

Reviewing and rewriting are basic steps in developing a manuscript for publication. As you review your work, eliminate redundancies and superfluous language. The use of pretentious jargon interferes with communication and can conceal the importance of your work. Write precisely in the active voice, use jargon only when absolutely necessary to convey specialized knowledge, and eliminate any language that might convey the perception of bias or any kind of stereotyping of people and behavior (see the "Guidelines for Writing About People" section in chapter 8). Finally, proofread your manuscript for spelling, punctuation, and grammatical errors. Use electronic tools, such as spell-check and a thesaurus, to ensure that you have used words correctly.

AUTHOR BLURBS

In newsletter, magazine, and newsletter articles, the author blurb is written in prose style. It contains each author's full name as it appears on the title page, highest degree and any licenses or certifications, job title, employing organization, full mailing address and e-mail address for primary author, and city and state for secondary authors. For secondary authors, the state does not need to follow the city if the city is among those that do not require that the state be given (see the list in the "References/Citations" section) or if the state is named in the affiliation.

If two consecutive authors are from the same organization, the name, degrees and certifications, and job title of the first author are followed by the same information for the second author, and the employing organization and mailing address follow. Authors in the blurb should appear in the same order as in the byline, even if, for example, the first and third authors are from the same institution.

The author information also includes any acknowledgments the author needs or wishes to make for grants or substantive contributions to the content of the article and information about earlier presentations of the article a conference or meeting.

Author listings format:

Author names and degrees are in bold face.

If an author's name includes a diacritical mark (a phonetic mark used in many non-English languages, such as an umlaut or accent), retain it. Do not add one if such a mark is not used.

Be sure to always include authors' degrees and credentials, particularly those related to social work.

When an author holds the ACSW certification, do not include "MSW"; an MSW is a requirement for the ACSW.

Author job titles are lower case, except for named professorships.

Eliminate "the" from in front of all university names, except "Rutgers University, The State University of New Jersey."

In academic affiliations, when an organization within an organization is listed, the smaller (for example, college or department) should precede the larger (usually the university).

The e-mail address follows the zip code, separated from it by a semicolon. A colon precedes the address, when introduced by the term "e-mail."

FUNDING INFORMATION

If your research was funded and you have funding requirements such as the National Institutes of Health requirement to deposit articles in PudMed Central, please be sure to submit a funding acknowledgment in the following format:

The sentence should begin: "This work was supported by . . ."

The full official funding agency name should be given, e.g., “National Institutes of Health,” not “NIH”
Grant numbers should be given in brackets as follows: [grant number xxxx]
Multiple grant numbers should be separated by a comma as follows: [grant numbers xxxx, yyyy]
Agencies should be separated by a semicolon (plus “and” before the last funding agency)
Where individuals need to be specified for certain sources of funding, the following text should be added after the relevant agency or grant number “to [author initials with periods]”.
An example is given here: “This work was supported by the National Institutes of Health [AA123456 to C.S., BB765432 to M.H.]; and the Alcohol & Education Research Council [hfygr667789].” Oxford Journals will deposit all NIH-funded articles in PubMed Central.

REFERENCES/CITATIONS

In scholarly publications, authors are expected to build on the published work of others and are responsible for giving adequate and accurate credit to those on whose work they draw. Any reference to earlier research, conceptual work, and so forth should be accompanied by a reference citation in text and complete reference information in the reference list; similarly, all statistical data that are not part of primary research being discussed in the article must be accompanied by a reference to the source of those data.
In rare cases, an author over-documents. **It is not necessary to provide a reference citation for statements of well-known or historical facts, and it is not desirable to provide unwieldy lists of references.** Unless an author’s purpose is to be exhaustive (as in a comprehensive literature review or meta-analysis), reviewers may query the author to delete all but the most essential of the supporting references.
Reviewers may also query the author if reference citations in text or reference list are unclear or incomplete. Queries should specify what additional information is needed.
NASW uses the author-date citation style set forth in the *Publication Manual of the American Psychological Association* (6th ed.).

WAYS TO ENHANCE ACCURACY

If you change information in a reference, be sure to correct all citations of that reference throughout the article. In addition, ensure that the reference list is still in alphabetical order.
As you review a reference list, check to be sure that information that should be consistent throughout the list is so. For example, journal titles should be treated consistently, volume numbers for the same journal should correspond appropriately with the years, authors’ names should be spelled consistently, and

so forth. Likewise, you should be sure that you have not inadvertently used the same page numbers for two articles in the same issue of a journal.

IN-TEXT AUTHOR-DATE CITATIONS

Parenthetical citations—Parenthetical reference citations in text should, whenever possible, go at the end of the sentence so they do not interrupt the flow of the sentence.

Arrange multiple author-date citations alphabetically by surname of the first author, then chronologically for sources by the same author. Order citations containing "et al." alphabetically in text, regardless of order in the reference list. Use a semicolon to separate reference citations within parentheses:

(Abramovitz, 1988; Miller, 1989; Ozawa, 1982, 1986, 1990)

(Duncan & Morgan, 1979; Lindquist et al., 1983; Smith, 1992)

Citations with the same surname and same year—If two references have the same author surname and year of publication, include author initials in all text citations to avoid confusion:

(M. Henderson, 1990; V. Henderson, 1990)

Citations of secondary sources—Secondary citations (for example, "Jones, cited in Roberts, 1990") are acceptable if the primary source is unavailable. Only the secondary source (Roberts in the example) should be listed in the reference list.

Personal communications—Personal communications consist of letters, telephone conversations, interviews, and the like. Because they are not recoverable, personal communications are not included in the reference list. Use the following style in text: (personal communication with [first initial and last name], [title], [affiliation], [city and state abbreviation, if necessary], [month, day, and year of communication]:

(personal communication with R. Fischer, professor of social work, University of California, Los Angeles, May 20, 1992)

Alternatively, the name, title, and affiliation can go outside the parentheses and the words "personal communication" and the date inside:

J. T. Jones, professor of sociology at the University of Maryland at College Park (personal communication, June 11, 1991), suggested . . .

Nonparenthetical citations—Once a reference has been cited in a paragraph, omit the year in subsequent nonparenthetical citations in that paragraph, unless the reference could be confused with others cited in the article (for example, when there are two references by the same author):

In a recent study, Jones (1997) compared the findings of research conducted through 1995. Jones found that the results were inconsistent and often conflicting.

Use the past tense with in-text reference citations:

In her editorial, Hartman (1990) discussed the many ways of knowing involved in social work practice.

In a reference that appears in parenthetical text, use commas (not brackets) to set off the date:
(See Table 2 of Philips & Ross, 1983, for complete data.)

REFERENCE LIST

Check to be sure that entries are listed in alphabetical order (by surname of first author), then chronologically (earliest publication date first).

Reference lists should have ½-inch hanging indents. This means that the first line of each entry is flush left, with the following lines indented ½ inch to the right. Microsoft Word can help you easily create hanging indents. Click on the help button (or hit F1) and search for "Indent paragraphs," then link to "Create a hanging indent" for instructions.

For references listed as "in press," you will be asked to update the listing.

Insert spaces between two initials; three initials should be bunched.
Jung, C. G.; Du Bois, W.E.B.

Capitalize the first word after colons and em dashes (an em dash is the "long dash," often created by typing two hyphens, that goes between words in a sentence).

Delete commas in page numbers.
Federal Register, 42(163), 42474-42518

Delete "The" in titles of newspapers and periodicals in the reference list.
Atlantic Monthly
Gerontologist
Nation
New Republic
New York Times

CITATION FORMS

Following are examples of the most commonly used citations found in reference lists.

Chapter in an Edited Book

Griss, B. (1988–89). Strategies for adapting the private and public health insurance systems to the health-related needs of persons with disabilities or chronic illness. In B. Griss (Ed.), *Access to health care* (Vol. I, pp. 1–38). Washington; DC: World Institute on Disability.

Hayden, W., Jr. (1988). A curriculum model for social work management. In P. R. Keys & L. Ginsberg (Ed.), *New management in human services* (pp. 58–69). Silver Spring, MD: National Association of Social Workers.

Article in a Journal

Bogo, M., Wells, L., Abbey, S., Bergman, A., Chandler, V., Embleton, L., Guirgis, S., Huot, A., McNeill, T., Prentice, L., Stapleton, D., Shekter-Wolfson, L., & Urman, S. (1992). Advancing social work practice in the health field: A collaborative research partnership. *Health & Social Work, 17,* 223–235.

Holland, T. P., & Kilpatrick, A. C. (1991). Ethical issues in social work: Toward a grounded theory of professional ethics. *Social Work, 36,* 138–144.

Check that the years for NASW journals correspond with the volume numbers: The 2009 volume number for *Social Work* is 54; for *Social Work Research,* 33; for *Health & Social Work,* 34; and for *Children & Schools,* 31.

Do not include numbers from publications if you are certain that pagination is consecutive for the entire volume. The issue number is necessary when each issue of the periodical begins on page 1. If in doubt, leave the issue number. If the issue number is given for one citation from a journal, all other citations of that journal in the reference list must provide the issue number.

For all NASW journals except *Social Work Research & Abstracts* and *Social Work* before 1970, do not include the issue number. *Social Work Research & Abstracts* was divided in 1994 into *Social Work Research* and *Social Work Abstracts,* both of which are paginated consecutively through volumes.

Books

Be sure that a book's volume or edition number corresponds to the correct year. For example, *The Social Work Dictionary,* 4th edition, was published in 1999. If you were listing the 5th edition as a reference or resource, you would need to list 2003 as the year of publication. Double-check any publication dates about which you are unsure.

Format for books as references:

Bartlett, H. M. (1988). *Analysing social work practice by fields* (Rev. ed.). Silver Spring, MD: National Association of Social Workers.

Feldman, D. A., & Johnson, T. M. (Eds.). (1986). *The social dimensions of AIDS: Methods and theory.* New York: Praeger.

James, F. J. (in press). *Factors which shape the risks of homelessness: Preliminary observations from Colorado.* Denver: University of Colorado, Graduate School of Public Affairs.

Jung, C. G. (1953). Psychology and alchemy. In H. Read, M. Fordham, & G. Adler (Eds.), *The collected works of C. G. Jung* (Bollingen Series, Vol.12) (R.F.C. Hull, Trans.). New York: Pantheon Books. (Original works published 1917 and 1928)

McReynolds, P., & Chelune, G. J. (Eds.). (1990). *Advances in psychological assessment* (Vol. 6). San Francisco: Jossey-Bass.

Encyclopaedia of Social Work and Supplement

If you cite material from an edition of the *Encyclopaedia of Social Work* or a supplement prior to the current (20th) edition, you may be asked if the subject matter was updated in the 20th edition. If it was, cite the 20th edition.

Do not cite all of the editors for an edition of the *Encyclopaedia of Social Work* in a reference. Cite only T. Mizrahi and L. E. Davis (Eds.-in-Chief) for the 20th edition, R. L. Edwards (Ed.-in-Chief), for the 19th edition, and A. Minahan (Ed.-in-Chief) for the 18th edition. Also, do not cite all of the editors for the 19th edition

supplement; cite only R. English et al. (Eds.). Be sure to cite the correct volume number (Vol. 1 or 2 for the 18th edition; and Vol. 1, 2, or 3 for the 19th edition; and Vol. 1, 2, 3, or 4 for the 20th edition).

Butterfield, W. H., & Schoech, D. (1997). The Internet: Accessing the world of information. In R. L. Edwards (Ed.-in-Chief), *Encyclopaedia of social work* (19th ed., 1997 Suppl., pp. 151–166). Washington, DC: NASW Press.

Garfinckel, I. (1995). Child support. In R. L. Edwards (Ed.-in-Chief), *Encyclopedia of social work* (19th ed., Vol. 1, pp. 417–424). Washington, DC: NASW Press.

Foster, L. W. (2008). Bioethics. In T. Mizrahi & L. E. Davis (Eds.-in-Chief), *Encyclopedia of social work* (20th ed., Vol. 1, pp. 197–204). Washington, DC, and New York: NASW7 Press and Oxford University Press.

Rauch, J. B. (1990). Genetic services. In L. Ginsberg et al. (Eds.), *Encyclopedia of social work* (18th ed., 1990 Suppl., pp. 113–134). Silver Spring, MD: NASW Press.

Sze, W. M., & Ivker, B. (1987). Adulthood. In A. Minahan (Ed.-in-Chief), *Encyclopedia of social work* (18th ed., Vol. 1, pp. 75–89). Silver Spring, MD: NASW Press.

Electronic Sources

Butterfield. W. H., & Schoech. D. (1997). The Internet: Accessing the world of information. In R. L. Edwards (Ed.-in-Chief). *Encyclopedia of social work* (19th ed., 1997 Suppl., Social Work Reference Library [CD-ROM]). Washington, DC: NASW Press.

Kaplan. C. (1997, November 4). Interethnic adoption provisions of the Small Business Job Protection Act of 1996 (P.L. 104-188): Implications for social work practice. Retrieved Date from https://www.naswdc.org/prac/adopt.htm

National Association of Social Workers. (2003, April). *New advocacy resources: Child welfare workforce; human services workforce; data on children & families.* Government Relations Update. Retrieved Date from https://socialworkers.org/advocacy/updates/041803.asp

Note: When citing electronic media in a list of resources (versus references), "retrieved from" should be replaced with "available at" and the date of retrieval omitted.

Information gathered via e-mail and electronic bulletin boards and discussion groups ("chat" rooms) should be cited as personal communications.

Legal References

Follow *The Bluebook: A Uniform System of Citation* (18th ed.) for citation forms of legal references. Note that court cases are *italic* in text but are roman in the reference list.

Cite the name and year of an act in the text, along with the public law (P.L.) number. If possible, cite acts to the current official statute (according to the United States Code Annotated, Popular Name Table); otherwise, cite the official session laws. (See *The Bluebook,* pp. 3–43, for basic.)

Limited Circulation Publications

For publications of limited circulation or availability (such as newsletters and updates) and unpublished manuscripts, include a complete mailing address for the publisher or author. This should appear after the publication title, in parentheses, with no period following.

Kelly, E. (1988, March). Social workers come together for peace. *Newsletter of the NASW Committee of Social Workers for Peace and Social Justice.* (Available from NASW, 750 First Street, Suite 700, Washington, DC 20002-4241)

Newspapers

Raymond. C. (1990, September 12). Global migration will have widespread impact on society, scholars say. *New York Times,* pp. A1, A6.

Nonprint Media

Reference citations of nonprint media should include the title of the primary contributor in parentheses, the format (for example, "[Videotape]" or "[Cassette]") in brackets, and the name and location of the distributor.

Dickson, D. (Producer). (1990). *State v. Swan: Testifying in a criminal child abuse trial* [Videotape]. Silver Spring. MD: NASW Press.

Hitchcock, A. (Producer/Director). (1958). *Vertigo* [Motion picture]. United States: Paramount Pictures.

Paper Presented at a Conference or Meeting

Note: Be sure to include the month of a conference or meeting after the year.

Chaskin, R. J. (1997, February). *Implementing comprehensive community development: Possibilities and limitations.* Paper presented at the NASW Pennsylvania Chapter Conference, Harrisburg.

DiCecco, J. (1990. November). *Using interpreters: Issues and guidelines for the practitioner in a multilingual environment.* Paper presented at NASW's Annual Conference, Boston.

Reamer, F. G. (1987. March). *Social work and the public good: Calling or career?* Paper presented at the annual program meeting of the Council on Social Work Education, St. Louis.

Romero, J. (1990, May). *Culturally appropriate interventions with Hispanics.* Paper presented at the Cross-Cultural Competence Conference, San Diego Mental Health Services, San Diego.

When referring to papers presented at an NASW conference, refer to the following:

NASW's Annual Conference, November 1988, Philadelphia
NASW's Annual Conference, October 1989, San Francisco
NASW's Annual Conference, November 1990, Boston
No meeting was held in 1991.
World Assembly: NASW's Annual Conference, July 1992, Washington, DC
NASW's Annual Conference, November 1993, Orlando, FL
NASW's Annual Conference, November 1994, Nashville, TN
NASW's Annual Conference, November 1995, Philadelphia

NASW's Annual Conference, November 1996, Cleveland
NASW's Annual Conference, November 1997, Baltimore
No meeting was held in 1998.
NASW Regional Conference, September 1999, New Orleans
NASW Regional Conference, October 1999, Los Angeles
NASW's Annual Conference, November 2000, Baltimore

Government Publications

Generally speaking, references to an executive department should contain the name of the department, preceded by "U.S." Independent executive and congressional agencies are referenced by their traditional name:

Library of Congress
Social Security Administration
the former Veterans Administration
Office of Technology Assessment

Exceptions: U.S. General Accounting Office, U.S. Census Bureau (part of the U.S. Department of Commerce)

Publications for sale from the U.S. Government Printing Office (GPO) should include the name of the originating department and agency if named (they usually are) and publication number if given.

U.S. Bureau of the Census. (1994). *Statistical abstract of the United States, 1993* (114th ed.). Washington, DC: U.S. Government Printing Office.

U.S. Census Bureau. (1997, November 4). County income and poverty estimates, 1990 census estimates: Virginia 198.9 Retrieved Date from https://www.census.gov/ftp/pub/hhes/saipe/90data/tab/51_89.html

U.S. Census Bureau. (1984). Projections of the population of the United States, by age, sex, and race: 1983 to 2080. In R. J. Koski (Ed.), *Current population reports* (Series P-25, No. 952, Tables C and F, pp. 6, 8). Washington, DC: U.S. Government Printing Office.

U.S. Department of Health and Human Services, Public Health Service. (1994). *Sudden infant death syndrome* (Publication No. PHS 2370-1114). Washington, DC: U.S. Government Printing Office.

U.S. Department of Labor, Bureau of Labor Statistics. (1994). *Occupational outlook handbook.* Washington, DC: U.S. Government Printing Office.

Note: Government publications written under contract often have bylines.

Hopkins, A. (1994). *Strategic planning for welfare administration* (Publication No. HHS 1005-66). Washington, DC: U.S. Department of Health and Human Services, Administration for Children, Youth and Families.

Even if the book is available from the GPO, it is preferable to give the department's name; publication numbers often do not clearly identify the agency or department.

Schafft, G., Erlanger, W., Rudolph, L., Yin, R. K., & Scott, A. C. (1987). *Joint study of services and funding for handicapped infants and toddlers, ages 0 through 2*

years (Final report for Contract No. 300-85-0143). Washington, DC: U.S. Department of Education, Office of Special Education Programs, Division of Innovation and Development.

Government publications not available from the GPO should give the location of the department or agency.

National Institute of Mental Health, Office of Community Health Facilities. (1994). *Community mental health centers.* Bethesda, MD: Author.

U.S. Department of Defense. (1994). *Military base closings in 1995.* Alexandria, VA: Author.

Letters, Editorials, and Reviews

Use brackets to distinguish departments, such as "Letter," "Editorial," and "Book Review" (or other nonarticle material published in journals) in a reference list.

Hartman, A. (1991). *Words create worlds* [Editorial]. *Social Work, 36,* 275–276.

Unpublished Manuscripts

For unpublished manuscripts with a university affiliation, cite the college or university first, then the department. Be sure to include the city and state (or country). If the city is well known, or if the state or country is part of the university's name, there is no need to include the state or country. (See the list of cities that do not require a state or country name later in this chapter.)

Farber, B. A. (1979). *The effects of psychotherapeutic practice on psychotherapists: A phenomenological investigation.* Unpublished doctoral dissertation, Yale University, New Haven, CT.

Rapp, C. (1989). *Shifting paradigms or the creation of straw people.* Unpublished manuscript, University of Kansas, School of Social Welfare, Lawrence.

Special Collections

Lathrop, J. (1921, April 6). Letter G. Abbott. Chicago: Edith and Grace Abbott Papers, University of Chicago Library.

Social Welfare Archives. (1915–1917). World War I clippings of the Paul Kellogg papers (Folder 252). Minneapolis: University of Minnesota Library.

Cities and States in Reference Citations

In reference citations and in text, NASW follows Associated Press style for the omission of states and countries, except for Washington, DC. Use "DC" with Washington in text, resources, and reference lists.

Use the standard two-letter postal abbreviation for all states when listed in the reference list or the author blurb. In text, however, spell out the state name and include a comma before and after:

Example: Data for this study were gathered from a sample of 191 individuals in Allegheny County, Pennsylvania, who were at high risk of institutionalization.

Do not cite the state with the following cities:

Atlanta	Miami
Baltimore	Milwaukee
Boston	Minneapolis

Chicago	New Orleans
Cincinnati	New York
Cleveland	Oklahoma City
Dallas	Philadelphia
Denver	Pittsburgh
Detroit	St. Louis
Honolulu	Salt Lake City
Houston	San Diego
Indianapolis	San Francisco
Los Angeles	Seattle

Do not cite the country with the following cities:

Amsterdam	Montreal
Beijing	Moscow
Berlin	Ottawa
Copenhagen	Paris
Geneva	Quebec
Havana	Rome
Hong Kong	Singapore
Jerusalem	Stockholm
London	Tokyo
Luxembourg	Toronto
Madrid	Vatican City
Milan	Vienna
Monaco	

If the name of a state or country is in the name of an institution in a reference list, do not include the state or country with the city

Example: Tempe: Arizona State University.

Resource Lists

Reference lists are for citing works to which you have referred in an article or chapter. Resources, however, are included to direct readers to further informative materials like books, Web sites, and journal articles. Frequently, organizations and professional groups are also included in resource lists. Resources should be listed in the same format as references, with two main differences:

Electronic publications: Do not include “retrieved from” or the date on which you accessed material in a resource list. Instead, simply state “Available at:” and list the URL. Remember that periods do not appear at the end of URLs or e-mail addresses, even at the end of a sentence, as they may cause confusion when readers type them into their Web browsers.

Kaplan. C. (1997, November 4). Interethnic adoption provisions of the Small Business Job Protection Act of 1996 (P.L. 104-188): Implications for social work practice. Available at: https://www.socialworkers.org

Organizations and professional groups: The names of professional groups and organizations should never be italicized in resource lists, they are groups of people, not publications. Simply list the organization or group name, followed by "Available at:" and the URL.

Appendix P

Ethical approval for the Theory Driven Research Project

MEDICAL SCIENCES INTERDIVISIONAL RESEARCH ETHICS COMMITTEE
Research Services, Boundary Brook House, Churchill Drive, Headington, Oxford, OX3 7GB
Tel: +44(0)1865 616575
ethics@medsci.ox.ac.uk

CONFIDENTIAL

Dr Fiona McFarlane & Saskia Phelps
Oxford Institute for Clinical Psychology Training (OxICPT)
Isis Education Centre
Warneford Hospital
Oxford

1 October 2024

Dear Dr McFarlane and Saskia,

Research Ethics Approval - CUREC 1

Ethics Approval Reference: R95257/RE001

Study title: Investigating Self-stigma in Parents of Young People with a Diagnosis of Functional Neurological Disorder as Compared to Parents of Young People with Asthma

Short title: Self-stigma in Parents of Young People with Functional Neurological Disorders or asthma

The above application has been considered on behalf of the Medical Sciences Interdivisional Research Ethics Committee (MS IDREC) in accordance with the University's procedures for ethical approval of all research involving human participants.

I am pleased to inform you that, on the basis of the information provided to the IDREC, the proposed research has been judged as meeting appropriate ethical standards, and approval has been granted from **1st October 2024** until **31st March 2026.**

Insurance-provided indemnity arrangements are in place for the duration of the approval stated above. It is your responsibility to ensure that you request an extension to the end date for indemnity to remain in place should you continue the research beyond the dates covered.

Amendments

Should there be any subsequent changes to the study, you should submit details to the MS IDREC for consideration and approval. Details of changes must be listed on an amendment form.

Yours Sincerely

DocuSigned by:
Leah Butts
9F14889D2BC549A...

Mrs Leah Butts
Research Ethics Administrator

for
Dr Helen Barnby-Porritt
Research Ethics Manager

Appendix Q

Participant Information Sheet

Oxford Institute of Clinical Psychology Training and Research (OXICPTR)

Fiona McFarlane
fiona.mcfarlane@hmc.ox.ac.uk
Research Supervisor

Saskia Phelps
saskia.phelps@worc.ox.ac.uk
Trainee Clinical Psychologist
01865 226431

UNIVERSITY OF OXFORD

Self-stigma in parents of young people with functional neurological disorders or asthma

CUREC Approval Reference: R95257/RE001

General Information

The aim of this research is to understand more about the experiences of parents of young people with a diagnosis of a functional neurological disorder (FND) or of asthma. Research shows that parents of young people with mental health disorders experience more stigma from society than parents of children without mental health disorders. Sometimes these parents internalize that stigma, which can lead to distress. We want to know whether this is the case for parents of young people experiencing FND in comparison to parents of young people with asthma.

We appreciate your interest in participating in this research. You have been invited to participate because you are a parent (aged 18 years or over) of a young person aged 11-17 with a diagnosis of FND or asthma living in the UK. Please read through this information before agreeing to participate (if you wish to) by ticking the 'yes' box below.

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

The Principal Researcher is Saskia Phelps who is attached to the Oxford Institute of Clinical Psychology Training at the University of Oxford. This research is being completed under the supervision of Dr Fiona McFarlane and Dr Inés Banos.

Once you have read this page you will be required to complete an eligibility form. You will then be asked to fill out four short questionnaires. The questionnaires will ask you for information about you and your child's background e.g. age, gender, socio-economic demographic, ethnicity, FND or asthma diagnosis and any additional mental and physical health diagnoses. You will also be asked questions about your experiences of stigma related to FND and asthma, how you feel about yourself as a parent and your general wellbeing. If you are a parent of a young person with FND you will have the option to answer some free text questions about your experiences. The whole process of completing the questionnaires should take about 10-15 minutes. No background knowledge is required.

The reason we are collecting this information is to help us understand more about parents' experiences of stigma. In order to develop this understanding, the data will be analysed by the researcher to explore the relationship between stigma awareness, self-stigma and emotional distress.

Do I have to take part?

No. Please note that participation is voluntary. If you do decide to take part, you may stop at any point for any reason **before** submitting your answers by pressing the 'Exit' button/ closing the browser. Once you click Submit, your data will be anonymised and therefore it cannot be withdrawn. The completion of the questionaires will take around 10-15 minutes.

The way the questionnaires are scored means that that each question must be answered. Therefore, each question will need to be filled out before you can progress to the next questionnaire. You can exit the questionnaire at any point before submitting your answers if you feel uncomfortable about answering a question.How will my data be used?

In the questionnaire survey we will not collect any data that could directly identify you. If you wish to receive a summary of the research once it has been completed, you will have the option to provide your email address. However, this will not be linked in anyway to the study data and will only be used to send you the summary. If you are a parent of a young person with FND and you choose to answer the free text questions, some quotes may be used in the writing up of the research, but any identifiable information such as names and places will be removed.

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

The responses you provide will be stored in a password-protected electronic file on University of Oxford secure servers and will be written up as part of the researcher's doctoral thesis and may be published in an academic journal. The research may be presented at a conference and to other relevant organisations. If you have opted to provide your email address to receive a summary of the research findings, this will be stored in a password protected electronic file on University of Oxford secure servers, and will be deleted after the summary has been sent out, which is anticipated to be September 2025. Research data will be stored for three years after publication or public release of the work of the research.

Who will have access to my data?

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

The data you provide will be accessed by the researcher and supervisors, and processed through the software platform Qualtrics.

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

The results will be written up for an DClinPsy degree.

Who has reviewed this research?

This research has been reviewed by, and received ethics clearance through, a subcommittee of the

University of Oxford Central University Research Ethics Committee [R95257/RE001].

Who do I contact if I have a concern or I wish to complain?

If you have a concern about any aspect of this research, please contact Saskia Phelps (saskia.phelps@worc.ox.ac.uk) or Fiona McFarlane, (fiona.mcfarlane@hmc.ox.ac.uk) 01865226431 , and we will do our best to answer your query. We will acknowledge your concern within 10 working days and give you an indication of how it will be dealt with. If you remain unhappy or wish to make a formal complaint, please contact the University of Oxford Research Governance, Ethics & Assurance (RGEA) team at rgea.complaints@admin.ox.ac.uk or on 01865 616480.

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

☐ I certify that I am 18 years of age or over

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

☐ Yes, I agree to take part

Appendix R
Parents' Stigma Awareness Scale

Further information available on request.

Appendix S
Parents' Self-Stigma Scale

Further information available on request

Appendix T

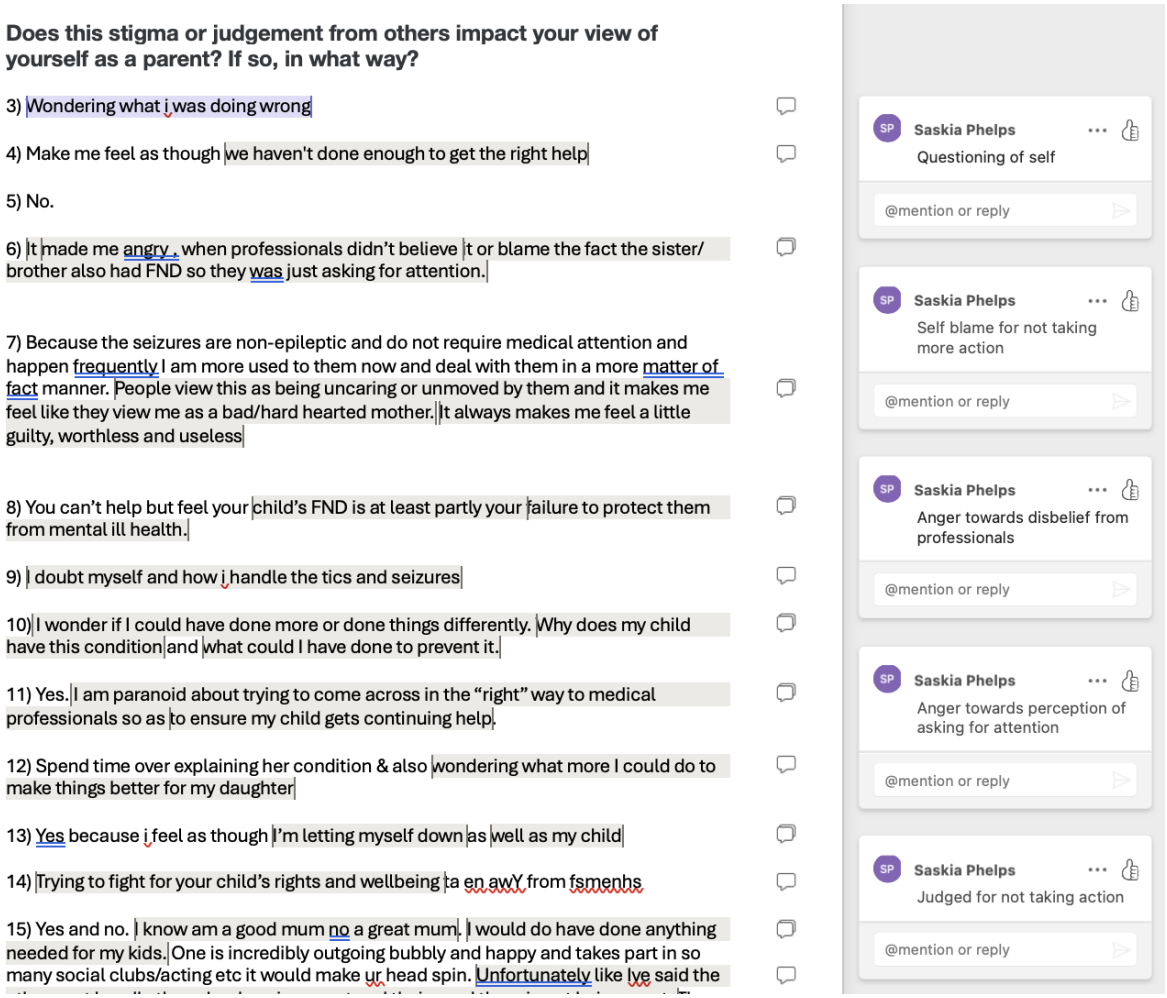
Free text questions

If you would like to provide more information about your experiences, please complete the optional questions below.

1) Have you experienced stigma or judgement as a result of your child's experiences of this condition? If so, could you provide details?
2) Does this stigma or judgement from others impact your view of yourself as a parent? If so, in what way?

Appendix U

Excerpt from coding process



Does this stigma or judgement from others impact your view of yourself as a parent? If so, in what way?

3) Wondering what i was doing wrong

4) Make me feel as though we haven't done enough to get the right help

5) No.

6) It made me angry , when professionals didn't believe it or blame the fact the sister/ brother also had FND so they was just asking for attention.

7) Because the seizures are non-epileptic and do not require medical attention and happen frequently I am more used to them now and deal with them in a more matter of fact manner. People view this as being uncaring or unmoved by them and it makes me feel like they view me as a bad/hard hearted mother. It always makes me feel a little guilty, worthless and useless

8) You can't help but feel your child's FND is at least partly your failure to protect them from mental ill health.

9) I doubt myself and how i handle the tics and seizures

10) I wonder if I could have done more or done things differently. Why does my child have this condition and what could I have done to prevent it.

11) Yes. I am paranoid about trying to come across in the "right" way to medical professionals so as to ensure my child gets continuing help.

12) Spend time over explaining her condition & also wondering what more I could do to make things better for my daughter

13) Yes because i feel as though I'm letting myself down as well as my child

14) Trying to fight for your child's rights and wellbeing ta en awY from fsmenhs

15) Yes and no. I know am a good mum no a great mum. I would do have done anything needed for my kids. One is incredibly outgoing bubbly and happy and takes part in so many social clubs/acting etc it would make ur head spin. Unfortunately like Ive said the

SP **Saskia Phelps** Questioning of self

@mention or reply

SP **Saskia Phelps** Self blame for not taking more action

@mention or reply

SP **Saskia Phelps** Anger towards disbelief from professionals

@mention or reply

SP **Saskia Phelps** Anger towards perception of asking for attention

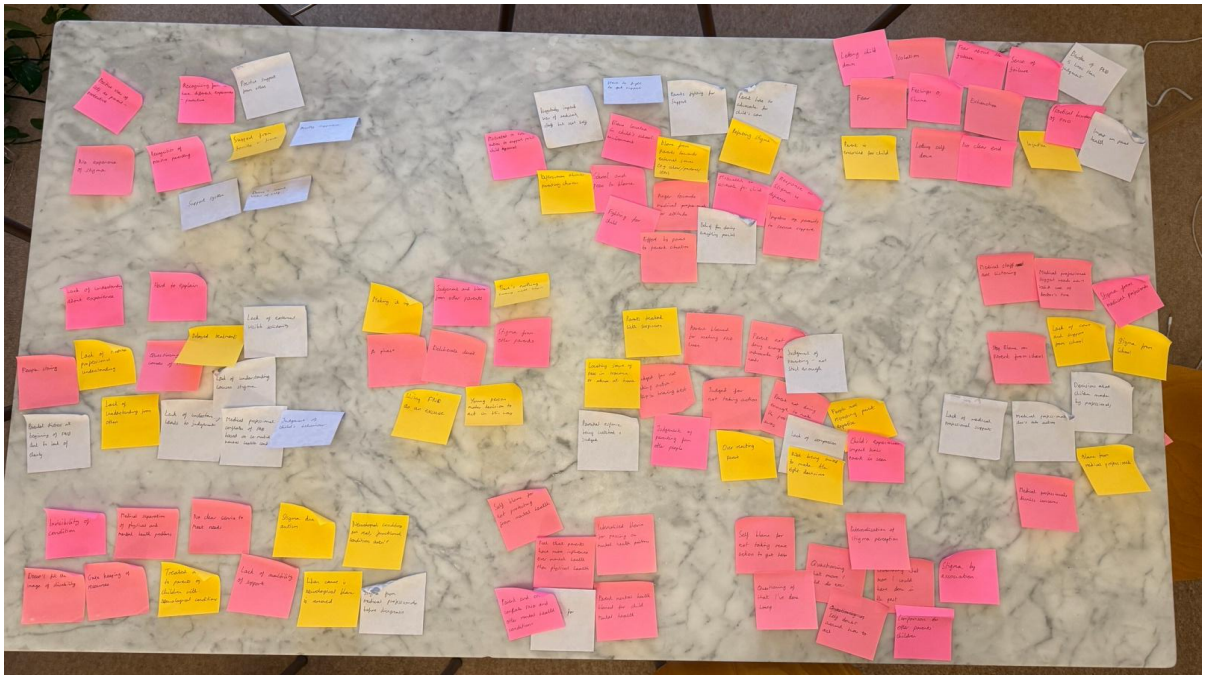
@mention or reply

SP **Saskia Phelps** Judged for not taking action

@mention or reply

Appendix V

Generating candidate themes



Appendix W

Description of outlier exclusion process

One parent had reported their age as 20 years old, and having a 15-year-old child. The rest of the data set was examined and did not show any abnormalities suggesting a bot response. As the age 20 was a significant outlier, it was assumed to be an error made by the parent and excluded from analysis.

Appendix X

Reported physical and mental health conditions of participants and their children

FND Parent Mental Health	FND Parent Physical Health	FND Child Mental Health	FND Child Physical Health
Anxiety Depression Depression and anxiety Depression Anxiety Dysmythia Depression Anxiety Depression Emotional unstable personality disorder Depression Autism Depression Depression Depression, anxiety, ADHD Depression and anxiety	Spinal stenosis. Osteoarthritis Asthma, Allergies Cervical Spondylitis Asthma Underactive thyroid, Diabetes Atrial Fibrillation Celiac disease, Reynard syndrome, gilberts syndrome Hypermobility, diabetes, menopause Fibromyalgia High blood pressure High blood pressure Diabetes Lupus (SLE) Asthma Lymphoedema Hashimoto's Blood Pressure and depression Fibromyalgia Sarcoidosis, inflammatory arthritis Asthma, migraines, b12 deficiency Diabetes Fibromyalgia Osteoarthritis	Mental health Depression anxiety and dissociative disorder. All diagnosed after FND Anxiety Chronic depression, generalised anxiety Anxiety, depression, OCD Depression and anxiety Generalised anxiety disorder Anxiety Severe anxiety, separation anxiety Depression, anxiety OCD Anxiety Anxiety, tics, NEADS (just under diagnosis, under neurology) Anxiety, ARFID, emetophobia Depression Anxiety Anxiety Anxiety and depression Anxiety Anxiety and depression Anxiety, depression and suicidal ideation Anxiety Tourette's EUPD anxiety Possible bipolar Anxiety Depression	Pots. Eds Chronic fatigue POTS Hypermobility, hypotonia, Hearing loss, mild global developmental delay Tourette's syndrome Subluxating joints, hypermobility, AU, migraines, stomach migraines, scoliosis, Costochondritis,1 kidney, 2wombs, Chronic constipation POTS Cerebral palsy POTS, coeliac disease Psoriasis Epilepsy Absence seizures EDS 3 Gene mutation, hypermobility, hypotonia Ehlers danlos and pots Rare gentic disorder and metopic craino synstosis

Asthma Parent Mental Health	Asthma Parent Physical Health	Asthma Child Mental Health	Asthma Child Physical Health
Depression, anxiety, self harm Depression/anxiety Generalized anxiety disorder (GAD) Bipolar t2 Anxiety Anxiety & depression Anxiety Depression	Asthma Eds Asthma Pcos Asthma, bone defect in spine Fibromyalgia and arthritis Asthma Cancer & asthma Sight loss - uveitus Osteoarthritis- waiting for knee replacements Graves Disease UCTD, asthma, sjorgens Rheumatoid Arthritis asthma, osteopenia, allergies Hypertension Severe asthma Crohn's disease and asthma Migraine Osteoarthritis Asthma, congenital heart disease Ehlers Danlos Syndrome, Postural Orthostatic Tachycardia Marfan syndrome Arthritis Asthma Fibromyalgia Long Covid, asthma, osteoarthritis Degenerative Disc Disease Asthma Scoliosis Asthma	Selective Mutism Anxiety Generalised anxiety disorder	Hypermobility Asthma Eczema Eczema Hypermobility Allergies Ehlers Danlos syndrome Ehlers Danlos Syndrome Eosinophilic oesophagitis ECZEMA Obstructive sleep apnea , rhinitis Eczema Constitutional Growth Delay Generalised hypermobility, and several non IgE food allergies Eczema and food allergies

Appendix Y

Description of missing data process

The PSAS scale accounts for three concepts blame, bad-parent, and courtesy stigma. However, no factor analysis has been conducted on the scale, therefore there are no defined subscales. This meant that we could impute data from the mean of the remaining answers for each respondent, with the aim to represent the missing response. Additionally, the missing data represented 9.09% of the overall scale. Research suggests that missing data under 10% it is unlikely to cause bias (Madley-Dowd et al., 2019).

Appendix Z

Correlation tables between demographic data and outcome variables for parents of young people with FND

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Stigma Awareness	--																
2. Self-Stigma	.544**	--															
3. Distress	.248*	.238	--														
4. Parent Age	-.159	.029	-.030	--													
5. Parent Ethnicity	.164	.189	.060	-.024	--												
6. Parent Mental Health	.212	.124	.212	-.148	.126	--											
7. Parent Physical Health	.111	.035	.223	.148	.009	.249*	--										
8. Child Age	-.049	.007	.025	.405**	.034	-.060	.231	--									
9. FND Duration	.053	-.105	.143	.041	.103	.028	.154	.179	--								
10. Diagnosis Age	-.120	.017	-.010	.183	-.006	-.062	.020	.536**	-.633**	--							
11. Child Gender	.225	.221	.331**	.060	.036	-.066	.074	.292*	.065	.212	--						
12. Child Ethnicity	.055	.151	.151	.020	.690**	.182	.014	.017	.044	.038	-.069	--					
13. Autism	.307*	.190	.224	.130	.070	.366**	.172	.009	.048	-.080	.096	.101	--				
14. ADHD	.079	-.152	.227	-.034	-.073	-.018	.032	.094	.180	-.053	-.053	-.106	.200	--			
15. Learning Disability	.117	-.029	.170	-.257*	.070	-.059	.097	-.115	.035	-.153	-.173	.102	.005	.239	--		
16. Child Physical Health	.036	-.199	-.047	-.030	.131	-.096	.072	.135	.144	-.060	-.124	.069	.184	.140	.173	--	
17. Child Mental Health	.323**	.252*	.205	.027	.037	.243	.029	.249*	-.023	.171	.217	.053	.356**	.125	-.161	.067	--

Appendix AA

Correlation tables between demographic data and outcome variables for parents of young people with Asthma

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Stigma Awareness	--																	
2. Self-Stigma	.157	--																
3. Distress	.163	.210	--															
4. Parent Age	-.068	-.037	-.137	--														
5. Parent Gender	.087	-.004	.131	.003	--													
6.. Parent Ethnicity	-.069	-.049	.157	-.102	.157	--												
7. Parent Mental Health	-.015	-.030	.590**	-.168	.067	.169	--											
8. Parent Physical Health	.107	.209	.195	.001	-.014	-.076	.311*	--										
9. Child Age	.005	-.005	-.122	.433**	.224	.025	-.139	-.231	--									
10. Asthma Duration	.154	.058	.124	.316*	.294*	.037	-.110	-.023	.499**	--								
11. Diagnosis Age	.078	-.129	-.056	-.021	-.226	-.057	.170	.076	-.096	-.654**	--							
12. Child Gender	.009	-.070	.160	-.056	.141	-.065	.089	.029	.336**	.149	.017	--						
13. Child Ethnicity	-.065	.056	.177	-.116	.134	.903**	.187	.000	.084	.041	-.013	.000	--					
14. Autism	.271*	.108	.114	-.065	-.171	-.149	-.030	.033	-.033	.006	.082	-.162	-.107	--				
15. ADHD	-.018	.019	.273*	-.114	-.171	-.149	.230	-.053	-.033	-.097	.109	-.074	-.107	.409**	--			
16. Learning Disability	.093	-.064	.013	.122	.039	.099	-.082	-.057	.243	.300*	-.164	-.023	.110	.313*	.109	--		
17. Child Physical Health	.142	.017	.050	.172	-.114	-.045	-.094	.079	.088	.228	-.158	.017	.000	.374**	.272*	.228	--	
18. Child Mental Health	-.076	.013	.162	.263*	.039	-.096	-.082	-.057	.105	.141	-.020	-.023	-.073	.109	.313*	.301*	.228	--

Appendix AB

Submission guidelines for Social Sciences and Medicine – Mental Health Journal

Writing and formatting

File format

We ask you to provide editable source files for your entire submission (including figures, tables and text graphics). Some guidelines:
Save files in an editable format, using the extension .doc/.docx for Word files and .tex for LaTeX files. A PDF is not an acceptable source file.
Lay out text in a single-column format.
Remove any strikethrough and underlined text from your manuscript, unless it has scientific significance related to your article.
Use spell-check and grammar-check functions to avoid errors.
We advise you to read our Step-by-step guide to publishing with Elsevier.

Title page

You are required to include the following details in the title page information:
Article title. Article titles should be concise and informative. Please avoid abbreviations and formulae, where possible, unless they are established and widely understood, e.g., DNA).
Author names. Provide the given name(s) and family name(s) of each author. The order of authors should match the order in the submission system. Carefully check that all names are accurately spelled. If needed, you can add your name between parentheses in your own script after the English transliteration.
Affiliations. Add affiliation addresses, referring to where the work was carried out, below the author names. Indicate affiliations using a lower-case superscript letter immediately after the author's name and in front of the corresponding address. Ensure that you provide the full postal address of each affiliation, including the country name and, if available, the email address of each author.
Corresponding author. Clearly indicate who will handle correspondence for your article at all stages of the refereeing and publication process and also post-publication. This responsibility includes answering any future queries about your results, data, methodology and materials. It is important that the email address and contact details of your corresponding author are kept up to date during the submission and publication process.
Present/permanent address. If an author has moved since the work described in your article was carried out, or the author was visiting during that time, a "present address" (or "permanent address") can be indicated by a footnote to the author's name. The address where the author carried out the work must be retained as their main affiliation address. Use superscript Arabic numerals for such footnotes.

Abstract

You are required to provide a concise and factual abstract which does not exceed 250 words. The abstract should briefly state the purpose of your research, principal results and major conclusions. Some guidelines:
Abstracts must be able to stand alone as abstracts are often presented separately from the article.
Avoid references. If any are essential to include, ensure that you cite the author(s) and year(s).

Avoid non-standard or uncommon abbreviations. If any are essential to include, ensure they are defined within your abstract at first mention.

Keywords

You are required to provide 1 to 7 keywords for indexing purposes. Keywords should be written in English. Please try to avoid keywords consisting of multiple words (using "and" or "of").
We recommend that you only use abbreviations in keywords if they are firmly established in the field.

Highlights

You are required to provide article highlights at submission.
Highlights are a short collection of bullet points that should capture the novel results of your research as well as any new methods used during your study. Highlights will help increase the discoverability of your article via search engines. Some guidelines:
Submit highlights as a separate editable file in the online submission system with the word "highlights" included in the file name.
Highlights should consist of 3 to 5 bullet points, each a maximum of 85 characters, including spaces.
We encourage you to view example article highlights and read about the benefits of their inclusion.

Graphical abstract

You are encouraged to provide a graphical abstract at submission.
The graphical abstract should summarize the contents of your article in a concise, pictorial form which is designed to capture the attention of a wide readership. A graphical abstract will help draw more attention to your online article and support readers in digesting your research. Some guidelines:
Submit your graphical abstract as a separate file in the online submission system.
Ensure the image is a minimum of 531 x 1328 pixels (h x w) or proportionally more and is readable at a size of 5 x 13 cm using a regular screen resolution of 96 dpi.
Our preferred file types for graphical abstracts are TIFF, EPS, PDF or MS Office files.
We encourage you to view example graphical abstracts and read about the benefits of including them.

Tables

Tables must be submitted as editable text, not as images. Some guidelines:
Place tables next to the relevant text or on a separate page(s) at the end of your article.
Cite all tables in the manuscript text.
Number tables consecutively according to their appearance in the text.
Please provide captions along with the tables.
Place any table notes below the table body.
Avoid vertical rules and shading within table cells.
We recommend that you use tables sparingly, ensuring that any data presented in tables is not duplicating results described elsewhere in the article.

Figures, images and artwork

Figures, images, artwork, diagrams and other graphical media must be supplied as separate files along with the manuscript. We recommend that you read our detailed artwork and media instructions. Some excerpts:
When submitting artwork:
Cite all images in the manuscript text.

Number images according to the sequence they appear within your article.
Submit each image as a separate file using a logical naming convention for your files (for example, Figure_1, Figure_2 etc).
Please provide captions for all figures, images, and artwork.
Text graphics may be embedded in the text at the appropriate position. If you are working with LaTeX, text graphics may also be embedded in the file.

Figure captions

All images must have a caption. A caption should consist of a brief title (not displayed on the figure itself) and a description of the image. We advise you to keep the amount of text in any image to a minimum, though any symbols and abbreviations used should be explained.
Provide captions in a separate file.

Generative AI and Figures, images and artwork

Please read our policy on the use of generative AI and AI-assisted tools in figures, images and artwork, which can be found in Elsevier's GenAI Policies for Journals.
This policy states:
We do not permit the use of Generative AI or AI-assisted tools to create or alter images in submitted manuscripts.
The only exception is if the use of AI or AI-assisted tools is part of the research design or methods (for example, in the field of biomedical imaging). If this is the case, such use must be described in a reproducible manner in the methods section, including the name of the model or tool, version and extension numbers, and manufacturer.
The use of generative AI or AI-assisted tools in the production of artwork such as for graphical abstracts is not permitted. The use of generative AI in the production of cover art may in some cases be allowed, if the author obtains prior permission from the journal editor and publisher, can demonstrate that all necessary rights have been cleared for the use of the relevant material, and ensures that there is correct content attribution.

Supplementary material

We encourage the use of supplementary materials such as applications, images and sound clips to enhance research. Some guidelines:
Supplementary material should be accurate and relevant to the research.
Cite all supplementary files in the manuscript text.
Submit supplementary materials at the same time as your article. Be aware that all supplementary materials provided will appear online in the exact same file type as received. These files will not be formatted or typeset by the production team.
Include a concise, descriptive caption for each supplementary file describing its content.
Provide updated files if at any stage of the publication process you wish to make changes to submitted supplementary materials.
Do not make annotations or corrections to a previous version of a supplementary file.
Switch off the option to track changes in Microsoft Office files. If tracked changes are left on, they will appear in your published version.

Research data

We are committed to supporting the storage of, access to and discovery of research data, and our research data policy sets out the principles guiding how we work with the research community to support a more efficient and transparent research process.

Research data refers to the results of observations or experimentation that validate research findings, which may also include software, code, models, algorithms, protocols, methods and other useful materials related to the project.
Please read our guidelines on sharing research data for more information on depositing, sharing and using research data and other relevant research materials.
For this journal, the following instructions from our research data guidelines apply.
Option B: Research data deposit, citation and linking
You are **encouraged** to:
Deposit your research data in a relevant data repository.
Cite and link to this dataset in your article.
If this is not possible, make a statement explaining why research data cannot be shared.

Data statement

To foster transparency, you are encouraged to state the availability of any data at submission.
Ensuring data is available may be a requirement of your funding body or institution. If your data is unavailable to access or unsuitable to post, you can state the reason why (e.g., your research data includes sensitive or confidential information such as patient data) during the submission process. This statement will appear with your published article on ScienceDirect.
Read more about the importance and benefits of providing a data statement.

Data linking

Linking to the data underlying your work increases your exposure and may lead to new collaborations. It also provides readers with a better understanding of the described research.
If your research data has been made available in a data repository there are a number of ways your article can be linked directly to the dataset:
Provide a link to your dataset when prompted during the online submission process. For some data repositories, a repository banner will automatically appear next to your published article on ScienceDirect.
You can also link relevant data or entities within the text of your article through the use of identifiers. Use the following format: Database: 12345 (e.g. TAIR: AT1G01020; CCDC: 734053; PDB: 1XFN).
Learn more about linking research data and research articles in ScienceDirect.

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This journal enables the publication of research objects (e.g. data, methods, protocols, software and hardware) related to original research in Elsevier's Research Elements journals.
Research Elements are peer-reviewed, open access journals which make research objects findable, accessible and reusable. By providing detailed descriptions of objects and their application with links to the original research article, your research objects can be placed into context within your article.
You will be alerted during submission to the opportunity to submit a manuscript to one of the Research Elements journals. Your Research Elements article can be prepared by you, or by one of your collaborators.

Article structure

Article sections

Divide your article into clearly defined and numbered sections. Number subsections 1.1 (then 1.1.1, 1.1.2, ...), then 1.2, etc.

Use the numbering format when cross-referencing within your article. Do not just refer to "the text."
You may give subsections a brief heading. Headings should appear on a separate line.
Do not include the article abstract within section numbering.

Theory and calculation

The theory section should lay the foundation for further work by extending the background you provided in the introduction to your article. The calculation section should represent a practical development from a theoretical basis.

Glossary

Please provide definitions of field-specific terms used in your article, in a separate list.

Footnotes

We advise you to use footnotes sparingly. If you include footnotes in your article, ensure that they are numbered consecutively.
You may use system features that automatically build footnotes into text. Alternatively, you can indicate the position of footnotes within the text and present them in a separate section at the end of your article.

Acknowledgements

Include any individuals who provided you with help during your research, such as help with language, writing or proof reading, in the acknowledgements section. Acknowledgements should be placed in a separate section which appears directly before the reference list. Do not include acknowledgements on your title page, as a footnote to your title, or anywhere else in your article other than in the separate acknowledgements section.

Author contributions: CRediT

Corresponding authors are required to acknowledge co-author contributions using CRediT (Contributor Roles Taxonomy) roles:
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Data curation
Formal analysis
Funding acquisition
Investigation
Methodology
Project administration
Resources
Software
Supervision
Validation
Visualization
Writing – original draft
Writing – review and editing
Not all CRediT roles will apply to every manuscript and some authors may contribute through multiple roles.
We advise you to read more about CRediT and view an example of a CRediT author statement.

Funding sources

Authors must disclose any funding sources who provided financial support for the conduct of the research and/or preparation of the article. The role of sponsors, if any, should be declared in relation to the study design, collection, analysis and

interpretation of data, writing of the report and decision to submit the article for publication. If funding sources had no such involvement this should be stated in your submission.
List funding sources in this standard way to facilitate compliance to funder's requirements:
Funding: This work was supported by the National Institutes of Health [grant numbers xxxx, yyyy]; the Bill & Melinda Gates Foundation, Seattle, WA [grant number zzzz]; and the United States Institutes of Peace [grant number aaaa].
It is not necessary to include detailed descriptions on the program or type of grants, scholarships and awards. When funding is from a block grant or other resources available to a university, college, or other research institution, submit the name of the institute or organization that provided the funding.
If no funding has been provided for the research, it is recommended to include the following sentence:
This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Appendices

We ask you to use the following format for appendices:
Identify individual appendices within your article using the format: A, B, etc.
Give separate numbering to formulae and equations within appendices using formats such as Eq. (A.1), Eq. (A.2), etc. and in subsequent appendices, Eq. (B.1), Eq. (B. 2) etc. In a similar way, give separate numbering to tables and figures using formats such as Table A.1, Fig. A.1, etc.

References

References within text

Any references cited within your article should also be present in your reference list and vice versa. Some guidelines:
References cited in your abstract must be given in full.
We recommend that you do not include unpublished results and personal communications in your reference list, though you may mention them in the text of your article.
Any unpublished results and personal communications included in your reference list must follow the standard reference style of the journal. In substitution of the publication date add "unpublished results" or "personal communication."
References cited as "in press" imply that the item has been accepted for publication.
Linking to cited sources will increase the discoverability of your research.
Before submission, check that all data provided in your reference list are correct, including any references which have been copied. Providing correct reference data allows us to link to abstracting and indexing services such as Scopus, Crossref and PubMed. Any incorrect surnames, journal or book titles, publication years or pagination within your references may prevent link creation.
We encourage the use of Digital Object Identifiers (DOIs) as reference links as they provide a permanent link to the electronic article referenced.

Reference style

All citations in the text should refer to:
Single author: the author's name (without initials, unless there is ambiguity) and the year of publication.
Two authors: both authors' names and the year of publication.
Three or more authors: first author's name followed by 'et al.' and the year of publication.

Citations can be made directly (or parenthetically). Groups of references can be listed either first alphabetically, then chronologically, or vice versa. Examples: "as demonstrated (Allan, 2020a, 2020b; Allan and Jones, 2019)" or "as demonstrated (Jones, 2019; Allan, 2020). Kramer et al. (2023) have recently shown".
The list of references should be arranged alphabetically and then chronologically if necessary. More than one reference from the same author(s) in the same year must be identified by the letters 'a', 'b', 'c', etc., placed after the year of publication.
Abbreviate journal names according to the List of Title Word Abbreviations (LTWA).
Examples:

Reference to a journal publication:

Van der Geer, J., Handgraaf, T., Lupton, R.A., 2020. The art of writing a scientific article. J. Sci. Commun. 163, 51–59. https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1016/j.sc.2020.00372.

Reference to a journal publication with an article number:

Van der Geer, J., Handgraaf, T., Lupton, R.A., 2022. The art of writing a scientific article. Heliyon. 19, e00205. https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1016/j.heliyon.2022.e00205.

Reference to a book:

Strunk Jr., W., White, E.B., 2000. The Elements of Style, fourth ed. Longman, New York.

Reference to a chapter in a book:

Mettam, G.R., Adams, L.B., 2023. How to prepare an electronic version of your article, in: Jones, B.S., Smith, R.Z. (Eds.), Introduction to the Electronic Age. E-Publishing Inc., New York, pp. 281–304.

Reference to a website:

Cancer Research UK, 2023. Cancer statistics reports for the UK. http://www.cancerresearchuk.org/aboutcancer/statistics/cancerstatsreport/ (accessed 13 March 2023).

Reference to a dataset:

Oguro, M., Imahiro, S., Saito, S., Nakashizuka, T., 2015. Mortality data for Japanese oak wilt disease and surrounding forest compositions [dataset]. Mendeley Data, v1. https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.17632/xwj98nb39r.1.

Reference to software:

Coon, E., Berndt, M., Jan, A., Svyatsky, D., Atchley, A., Kikinzon, E., Harp, D., Manzini, G., Shelef, E., Lipnikov, K., Garimella, R., Xu, C., Moulton, D., Karra, S., Painter, S., Jafarov, E., & Molins, S., 2020. Advanced Terrestrial Simulator (ATS) v0.88 (Version 0.88) [software]. Zenodo. https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.5281/zenodo.3727209.

Web references

When listing web references, as a minimum you should provide the full URL and the date when the reference was last accessed. Additional information (e.g. DOI, author names, dates or reference to a source publication) should also be provided, if known.
You can list web references separately under a new heading directly after your reference list or include them in your reference list.

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We encourage you to cite underlying or relevant datasets within article text and to list data references in the reference list.
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Add [dataset] immediately before your reference. This will help us to properly identify the dataset. The [dataset] identifier will not appear in your published article.

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We ask you to mark preprints clearly. You should include the word "preprint" or the name of the preprint server as part of your reference and provide the preprint DOI.
Where a preprint has subsequently become available as a peer-reviewed publication, use the formal publication as your reference.
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If you use a citation plug-in from these products, select the relevant journal template and all your citations and bibliographies will automatically be formatted in the journal style. We advise you to remove all field codes before submitting your manuscript to any reference management software product.
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