Oxford Doctoral Course in Clinical Psychology

Thesis submitted in partial fulfilment of the degree of Doctor of Clinical Psychology (DClinPsych)

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A thesis submitted in partial fulfilment of the requirements of the degree of Doctor of Clinical Psychology, University of Oxford

Harris Manchester College

January 2022

Critical review of the literature: 6569 words

Service improvement project: 5387 words

Main research project: 5995 words

Executive summary: 991 words

Reflective narrative: 965 words

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Critical Review of the Literature (CRL)

Providing care for individuals with a diagnosis of Borderline Personality Disorder (BPD) forms a large part of mental health service provision. The care needs of this population are often complex and can raise a number of unique challenges for healthcare staff. Using insights from the social-cognitive model of stigma, this review first explores the challenges that may be experienced by this client group within a healthcare context. From this foundation, this review seeks to consider the specific components of training interventions for staff which seek to improve knowledge, attitude and/or behaviour toward this client group. To this end, searches were undertaken on EMBASE, PubMed, PsycINFO, CINAHL and Medline and, after screening, 18 eligible papers were identified. These included quantitative, qualitative and mixed method papers. Quantitative data highlights the variety of practical and interactive delivery methods employed by facilitators to convey theoretically driven training content. Qualitative data revealed that participants (healthcare staff) found benefit from an interactive, practical training programme, alongside the provision of a novel yet accessible framework through which to better understand BPD. The benefit of peer-support, personal testimony from an individual with lived experience and support post-training was also highlighted. Key limitations of existing literature are explored and recommendations for future research are suggested.

Service Improvement Project (SIP)

Purpose

Mental health crisis care within the UK has been highlighted as a healthcare challenge that demands urgent attention. Launched in 2018, Oxford Safe Haven (OSH) is an out-of-hours crisis service seeking to provide a non-medical space for adults in mental health crisis. This study seeks to explore the impact of OSH from two perspectives; the experience of the

service-user and whether there is a change in use of other emergency services for those attending OSH.

Study approach

This study employs a mixed-method approach. Semi-structured interviews with eight service-users were conducted to explore individual's experience of the service. Thematic analysis was used to identify key themes. Service-user feedback forms were also considered. Alongside this, A&E attendance rates 12 months before and after first OSH attendance were analysed to assess whether pattern of OSH use impacts use of A&E.

Findings

Overall response from service users was positive and service-users indicated that OSH provides rich and varied care. Contrary to prediction however, there did not appear to be a change in A&E use for individuals using OSH. This presents a complex picture. Findings suggest that there are distinct groups of individuals who have differing care needs and engage with crisis services in different ways.

Value

Whilst conducted at OSH, this study provides novel insights into service-user experience and engagement with this service delivery model. This study presents recommendations for service development from both a commissioner and practitioner perspective. Further research is needed to understand the perspective of different groups of individuals engaging with crisis care services.

Main Research Project (MRP)

Transition to motherhood can be a time of intense stress for women, and mental health problems, including anxiety, are common during this time. This study seeks to understand the relationship between post-natal stress, level of social support and the

development of post-natal anxiety in the first months of motherhood. Online questionnaire data collected between 6-10 weeks and 14-18 weeks post-partum for 80 new mothers was included in the study analysis. Contrary to prediction, moderated regression analysis indicated that level of social support did not moderate the relationship between stress and anxiety during this period. Overall, this sample reported low levels of anxiety which is in contrast to other similar studies. In seeking to understand these findings, the impact of online recruitment and data collection are considered, alongside factors such as the presence of other mediating or moderating factors. Future research with this population should carefully consider participant recruitment methods in order to connect with a sample of women that reflects the wider population.

Keywords. post-natal anxiety, stress, social support, first-time mother, motherhood

Critical Review of the Literature

Key components of training interventions for mental health professionals in their care of those with a diagnosis of Borderline Personality Disorder: A Systematic Review

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Proposed Journal: The Journal of Personality Disorders. This journal publishes peer-reviewed papers which consider the diagnosis and treatment of personality disorders. It accepts longer reviews and seeks to promote dialogue between practitioners and researchers in their work with individuals with a personality disorder diagnosis.
(**Appendix E** for author guidelines)

Acknowledgements: Thank you to Alexandra Harper (Trainee Clinical Psychologist, Oxford University) for her encouragement and support in providing peer-review of papers.

December 2021
Word Count: 6569 words

Abstract

Providing care for individuals with a diagnosis of Borderline Personality Disorder (BPD) forms a large part of mental health service provision. The care needs of this population are often complex and can raise a number of unique challenges for healthcare staff. Using insights from the social-cognitive model of stigma, this review first explores the challenges that may be experienced by this client group within a healthcare context. From this foundation, this review considers the specific components of training interventions for staff which seek to improve knowledge, attitude and/or behaviour toward this client group.

To this end, searches were undertaken on EMBASE, PubMed, PsycINFO, CINAHL and Medline and, after screening, 18 eligible papers were identified. These included quantitative, qualitative and mixed method papers. Quantitative data highlights the variety of practical and interactive delivery methods employed by facilitators to convey theoretically driven training content. Qualitative data revealed that participants (healthcare staff) found benefit from an interactive, practical training programme, alongside the provision of a novel yet accessible framework through which to better understand BPD. The benefit of peer-support, personal testimony from an individual with lived experience, and support post-training was also highlighted. Key limitations of existing literature are explored and recommendations for future research are suggested.

Introduction

Providing care for individuals who meet criteria for Borderline Personality Disorder (BPD) is a large part of mental health service provision, with estimates suggesting that, in the UK, this client group account for approximately 12% of psychiatric outpatients and 22% of psychiatric inpatients (Ellison, Rosenstein, Morgan, & Zimmerman, 2018). BPD, also termed Emotionally Unstable Personality Disorder (borderline type) in the ICD-10 (World Health Organization, 1993), is characterised by a markedly poor self-image and unstable self-identity, alongside pervasive patterns of cognitive, emotional and behavioural dysregulation. This instability typically manifests through interpersonal difficulties, impulsivity and suicidality which may be difficult for clinicians to manage (Shaikh et al., 2017). These symptoms overlap significantly with those of Complex Post-Traumatic Stress Disorder (CPTSD) and, whilst the debate is longstanding as to whether BPD and CPTSD are the same disorder, there is now some agreement that they are distinct diagnoses (Mosquera & Steele, 2017). In order to align with the extant literature, the term BPD is used throughout this review, however it is acknowledged that the healthcare challenges raised may also be applicable to those with a CPTSD diagnosis.

Using insights from the social-cognitive model of stigma (Corrigan, 2002), this review first outlines the challenges that may be experienced by this client group within a healthcare context. From this foundation, this review seeks to explore the components of staff training programmes which have sought to ameliorate both the understanding of BPD, and the approach to working with this population.

The social-cognitive model of stigma proposes three components of stigma formation; stereotypes, prejudice and discrimination (Corrigan, 2002). First, difference must be identified between a community (in the context of this paper this refers to staff within healthcare settings) and a stigmatised group (Link & Phelan, 2001). Stereotypes are the

cognitive components which give words and meaning to this identified difference. Prejudice speaks to the negative affect that occurs when stereotypes are endorsed by people, and discrimination is the behavioural response to stereotype and prejudice. Stereotypes, particularly if based on inaccurate knowledge, can therefore represent and support prejudicial attitudes and discriminatory behaviour.

This stigma process does not remain solely within the public realm, rather, individuals within the stigmatised group may accept and apply the stereotype to themselves. As a result, they may also experience negative affect or prejudice toward themselves and stigma may then be internalised (Corrigan & Watson, 2002). This self-stigma has been associated with increased severity of mental health distress, hopelessness, low self-esteem, feelings of disempowerment and poorer treatment engagement (see Livingston & Boyd (2010) for review); the antithesis of what the healthcare system aims to provide (The Department Of Health & Social Care, 2015).

The potential implications of this for individuals with a BPD diagnosis, and the services who seek to care for them, are particularly pertinent for two main reasons. First, research states BPD is among the most stigmatised psychiatric diagnoses (Sheehan, Nieweglowski, & Corrigan, 2016), with some studies suggesting that the primary source of this stigma is within healthcare services (Bonnington & Rose, 2014). Studies looking at BPD-specific stigma have highlighted stereotypes that some mental health professionals may have toward those with a BPD diagnosis. This research indicates that perceptions include clients with BPD being viewed as “attention-seeking” (Kling, 2014), not “truly” mentally unwell (Sulzer, 2015), and “threatening” (McGrath & Dowling, 2012). Themes of “untreatability” and these individuals being perceived as “manipulative” were also highlighted by Ring & Lawn (2019) in their review of this literature. The potential impact of these stereotypes is significant, not least because, if these cognitive assertions are endorsed by a clinician, the

behavioural response toward their client is more likely to be discriminative (Link, Cullen, Frank, & Wozniak, 1987). An example of this identified by Markham (2003), was for mental health nurses to desire greater social distance from those with a BPD diagnosis compared with those diagnosed with schizophrenia or depression.

Second, research indicates that individuals with a BPD diagnosis utilize both mental and physical health services to a greater extent than those with other mental health diagnoses (Bender et al., 2001; Selby & McHugh, 2013). Evidence suggests that this intensive use of services occurs even for those with subthreshold symptoms of BPD, albeit to a lesser degree than those with severe symptoms or co-morbid disorders (ten Have et al., 2016).

This narrative points to specific, and potentially significant implications for services in addressing staff attitudes toward this client group. Given the high number of individuals with this diagnosis accessing mental health care, the BPD-specific prejudice and discrimination that may be present within this treatment environment, and the deleterious impact of this for health and recovery, it is vital that we are attentive to the literature which seeks to teach, support, and equip staff in their work with this population. A recent systematic review found that, overall, staff training appears to be beneficial in improving attitudes toward those with a personality disorder diagnosis (Attwood, Wilkinson-Tough, Lambe, & Draper, 2019). In addition, there was some evidence to suggest that the inclusion of psychological theory, skills training, and/or the involvement of an individual with lived experience contributed to improved attitudes.

The current review aims to build on the work of Attwood and colleagues by focussing on the specific components which contribute to staff training programmes. In particular, the review considers what is commonly included in programme content, what methods are employed to deliver this, and how these aspects of training are perceived by participants (in this case, healthcare professionals). Given that this review is focussed on training

components, rather than intervention effectiveness, exclusion of qualitative methodology may have omitted relevant training programmes. Therefore, in order to provide a comprehensive overview of training components across interventions, a mixed method review was undertaken. In addition, qualitative data speaks more readily to how training components are received by participants, as well as capturing broader considerations which may inform the development and implementation of future interventions.

It is hoped that, in this way, a greater depth of understanding can be provided for both researchers and clinical leaders who seek to shape and implement effective interventions within a healthcare setting, for those caring for individuals with a BPD diagnosis. Key limitations of existing literature are also explored and recommendations for future research are suggested.

Method

The review was conducted using the relevant elements of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Page et al., 2021)

Search terms seeking to encapsulate “training” for “staff” who work with those diagnosed with “Borderline Personality Disorder” were used to search online databases (EMBASE, PubMed, PsycINFO, CINAHL and Medline). The wild card (denoted by *), together with the use of the thesaurus function, ensured inclusion of all variations of the key terms. Detail of search terms and combinations used are outlined in **Appendix A**. Although the term Borderline Personality Disorder was used throughout this review, it is acknowledged that there are multiple perspectives and a number of alternative terms that may be attributed to individuals with this set of experiences. This was reflected in the search terms.

Search results for each database were exported to Mendeley and duplicates were removed. Titles and abstracts were screened, and the full text of any potentially relevant

study was reviewed against inclusion criteria (Table 1) by both the first author and a peer-reviewer (AH). Reference lists of all included studies were also screened.

The inclusion criteria sought to capture studies pertaining to facilitator-led teaching or training, of any duration, for healthcare staff. The aims of this review were set within the context of identifying the need to support staff understanding, perception and care of this client group, as such, whilst specifically named anti-stigma training was not an inclusion criterion, interventions were required to be aimed at ameliorating knowledge, attitude, and/or behavioural intention of staff in their work with this population. In addition, training for students was excluded given that this teaching is within the context of a broader training paradigm, rather than professional development within a healthcare setting.

Table 1

Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
Studies concerning facilitator-led training/teaching, of any duration and any theoretical perspective.	
Studies whose training is directed at health care professionals (e.g. nurses, social workers, therapists, medics, allied health professionals, or multi-disciplinary teams)	Studies where training is directed at student populations
Studies whose training is focussed on working with Borderline Personality Disorder	Studies where training is focussed on stigma more broadly or other personality disorders (e.g. antisocial personality disorder)
Studies measuring change to knowledge, attitude and/or behavioural responses of staff toward those with a diagnosis of BPD	Studies *solely* measuring training quality, application of learning in clinical practice or other factor not pertaining to staff attitude or response to BPD
Quantitative, Qualitative and Mixed Method studies	Book Chapters
Studies for 2000 onwards	Papers not written in English

Quality Assessment

Given the high proportion of uncontrolled cohort studies identified, all included studies were assessed using the Critical Appraisal Skills Programme (CASP) cohort study checklist (Critical Appraisal Skills Programme, 2018a). The checklist comprises of 12

questions, each of which can be answered with “Yes”, “Can’t tell” or “No”. These responses were awarded two (yes), or zero points (can’t tell or no) in order to provide an overall rating of methodological quality. In addition, one point was assigned if a question was “partially” addressed; for example, one was given if a follow-up was completed yet there was a high drop-out rate (zero would equate to no follow up or no clear details given, and two would indicate a high completion rate at follow up). Total scores (out of 26) were then used to categorise studies as low (1-13), medium (14-19) or high (20-26) quality. Although the CASP does not provide scoring boundaries, classifying papers in this way is in line with Cochrane recommended practice (Noyes, Booth, Flemming, & et al., 2018) in order to provide structure and clarity of quality assessments. Previously published reviews which employ the CASP, have categorised papers using percentage of total score (Van Hees et al., 2019; Miller, Alele, Emeto, & Franklin, 2019). Scores in this review were not converted into percentages, however the grade boundaries mirrored the categories set by previous reviews (e.g., scoring below 50% on the CASP was deemed a low-quality paper (Van Hees et al., 2019) therefore scores below 13/26 were also categorised as low quality in this review).

For all qualitative papers, the CASP qualitative study checklist (Critical Appraisal Skills Programme, 2018b) was used. This checklist was used alongside the CASP cohort study checklist for mixed methods papers. The qualitative CASP includes 10 questions and the same scoring system as described above was used. Total scores (out of 20) were then used to categorise studies as low (1-10), medium (11-15) or high (16-20) quality. As referenced above, these grade boundaries were specified with guidance from published reviews.

The original CASP questions and how these were operationalised for this review are detailed in **Appendix B.** Six of the 18 included studies were independently rated by peer-review (AH) and a further five by the project supervisor (MK) to ensure interrater reliability. These 11 papers included two mixed methods studies and two qualitative studies, such that

the independent review process encompassed both the qualitative and cohort study checklist. All discrepancies were discussed and resolved.

Results

The following section will first provide an overview of identified studies and how these were screened. Quality assessment of these studies will then be presented.

The complete database search yielded 1244 studies after duplicates had been removed. After screening of titles and abstracts, 41 studies were read in full and 23 of these were removed as they did not meet inclusion criteria. This process is depicted in Figure 1.

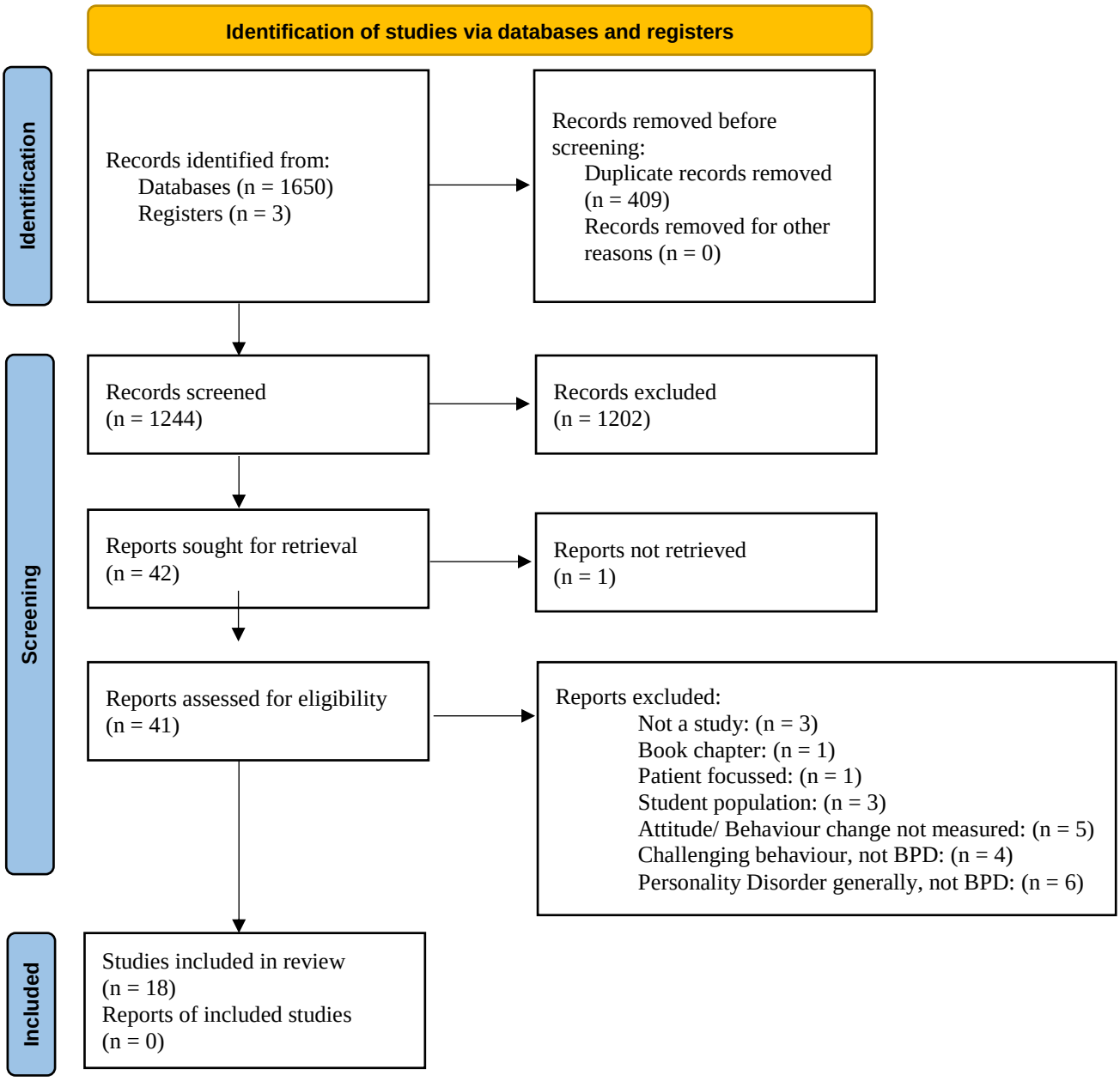

Figure 1: Flow diagram of study selection process (Page et al., 2021)
Initial search completed February 2020. Final search completed December 2021

Study Characteristics

The majority of the 18 papers included were based in the UK or the USA, however training from Ireland, Canada, Australia and New Zealand was also found. Outcome data for a total of 2445 participants (sample size range from 9 to 442) was included across all training programmes, which ranged from 90 minutes to three months in length and employed a wide

range of outcome measures. Data from all 18 studies was extracted by the first author (JM) and can be found in Table 2.

Table 2

Summary of study characteristics

Study	Setting	Facilitators	Sample		Country	Outcomes	
			Number	Professions		Measures Used	Follow up
Quantitative							
Kumar, Brand and Courtois (2019)	Staff from various healthcare settings; hosted by training centre	DNS	N= 30	PSY, SW, DRS, O	Australia and USA	10-item knowledge questionnaire* Competence & empathy questionnaire (adapted from Greenwald et al., 2008)	No
Masland et al., (2018)	Academic Medical Centre	Three psychiatrists, one of whom was employed by hosting centre.	N=52	PSY, DRS, N, SW, MHC, O	USA	31-item questionnaire (taken from Shanks et al., 2011)	6m
Keuroghlian et al., (2016)	Across four Academic Medical Centres	Four psychiatrists	N=297	DRS, PSY, SW, MHC, N	USA	31-item questionnaire (taken from Shanks et al., 2011)	No
Knaak et al., (2015)	Community and inpatient mental health	Programme developer (psychiatrist) and three "co-presenters"	N=187	SW, MHC, N, OT, PSY, DRS, NC, O	Canada	OMS-HC (revised for BPD)	No
Clarke, Taylor, Lancaster et al. (2015)	National advertising for UK state-funded and charitable organisation staff working with BPD clients	Consultant clinical psychologists experienced in delivering ACT and PETr (different trainer for each group)	N=63 (PETr) N=67 (ACT)	Professions not specified	UK	*1)* ADPQ, HAQ-II, SDS *2)* MBI, GHQ, VLQ *Control:* CEQ	6m
Clark, Fox, and Long (2014)	Low secure unit	The unit's consultant clinical psychologist	N=34	N, OT, PSY, SW, NC, O	UK	MHLO (revised for BPD), IRI	8wk
Herschell et al., (2013)	Community Mental Healthcare Centre	Two external trainers hired	N=64	"therapists"	USA	30-item questionnaire*	8m

Shanks et al., (2011)	DNS	Consultant Psychiatrist	N= 271	DRS, PSY, SW, N, MHC, SAC, O	USA	31-item questionnaire*	No
Commons Treloar (2009)	Public mental health	DNS	N= 18 (CBT) N= 25 (PA) N= 22 (control)	Professions not specified (ED & MH staff)	Australia and New Zealand	ASDHQ	6m
Commons Treloar & Lewis (2008)	Public mental health	DNS	N=99	Professions not specified (ED & MH staff)	Australia	ASDHQ	No
Krawitz (2004)	Public health and substance misuse inpatient, outpatient and rehab.	DNS	N=418	PSY, SW, OT, DRS	Australia	Questionnaire*	6m
			Qualitative				
Burke, Kells, Flynn, & Joyce (2019)	Public mental health	Family Connections trained individuals	N=13	DRS, N, SW, OT (ED&CMHT)	Ireland	n/a	No
Warrender (2015)	Acute mental health inpatient	Member of the hospital's education team	N=9	N	UK	n/a	No
Darongkamas, Dobel-Ober, Moody, Wakelin & Saddique (2020)	Community and inpatient mental health	Regional clinical psychologists	N=442	DRS, PSY, N, OT, HCSW	UK	HAQ-II, WEWBS, APPD*, CWW*	No
Dickens et al., (2019)	Community and inpatient mental health	Person with lived experience of BPD, with clinician (DNS profession)	N= 28	N	UK	BPD-CAI, BPD-EAI, BPD questionnaire (taken from Cleary, Siegfried, & Walter, 2002)	4m
Carmel, Logvinenko, and Valenti (2018)	Psychiatry Residents programme	DNS	N= 57	DRS	USA	OMS-HC, 25-item questionnaire (taken from Brodsky, Cabaniss, Arbuckle,	No

						Oquendo, & Stanley, 2017)	
Clarke, Taylor, Boldersto n et al. (2015)	National advertising for UK state-funded and charitable organisatio n staff working with BPD clients	Two consultant clinical psychologists Both experienced in DBT and ACT training and therapy	N=47 (DBT) N= 53 (ACT)	Professions not specified	UK	*1)* ADPQ, HAQ-II, SDS *2)* MBI, GHQ, VLQ, AAQ-II *Control:* CEQ	6m
Hazleton, Rossiter & Milner (2006)	DNS	DNS	N=69 (quant) N=24 (qual)	DRS, N, AHP	Australia	BPD questionnaire (adapted from Cleary et al., 2002)	1m & 6m

DNS = did not specify

Number: ACT=Acceptance and Commitment Therapy, CBT=Cognitive Behavioural Therapy, DBT=Dialectical Behaviour Therapy, PA=Psychoanalytic, PETr=psycho-education training.

Professions: AHP=Allied Health Professional, CMHT=Community Mental Health Team, DRS=psychiatrists/medics, ED= Emergency Department, HCSW=Healthcare Support Workers, MH=Mental Health, MHC=Mental Health counsellors, N=nurses, NC=non-clinical staff, O=Other, OT=Occupational Therapist, PSY=psychologists, SAC=Substance Abuse Counsellors, SW=social workers.

Measures Used: AAQ-II=Acceptance and Action Questionnaire, APDQ=Attitude to Personality Disorder Questionnaire, APPD=Attitude toward People with Personality Disorder, ASDHQ=Attitudes Toward Deliberate Self-Harm Questionnaire, BPD-CAI=Borderline Personality Disorder-Cognitive Attitudes Inventory, BPD-EAI=Borderline Personality Disorder Emotional Attitudes Inventory, CEQ=Credibility and Expectancy Questionnaire, CWW= Confidence Working With questionnaire, GHQ=General Health Questionnaire, HAQ-II=Helping Alliance Questionnaire – Therapist Version, IRI=Interpersonal Reactivity Index, MBI=Maslach Burnout Inventory, MHLO=Mental Health Locus of Origin scale, OMS-HC=The Opening Minds Stigma Scale for Health Care Providers, SDS=Social Distancing Scale, WEWBS=Warwick-Edinburgh Well-Being Scale. 1)=primary measures 2)=secondary measures. *indicates that the questionnaire was created for the purposes of the study in which it was used.

Quality Rating

Quality ratings for each of the studies are outlined in Table 3a and 3b, with key points highlighted here. Of the 16 studies which included quantitative methodology, five were considered of high quality, eight were deemed to be of medium quality and the remaining two were rated as low quality. Overall, studies had a clear aim for their research and were deemed to demonstrate both ease of delivery and applicability to the health and social care setting. It was noted however that 75% of the studies either had no follow up or reported high

dropout, which has potential implications for assessing the longer-term benefits of staff training in this context.

For qualitative ratings, two studies were assessed as high quality, four were of medium quality and one was graded low quality. Overall, these ratings demonstrate that the qualitative aspects of this literature add to the understanding of the teaching effectiveness and illuminate participant experience to an acceptable quality. Quality ratings therefore place value on the addition of the qualitative findings of these studies in seeking to improve understanding, attitude and behaviour toward those with a BPD diagnosis.

Only one study received a low score across both qualitative and quantitative aspects (Darongkamas, Dobel-Ober, Moody, Wakelin, & Saddique, 2020), and as such, this paper will not be reported on further in this review. Hazleton et al. (2006) will be included, along with all high and medium quality studies, given that the qualitative aspects of this mixed method study were deemed of medium quality and quantitative findings are in line with other studies.

Table 3a

Quality Assessment Ratings: quantitative studies and quantitative aspects of mixed method studies using CASP cohort studies checklist

Paper	Quant (Q) or mixed method (M)	1. Clear aim	2. Acceptable Recruitment	3. Received same intervention	4.Measure valid/ reliable	5a. Confounding factors noted	5b. Confounding factors included in analysis	6. Follow-up?	7. Results	8. Confidence intervals reported?	9. Results due to confounders/ bias	10. Application to health & social care	11. Fit with other studies	12. Deliverable intervention?	TOTAL (max: 26)
Kumar, Brand and Courtois (2019)	Q	2	1	0	1	2	1	0	2	2	1	1	1	2	16
Masland et al. (2018)	Q	2	2	1	1	2	2	2	2	0	2	2	2	2	22
Keuroghlian et al. (2016)	Q	2	2	1	1	2	2	0	2	0	2	2	2	2	20
Knaak et al. (2015)	Q	2	0	2	2	2	0	0	2	0	2	2	2	2	18
Clarke, Taylor, Lancaster et al. (2015)	Q	2	2	2	2	2	2	1	2	0	2	2	2	2	23
Clarke, Taylor, Bolderston et al. (2015)	Q	2	2	2	2	2	2	2	2	0	1	1	2	1	21
Clark, Fox, and Long (2014)	Q	2	2	1	2	2	2	1	0	0	1	2	1	2	18
Herschell et al. (2013)	Q	2	1	1	1	2	2	2	2	2	1	1	2	1	20

Shanks et al., (2011)	Q	2	0	2	1	1	2	0	2	0	2	1	2	2	18
Commons-Treloar (2009)	Q	2	2	2	2	2	0	1	2	0	2	1	1	2	19
Commons-Treloar and Lewis (2008)	Q	2	2	1	2	2	2	0	2	0	1	2	1	2	19
Darongkamas, Dobel-Ober, Moody, Wakelin & Saddique (2020)	M	1	1	1	2	0	0	0	2	0	1	2	2	2	14
Dickens et al. (2019)	M	2	2	2	2	2	1	1	2	0	1	1	2	2	20
Carmel, Logvinenko, and Valenti (2018)	M	2	2	1	2	1	1	0	0	0	1	2	2	1	15
Hazelton (2006)	M	2	0	0	1	2	0	1	0	0	1	1	1	2	11
Krawitz (2004)	M	2	1	0	1	2	2	2	2	0	1	2	2	2	19

Table 3b

Quality Assessment Ratings: qualitative aspects of mixed method and qualitative studies using CASP qualitative checklist

Paper	Qual (Q) or mixed method (M)	1. Clear statement	2. Illuminate subjective experience	3. Was qual or mixed methods appropriate?	4.Recruitment	5. Clear data collection	6. Relationship considered?	7. Ethical considerations	8. Detailed analysis	9. Findings related to research question	10. Add to understanding?	TOTAL (max: 20)
Burke, Kells, Flynn, & Joyce (2019)	Q	2	2	1	1	2	1	2	1	2	2	16
Warrender (2015)	Q	2	2	2	2	1	2	2	2	2	2	19
Darongkamas, Dobel-Ober, Moody, Wakelin & Saddique (2020)	M	0	2	1	0	1	0	0	2	1	1	8
Dickens et al. (2019)	M	2	2	2	1	2	1	1	1	1	2	15
Carmel, Logvinenko, and Valenti (2018)	M	2	2	1	0	1	2	1	1	0	1	11
Clarke, Taylor, Bolderston et al. (2015)	M	0	1	2	2	2	2	1	2	1	2	15

Hazelton, (2006)	M	1	2	2	0	1	0	1	0	2	2	11

Overview of training components

Components of the training programmes are outlined in Table 4 alongside the duration and theoretical framework employed in each study. All first authors were contacted to request any additional information pertaining to programme components (for detail see **Appendix C**). For the study components, 'Content' speaks to the subject matters covered in the training and 'Method of Delivery' refers the way in which facilitators conveyed the content to participants. Further details concerning component terms can be found in **Appendix D**.

Table 4

Study Components

Study	Length	Theoretical Framework	Components	
			Content	**Method of Delivery**
			Quantitative	
Masland et al., (2018)	1 day	GPM	Psych-ed Research Theory explanation Theory/Case link Psychopharmacology Risk management	Lecture Live/Video demonstrations Case Examples+
Keuroghlian et al., (2016)	1 day	GPM	Psych-ed Research Theory explanation Theory/Case link Psychopharmacology Risk management	Lecture Live/Video demonstrations Case Examples+
Knaak et al., (2015)	3 hrs	DBT	Psycho-ed Personal Testimony	Lecture Skills Training Modelling by facilitator
Herschell et al., (2013)	12 days (+ weekly phone consultation for 3months)	DBT	Psycho-ed Theory explanation	Lecture Skills Training Live/Video demonstrations Role Play Ongoing clinical supervision (weekly phone consultation)
Clarke, Taylor,	2 day	DBT	Theory explanation Theory/Case link Staff experience	Lecture Case Examples+ Skills Training

Bolderston et al. (2015)		ACT	Theory explanation Staff values	Lecture Self-management skills Skills training
Clarke, Taylor, Lancaster et al. (2015)	2 days (2 weeks apart)	ACT	Staff values Theory/Case link	Lecture Self-management skills Skills training Group Discussion
		PETr	Psycho-ed Research Risk management Personal Testimony	Lecture Group Discussion
Shanks et al., (2011)	1 day (6hrs)	STEPPS	Psycho-ed	Lecture Skills training Live/Video demonstrations Case Examples+
Commons Treloar (2009)	2 hrs	CBT	Psycho-ed Theory explanation Theory-Case link	Lecture Case Examples+ Group Discussion
		PA	Psycho-ed Theory explanation Theory-Case link	Lecture Case Examples+ Group Discussion
	None	Control	n/a	n/a
Clark, Fox, & Long (2014)	90 minutes	Neuro	Psycho-ed Theory explanation	Lecture
Kumar, Brand & Courtois (2019)	1-2 days	Unspecified	Psycho-ed	Lecture Live/Video demonstrations Role Play Group Discussion
Commons Treloar & Lewis (2008)	2 hrs	Unspecified	Psycho-ed Research Theory-Case link Treatment Guidelines	Lecture Case Examples+ Group Discussion
Krawitz (2004)	2 days	Unspecified	Psycho-ed Own experiences/values	Lecture Skills Training Role play Group Discussion Case Examples+ Given resources Modelling by facilitator
		Qualitative		
Burke, Kells, Flynn, & Joyce (2019)	7 hrs over 2 days	DBT	Psycho-ed Theory explanation	Lecture Skills Training
Warrender (2015)	2 days (2 weeks apart)	MBT-S	Psycho-ed Theory explanation Theory/Case link	Lecture Role play Video demonstrations Skills training Case Example+

				Direct patient care/contact Ongoing clinical supervision
Mixed Methods				
Carmel, Logvinenko, & Valenti (2018)	3 months "weekly training" (no time length specified) *DBT only:* 3hr orientation to DBT session and weekly DBT consultation (no time length specified) in addition to "weekly training"	DBT	Theory explanation Theory-Case link Risk management	Lectures Skills Training Case Examples+ Weekly DBT consultation Direct patient care/contact
		TAU	Psycho-ed Case management Psychopharmacology	Lectures Skills Training Case Examples+ Direct patient care/contact
Hazleton, Rossiter & Milner (2006)	2 days	DBT	Psycho-ed Theory explanation Theory-Case link Staff experience	Lecture Skills Training
Dickens et al., (2019)	1 day (2x 3 hr sessions)	Unspecified	Psycho-ed Personal Testimony Staff experience	Lecture Group Discussion Given resources

Theoretical Framework: ACT=Acceptance and Commitment Therapy, CBT=Cognitive Behavioural Therapy, DBT=Dialectical Behaviour Therapy, GPM= Good Psychiatric Management, MBT-S=Mentalisation-Based Therapy – Skills Training, PA=Psychoanalytic PETr=psycho-education training, STEPPS= Systems Training for Emotional Predictability and Problem Solving, TAU=Treatment as usual. + indicates inclusion of written/ video vignettes or case formulation. Length of training is detailed to the level afforded by the paper. Details of 'content' and 'method of delivery' terms can be seen in **Appendix D.**

Synthesis

Quantitative Data

Findings from 12 quantitative studies and 3 mixed method studies are considered in this section. Overall effectiveness of the training programmes is summarised however, in line with the aims of this review, this section primarily focuses on the components of training. Findings are grouped into two categories: (a) content of training and (b) method of delivery.

Training effectiveness. Overall, the studies included in this review report positive change across a range of outcome measures as a result of training. Of the nine studies which included follow up data (see Table 2), the majority found that improvements were maintained over time. Studies used a wide variety of outcome measures, aimed to assess change in a range of concepts pertaining to knowledge, attitude, or behavioural intention toward those with a diagnosis of BPD, as well as confidence to treat this client group. There was some evidence to suggest that training with a strong weighting toward 'content', rather than a variety of delivery methods, may be less effective in changing negative attitude toward those with BPD (Clark, Fox, & Long, 2014; Keuroghlian et al., 2016; Masland et al., 2018). Rather, significant change was observed in improved knowledge of BPD (med-large effect sizes) in these studies.

Content of training. Psychoeducation was the most commonly identified content component and was present across all studies. Four of the studies did not specify the theoretical position from which the training was developed, and it appeared that psychoeducation was the principal way in which staff were guided to understand BPD. For Krawitz (2004), Kumar, Brand & Coutois (2019) and Commons Treloar & Lewis (2008) this included a focus on the aetiology, prognosis, and treatment of BPD, however Dickens et al. (2019) also included "a biosocial understanding" of BPD as part of the psychoeducation content. For these studies without a specific, named therapeutic framework underpinning the programme, positive outcomes were observed.

The remaining 11 training programmes were all underpinned by a therapeutic model which dictated the conceptual framework through which an understanding of BPD was presented to staff. Theory explanation was therefore a key content component for these

studies, and all authors noted that the intention of this was to provide a theoretically driven framework through which client behaviour, or staff-client interactions, could be formulated in a non-pejorative manner. Five studies augmented theory explanation through linking theory to case examples (Commons Treloar, 2009; Carmel, Logvinenko, & Valenti, 2018 [Dialectical Behaviour Therapy (DBT) group]; Commons Treloar & Lewis, 2008; Hazelton, Rossiter, & Milner, 2006; Keuroghlian et al., 2016; Masland, Price, Macdonald, et al., 2018). Within this context, psychoeducation therefore appeared to be included to provide supplementary information and knowledge about BPD.

There were a number of aspects to training content that were less frequently identified; namely, inclusion of personal testimony from someone with lived experience of BPD, research, case management, risk management, psychopharmacology, and exploration of staff' own experiences or values. The three latter components appeared driven by the theoretical underpinnings of the training programme in which they were employed. For example, psychopharmacology and risk management were included in training underpinned by Good Psychiatric Management (GPM), which identifies risk-management and symptom-targeted pharmacology as two of its core tenets (Gunderson, 2014). Similarly, in line with Acceptance and Commitment Therapy (ACT) model, ACT-based interventions included content which openly explored staff's personal values in a workplace context, with reference to how these may shape their attitude or response to clients (Clarke, Taylor, Bolderston, Lancaster, & Remington, 2015; Clarke, Taylor, Lancaster, & Remington, 2015). When directly comparing this training to a DBT-based intervention, Clarke, Taylor, Bolderston et al. (2015) shifted the focus of this content to explore and validate staff's experience of working with this client group. Validation is a

key aspect of the DBT model and, building on this foundation, facilitators then guided staff in how they may validate their client' experience. ACT-based training was also compared to Psycho-education Training (PETr; Clarke, Taylor, Lancaster, & Remington, 2015); the only intervention other then GPM to include risk management and research in teaching content.

PETr was also one of only three interventions to include personal testimony from an individual with lived experience of BPD. Knaak et al. (2015), similarly to PETr, gave space for an individual to talk about their experience of BPD, their treatment and reflecting on the care they would like to receive. Dickens et al. (2019) was unique amongst the training programmes included in this review given that, alongside the inclusion of personal testimony, an individual with lived experience of BPD both developed and facilitated a three-hour section of the training content.

Method of delivery. In general, studies tended to employ a range of delivery methods to illustrate the training content, with a number of papers referencing the intention to emphasise experiential learning and actively involve participants in discussions (Hazelton et al., 2006; Knaak, Szeto, Fitch, Modgill, & Patten, 2015; Shanks, Pfohl, Blum, & Black, 2011, Krawitz, 2004). Three further programmes were identified as utilising a wide variety of delivery methods (≥5 components). Two of these were DBT-based, with specific components of the treatment model being incorporated into the longer term programmes; namely, weekly DBT consultation with a team of DBT trained colleagues (Carmel et al., 2018) and weekly phone consultation offered to participants by facilitators (Herschell, Lindhiem, Kogan, Celedonia, & Stein, 2014). The third training programme identified as employing a high number of delivery methods (Krawitz, 2004), specified both

the intention of keeping lecture style teaching to a minimum during training, as well as creating a safe place for clinicians to engage with the content. This was achieved through acknowledging the sense of frustration and powerlessness that may arise when working with this client group, as well as the facilitator naming their own struggles yet modelling an alternative. This method of facilitator modelling was also referenced by Knaak et al. (2015) when detailing their DBT-based training.

Didactic delivery of content through lecturing was present across every study, with only one intervention using lecture-style presentation alone to deliver a 90-minute session entitled the "Science of Borderline Personality Disorder" (Clark, Fox & Long, 2014). Didactic teaching was most commonly accompanied by skills training, and this appeared to be the main component through which active participation of staff was facilitated. Of the eight studies which reported skills training, three scaffolded learning through live/video demonstration or role play (Herschell et al., 2014; Krawitz, 2004; Shanks et al., 2011).

Similarly to training content, the inclusion of skills training appeared to be informed by the theoretical underpinning of the programme in which this method was used. For example, all DBT-based programmes included training in DBT-skills for clients. Similarly, 1-day Systems Training for Emotional Predictability and Problem Solving (STEPPS) contained a significant skills training component; both client-focussed emotional coping skills, and those focussed on educating and upskilling an individual's family or support system (Shanks et al., 2011). This is in line with the STEPPS model which integrates cognitive-behavioural principles with skills training and systems theory (Blum, Pfohl, St. John, Monahan, & Black, 2002). Finally, ACT-based training had a greater emphasis on self-management skills which may support staff to live in line with their

workplace values, whilst also being applicable to direct work with clients (e.g. mindfulness).

Qualitative Data

Qualitative data from two qualitative papers and three mixed method papers was explored and grouped within the themes of (a) providing an alternative perspective (b) providing practical components (c) the role of team within and beyond the training.

Providing an alternative perspective. It was evident across this literature that participants found value in an increased awareness or understanding of client experience, with many linking this new perspective to change in their practice, change in attitude toward clients with BPD and increased confidence in working with this client group. Theory explanation, psychoeducation and personal testimony were referred to as content components that provided this alternative perspective.

Post-training, participants in the studies by both Burke, Kells, Flynn, & Joyce (2019) and Warrender (2015) reflected that "people [those with a BPD diagnosis] aren't just purposely trying to be difficult" (Burke et al., 2019, p.6). Having "more of an understanding of the reasons behind [client's] behaviour" (Warrender, 2015, p.629), including an awareness of "patterns in their childhood" (Burke et al., 2019, p.6), appeared to support this perspective shift. Quotes from participants in both these studies mirrored one another in their expression of how this alternative perspective "takes away the impatience and lack of empathy you [staff] can sometimes have" toward these individuals (Burke et al., 2019, p.6).

Providing an alternative perspective within the training was not limited to a new understanding of the client; rather, a number of participants reflected that the training also

shifted their perception of themselves in relation to their work. The benefit of understanding one's own position during communication with clients was highlighted by Carmel et al. (2018), Burke et al. (2019), Hazelton et al. (2006) and Clarke, Taylor, Bolderston, et al. (2015), as something which facilitated reflection on past attitudes or behaviours (e.g. "you tend to blame them but your own facial expressions can make it worse"; Burke et al., 2019, p. 6). For both Burke et al. (2019) and Hazelton et al. (2006), this reflection appeared to be as a result of supporting staff to understand the theoretical concepts and impact of skills such as validation, rather than explicit exploration of staff's own experiences as included in other studies (e.g. ACT-based training; Clarke, Taylor, Bolderston, et al., 2015).

Notably, in finding this new perspective, participants noted a shift from feeling hopeless to hopeful (e.g. "I now understand more about borderline personality disorder . . . you know, it doesn't feel so hopeless anymore (Hazelton et al., 2006, p.127)). For some, hearing personal testimony from an individual with a BPD diagnosis offered "hope" and was viewed as the "most influential aspect" of training (Dickens, Lamont, Mullen, MacArthur, & Stirling, 2019, p. 2618). Having a session led by an individual with lived experience "brought a closer understanding of what she's going through" (p. 2618), and participants requested further service user input; in particular, to better understand what was wanted and needed from services. By contrast, when referencing the clinician-led session entitled "the science of BPD", one participant perceived some aspects to be "quite patronising" at times (Dickens et al., p. 2618). Another expressed a sense that this section was covering old ground ("I felt like we knew [all this]", p. 2618), thus providing another example of both the call for, and value of, providing a new perspective within training.

Providing practical components. Participants across a number of studies made reference to practical, skills-based training; either the benefit of this approach or the request for more practical skills to be included on future courses. Several studies identified that having something tangible to take away from the training and apply at the healthcare frontline, was invaluable for staff. Skills training was found to both increase confidence (e.g. "I just feel like I know what I'm doing a little bit more" (Warrender, 2015, p. 628)), as well as change the approach staff took to their interactions with clients (e.g. in reference to validation skills: "it changes the expectation of getting through the agenda, but the most important thing is she is heard" (Burke et al., 2019, p. 7)). For a number of participants, "having something practical to do. . . was really a turning point" (Hazelton et al., 2006, p. 128), with some voicing how these skills have benefited them personally, as well as professionally (Clarke, Taylor, Bolderston, et al., 2015; Hazelton et al., 2006).

Two training programmes included in this review incorporated direct client contact into the training programme. For one medic taking part in the longest programme included in this review, "the integrated and hands-on intensive experience changed [their] opinion of patients with BPD" (DBT group, Carmel et al., 2018, p. 39)). Members of the TAU group in this study also voiced that contact with this client group "decreased discomfort while assessing and treating BPD traits" (p.39). For the second programme that included direct client contact, this aspect of training was not mentioned in the qualitative data, and therefore cannot be commented on (Warrender, 2015), however the intention to deliver each day of the training two weeks apart is notable. This unique distinction allowed client contact to be incorporated into a short training programme, such that there was opportunity to apply learning and complete allotted tasks between sessions.

The role of team within and beyond the training. A common theme emerging from the qualitative data was the importance of team members and team culture; both within and beyond training.

For Carmel et al. (2018) the role of team was distinct from other studies given that participants had weekly contact with "a passionate and dedicated multi-disciplinary team" from whom they could learn and witness "a variety of perspectives on patients/situations" (p. 39). For one member this aspect of the training was "very influential" (p. 39). The group culture was also noted to either facilitate or hinder learning within shorter training programmes. Whilst direct quotes were not included in the qualitative findings by Clarke, Taylor, Bolderston, et al. (2015), the author indicated that, for participants, a sense of community and humanity was fostered within the group through personal disclosure. This mirrored findings from Burke et al., (2019) and Warrender (2018) where peer support was noted to facilitate a sense of safety and connection with others. The training programme delivered by Dickens et al. (2019) integrated staff from both inpatient and community teams and, in contrast to other studies, whilst some felt this allowed the "batting of different ideas and opinions" (p. 2618), others identified a "split" in the room (p. 2618). In this context some participants reflected training should be tailored to the demands and needs of a specific healthcare setting; for example, acknowledging the limitations of acute wards in being able to offer time to clients and apply the skills learnt in training.

Beyond training, ongoing clinical supervision was offered to participants as a component of MBT-S training (Warrender, 2015). This was noted as another source of peer support by those who attended as well as being a space to support consolidation of the MBT model and gain strategies for moving forward with clients. One participant remarked

that she often leaves supervision with "an improved sense of 'well ok you know, I'm not doing it completely wrong'". Despite this, Warrender (2015) noted that only a third of participants attended for supervision. It was wondered whether this reflected the "ongoing staffing issues and level of clinical activity" (p. 629), which were identified by participants as an anticipated barrier to applying skills post-training.

This finding was also echoed in other studies, with Warrender (2015) and Dickens et al. (2019) but quoting references to the busy acute psychiatric setting not "always [being] conducive" (Warrender, 2015, p. 269) for the care of this client group. Whilst the complex interaction between work environment stressors and staff wellbeing was noted by Dickens et al. (2019), qualitative data pointed toward team culture as a barrier to maintain momentum post-training (e.g., "I think the training was helpful, it's just how … you keep that going within your team's culture is really difficult" p. 2619). For some however, support from "people higher up" was noted as valued and an encouragement to staff to "run with" what they had learnt in training, despite the challenges of being at the "clinical 'coalface'" (Hazelton et al., 2006, p. 128).

Overall synthesis of findings

Together, the quantitative and qualitative data indicate that, whilst there is an array of components that are incorporated into staff training, there are common threads across approaches. When considered as a whole, the findings from this literature advocate for the presence of a non-pejorative, accessible framework or narrative which adequately conceptualises the experiences of staff and clients. This theoretical grounding was complimented with provision of practical skills which staff could see modelled (e.g., through role play or video demonstration), practice in training, and then take forward into

clinical practice. Whilst there was some evidence for the potential benefit of incorporating a variety of delivery methods, qualitative findings suggested that it was the "hands on" (Carmel, Logvinenko, & Valenti, 2019, p. 39) or "practical" (Burke et al., 2019, p. 8) aspects of training that were valued. Qualitative findings also pointed toward the benefit of personal testimony and meaningful client contact.

Although difficult to quantify or prescribe in a training plan, the role of the team was a common theme across these studies. When considering the quantitative data, group discussion was included as a delivery method to actively involve the team, and a few studies noted the role of the facilitator in encouraging a psychologically safe environment within which to share experiences. Qualitative data supported these observations, with a number of staff voicing the sense of shared humanity and connection from peers as beneficial. The healthcare setting in which training is to be delivered, support from management staff and opportunity for ongoing supervision were examples of overarching components that clinicians and researchers were encouraged to consider in the development of future training.

Discussion

This review aimed to explore the components of training interventions for staff working with those with a BPD diagnosis, in order to inform the development and delivery of future training in this area. Results point toward a number of key considerations for both the content of teaching and delivery methods within staff training programmes of this kind.

Qualitative findings made reference to the benefit of various content components in supporting a new understanding of BPD. These included 'theory explanation', 'psychoeducation', learning about one's 'own experiences/values' and personal testimony.

It is suggested therefore, that there are multiple approaches to adequately providing a novel, non-pejorative understanding of either BPD, or the challenges which may arise from working with this client group. Qualitative findings also indicate however, that the context in which training is delivered has the potential to influence how content is received by participants. For example, new understanding appeared to be hindered when content was not perceived as relevant by staff. In this context, when developing future training, careful thought should be given to which psychological ideas may be most relevant to the staff group for whom training is being delivered. For example, for those working in community or day hospital setting, a more comprehensive understanding of therapeutic models may be of greater benefit than to those in acute settings, who "are at the coal face" and "can't give the … one-to-one" time to clients (Dickens et al. 2019 p. 2619). If feasible, facilitators may consider consultation with team members or service-users as part of this preparation process.

Both quantitative and qualitative findings pointed toward the benefit of employing a combination of various delivery methods. This idea is in line with a published review by Crookes, Crookes, & Walsh (2013) who, in considering the teaching techniques for nursing students, concluded that individuals are more engaged with teaching that accentuates practical application of information in a way that makes explicit the link between theory and practice. It is therefore suggested that delivery of teaching should seek to interactively engage staff in the practice and application of theoretical content. In developing future teaching programmes, it is suggested that care is taken to include creative and inclusive ways for staff to both see concepts in action (e.g. modelling by presenter or videos) and practice skills themselves (e.g. role play).

Broader considerations

Whilst key benefits of training were evident in this review, there were a number of observations which are deemed pertinent to the development and delivery of future staff training in this context. First, a number of studies referenced stigma toward those with BPD as a driving force for the development of staff training. However, despite this the theoretical focus of every study in this review was BPD, with little or no reference to the stigma-reduction literature. For example, in-person contact-based education (i.e. teaching which includes contact with an individual with mental-illness) has been shown to yield the greatest improvements in attitude and behavioural intentions (for reviews see Corrigan, Morris, Michaels, Rafacz, & Rusch, 2012). However, less than half of the studies in this review included in-person contact or personal testimony. Furthermore, evidence suggests that lasting change to negative stereotypes requires repeated contact over time (Hewstone, 2000), yet only three studies incorporated client contact into their programme, and only two were able to provide ongoing supervision post-training.

Second, many training programmes focused on improving knowledge and attitude with the assumption that this will, in turn, impact discriminatory behaviour (Stuart, Arboleda-Florez, & Sartorius, 2012). The validity of this assumption has been refuted however, and researchers have expressed a need for interventions which specifically target and assess behavioural change (Koller & Stuart, 2016). As such, if meaningful change in healthcare provision for those with a BPD diagnosis is to be achieved, a shift of focus toward behaviour change is required. Whilst behavioural intention was assessed in some staff teaching programmes, this was not the norm, with most including components that aimed to improve knowledge, attitude, or confidence to treat this client group. Of the

studies that considered behaviour toward this client group, none used objective observational measures of behaviour change.

Finally, broader systemic influences were noted by a number of authors to be a potential barrier to either training uptake or maintenance of change over time. Whilst not a direct component of the training programmes, it is critical to acknowledge and understand the environment in which staff are seeking to implement their learning. Staff reported that education can feel "redundant or frustrating" if resources and time to implement these are lacking (Dickens et al. 2019, p.2620). Warrender (2015) and Dickens et al. (2019) both reported a staff perception that the ward environment was "not always conducive" to caring effectively for these individuals, such that change to clinical practice is limited. Although not a training component that can be prescribed, support from team members should be noted as an aspect of training which participants highlighted as influential. Findings from this literature suggests that use of self-disclosure and modelling by facilitators may foster a sense of safety and connectedness within the group. In light of this, it is critical that a broader perspective is taken in the development of staff interventions, if effective long-term change is to be achieved when working with this population.

Conclusions

Overall, this body of literature demonstrates that training can be effective in changing the knowledge, attitude, and behavioural intention of staff toward those with a BPD diagnosis. Review of training components highlights the benefit of a theory to practice partnership such that training content includes a novel, non-pejorative and accessible understanding of BPD, alongside practical application of learning through a variety of delivery methods. This review also illuminated the need for future research to

consider and apply learning from the stigma-reduction literature, as well as broader systemic factors to ensure the long-term maintenance of change within complex healthcare settings.

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Thesis submitted in partial fulfilment of the degree of Doctor of Clinical Psychology

Service Improvement Project

"…. the defibrillator for mental health." Exploring the impact of Oxford's out-of-hours crisis service

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Proposed Journal: Mental Health Review Journal. The focus of this journal is research concerning the policy and practice of mental health service delivery.
(**Appendix J** for author guidelines)

Acknowledgements: Thank you to Ruth Eames (Service-User Consultant) for her insight and guidance during project development, and to the staff at Oxford Safe Haven for their support with recruitment. Thanks also to Charlotte Watson (Assistant Psychologist, Oxford Health NHS Foundation Trust) for her support with transcription and thematic analysis.

October 2021
Word Count: 5387

Thesis submitted in partial fulfilment of the degree of Doctor of Clinical Psychology

Abstract

Purpose

Mental health crisis care within the UK has been highlighted as a healthcare challenge that demands urgent attention. Launched in 2018, Oxford Safe Haven (OSH) is an out-of-hours crisis service seeking to provide a non-medical space for adults in mental health crisis. This study seeks to explore the impact of OSH from two perspectives; the experience of the service-user and whether there is a change in use of other emergency services for those attending OSH.

Study approach

This study employs a mixed-method approach. Semi-structured interviews with eight service-users were conducted to explore individual's experience of the service. Thematic analysis was used to identify key themes. Service-user feedback forms were also analysed. Alongside this, A&E attendance rates 12 months before and after first OSH attendance were analysed to assess whether pattern of OSH use impacts use of A&E.

Findings

Overall response from service users was positive and service-users indicated that OSH provides rich and varied care. Contrary to prediction however, there did not appear to be a change in A&E use for individuals using OSH. This presents a complex picture. Findings suggest that there are distinct groups of individuals who have differing care needs and engage with crisis services in different ways.

Value

Whilst conducted at OSH, this study provides novel insights into service-user experience and engagement with this service delivery model. This study presents recommendations for service development from both a commissioner and practitioner perspective. Further research is needed to understand the perspective of different groups of individuals engaging with crisis care services.

Introduction

Policy Context

Over the past decade mental health crisis care within the UK has been frequently highlighted as a healthcare challenge that demands urgent attention. The Five Year Forward View for Mental Health advocated for a "fresh mindset for mental health" (NHS England, 2016a, p.5), underlining not only the inconsistency of crisis care, but also the need for integration between the NHS and voluntary sector. This call has been echoed across both government policy (Department of Health, 2014; NHS England, 2016b) and independent national reports (Care Quality Commission, 2015; Mind, 2011). In 2014 an agreement was established between 27 national organisations involved in the provision of mental health crisis care across the UK. This Mental Health Crisis Concordant sets out how organisations will work together to improve access, availability and quality of care for those in mental health crisis; specifically, that people have 24/7 access to care that treats them with dignity and respect in a therapeutic environment ("Crisis Care Concordant," 2014). It is within this context that weekend out-of-hours services were established across the UK.

Whilst the majority of crisis support services, such as Safe Haven, have been developed based on expert opinion with limited research in this area (Paton et al., 2016), the key service aim of providing timely support in a safe environment is a clear precept of crisis intervention within the literature.

Theoretical Context

The conceptualisation of 'crisis' and 'crisis intervention' have been influenced by a number of different models, practices and theories throughout the 20th century, however the work of Erik Erikson (1950) has had a prominent impact on our understanding of crisis (Callahan,

1998). In his psychosocial development theory, Erikson refers to stages of crisis throughout the life cycle in which opposing emotional forces (e.g. “hope” and “despair”, or “trust” and “mistrust”) create conflict and distress. Erikson stipulates that in order to successfully pass through the crisis a balance between these two dispositions must be achieved. If this balance is not achieved, then an individual will tend towards one or other of the opposing forces. Crisis-orientated intervention is therefore focussed on resolving the immediate problem or emotional conflict to support equilibrium. The role of the practitioner is to communicate acceptance and hopefulness to the individual (Roberts & Yeager, 2009), adopting a role which maintains the individual’s ownership of the problem, yet actively guides them in problem solving (Fairchild, 1986). In her work on crisis intervention, Rapoport (1967) also highlighted the importance of rapid access to a crisis worker, noting that “a little help, rationally directed and purposefully focused at a strategic time, is more effective than more extensive help given at a period of less emotional accessibility” (Rapoport, 1967, p. 38).

Service Context

Launched in March 2018, OSH is built on this foundation of both policy and crisis theory. OSH is one of two Safe Haven’s within Oxfordshire and is an NHS and third-sector organisation partnership. At the time of writing, the service is open Friday to Monday from 6pm to 9pm, and individuals are able to attend once per evening. In order to ease access to support, service users are able to self-refer via a telephone line which is monitored from 5pm. Upon arrival service users are offered 1:1 support including space to talk, risk assessment and safety planning. Staff attend regular training and supervision to inform and develop their ability to provide effective care and support service users with coping skills or relaxation techniques. Individuals are able to take ownership of their service use by choosing to engage

in social activities or distraction with peers or sit quietly in a different room.

As well as seeking to improve the quality of mental health crisis care, the service also aims to increase capacity within the acute care pathway through reducing use of other emergency or acute care services. This study seeks to explore the impact of OSH through the lens of patient experience and use of other services.

Using a mixed methodology, this study will address the following questions:

1) What is the service user perspective of OSH? Do they find the service beneficial during a time of crisis and why? (Part 1 and 2)
2) Does contact with OSH reduce contact with A&E or other emergency care such as Section 136 or psychiatric inpatient admission? (Part 3)
3) How can findings from OSH be applied to other out-of-hours crisis intervention services?

Method

Ethical Approval

This study was approved by Oxford Health NHS Foundation Trust (OHFT) Quality and Audit team. Although service users were interviewed as part of this service evaluation, NHS ethical approval was not required as service users were interviewed about their use of the service rather than their personal experience of crisis or mental health distress. In addition, quantitative data and review of feedback forms fall within the parameters of audit and evaluation.

Detailed study information was provided for participants ahead of interviews and written consent was collected. Post-interview support was offered to participants as appropriate.

Design

A mixed-method design was used in this three-part study. Service user experience was assessed in two ways. First, semi-structured interviews were conducted, either in person at OSH or via video call at the participants request (Part 1). Second, feedback forms routinely completed by service users at the end of each attendance were reviewed (Part 2). The impact of OSH attendance on contact with other services was also assessed through analysis of attendance rates to A&E, number of hospital admissions and number of detentions under Section 136 of the Mental Health Act (S136) for OSH service users (Part 3).

For parts 1 and 3 of this study, participants were grouped based on the pattern and frequency of their OSH use. The following section first describes these group definitions and then outlines the procedure for parts 1, 2 and 3 in turn.

Group definitions

OSH attendance records were reviewed by the author and service manager, and it was found that the frequency and pattern of attendance differed across individuals. Four distinct patterns were identified and formed the basis for group descriptions. To the authors knowledge, there is no accepted definition of high intensity use of services within the context of mental health crisis. Therefore, specific parameters concerning frequency of visits (20% usage as defined in Table 1) were agreed upon through in-depth discussion with the research team, including the service manager. In regard to period of time, several authors concur that the severe emotional disequilibrium of mental health crisis will typically reduce significantly within six weeks, yet resolution of a crisis may take several

months (Yeager & Roberts, 2015). As such, six weeks and six months were incorporated into the group definitions.

Table 1

Group definitions

Group	Group description	Group definition
0	Use the service only once or twice	Only attended once or twice in the period of six months and had not accessed the project again a year later
1	Consistent low use of the service	Utilised less than 20% of available visits* in the first 6 weeks AND this was maintained over the first 6 months
2	Initial period of high intensity use which reduces after period of disequilibrium	Utilised more than 20% of available visits* in the first 6 weeks BUT less than 20% of visits across the first 6 months
3	Extended period of high intensity use of the service	More than 20% of available visits* in the first 6 weeks AND this was maintained over the first 6 months

*Available visits = total available visit offered by OSH (i.e. Maximum 4 attendances per weekend - 1 each day the service is open). The number of total available visits utilised by an individual was used to calculate percentage.

Part 1 - Service user perspective: Semi-structured interviews

Participants. Using a convenience sampling method, eight individuals were interviewed about their experience of attending OSH. Posters were put up in the OSH building and an email to invite participation was sent to every individual who had both used the service in the past year and consented to being contacted for research purposes. The first individuals from each group to express interest were invited to participate. A second email was sent to all those from group 0 and group 2 given the low response rate from these groups. No individuals from group 0 expressed interest in taking part, however there were three participants from group 1, one from group 2, and four from group 3.

Table 2

Interview participant's demographics

Group	Number of participants	Age	Gender	Ethnicity	Diagnosis	First contact with MH Services	First OSH attendance
0	0		n/a	n/a	n/a	n/a	n/a
1	3	3 aged over 50	2 females 1 male	White British White Irish White Other	Depression, Anxiety, Personality Disorder, PTSD, Suicidal thoughts/ deliberate self-harm (DSH)	2 in the last 10 years 1 pre-2000	2 in 2018 1 in 2020
2	1	Over 50	Female	White British	Anxiety, Suicidal thoughts/ DSH	In the last 10yrs	2020
3	4	2 aged 30-40 1 aged 40-50 1 aged over 50	3 females 1 male	3 White British 1 White Other	Depression, Anxiety Personality Disorder, PTSD Schizo-effective Disorder, Suicidal thoughts/ DSH	1 in the last 10 years 2 in the last 20 years 1 pre-2000	3 in 2018 1 in 2020

Note: participants were able to select all mental health diagnoses that applied to them.

Data collection. All interviews were conducted by the author, either in person (N=2) or via video call (N=6) at the request of the participant. The author is not a member of the OSH team and, in order to protect confidentiality, participants were made aware that only anonymised responses would be shared with the staff team. Face to face interviews were held in a private space at OSH, thus providing a confidential yet familiar, setting for participants. The semi-structured interview schedule (**Appendix F**) asked participants to consider a recent visit to OSH and talk about their experience of attending on that day.

Prompt questions were used to encourage participants to share both what they thought worked well, as well as ways in which the service may be improved. To prevent misinterpretation of results, the interviewer followed up responses with clarification questions as appropriate, and all interviews were audio recorded and transcribed verbatim by the author and assistant psychologist employed by OHFT (CW). All interviews were between 20 and 30 minutes, with one exception of 11 minutes 30 seconds.

Analysis. Given the limited research in this area, rather than taking an informal approach to qualitative analysis, this project sought to present a rich account of service user experience using a systematic, robust methodology. Thematic analysis was employed as it aligned well with the research context and aims. First, it is independent of any predetermined theoretical framework (Willig et al., 2017), and second, it is well suited to identifying and organising data themes in rich detail (Braun & Clark, 2006).

Transcribed interviews were therefore analysed by the author and CW using thematic analysis (Braun & Clarke, 2006). Half of the interviews were randomly assigned to each and, using an inductive approach, initial themes were identified. Both the author and CW then met to collaboratively discuss the themes and initial codes were generated. All interviews were then analysed independently by the author and CW using these codes, and differing viewpoints were discussed. Final themes and quotes were also reviewed by the project supervisor (LH). N-Vivo Version 12 (QSR International, 2020) was used to support this process.

Part 2 - Service user perspective: Feedback questionnaires

Participants. From April 2018, feedback questionnaires have been routinely completed after every visit to the service. All available feedback questionnaires between

April 2018 and April 2020 were included in the study. During this period there were 2604 visits made to OSH by 475 individuals and the completion rate of feedback forms was 42% in the first year (April 2018 - April 2019) and 47% in the second year (April 2019 - April 2020). Analysis of feedback was therefore completed with 1171 completed forms; 479 from 2018, and 692 from 2019. Although the main body of the questionnaire has remained consistent over the two years, one question was added in December 2019 and one question was replaced after the first year of opening. For these questions where number of responses differs from 1171, the total is included in the results table. The feedback questionnaire can be found in **Appendix G**.

Analysis. Questions that elicited a qualitative response were excluded given that this information was sought as part of the semi-structured interview; thus, questionnaire answers were likely to be superseded by the richness of interview data. Descriptive statistics were used to analyse the feedback information and, given that these questionnaires are anonymous, responses across the four different groups could not be compared.

Part 3 - Influence of wider service use

In this context the term 'wider service use' refers to contact with A&E, hospital admission and S136 detention. Data from 12 months pre- and 12 months post- first OSH attendance was requested from the Commissioning Support Unit (CSU) within OHFT.

Participants. Records of wider-service use were requested for these 101 individuals who had first used the service between 1st April 2018 (OSH opening) and 1st June 2019. The latter date was selected in order that, at the time of the request (June 2020), 12 months of data *post*-first OSH visit was available for analysis. Despite eligibility, data

for a further 12 individuals was not requested due to non-consent. One individual was excluded as their NHS number could not be validated against national systems, therefore the report provided data concerning wider service use for 100 individuals.

Of these 100 individuals, 20 had had no contact with wider services 12 months pre- or 12 months post- their first OSH visit (Group 0, N=8; Group 1, N=7; Group 2, N=4; Group 3, N=1). Of the remaining 80, 79 individuals had had one or more contacts with A&E services; however, only 13 had been detained under S136 (Groups 0, 1 and 2, N=3; Group 3, N=4) and only 27 had been admitted to psychiatric hospital (Group 0, N=8; Group 1, N=7; Group 2, N=4; Group 3, N=8).

Table 3

Demographics of individuals who had contact with A&E and first attended OSH between 1st April 2018 and 1st June 2019

Group	Number of service users	Gender		Age (Mean, SD)
		Male (M)	Female (F)	
0	29	10 (34.48%)	19 (65.52%)	33.38, 10.99
1	18	4 (22.22%)	14 (77.78%)	40.83, 14.65
2	14	5 (35.71%)	9 (64.28%)	36.14, 12.43
3	18	3 (16.67%)	15 (83.33%)	40.83, 14.65
Total	79			

n.b. Demographic information was not available for the 21 individuals who had had no contact with A&E over the specified period.

Analysis. Due to the low number of participants who had been admitted to psychiatric hospital or detained under S136, this data was excluded from analysis. As a result, overall effect of OSH attendance on wider service use was considered in relation to A&E attendance only.

It was intended that a one-way analysis of co-variance (ANCOVA) would be used to ascertain whether A&E attendance was influenced by pattern and frequency of OSH attendance, however visual inspection of the data found it to be heavily skewed. Levene's test of homogeneity of variance also indicated non-homogeneity of variance ($p = 0.001$; see **Appendix H).**

In light of this, a new variable was computed by deducting the number of A&E attendances post-first OSH visit from number of attendances pre-first visit. This highlighted 'change in A&E use' before and after first attendance at OSH for each individual. A one-way ANOVA was then performed, with Group (0-3) as the independent variable and 'change in A&E use' as the dependent variable.

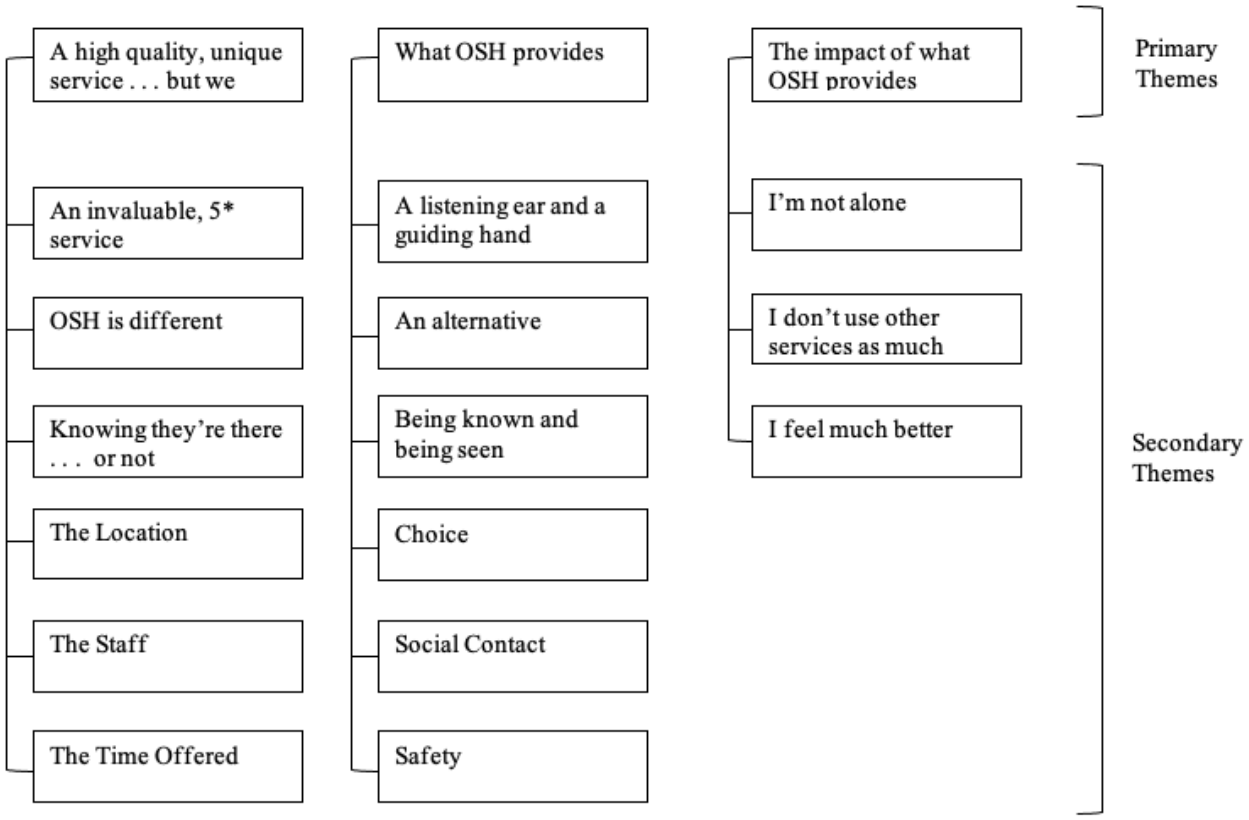
Results

Part 1 - Service user perspective: Semi-structured interviews

Thematic analysis yielded three primary themes and 16 secondary themes. These are depicted in Figure 1 and considered to represent the experience of attending OSH for participants. The primary themes are summarised below, however illustrative quotes from each secondary theme are presented in **Appendix I.** To protect the anonymity of participants, all names below are pseudonyms.

Figure 1

Thematic map outlining three primary and 15 secondary themes



A high quality, unique service . . . but we need more. All participants spoke highly of their experience of OSH, with some describing it as a "5* service" (James, Group (G)1) that is "invaluable . . . to this city" (Sally, G2). Staff were also spoken of positively, with participants referring to both their professional training and their "supportive" approach (Jane, G1).

The experience of attending OSH was compared to that of other services, with themes of OSH providing an appropriate level of support for mental health crisis and being different to other services. For example, James (G1) felt that OSH was a "much gentler landing"; "[service name] is like a sledgehammer to crack a nut, Safe Haven is like a Nutcracker to crack a nut". Notably when comparing services, participants expressed their

desire not to criticise other services, rather illustrate the comparative benefit of OSH at a time of crisis.

Alongside the benefits of the service, two secondary themes illustrated potential barriers to attending. First, a lack of knowledge of the service. For example, Zara (G3) "didn't call Safe Haven before COVID because [she] didn't know it was there" and others shared that they didn't know what services OSH was offering during the COVID-19 pandemic. Second, the service location:

Zara (G3): "When I'm low its quite a trek to travel half an hour and I know that sounds really ridiculous because I have a car and I'm very lucky that I can drive but I just get paralysed and just can't face it."

Alice (G3): "the anxiety behind actually getting on the bus, getting on two buses to get there, especially not being able to wear a mask without um without freaking out more."

What OSH provides. Interviews illustrated the richness and scope of what OSH provides for those who attend, such that six secondary themes were identified. It was clear that service users did not attend OSH for one particular reason, rather, the narrative spoke to a multifaceted approach to care, which created a safe haven in which service users could be known as an individual and guided through crisis.

There were several provisions that were named by participants as helpful (e.g., a comfortable environment, one-to-one time with staff, social activities or food and drink), however it appeared that the benefit of these practical aspects was inextricably linked to the promotion of emotional safety. This can be illustrated by the contrasting experience of one-to-one time for Becca and Jane. Whilst the practical provision of time was consistent, the sense of being seen and known was not present on one occasion for Jane; thus, the benefit appeared to be lost.

Becca (G3): "The most helpful would have been erm interaction with the staff like . . .

> they know me. . . they know my name, erm and when I go in, I'm actually a person . . . it really helps me being noticed for who I am and not being judged by anybody."
>
> Jane (G1): "I don't think they really, really realised how distressed I was about the form. And erm, and as the conversation developed, I thought you know, ermmm [pause] you know I wasn't, I didn't feel erm as much, as much erm support as I had wanted."

Participants also highlighted that OSH is both a "safety valve" to prevent escalating crisis (Chris, G3) and an alternative to previously utilised coping mechanisms:

> Zara (G3): "they erm manage to ground, ground me sufficiently so that I don't take off like a helicopter. . . it's a huge crisis prevention."
>
> Sally (G2): "I would have probably gone back into myself, drank, and probably ended back in A&E if the truth be known."

The impact of what OSH provides. Participants expressed both the short and long term impact of attending OSH. As well as a sense of comfort from knowing "you're not the only one going through that" (Joan, G1), participants shared the positive impact of OSH on their mental wellbeing and use of wider services:

> Sally (G2): "I come home [after each visit] and I think I'm going to get through this . . . . I've now been well for over a year, and I mean, that, that says it all doesn't it really. I mean I'm going to work, I'm a carer. . . . So, it's given me a new lease of life, you know so, precious service, precious service"
>
> Becca (G3): "I think I'd been to A&E erm probably every two or three weeks from self-harm or overdosing, but from October to December, in those three months I attended [OSH] I think I'd only been [to A&E] once or twice. So it shows like a massive change"

Part 2 - Service user perspective: Feedback questionnaires

Since the service opened, the average response rate of feedback questionnaires across the two years was 45%. These responses are depicted in the figures below. Figure 2 presents responses from 930 questionnaires and highlights that the majority of visits to OSH are when an individual is in mental health crisis (N=523, 56%). The term crisis in this

context is subjective for the individual, however the 281 visits made to OSH to prevent crisis indicate that, in 30% of cases, individuals are seeking to prevent escalation of their mental health distress.

Figure 2

What support were you looking for from Oxford Safe Haven? (Question added in December 2019; N=930)

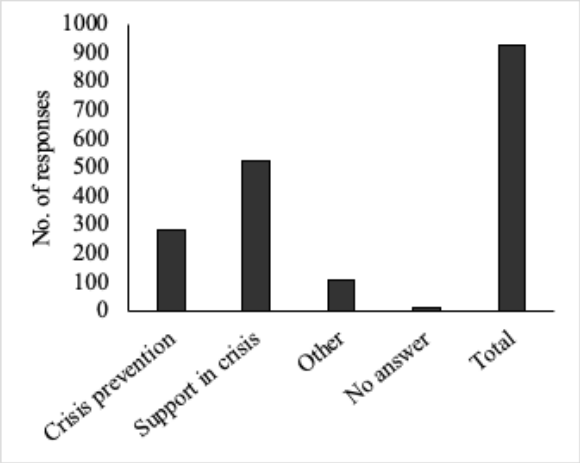
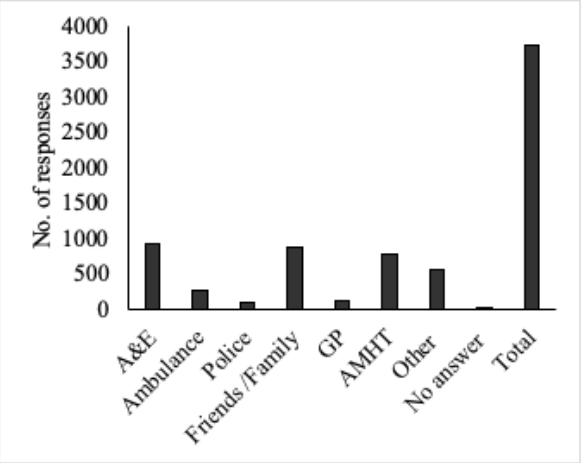


Figure 3

Where would you have gone for support over the weekend if you hadn't come here? (Individuals able to tick all that apply)



When asked where they would have sought help if unable to attend OSH, individuals selected an average of three responses from the options presented (Figure 3). A&E, friends/family and AMHT were most commonly selected, with A&E attendance as an alternative to OSH accounting for 80% of all responses.

Overall, the questionnaires indicate that, for the visits where feedback questionnaires were completed, experience of the service was positive (Figures 4 to 6), with individuals feeling better after their visit 67% of the time. The reason why responses may have been left with no answer for questions displayed in Figures 4 and 5 is unclear, however the figures indicate a willingness to both return to the service and recommend this to others which has been maintained throughout the two years of data collection.

Figure 4

How do you feel now compared to when you arrived?

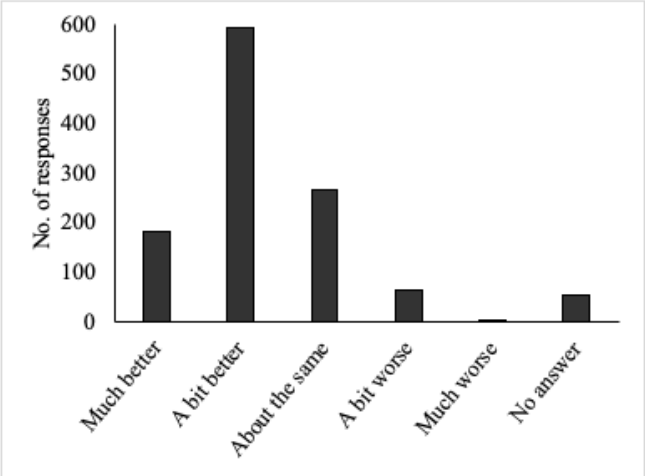


Figure 5

Would you consider coming to Oxford Safe Haven again? (Question asked between April 2018 and April 2019; N=479)

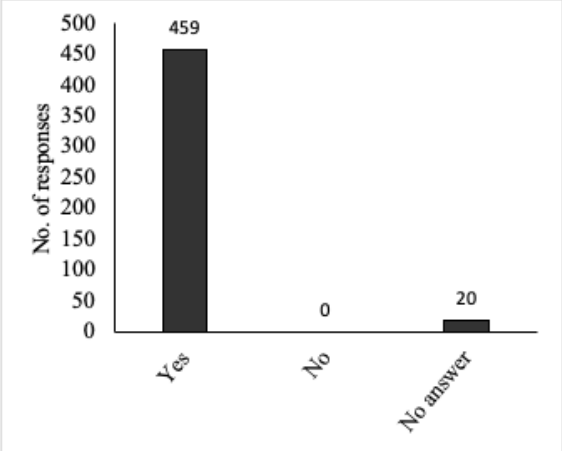
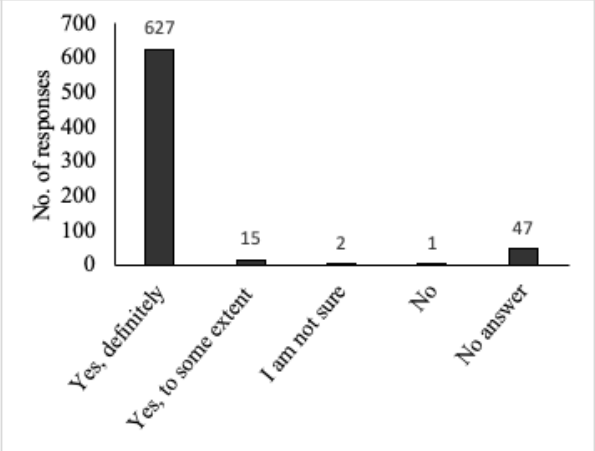


Figure 6

Would you recommend the service? (Question asked from April 2019; N=692)



Part 3 - Influence of wider service use

Descriptive statistics for primary variables (Table 4) indicate large variance in A&E attendance across the sample; this appears to be greatest in group 0 and group 3. It was not the case that use of OSH mirrored use of wider services. Some individuals in group 0 had high A&E use and some in group 3 had consistently low A&E use, this variation is likely to account for variance in A&E use within the groups. It was also found that 72 of the 100 individuals across the whole sample had two or less A&E attendances in the year prior to

attending OSH, indicating that those who have contacted OSH may not be the same individuals who are high users of A&E services.

Table 4

Means and Standard Deviations across groups for all primary variables

		Total number of visits to OSH		*A&E count before attending OSH*		*A&E count after attending OSH*		*Change in A&E use**	
	N	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Group 0	39	2.64	1.11	2.87	8.97	2.38	5.86	0.49	8.79
Group 1	24	7.58	3.88	2.46	3.95	3.04	5.04	-0.58	5.34
Group 2	18	16.67	5.62	3.33	5.34	4.39	7.10	-1.06	4.62
Group 3	19	51.47	22.45	9.21	16.43	9.37	12.67	-0.16	18.77

Note: *N* = number of participants, *M* = Mean, *SD* = Standard Deviation, for group descriptions, see Table 1, p.55
*Negative mean represents increase in A&E use post-first visit to OSH

A one-way ANOVA was conducted to determine if change in A&E use was impacted by pattern and frequency of OSH attendance, as defined by groups. There was homogeneity of variance as indicated by Levene's test of homogeneity of variance (p=.107), and results found that there was no difference in A&E attendance change across the groups, F(3, 96) = .109, p= .955. This suggests that pattern and frequency of attendance at OSH does not significantly impact change in A&E use.

Discussion

This study aimed to examine the impact of the crisis care provided by Oxford Safe Haven from two perspectives: first, the view of the service user and second, impact on use of other services. Consistent with previous reviews of the Safe Haven model (Aldershot Safe Haven Service, 2017), the overall response from service users was positive. Qualitative findings from semi-structured interviews were also encouraging and indicated that OSH provides

rich and varied care. In line with crisis theory (Roberts & Yeager, 2009), there was evidence that staff communicated hope and acceptance, as well as helping to ground individuals in order to reduce emotional conflict. The experience of interviewed participants appeared consistent across groups based on patterns of usage which suggests that, for these individuals, pattern and frequency of OSH use was not determined by experience of the service, or vice versa.

Three of the participants interviewed (groups 2 and 3) voiced a significant reduction in their use of A&E or other NHS services since attending Safe Haven; however, contrary to expectation, analysis of A&E records in a wider sample found that there was no impact of OSH attendance on number of A&E contacts. Whilst these results must be considered in the context of a potential floor effect due to low A&E attendance overall pre-OSH, it is clear that further exploration is needed to understand this unexpected outcome. It was not the case that high users of A&E were also high users of OSH and, given that no individuals who only attended once or twice were recruited for interview, it is unclear why high A&E attenders in this group only used OSH once or twice, despite frequent crisis. In addition, whilst high use of OSH reduced A&E use for some people, this was not the case for several individuals. Given that the OSH model appears to provide care that is in line with what individuals with lived experience of crisis report to be helpful (Mind, 2011), these findings suggest a more complex picture of effective crisis care and possibly, the need for a more individualised approach.

The case of one participant in the study, Alice, illustrates the need for more creative solutions for individuals. Alice was part of group 3 (consistent high OSH use) and, during her interview, she described how OSH staff worked closely with her and her care co-

ordinator to support the reduced use of both OSH and emergency services. She expressed that OSH "felt similar to an advocate" during this process. Whilst Alice's experience and the benefit of this approach may not be applicable to others within the larger sample, her story raises the question of whether, for some individuals, OSH attendance alone may not be sufficient in reducing wider service use, rather, tailored crisis planning alongside community teams may be required. Further research to explore the potential differences between standard attendances and integrated support alongside CMHT care co-ordinators may be a useful avenue for future research to explore.

Strengths and Limitations

This study used an inductive, mixed-method approach which enabled a review of OSH aims from multiple perspectives. The study was distinct from similar previous studies as it acknowledged differences in how much and how often the service was used by individuals and sought to capture whether service outcomes varied as a result. This detailed approach revealed that the relationship between OSH attendance and use of A&E may be more complex than first thought, with both use of, and benefit from, OSH appearing to vary across individuals. It also highlighted that there is a proportion of service users whose experience is difficult to obtain; namely, those who do not return to the service. This may be particularly pertinent in the context of the qualitative aspect of this study, for which no individuals from group 0 were recruited and, overall, a small sample size was recruited. Whilst findings need to be considered in the context of this, these interviews formed part of a larger project and sought to explore themes across service user experience, rather than develop existing theory. In addition, for small projects, between six and ten participants has been recommended when using thematic analysis (Braun & Clarke, 2013, p. 50).

It is unclear what proportion of uncompleted feedback questionnaires (55% of all visits) were from group 0, nevertheless, it is clear that there is a section of service user experience that was not able to be captured by this study. Whilst findings need to be considered within this context, it is a strength of this study methodology that this gap in knowledge has been brought to the fore, such that specific recommendations can be made from both a clinical and research perspective.

Recommendations

For OSH

Being understood and known as an individual was a key theme of the qualitative interviews in this study and appeared to be a critical component of effective crisis care. It is therefore crucial that future research at OSH seeks to understand and get to know the perspective of those who continue to access A&E instead of, or alongside OSH, in order that specific recommendations for clinical practice can be made. Given the complex picture presented, it may be that grouping individuals by rates of wider service use, or contact with crisis services more broadly, may provide improved insights into the differing needs of adults experiencing acute crisis. Similarly, given that there appears to be a large number of frequent A&E attenders who have had no contact with OSH, it may be beneficial to also explore the perspectives of acute care staff, considering, for example, if there are barriers to referral within the system that can be identified and addressed.

From a clinical perspective, the service should be aware that frequency of Safe Haven use may not be reflective of wider service use, therefore in order to meet aims to reduce emergency service use, communication with the A&E psychiatric liaison service or other teams within the acute care pathway may be needed to identify those for whom

targeted interventions may be required. Research suggests that when under acute stress (as would be the case during mental health crisis), habitual, familiar responses are favoured in an attempt to minimise distress (Wirz, Bogdanov, & Schwabe, 2018). In this context, the service may benefit from considering ways in which they can increase familiarity with both the Safe Haven environment and staff before the point of crisis. This could be addressed through joint working with CMHT staff where care co-ordinators are invited to meet with their client at Safe Haven instead of the CMHT building for one of their sessions. Research has also highlighted improved client engagement when individuals are supported by consumer-employees (Craig, Doherty, Jamieson-Craig, Boocock, & Attafua, 2004). Therefore, commissioners may also consider the potential benefits of a service-user consultant role who, as a member of the staff team, could meet with individuals for whom Safe Haven has been suggested.

For other Safe Haven services

Similar to recommendations for OSH, other Safe Haven services should be aware that contact with their service may not be reflective of wider service use, as such tailored or targeted intervention may be required to best meet service aims. Safe Haven services may therefore benefit from reviewing their attendance records to ascertain whether patterns of local service use mirror that which was found in this study.

Finally, qualitative findings in this study highlighted that location of OSH may be a potential barrier to accessing the service at time of crisis for those who lived outside of Oxford city. The geographical area that a service is commissioned to cover should therefore be considered in the establishment of other crisis services if equal access and availability of out-of-hours mental health care is to be achieved.

Summary of findings

Qualitative interviews and feedback questionnaire responses provide evidence that, at least for some, OSH is meeting its aim to improve the experience of mental health crisis care and deliver timely, appropriate support. All participants in the interviews spoke highly of the service and the beneficial impact it has had on their psychological wellbeing and independence. Further research is needed however to understand the experience of those for whom wider service use continues instead of, or alongside use of Safe Haven.

Safe Haven is a lifeline, it's a safe and caring space,
To share your demons and worries in this family type of place.
You can play games and chat or there are activities to do,
but if you feel life's not great there's no pressure focussed on you.
Everyone has their wobbles but here you're safe from harm.
Safe Haven is a life saver, it's the comfort of an arm.
An arm holds us together, so we feel strong enough,
to go at it alone once again, unless the struggles are too tough.
At times like that you may return, and once again they'll be there,
a shoulder to cry on, a listening ear, someone to tell you we care.
Safe Haven literally has saved my life
This poem is my thanks to you,
to the staff at this wonderful place and all the work that you do.

Alice (G3)

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Thesis submitted in partial fulfilment of the degree of Doctor of Clinical Psychology

Main Research Project

Does the availability of social support moderate the relationship between perceived stress during the postpartum period and the development of post-natal anxiety in first time mothers?

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Proposed Journal: The Journal of Perinatal & Neonatal Nursing. This journal publishes peer-reviewed articles which advance evidence-based practice in perinatal nursing. (**Appendix R** for author guidelines)

Acknowledgements: With thanks to Jodie Knight and Jenny Mahtani for their insight, guidance and generosity in sharing their experience of pregnancy and early motherhood.

January 2022
Word Count: 5995

Thesis submitted in partial fulfilment of the degree of Doctor of Clinical Psychology

Abstract

Transition to motherhood can be a time of intense stress for women, and mental health problems, including anxiety, are common during this time. This study seeks to understand the relationship between post-natal stress, level of social support and the development of post-natal anxiety in the first months of motherhood. Online questionnaire data collected between 6-10 weeks and 14-18 weeks post-partum for 80 new mothers was included in the study analysis. Contrary to prediction, moderated regression analysis indicated that level of social support did not moderate the relationship between stress and anxiety during this period. Overall, this sample reported low levels of anxiety which is in contrast to other similar studies. In seeking to understand these findings, the impact of online recruitment and data collection are considered, alongside factors such as the presence of other mediating or moderating factors. Future research with this population should carefully consider participant recruitment methods in order to connect with a sample of women that reflects the wider population.

Keywords. post-natal anxiety, stress, social support, first-time mother, motherhood

Introduction

Transition to motherhood is known to be a time of intense stress and is associated with a range of challenges and emotional experiences for new mothers (Kanotra et al., 2007), and mental health problems are common during this time. Anxiety is one of the most common mental health disorders experienced by women during pregnancy (NICE, 2014) and high prevalence rates are maintained post-partum. A recent meta-analysis reported that 15% of women experience anxiety symptoms during the first 24 weeks after birth, and 9.9% of these would meet criteria for an anxiety disorder (Dennis, Falah-Hassani, & Shiri, 2017). Research suggests that, as well as impacting the psychological wellbeing of mothers, post-partum anxiety also disrupts mother-infant interactions (McGrath, Records, & Rice, 2008) and is associated with poorer child outcomes (Field, 2017). Despite these prevalence rates and potential impact on both mother and child, there continues to be limited focus on anxiety in the perinatal period, which has led to a call for increased attention from both a research (Loughnan et al., 2018) and clinical perspective (Dennis et al., 2017).

In seeking to understand risk factors for the development of anxiety disorders in new mothers, Dennis, Falah-Hassani, Brown, & Vigod (2016) identified that level of perceived stress at one- and four-weeks post-partum is more predictive of anxiety eight-weeks post-partum than is the presence of specific stressors. Perceived stress in this context is defined as the "relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering wellbeing" (Lazarus & Folkman, 1984; p141). As such, the focus of perceived stress is not the presenting stressor, rather the evaluation by an individual about their ability to respond to the stressful event. For new mothers, this concept is therefore not focussed on the demands of

motherhood, or specific stressors as identified by Dennis et al. (2016), rather the perception of one's own ability to manage the unknown challenges of becoming a mother.

The stress-buffering model (Cohen & Ashby Wills, 1985) posits that social support protects, or 'buffers' a person from potential negative impact of stressful events by altering the appraisal of stressors; either in the initial appraisal of capability in managing the stressor or in supporting re-appraisal post-event. This buffering effect has been well replicated, with many studies evidencing the protective impact of social support in the presence of perceived stress for both physical and mental health conditions (Brandstetter et al., 2017; Siegmann et al., 2018), including anxiety (Tran, Lam, & Legg, 2018). To the authors knowledge however, this effect has not been explored with respect to anxiety in the post-natal period, which may have been due to a lack of specific social support measure for this population (Leahy-Warren, Mulcahy, & Lehane, 2019; Razurel, Kaiser, Sellenet, & Epiney, 2013).

Social support is defined as "verbal and non-verbal information or advice, tangible aid, or action that is proffered by social intimates or inferred by their presence, and has beneficial emotional or behavioural effects on the recipients" (Gottlieb, 1983, p.28). Although various terminology is used for the different types of social support mentioned in this definition, they can be divided into two categories: Practical Support and Supporting Presence (Leahy-Warren et al., 2019). Practical Support includes tangible support (e.g., money, cooking meals) as well as informational support and advice (e.g., "I think the baby may need feeding"). In contrast, Supporting Presence does not aim to problem solve but speaks to emotional needs, including showing empathy, concern or care (e.g., "are you feeling better?"), as well as expressing encouragement about another's ability or worth

(e.g., “finding things hard doesn’t mean you’re a bad Mum”). The overall term given to the two types of social support outlined above is “functional social support”. This differs from “structural social support” which refers to the source of the support (i.e., health visitor, parent, partner).

Studies have investigated the impact of both functional and structural social support on the relationship between perceived stress and psychological health outcomes in new mothers; namely, depression, anxiety, and maternal self-efficacy. Razurel, Kaiser, Antonietti, Epiney, & Sellenet (2017) measured stress at three time points during pregnancy, post-delivery and six weeks post-partum. They considered the unique contributions of each social support sub-type, such that interactions between each health outcome, functional sub-types and various sources of support were included in the analyses. This led to specific findings such as *informational* support from *spouse* moderates the relationship between stress in the *post-delivery period* and *anxiety symptoms*.

The current study takes a broader perspective on the potential role of social support, building on the work of Razurel and colleagues in three main ways. First, although specific combinations of functional and structural support can be distinguished conceptually, in real-world settings women are likely to receive functional support (both practical support and a supporting presence) from differing sources (Leahy-Warren et al., 2019). In addition, from a statistical perspective, high specificity in the Razurel et al. study meant that each combination of health outcome and social support facet pertained to only one question on the measure. Broader consideration of the overall impact of functional social support may therefore allow greater applicability of findings, and provide a different perspective to the role of functional social support as a whole on the development of post-natal anxiety.

Second, the current study focuses on the experience of anxiety and the impact of social support within the post-natal period specifically. Although Razurel et al. (2017) conducted a longitudinal study, only one time point was taken postnatally. Therefore, causal inferences cannot be made about the moderating effect of social support in the postnatal period, particularly when different measures of stress were used at time one, two and three to account for particular stressors at each stage of perinatal period (e.g. concern about giving birth was not applicable postnatally).

Third, Razurel and her colleagues recruited mainly from a large university hospital in Switzerland. A published study of this kind has not been conducted in the UK and with a wider community recruitment strategy. It is within this context that the current study aims to add to the knowledge base concerning the development and moderation of maternal distress. In line with previous studies, it is predicted that the degree of perceived stress during the postpartum period will be predictive of subsequent post-natal anxiety. In addition, it is hypothesised that the availability of functional social support will moderate the relationship between perceived stress during the postpartum period and the level of post-natal anxiety.

Hypotheses

1) Greater perceived stress at time 1 will predict higher levels of post-natal anxiety at time 2) Increased availability of functional support at time 1 will moderate this relationship between perceived stress and anxiety.

Method

Ethical Approval

Ethical approval was received by the University of Oxford Central University Research Ethics Committee (CUREC; reference number: R71786/RE001).

Patient and Public Involvement (PPI)

As recommended by the National Institute of Health Research (NIHR, 2018) for PPI, two first-time mothers with a young baby were actively involved in the design of the study. During the early stages of the project, the two women provided views on the participant perspective and experience, with particular focus on timing of data-collection, survey length, and potential barriers to, or impact of, participation. One woman had particular involvement in discussions regarding which perceived stress measure would most effectively capture women's experience, providing insight as to the benefits of a general or a motherhood-specific measure. She also completed the study measures prior to the surveys being finalised to provide feedback on the ease of completion and understandability of information.

Study Design

The study used a longitudinal design with two time points: the first between six- and ten-weeks post-partum and the second between 14- and 18-weeks post-partum. The four-week window for each time point gave sufficient time and flexibility for new mothers to complete the survey. The first time point was selected for two reasons: first, before six-weeks postpartum, the physical symptoms of birth are more likely to confound measures of mood (Meades & Ayers, 2011). Second, the main independent variable measure has been

validated for use in the Time 1 (T1) window (Razurel, Kaiser, Dupuis, et al., 2013). The length of time between T1 and Time 2 (T2) was informed by previous longitudinal studies in the early postnatal period (Dennis et al., 2016; Razurel & Kaiser, 2015)

Participants

First-time mothers were recruited for this study using a convenience sampling method. An a priori statistical power analysis with an alpha of .05 and power of 0.90 indicated that a sample size of 73 was recommended. Social media platforms and National Childbirth Trust Groups were approached to disseminate information about the research. In total, 67 different groups or organisations were contacted via email or Facebook messenger, and, of those who agreed to share study details, 33 agreed to post more than once. The project was also promoted in a podcast and presented at an Institute of Health Visiting forum. No response was received from 20/67 groups, and a further 3/67 either declined to post or stated they were no longer meeting. Whilst the majority of groups were based in Oxfordshire, care was taken to contact local groups across the UK, particularly those in cities with a greater proportion of individuals from a BAME background. Seventeen groups were UK wide (for further detail on recruitment sites, see **Appendix K**). There were no face-to-face pregnancy checks or support groups (e.g. breastfeeding support or peer-led social groups) during the period of recruitment due to government COVID-19 restrictions, and therefore poster advertisement was limited. As restrictions eased, posters were put up at local parks and coffee shops where Mum's support groups were known to take place. The poster can be found in **Appendix L**, along with an example social media post.

Procedure

Data were collected via online questionnaires using Qualtrics Software, Version 10/2020 (Qualtrics, Provo, UT). Participants were able to access the questionnaire by using the link or QR code provided in all recruitment posts. Detailed information about what the study would involve, right to withdraw and how to raise concerns was presented at the start of the questionnaire. This was followed by confirmation questions pertaining to eligibility criteria (Table 2) and a consent form. The survey was programmed so that participants were unable to proceed if they did not consent to any part of the study or indicated that they did not meet the inclusion criteria.

Table 1

Eligibility Criteria

Inclusion Criteria	Exclusion Criteria
- Mothers over 18 years old at the time of giving birth to their first child - First time mothers with or without a diagnosis of anxiety or depression - Baby between six and ten weeks old when time 1 questionnaire is completed.	- Any mother who is unable to speak English to a level whereby they can understand and complete questionnaires independently - Mothers who have a mental health diagnosis other than anxiety or depression, including a diagnosed intellectual disability - Mothers giving birth to more than one child (e.g. twins/ triplets) - Mothers who have other children

In order to maintain anonymity, participants were asked to create a unique four-digit code by following a set of instructions. These instructions were presented again at the start of the T2 questionnaire in order that data from both time points could be matched. In addition, at the end of T1 participants were automatically directed to a separate survey to provide their

email address. In this way, email addresses were held separately to questionnaire responses and Qualtrics was programmed to send the T2 survey link to each individual automatically eight weeks after T1 was received. Errors in the programming were identified 4-months into recruitment and, after being unable to rectify the fault, all further T2 questionnaires were sent manually by the researcher. Complications with coding instructions were also recognised at this time, therefore it became necessary to amend the four-digit code instructions. All changes were pre-approved by CUREC and, as noted above, details can be found in **Appendix M**.

Measures

The measures used in the study are outlined below. All measures were collected at T1, and the T2 questionnaire only requested the Depression Anxiety Stress Scale-21 and baby's date of birth. The demographic questionnaire and validated measures used in this study can be found in **Appendix N, O, P, and Q**

Demographic questionnaire. This included age range, ethnicity, level of education, history of anxiety and depression, whether the individual is a single parent and reproductive history (e.g. planned pregnancy, past terminations, miscarriages or still birth, delivery complications). Questions pertaining to mental health history and reproductive history were as brief as possible given the potentially sensitive nature of these questions (**Appendix O**. Child date of birth was also included in order to ensure that the age of the child met the criterion for the study.

The Perinatal Infant Care Social Support (PICSS) instrument (Leahy-Warren et al., 2019; Appendix O). Underpinned by social support theory (Lakey & Cohen, 2000), this questionnaire is designed to assess the availability and nature of social support during

the post-partum period. This measure has been found to be a valid and coherent measure of perceived social support for mothers in the post-natal period ($\alpha = 0.903$) (Leahy-Warren et al., 2019).

The measure has two parts: functional support (type of support) and structural support (who provides the support). This study was interested in the overall functional social support (FSS) score only. This FSS subscale comprised 19 items; nine of which related to a Supporting Presence (e.g. "I have someone to care and comfort me") and ten items asked about Practical Support (e.g. "I can get 'hands-on' help with feeding my baby"). A 4-point Likert scale is used ('strongly disagree', 'disagree', agree', 'strongly agree'), giving a total possible score of between 19 (low support) and 76 (high support)

Post-natal Perceived Stress Inventory (PNPSI; Razurel et al., 2013; Appendix P). This questionnaire is a 19-item, self-report questionnaire which measures perceived stress in the post-partum period. Items are answered using a 5-point Likert scale ("I don't feel stressed at all by this", "I feel a little bit stressed by this", " I feel moderately stressed by this", "I feel very stressed by this", " I feel hugely stressed by this") providing a total possible score of between 19 (low stress) and 95 (high stress). The PNPSI has good internal consistency ($\alpha = 0.82$) and has been validated in primiparous women at six-weeks post-birth (Razurel, Kaiser, Dupuis, et al., 2013) within a French population.

The English translation of the measure was requested from the first author, yet new mothers involved in the development of the present study voiced confusion with a number of questions. With permission from Razurel and colleagues, the original French measure was translated into English by Dr Rebecca Knowles-Bevis. This was translated back to French by a second, independent translator and compared to the original PNPSI. The

updated English version was used in this study and had high internal consistency (α = 0.903).

The Depression Anxiety Stress Scale 21 (DASS-21; Lovibond & Lovibond, 1995; Appendix Q). The DASS-21 has three subscales (seven items for each) designed to discriminate between stress, anxiety and depression (Antony, Bieling, Enns, & Swinson, 1998). This scale was selected for three main reasons. First, questions pertaining to somatic symptoms of anxiety such as sleep disruption or reduced energy have been removed from this measure, therefore it is a valid measure during the post-natal period (Meades & Ayers, 2011). Second, the measure has been validated for use in both a clinical and non-clinical population (Antony et al., 1998). Third, the subscales allowed for the main outcome variable (anxiety) and control variable (depression) to be collected without significant increase in questionnaire length, which may have led to increased drop out during survey completion. The presence of the three subscales in one concise measure has also led to recommended use in the context of assessing overall maternal distress (Rallis, 2008)

Analyses

All statistical analyses were performed using SPSS (Version 27).

Analysis for Hypothesis 1.

Planned Analysis. In order to determine the association between the perceived stress at T1 (independent variable, IV) and post-natal anxiety at T2 (dependent variable, DV), a correlation analysis was planned using the PNPSI total score (IV) and the DASS-21 anxiety sub-scale score (DV)

Performed Analysis. Initial review of the data indicated that both the PNPSI scores and the DASS-21 anxiety scores had non-normal distribution as indicated by $p < .001$ on

the Shapiro-Wilk test. A non-parametric (Spearman's) correlation analysis was therefore performed to determine the correlation between T1 PNPSI and T2 DASS-21 anxiety score.

Analysis for Hypothesis 2.

Planned Analysis. To determine whether overall functional social support (PICSS, FSS scale) moderated the relationship between perceived stress at T1 (PNPSI total score) and anxiety at T2 (DASS-21 anxiety sub-scale score), a moderated regression analysis was planned using the PROCESS macro (v4.0) programme (Hayes, 2018). Diagnosis of anxiety or depression and T1 DASS depression score were to be included in the model as control variables, along with any demographic factors that were significantly correlated with the main outcome variable. To this end, a further correlation analysis was planned between each demographic factor and the DV.

Performed Analyses. As noted above, it was observed that both PNPSI (IV) and T2 DASS-21 anxiety sub-scale (DV) scores were not normally distributed. For PNPSI data, this violation was rectified using a log transformation, as demonstrated by $p > .05$ on the Shapiro-Wilk test. However, data transformations were ineffective in producing sufficient change in the data distribution of T2 DASS-21 anxiety sub-scale. These scores were negatively skewed (2.45), with 27.5% of women (22/80) scoring 0. This violation of normal distribution meant that planned moderated regression analysis were not able to be performed. The DASS-21 anxiety clinical cut-off score of 7 was therefore used to determine a new dichotomous variable for the DV. Participants with a T2 DASS-21 anxiety sub-scale score of 7 or lower were assigned 0, and those scoring above 7 were assigned 1. This new variable (from here on termed DASSanxiety01) was used as the main outcome variable rather than the raw DASS-21 anxiety score for the analysis.

A moderated binomial regression was performed using the PROCESS macro programme (v4.0; Hayes, 2018) to ascertain whether overall functional social support (PICSS, FSS scale score) moderated the relationship between perceived stress at T1 (log(PNPSI total score)) and anxiety level at T2 (DASSanxiety01). As planned, T1 DASS depression sub-scale score and diagnosis of anxiety or depression were controlled for in the model. There were no significant correlations between any other demographic factor and DASSanxiety01, therefore no further variables were added to the model.

Exploratory Analysis. Given the unexpected low anxiety scores in this sample, a further exploratory analysis was performed to consider the relationship between perceived stress (log(PNPSI total score), functional social support (PICSS score) and overall maternal distress as measured by the DASS-21 total score. First, a correlation analysis was performed to determine the association between the log(PNPSI) and DASS-21 total score. Second, a moderated regression analysis was conducted using PROCESS macro v4.0 to examine the potential moderating effect of functional social support on maternal distress. Perceived stress as measured by the log(PNPSI) remained the IV, and anxiety or depression diagnoses were controlled for in the model. Depression score is included in the DASS-21 total score, therefore was not added as a control.

Results

A total of 133 women completed the questionnaire at time 1 (T1) and were sent the time 2 (T2) questionnaire via email. Errors in the software programming led to a number of women being sent the T2 questionnaire immediately after T2, thus making the dataset invalid (N=22). A further 17 participants could not be included as their T1 questionnaire results could not be accurately matched to their T2 data. When accounting for these

complications in data collection, drop out between the two time points was 6.8%. The final number of paired datasets was 80 (for further detail of data collection, see procedure below and **Appendix N**). Binary logistic regression analysis indicated that neither drop-out nor failure to complete T2 at the correct time was predicted by any demographic factor or reported level of mental health distress at T1. Participant demographics and the process by which data sets were included for analysis are outlined in Table 1 and Figure 1 respectively.

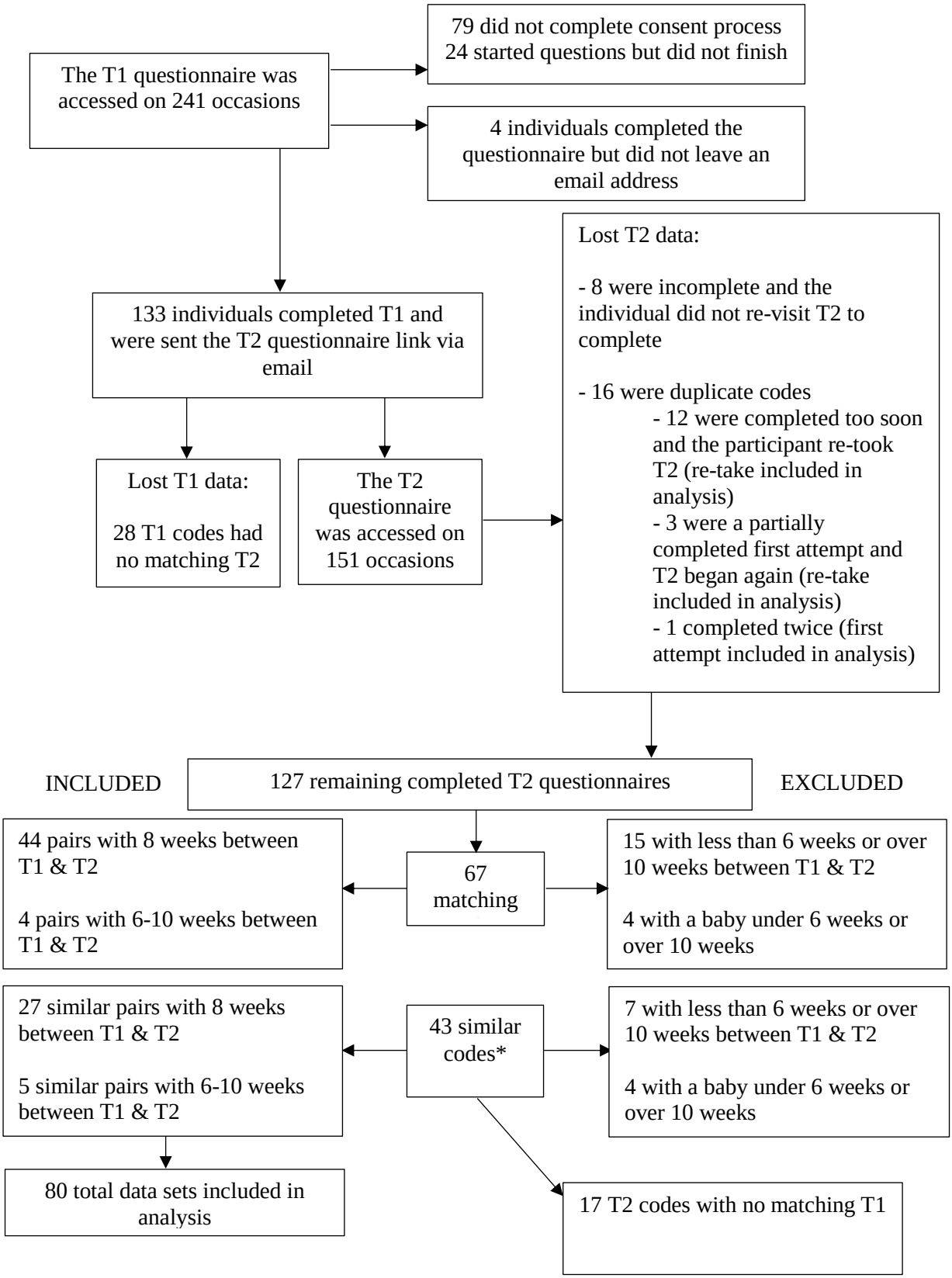
Table 2

Demographics of the participants that were included in analysis (N=80)

Variable	Category	Number
Age	18-25	4
	26-35	65
	36+	11
Ethnicity	White or Caucasian	74
	Asian	5
	Mixed – Asian and White	1
Level of education	GCSE/ A-Level/ Vocational	6
	Bachelor's Degree	37
	Master's Degree	28
	Doctoral level or higher	9
Single parent?	Yes	0
	No	80
Planned pregnancy?	Yes	75
	No	5
Previous miscarriage/ abortion?	Yes	20
	No	60
Birth complications?	Yes	42
	No	38
Diagnosis of anxiety?	Previous	13
	Current	8
	No	59
Diagnosis of depression?	Previous	5
	Current	15
	No	60

Figure 1.

Diagram of participant flow through the study



*similar codes refer to codes with one letter difference or two letters in the wrong order. For further details see **Appendix N**

Analysis for Hypothesis 1.

A moderate positive correlation was found between T1 PNPSI and T2 DASS-21 anxiety ($r_s(78) = .41$, $p<.001$). This indicates that as perceived stress at T1 increased, anxiety score at T2 also increased.

Secondary Analysis for Hypothesis 2

The overall binomial regression model was significant $\chi2(5) = 12.54$, $p = .04$. The model correctly classified 92.5% of cases and explained 60% (Nagelkerke R^2) of the variance in anxiety. In this model, scoring above clinical cut-off for anxiety was positively associated with perceived stress at T1 ($p = 0.048$), but not functional social support ($p = 0.12$) (see Table 3). The interaction effect was not statistically significant, $b = -0.01$, 95% CI [−0.25, 0.001], $Z = -1.82$, $p = .069$, indicating no moderating effect of functional social support on the relationship between perceived stress and likelihood of subsequent anxiety. There was a significant positive association between DASSanx01 and having received a depression/anxiety diagnosis (see Table 3).

Table 3

Predicting anxiety from perceived stress, functional social support and control variables

	B [95% CI]	*SE B*	*Z*	*p*
Main Variables				
Perceived Stress (PS)	.68 [.02, 1.38]	.36	1.89	.048
Functional Social Support (FSS)	.38 [-.098, .86]	0.24	1.56	.12
PS x FSS	-.01 [−.02, .0009]	.0064	-1.82	.069
Control Variables				
Anxiety/ depression diagnosis	2.87 [.58, 5.16]	1.17	2.46	.014
DASS (depression subscale)	-.05 [-.32, .22]	0.14	-.37	.71

Exploratory Analysis.

Preliminary analysis indicated that the DASS-21 total had non-normal distribution, as assessed by the Shapiro-Wilk's test ($p < .05$). Following log transformation, DASS-21 total displayed normal distribution and visual inspection of scatter plots showed the relationship between log(PNPSI) and log(DASS-21 total) to be linear. There were two outliers, however the removal of these datapoints did not change the strength or statistical significance of the correlation, therefore they were included in the analysis. There was a statistically significant, moderate-high positive correlation between perceived stress at T1 and maternal distress at T2 $r(78) = .502$, $p < .001$.

The overall regression model was statistically significant, $R = .629$, $F(4, 75) = 12.24$, $p < .001$. There was a statistically significant association between maternal distress and the control variables of anxiety or depression diagnosis. Maternal distress at T2 was predicted by level of perceived stress at T1, and negatively associated with functional social support at T1 (see Table 4). However, the interaction effect was not significant ($b = .0148$, 95% CI [−0.03, 0.06], $t = .64$, $p = .52$) showing that the relationship between perceived stress and maternal distress was not moderated by level of functional social support. These findings are reflected in the interaction plot (Figure 2), which shows that, at all levels of perceived stress, those with lower FSS tend to experience greater levels of maternal distress compared to those with higher FSS. Second, it displays that greater perceived stress at T1 is associated with increased maternal distress at T2, however similar gradients across the three slopes reveal that this positive association is not impacted by level of FSS.

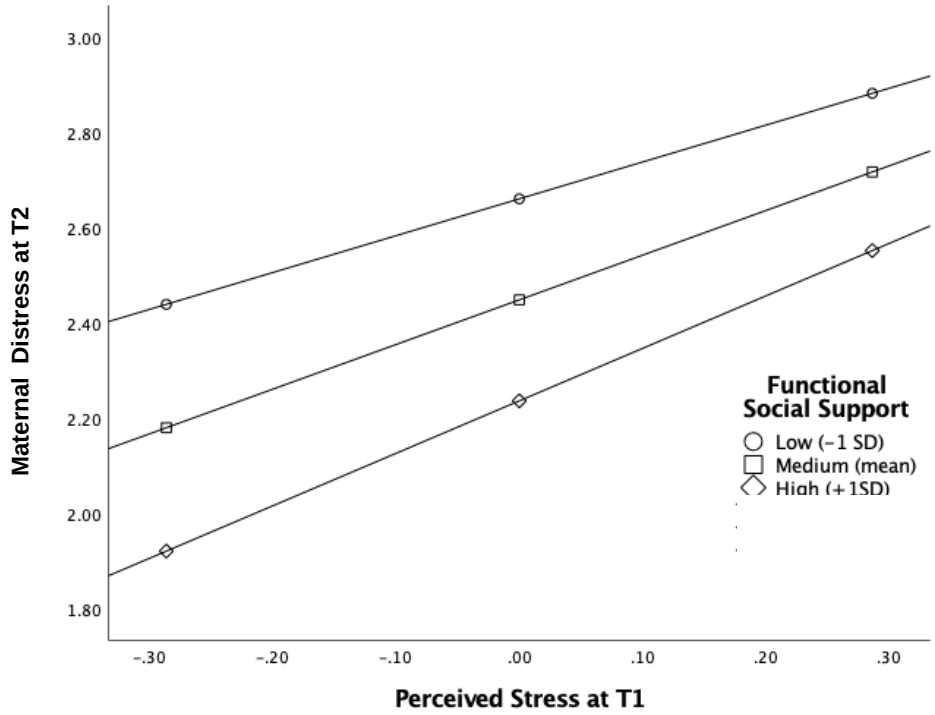
Table 4

Predicting maternal distress from perceived stress, functional social support and control variables

	B [95% CI]	*SE B*	*t*	*p*
Main Variables				
Perceived Stress (PS)	.94 [.30,1.58]	.32	2.92	.005
Functional Social Support (FSS)	-.02 [-.035, -.003]	.008	-2.38	.02
PS x FSS	.015 [−0.31, .06]	.02	.64	.52
Control Variables				
Anxiety/ depression diagnosis	.19 [.006, .395]	.10	1.93	.04

Figure 2

Functional social support as a moderator between perceived stress at 6-10 weeks post-partum (T1) and maternal distress at 14-18weeks post-partum (T2). All variables were standardised to mean 0, variance 1.



Discussion

This study sought to investigate whether level of functional social support moderated the relationship between new mothers' perceived stress at 6 to 10 weeks post-partum and their anxiety at 14 to 18 weeks post-partum. The study aimed to increase our understanding of the development of post-natal distress in first-time mothers and, as such, inform healthcare provision for this population. Results indicated that, whilst greater perceived stress was correlated with increased likelihood of scoring above clinical cut-off for anxiety, this relationship was not moderated by functional social support. Exploratory analysis of the potential moderating effect of functional social support on the relationship between new mothers' perceived stress and maternal distress (anxiety, depression and stress) found similar results. The study findings are contrary to predictions and are not in line with the stress-buffering model, which posits that social support 'buffers' against the impact of stress in the development of mental health distress (Cohen & Ashby Wills, 1985).

There are a number of factors to consider in seeking to understand these results, including, but not restricted to, limitations of the study. The first of these factors is the level of social support reported in the study. In all statistical analyses, low, medium and high support were defined in relation to the sample mean, which in this study was 56.3/76 (min = 37/76, max = 76/76). Leahy-Warren et al. (2019) do not specify scoring boundaries for low, medium and high support and, to the author's knowledge, no subsequent papers using this measure have been published to provide comparison. It was noted, however, that a high percentage of women reported "agree" or "agree strongly" to a number of questions. For example, 97.5% of participants reported that they had someone to care for and comfort them, 86.1% reported they had people to show them appreciation for the care they give to

their baby, and 93.7% felt that they had somebody to count on when things go wrong. The questions with the lowest proportion of "agree" or "strongly agree" responses were those pertaining to having "hands on help", with a mean of 53.76% agreement. These figures suggest that the overall level of social support, particularly Supporting Presence, was high within this sample. This therefore raises the question as to whether a moderating effect is observable at lower levels or across a wider range of functional social support, or whether the relationship between perceived stress and maternal distress is impacted differently by the two sub-types of FSS (Practical Support, Supporting Presence).

Second, findings from the exploratory analysis indicated that those with higher social support reported lower levels of perceived stress at T1 compared with those with lower FSS. The stress-buffering model suggests that social support buffers against distress by promoting positive appraisal of one's ability to cope with a stressor. In this context, it is therefore possible that the moderating effect of social support is experienced earlier in the peri-natal period, such that the perception of stress (i.e. the perception of one's own ability to manage the challenges of motherhood) at 6-10 weeks post-birth is impacted by level of FSS during pregnancy. This hypothesis would be in line with findings from Razurel et al. (2017) who, when exploring the role of social support across the perinatal period, noted a moderating effect of certain types of functional and structural social support on anxiety both during pregnancy and post-delivery.

Study Limitations

Alongside high levels of FSS, low levels of anxiety were reported across the sample, leading to a floor effect. Similarly, whilst there was greater variation in scores for maternal distress (DASS-21 total), no participant scored above moderate levels of distress,

with the majority of women scoring in the normal range. The absence of face-to-face support for new mothers and the subsequent impact on maternal mental health was in sharp media focus during this study's recruitment period, and this narrative appears to be reflected in recently published research; for example, Fallon et al. (2021) report high prevalence rates of both anxiety and depression in new UK mothers compared to pre-pandemic levels. This raises the question as to why low anxiety levels were observed within this study, particularly given that Fallon and colleagues also recruited during COVID-19 lockdown using only social media advertisement. Data collected at time 1 that could not be included in the longitudinal analysis (due to lack of time 2 data) also had low DASS-21 scores, therefore low anxiety levels in the final sample do not appear to have been the result of drop-out or data collection errors.

There are different factors to consider in seeking to understand the unexpected low anxiety levels in this sample. First, the DASS-21 is one of a number of measures that have been recommended for use during the early post-natal period (Meades & Ayers, 2011) and, whilst it has been validated for use within a non-clinical sample, it is most often used within clinical populations. Given that the women in this study were recruited from the community, it is acknowledged that the language used in other measures (for example, the Hospital Anxiety and Depression Scale which was developed for use in non-psychiatric populations) may provide greater sensitivity to distress in this sample.

Secondly, despite careful thought regarding online recruitment to capture a diverse audience, a largely homogenous sample was recruited. This is likely to have been a key factor in the limited variability seen in anxiety scores. A recent study found that, across a sample of mothers with a baby under 12 months, greater mental health distress during

COVID-19 was significantly influenced by low income and lockdown limiting the ability to buy food (Dib, Rougeaux, Vázquez-Vázquez, Wells, and Fewtrel, 2020). This suggests increased prevalence of mental health distress among new mothers of lower socio-economic status (SES); a demographic that was poorly represented within the current study. Rather, the sample included a large proportion of highly educated women (education being a demographic factor that is often used as an indicator of SES; Duncan, Daly, McDonough, & Williams, 2002). By contrast both Dib et al. (2020) and Fallon et al. (2021) recruited individuals across a range of socio-economic backgrounds from social media sources. To consider this further, in the current study 7.5% of participants reported their highest qualification to be GCSE, A-Level or vocational, compared with 32.9% (Dib et al., 2020) and 35.1% (Fallon et al., 2021). Similarly, 46% of the women in this study reported holding a master's or PhD level qualification compared with 27.2% (Dib et al. 2020) and 24.4% (Fallon et al., 2021). It appears that the key difference between these two projects and the current study is the age of the baby at time of the mothers' participation. Given that the current study sought to recruit first-time mothers with a baby under 10-weeks (compared to under 12 months in the studies by Dib et al. (2020) and Fallon et al. (2021)), there is a potential that participation at this early stage of transition to motherhood was a barrier to women with higher levels of mental health distress and/or lower social support. No single women took part in the current study and, given the increased likelihood of partners working from home during the lockdown period, it is possible that the absence of a partner in the home precluded single women from feeling able to take 30 minutes for an online survey.

There are undeniable benefits to online data collection, not least ease of reaching women across the country, and the fact that in the context of this study, in-person contact was not viable during the COVID-19 pandemic. Nevertheless, the homogeneity of the sample suggests that online recruitment and data collection may not adequately access and/or support participation for some women, particularly those who are finding transition to motherhood more difficult to navigate. Heterogeneity may be improved through increased offline recruitment, including via NHS services who are likely to have contact with mothers from various socio-economic and ethnic backgrounds. Active recruitment strategies (e.g. face-to-face contact, telephone communication) are also likely to be more effective than passive strategies (e.g. media adverts) with regard to response rate (for review see; Gul & Ali, 2010).

Another potential limitation to consider is that this study focussed solely on the role of functional social support and, although relevant demographic factors were controlled for in the model, it is possible that symptoms of distress at T2 were also influenced by other factors not assessed in this study. For example, Leahy-Warren, Mccarthy, & Corcoran (2012) found a significant association between social support and maternal parental self-efficacy at 6 weeks post-partum, with earlier studies suggesting that self-efficacy plays a mediating role between social support and post-natal depression (Cutrona & Troutman, 1986). Whilst these findings are in the context of post-natal depression it is plausible that similar mechanisms occur in the development of post-natal anxiety or overall maternal distress.

Finally, it is acknowledged that the perceived stress scale employed in this study was developed and validated within a French population, with questions pertaining to

return to work perhaps being less relevant to a UK sample at six-weeks postpartum. The inclusion of this question did not change the internal consistency of the measure and PPI indicated good overall face validity, however there is a need for formal validation of this measure within a UK sample.

Conclusions and Recommendations

Whilst this study found that higher perceived stress predicted greater post-natal anxiety, contrary to prediction, overall functional social support did not moderate this relationship. Nevertheless, the findings help to direct future research in this area from both a theoretical and methodological standpoint. First, the lack of a moderating effect of overall functional support suggests a greater complexity of the mechanisms of developing post-natal anxiety. Future studies examining post-natal anxiety or overall maternal distress could therefore consider findings from the post-natal depression literature, which point to the potential role of other factors, such as maternal self-efficacy, alongside social support.

Finally, this study has highlighted key considerations regarding recruitment strategies for research seeking to understand the experiences of first-time mothers with newborn babies. Future studies investigating early post-partum distress should carefully consider their methods of recruitment and data-collection in order to best capture the diversity of mothers and mothers' experiences.

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Executive Summary

Word count: 991

Why was the study conducted?

Transition to motherhood can be a challenging time for women. They are faced with an array of novel experiences which they are required to navigate whilst simultaneously processing the physical and emotional impact of childbirth and hormonal changes. The level of perceived stress during this period is a result of an individual's perception of how able they are to manage the various challenges of becoming a mother. High levels of stress, which, in this context is a poor sense of one's ability to cope with motherhood, can understandably have a detrimental impact on a woman's mental health. It is thought however that social support may protect against the impact of stress by supporting women to think differently about their capability in managing stressors. This idea of social support 'buffering' against the effect of stress was proposed by Cohen & Ashby Wills (1985) in their stress-buffering model.

The stress-buffering model has not previously been considered with respect to anxiety in the early transition to motherhood and, given the high prevalence levels of anxiety in this population, further research is needed to better understand that which may protect against maternal mental health distress. This study will not consider the source of the support (e.g. partner, mother, professional), rather, it will consider functional social support. The term functional refers to both the emotional and practical aid, information or advice offered by another and received as beneficial.

What was done?

In order to better understand the relationship between perceived stress, social support and anxiety in the earliest months of motherhood, this study used online platforms to invite new mothers to participate in this two-part online questionnaire study. Women were eligible to take part if they were over 18, had given birth to only one child, were not a primary carer for another non-biological child, and if they did not have a mental health diagnosis (other than depression/ anxiety), including intellectual disability. Women were asked to complete the first online survey when their baby was between 6-10 weeks old (Time 1), and a second survey when their baby was between 14-18 weeks (Time 2). The first survey comprised four questionnaires including the Perinatal Infant Care Social Support (PICSS) instrument (Leahy-Warren et al., 2019), Post-natal Perceived Stress Inventory (PNPSI; Razurel et al., 2013), The Depression Anxiety Stress Scale 21 (DASS-21; Lovibond & Lovibond, 1995) and a demographic questionnaire. The DASS-21 was the only questionnaire included at time 2. Survey answers across time points were linked using an anonymous code created by the participant at the start of the first survey. 130 women completed the first questionnaire however after drop-out, screening for eligibility, and pairing matched time 1 and time 2 codes, only 80 complete data sets were able to be included in the final analysis.

Correlation analysis was performed to assess whether there was a correlation between perceived stress and anxiety. The level of reported anxiety across the sample was lower than expected, which meant that a moderated regression analysis could not be reliably performed. A dichotomous variable was therefore created and, based on the DASS-21 anxiety sub-scale score, women were categorised as above or below the clinical cut-off

for anxiety. A moderated binomial regression analysis was then performed to consider whether functional social support moderated the relationship between perceived stress at time 1 and the likelihood of having anxiety at time 2. The DASS-21 depression score and mental health history were controlled for in these analyses.

A further exploratory analysis was also performed. The total DASS-21 score is a measure of maternal distress, and the spread of these scores across the sample meant that a moderated regression analysis could be undertaken. This assessed whether functional social support moderated the relationship between perceived stress at time 1 and maternal distress at time 2.

What was found?

Results indicated that as perceived stress at time 1 increased there was a statistically higher likelihood that women would score above the clinical cut-off for anxiety at time 2. However, this relationship was not moderated by functional social support, that is to say that the level of functional social support did not change the strength or direction of the relationship between perceived stress and the likelihood of anxiety. Similarly, functional social support was not found to moderate the relationship between perceived stress at time 1 and maternal distress at time 2.

What does this mean?

The findings of this study were not what was expected, and there are multiple factors which may aid understanding of this outcome. Research published during the COVID-19 pandemic suggests that the absence of face-to-face support from both professionals and peers has impacted maternal mental health and, compared to pre-pandemic, higher maternal anxiety is reported (e.g. Fallon et al., 2021). As such, it is

important to consider why low levels were reported in this sample of 130 women. Findings from Dib, Rougeaux, Vázquez-Vázquez, Wells, and Fewtrell (2020) suggest that there is a higher prevalence of mental health distress among new mothers of low socio-economic status (SES); a demographic that was poorly represented in this study. The sample also had limited ethnic diversity and no single women took part in the study. Other similar studies conducted online during COVID-19 reported greater diversity in their sample, however they recruited women with older babies (under 12 months). This may suggest that the early stage of motherhood targeted in this study was a barrier to women with higher levels of distress and/or lower social support feeling able to take part in an online survey. This has potential implications for future studies seeking to understand and support women in this early stage of transition to motherhood. In order to enable access for a wider demographic of women, future studies should carefully consider recruitment procedure, including the benefits and restraints of online studies. Future research may also consider the role of other factors alongside social support (e.g. maternal self-efficacy or child temperament) in the development of post-natal anxiety.

Reflective Narrative

Word count: 965

My relationship to research and my projects

From my first days on the clinical doctorate, I anticipated that the research component of the course would be my greatest challenge. I had been privileged to spend a number of years working in A&E, acute mental health inpatient services and adult mental health crisis care prior to training, and as such had climbed a number of, what felt at the time, to be rather steep learning curves. From a clinical perspective I was therefore confident that, if I felt out of my depth, I would learn to swim in time. I had not been through this journey with research however, so the unfamiliar road felt more daunting.

Upon reflection, I think I therefore started my research portfolio from a place of familiarity; namely, teaching staff. My time in acute mental health services had piqued my curiosity in the relational patterns that I observed play out between staff and service users, particularly those with complex interpersonal and emotional difficulties. As such, I first thought to facilitate staff training within my adult placement for my SIP. As I began to read the literature however, I was struck by how many similar teaching programmes had already been undertaken. I began to consider the benefit of developing a clear understanding of existing research, rather than being guided by my own experience of staff teaching or knowledge of BPD. My SIP idea therefore became my CRL.

My CRL was the project that sparked the most reflection for me, and the one which I believe I am most likely to build upon, both through further research and application to practice post-training. Whilst my interest in teaching others and seeking to change stigmatised narratives remains, the process of engaging with this literature and writing a

narrative review has taught me something about the integral role research plays in the development of our practice. The way in which I will approach any future teaching has changed dramatically as a result of this project; from how and when to introduce the idea of teaching to staff teams, to the training components, underpinning theoretical stance and allocating resources for ongoing, structured support.

The vacancy for my SIP was filled when I was approached by Oxford Safe Haven for support with evaluating their service. The SIP was the first project that I completed and arguably was the one which I felt most comfortable with from a methodological perspective. In part, I believe that this was because I had prior experience of both qualitative analysis and talking to individuals about their experience of crisis care. Balancing the three branches of the project was my greatest challenge, both in terms of time dedicated to the research process, but also in writing up the project in a cohesive and clear manner. I was aware of Oxford Safe Haven's position in wanting to evaluate their service aims from both a commissioner and service-user perspective, and I felt strongly that the service-user voice should form a significant part of this. I enjoyed working closely with staff from Oxford Safe Haven and a service-user consultant, Ruth Eames, particularly in the early development of the project. These conversations helped me to hold in mind the different perspectives of all those invested in the study, and despite its challenges, I feel that each branch of the project made a significant contribution to the overall understanding of not only Oxford Safe Haven's impact, but the Safe Haven model more widely.

In contrast to my other two projects, my MRP was a new research interest for me. My interest in early attachment drew me to place the relationship between mother and baby as the focus of my project. The development of this study took many months of careful

thought, from early considerations about which mental health difficulty and stage of the perinatal period to study, to ethical considerations of collecting sensitive data online, and tackling the practical challenges of online longitudinal research, to name a few. My MRP was the project which was most impacted by COVID-19 (particularly in terms of recruitment), however there were a number of unanticipated hurdles which made this project the most challenging for me. Perhaps the greatest of these was the unexpectedly low anxiety scores across the sample. This data challenged my statistical analysis plan, and I was aware of the pull to explore multiple avenues to try and make sense of a complicated statistical picture. Whilst challenging to navigate, I valued the learning from stepping back and identifying a theoretically grounded avenue for exploratory analysis, and presenting this in a transparent, open manner during the write up. In understanding the ethical reasoning for this approach to research, my perspective of what constituted a 'valuable' finding shifted, and I was able to think more deeply about the research process, including the limitations and strengths of the project.

General reflections

Upon reflection, I believe the thread that runs through my research portfolio is relationship. It considers one of life's most precious and significant relationships between mother and child, the impact on people's lives and mental health when relationships go wrong, the potential strain on staff-client relationships in the context of stigma, and the role of safe therapeutic relationships for people who are isolated by mental health crisis. This theme aligns with both my personal and professional values of seeking to both protect and foster safe, secure relationships, which I believe to be an integral part of human experience and wellbeing.

A key learning experience for me has been the shift from seeing research as an expectation, to understanding it as an opportunity to develop clinical interests and share this on a wider platform. Whilst this integrated thesis has undoubtedly brought challenges and tears, it has certainly increased both my knowledge and confidence in a range of research skills.

Acknowledgements

Thank you to my supervisors Matthew, Becca, Louise, Lorna and Ania for your guidance and support in both shaping and undertaking these projects. Thank you also for your patience and flexibility during the more challenging moments, allowing me to continue at my own pace and seeing me over the finish line!

Thank you to others who did not formally supervise me, but whose support has been invaluable. Danielle and Paul, thank you for pointing me in the right direction and helping me organise my thinking in the statistical analysis of my MRP and SIP data. To Helen, Catriona, Chantal and John, my clinical supervisors, who have compassionately acknowledged the research demands of the course and helped me to navigate this alongside clinical learning; I am so very grateful.

Thank you to my wonderful cohort, the 'girls of the Oxford DClinPsy', for your friendship, encouragement and companionship throughout this process. Thank you particularly to Sarah, Bryony, Caty and Natacha, I could not have done this without you! Thank you for sharing your knowledge with me and for being such wonderfully reflective, insightful, and passionate friends to me over the past three years.

To my friends who listened to me, uplifted and encouraged me, cooked meals for me, and prayed for me – thank you! Bex, Tori and Chaitali, thank you for patiently walking with me and finding endless ways to say "you've got this!".

Thank you to my Mum, Dad and beautiful siblings. Thank you for supporting and guiding me through all my learning, applications, disappointments and successes. Thank you for listening to me, even when you didn't understand, and for being steadfast in everything for me. And finally, I would like to thank my Nan who has faithfully prayed for me through every hurdle. I have known God's faithfulness in answered prayer and this thesis would not have been written without you.

Thesis submitted in partial fulfilment of the degree of Doctor of Clinical Psychology

Appendices

DClinPsy Portfolio

Joanna Emily Maher

January 2022

Critical Review of the Literature Appendices

Appendix A. CRL: Full search strategy

1. "Training"
"train*" OR "teach*" OR "coach*" OR "educat*" OR "intervention"

2. "Staff"
"staff" OR "team" OR "mental health professional*" OR "professional*" OR "nurse*" OR "occupational therapist" OR "social worker" OR "psychiatrist" OR "psychologist"

3. "BPD"
"BPD" OR "borderline personality disorder" OR "emotionally unstable personality disorder" OR "EUPD" OR "complex trauma" OR "complex PTSD"

(Combine: 1 AND 2 AND 3)

Appendix B. CRL: Operation of quality assessment questions for both the CASP cohort study checklist (quantitative; adapted from Attwood, Wilkinson-Tough, Lambe, & Draper, 2019) and CASP qualitative study checklist

Question Number	CASP question	Operationalised question
	Quantitative Checklist	
1	Did the study address a clearly focussed issue?	Is the study aimed at evaluating the impact of training on attitudes toward people with a. diagnosis of BPD?
2	Was the cohort recruited in an acceptable way?	Were recruitment methods such that a representative sample of people who work with clients with a diagnosis of BPD was likely?
3	Was the exposure accurately measured to minimise bias?	Is it certain all participants received the exact same intervention?
4	Was the outcome accurately measured to minimise bias?	Are the measures used valid and reliable?
5a	Have the authors identified all important confounding factors?	Has adequate attention been paid to gender, experience with client group, professional role, prior training and baseline attitudes?
5b	Have the authors taken account of the confounding factors in the design and/or analysis?	Have factors identified in Q5a been accounted for in analysis of data?
6	Was the FU of subjects complete enough?	Was the FU longer or equal to 6 months and has any loss to follow up been adequately managed?
7	What are the results of the study?	Are the means, standard deviations and levels of significance reported?
8	How precise are the results?	Are the confidence intervals reported?
9	Do you believe the results?	Could the results be due to bias or confounding? (reversed scored)
10	Can the results be applied to the local population?	Can the results be applied to health and social care settings?
11	Do the results of this study fit with other available evidence?	Do the results fit with other evidence that training is effective in changing attitudes?
12	What are the implications of this study for practice?	Is the intervention deliverable in clinical practice?

	Qualitative Checklist	
1	Was there a clear statement of the aims of the research?	Was there a clear statement of the aims of the study, or qualitative aspect to the study for mixed method design?
2	Is a qualitative methodology appropriate?	For a mixed method study: Is a mixed method methodology appropriate? i.e. does the study seek to inform quantitative results by illuminating the subjective experience of participants?
3	Is a mixed method methodology appropriate? i.e. does the study seek to inform quantitative results by illuminating the subjective experience of participants?	Is a mixed method methodology appropriate? i.e. does the study seek to inform quantitative results by illuminating the subjective experience of participants?
4	Was the recruitment strategy appropriate to the aims of the research?	Were all participants who took the training included in the qualitative aspect of the research? If not, was this justified appropriately?
5	Was the data collected in a way that addressed the research issue?	Are the methods of data collection clear, including how interviews were conducted, whether 1:1 or focus groups, selection of questions considered?
6	Has the relationship between researcher and participants been adequately considered?	Were interviews/ focus groups conducted by training facilitators? If so, was the potential impact of this considered adequately?
7	Have the ethical issues been taken into consideration?	Have ethical issues regarding informed consent and confidentiality been discussed with participants?
8	Was the data analysis sufficiently rigorous?	Is there a detailed description of the analysis process?
9	Is there a clear statement of findings?	Are findings discussed in relation to the research question?
10	Are findings discussed in relation to the research question?	Do the findings/ qualitative aspect of the study add to the understanding of the impact of training on attitudes toward those with a BPD diagnosis?

Appendix C. CRL: Author responses to request for study details

Study	Response received	Received content
Burke, Kells, Flynn, & Joyce (2019)	No	n/a
Dickens et al., (2019)	No	n/a
Kumar, Brand & Courtois (2019)	No	n/a
Carmel, Logvinenko & Valenti (2018)	No	n/a
Masland et al., (2018)	Yes	Training slides provided
Keuroghlian et al., (2016)	Yes	Training slides provided (same slides as Masland et al., 2018)
Knaak et al., (2015)	Yes	Training slides provided
Clarke, Taylor, Lancaster et al. (2015)	No	n/a
Clarke, Taylor, Bolderston et al. (2015)	No	n/a
Warrender (2015)	Yes	Brief description of teaching, plus link provided for further detail
Clark, Fox, & Long (2014)	No	n/a
Herschell et al., (2013)	No	n/a
Shanks et al., (2011)	Yes	Outline for a "typical" one day training provided, plus additional detail re. ongoing provision of supervision post training
Commons Treloar (2009) Commons Treloar & Lewis (2008)	Yes	Detail regarding vignettes provided. Also directed to authors book for further detail.
Hazleton, Rossiter & Milner (2006)	No	Email acknowledging receipt of email however no further follow up
Krawitz (2004)	Yes	Detail regarding inclusion of individuals with lived experience, plus further papers regarding training development

Appendix D. CRL: Definitions of the study component terms

Term	Study	Description
	Content	
Psycho-education	All studies	This term was used when any of the below aspects were included in the teaching: diagnostic criteria, aetiology of BPD, prognosis, treatment, prevalence rate, understanding of symptoms.
Personal Testimony	Dicken et al., 2019 Clarke, Taylor, Bolderston, 2015 Knaak et al., 2015 Commons Treloar, 2009	Indicates the inclusion of either video or live testimony of an individual with lived experience of a BPD diagnosis.
Theory Explanation	Burke, Kells, Flynn, & Joyce, 2019 Carmel, Logvinenko, & Valenti, 2018 Masland et al., 2018 Keuroghlian et al., 2016 Clarke, Taylor, Lancaster, 2015 Warrender, 2015 Herschell et al., 2013 Hazleton, 2006	Reference was made to explanation of theory or theoretical underpinning included in training content. This may have been directly mentioned in the paper or in author correspondence
Theory/Case link	Carmel, Logvinenko, & Valenti, 2018 Masland et al., 2018 Keuroghlian et al., 2016 Clarke, Taylor, Bolderston, 2015 Clarke, Taylor, Lancaster, 2015 Warrender, 2015 Hazleton, 2006 Commons Treloar, 2009 Commons Treloar & Lewis, 2008	Reference made to case formulation or supporting participants to apply theoretical constructs to the client experience/ presentation. This may have been directly mentioned in the paper or in author correspondence.
Staff values	Clarke, Taylor, Lancaster, 2015 Clarke, Taylor, Bolderston, 2015	Inclusion of the participants own beliefs and values and how these may shape the care / behaviour toward those with a diagnosis of BPD.
Staff experience	Dicken et al., 2019 Hazleton, 2006 Krawitz, 2004	Exploration of emotions/behavioural urges during interaction with individuals with a BPD diagnosis. This is distinct from staff values in that the primary intention is to validate and connect with staff' experience
Risk Management	Carmel, Logvinenko, & Valenti, 2018 Masland et al., 2018 Clarke, Taylor, Bolderston, 2015 Keuroghlian et al., 2016	Reference was made to "risk management", crisis management or inclusion of factors which increase/ decrease risk
Case management	Carmel, Logvinenko, & Valenti, 2018	Medical discussion with other clinicians about the treatment plan for individuals with BPD
Psychopharmacology	Carmel, Logvinenko, & Valenti, 2018 Masland et al., 2018 Keuroghlian et al., 2016	Indication that training content included recommended drug treatments for those with BPD, including efficacy and side effects.

Research	Darongkamas, et al., (2020) Masland et al., 2018 Keuroghlian et al., 2016 Clarke, Taylor, Bolderston, 2015 Commons Treloar, 2009 Commons Treloar & Lewis, 2008	This term was used when reference was made to the inclusion of clinical or research literature/findings, review of the evidence base for treatments or research papers were referred to in the teaching slides.
Treatment guidelines	Commons Treloar, 2009 Commons Treloar & Lewis, 2008	Clinical guidelines to working with this client group incorporated. This may have included crisis intervention guidelines, or national clinical practice guideline on self-harm.
Method of Delivery		
Lecture	All studies	Refers to didactic teaching with slides
Skills training	Burke, Kells, Flynn, & Joyce, 2019 Carmel, Logvinenko, & Valenti, 2018 Clarke, Taylor, Bolderston, 2015 Knaak et al., 2015 Clarke, Taylor, Lancaster, 2015 Warrender, 2015 Herschell et al., 2013 Shanks et al., 2011 Hazleton, 2006	This term was used when any of the below aspects were referred to in the paper: skills training, supporting staff with skills development (often specific to theory underpinning the training), skills practice, or that skills were modelled then role-played.
Self-management skills	Clarke, Taylor, Bolderston, 2015 Clarke, Taylor, Lancaster, 2015	Skills teaching aimed at participants to support them in the management of emotions, thought or action-urges that arise when working with clients.
Case Examples	Carmel, Logvinenko, & Valenti, 2018 Masland et al., 2018 Keuroghlian et al., 2016 Clarke, Taylor, Lancaster, 2015 Warrender, 2015 Shanks et al., 2011 Commons Treloar & Lewis, 2008	Examples of client experience presented in the form of either video/ written vignettes or case formulation. N.b. this is distinct from theory/case link. Unless link to theory was explicitly stated, theory/case link was not included as content component.
Group Discussion	Kumar, Brand & Courtois, 2019 Dicken et al., 2019 Clarke, Taylor, Bolderston, 2015 Commons Treloar, 2009 Commons Treloar & Lewis, 2008	Aspects of teaching, often concepts, case vignettes or skills discussed in small groups
Live/Video demonstrations	Kumar, Brand & Courtois, 2019 Keuroghlian et al., 2016 Warrender, 2015 Herschell et al., 2013 Shanks et al., 2011	Demonstration of skills showed by either live trainer role play or over video clip
Role play	Kumar, Brand & Courtois, 2019 Warrender, 2015 Herschell et al., 2013	Participants practice skills in the form of role play with one person practising the skill and another playing the role of a client
Modelling by faclitator	Knaak et al., 2015	This term denotes that authors considered the role of the facilitator in modelling enthusiasm and use of

		person-first (as opposed to disorder-first) language and behaviour.
Ongoing clinical supervision	Herschell et al., 2013 (phone, individual) Warrender, 2015 (in person, group)	*Phone consultation:* Feedback was provided to participants about their application of programme content in their work with clients via consultation with programme facilitators. *Clinical supervision:* referred to only as 'clinical supervision' offered post-training.
Weekly DBT consultation	Carmel, Logvinenko, & Valenti, 2018	This is part of the DBT model of treatment. This is a multi-disciplinary team with experience of DBT. The aim of consultation is to promote motivation in delivering effective treatment, support each other to enhance clinical skills, and monitor fidelity to the treatment model.
Direct patient care/contact	Carmel, Logvinenko, & Valenti, 2018 Warrender, 2015	Interactions with clients/ client care was incorporated into the training. Studies which delivered teaching on non-consecutive days were only assigned this component if reference was made to this as a purposeful break in order to give opportunity for client contact/ application of learning from day 1.
Given resources	Dicken et al., 2019	Resources to aid participants in their work with clients were provided (e.g. suggested talking points/ flash cards)

Appendix E. CRL: Journal of Personality Disorders author guidelines

Journal of Personality Disorders

Instructions to Authors

Types of Articles

Regular Articles: Reports of original work should not normally exceed 30 pages (typed, double-lined spaces, and with standard margins, including tables, figures, and references). Occasionally, an author may feel that he or she needs to exceed this length (e.g., a report of a series of studies, or a report that would benefit from more extensive technical detail). In these circumstances, an author may submit a lengthier manuscript, but the author should describe the rationale for a submission exceeding 30 pages in the cover letter accompanying the submission. This rationale will be taken into account by the Editors, as part of the review process, in determining if the increased length is justified.

Invited Essays and Special Articles: These articles provide an overview of broad-ranging areas of research and conceptual formulations dealing with substantive theoretical issues. Reports of large-scale definitive empirical studies may also be submitted. Articles should not exceed 40 pages including tables, figures, and references. Authors contemplating such an article are advised to contact the editor in advance to see whether the topic is appropriate and whether other articles in this topic are planned.

Brief Reports: Short descriptions of empirical studies not exceeding 20 pages in length including tables, figures, and references.

Web-Based Submissions: Manuscripts must be produced electronically using word processing software, double spaced, and submitted along with a cover letter to http://jpd.msubmit.net. Authors may choose blind or non-blind review. Please specify which option you are choosing in your cover letter. If you choose blind review, please prepare the manuscript accordingly (e.g., remove identifying information from the first page of the manuscript, etc.). All articles should be prepared in accordance with the Publication Manual of the American Psychological Association. They must be preceded by a brief abstract and adhere to APA referencing format.

Tables should be submitted in Excel. Tables formatted in Microsoft Word's Table function are also acceptable. (Tables should not be submitted using tabs, returns, or spaces as formatting tools.)

Figures must be submitted separately as graphic files (in order of preference: tif, eps, jpg, bmp, gif; note that PowerPoint is not acceptable) in the highest possible resolution. Figure caption text should be included in the article's Microsoft Word file. All figures must be readable in black and white.

Permissions: Contributors are responsible for obtaining permission from copyright owners if they use an illustration, table, or lengthy quote (100+ words) that has been published elsewhere. Contributors should write both the publisher and author of such material, requesting nonexclusive world rights in all languages for use in the article and in all future editions of it.

Supplemental Materials: Supplemental materials will run online-only and should be no longer than the manuscript itself. If the material you wish to include is longer than the article, we will instead include a note that all supplemental material can be obtained, by request, from the author. Supplemental materials in the form of tables and figures must comply with the above table and figure instructions for the main article. Remember to include call-outs for all figures and tables within the supplemental material. Supplemental material files will be uploaded online as supplied. They will not be checked for accuracy, copyedited, typeset or proofread.

References: Authors should consult the publication manual of the American Psychological Association for rules on format and style. All research papers submitted to the Journal of Personality Disorders must conform to the ethical standards of the American Psychological Association. Articles should be written in nonsexist language. Any manuscripts with references that are incorrectly formatted will be returned by the publisher for revision.

Sample References:

Davis, C. G., & McKearney, J. M. (2003). How do people grow from their experience with trauma or loss? Journal of Social & Clinical Psychology, 22(5), 477-492.

Dweck, C., & Wortman, C. (1982). Learned helplessness, anxiety and achievement. In H. Kron & L. Laux (Eds.), Achievement, stress, and anxiety (pp. 93-125). Washington, DC: Hemisphere Publishing Group.

Roelofs, J., Meesters, C., Ter Huurne, M., Bamelis, L., & Muris, P. (2006). On the links between attachment style, parental rearing behaviors, and internalizing and externalizing problems in nonclinical children. Journal of Child and Family Studies, 15, 331-344.

Service Improvement Project Appendices

Appendix F. SIP: Semi-structured Interview Schedule

Brief introduction to interview

Thank you for coming today and sharing some of your story with us
Complete consent form.
As you know, the aim of today is to hear about your experience of attending Oxford Safe Haven. The purpose of today is to hear about your personal experiences of attending Oxford Safe Haven so that we can build a picture of what aspects of the service are going well and which are going less well. This information will be really helpful in shaping how this service provides care so thank you for taking the time to speak with me. There is no right or wrong answer to any of the questions so I would encourage you to share as openly as you feel comfortable.
Complete socio-demographic/ clinical information questionnaire.

Preliminary Questions:

1) Can you recall your most recent visit to OSH prior to COVID-19?
    a. If no: Can you recall a recent visit?

The reason we ask this is because many people find it helpful to have a specific visit in mind when they answer the questions, however I would like you to be able to share all that you would like to, so you can refer to other experiences as well if you would like to. There will be an opportunity at the end to speak more generally about anything else I haven't asked about.

Main Question:

With your (most) recent visit in mind, can you tell me a bit about what led you to seek help from OSH?

Can you tell me about your experience of attending OSH on this day?

Further questions as needed:

1) What did you find helpful from your experience of attending OSH on this day?

2) What was less helpful from your experience of attending OSH on this day?

3) If OSH wasn't an option on this day where would you have sought support?

4) Does the support of OSH differ from the support you would receive from X *(answer to Q3*)?
    a. If yes: How does this differ? What impact does this difference have on your mental health?

5) Was your most recent visit representative of other times you have used OSH?
    a. If no: How were other occasions different?

6) Is there anything that you think could be improved in OSH?
    a. If yes: How do you think this could be improved?
    How would this improvement support your mental health in crisis?

7) Where or who would you have gone to for support prior to OSH opening and has this changed since becoming aware of OSH?

8) What do you think the effect of these changes have been on your mental health recovery?

9) Is there anything else you would like to say that you have not already mentioned?

Appendix G. SIP: OSH Feedback Questionnaire

Tell us what you think

We want to make sure we're providing the best possible service, and that you feel safe and supported coming to Oxford Safe Haven. Please let us know:

▶ What support were you looking for from Oxford Safe Haven?

Support in crisis / Crisis prevention

Other…….

▶ What did you find helpful?

▶ What can we do better?

▶ How do you feel now compared to when you arrived?

Much better / A bit better / About the same / A bit worse / Much worse

▶ Where would you have gone for support over the weekend if you hadn't come here? (Please tick all that apply)

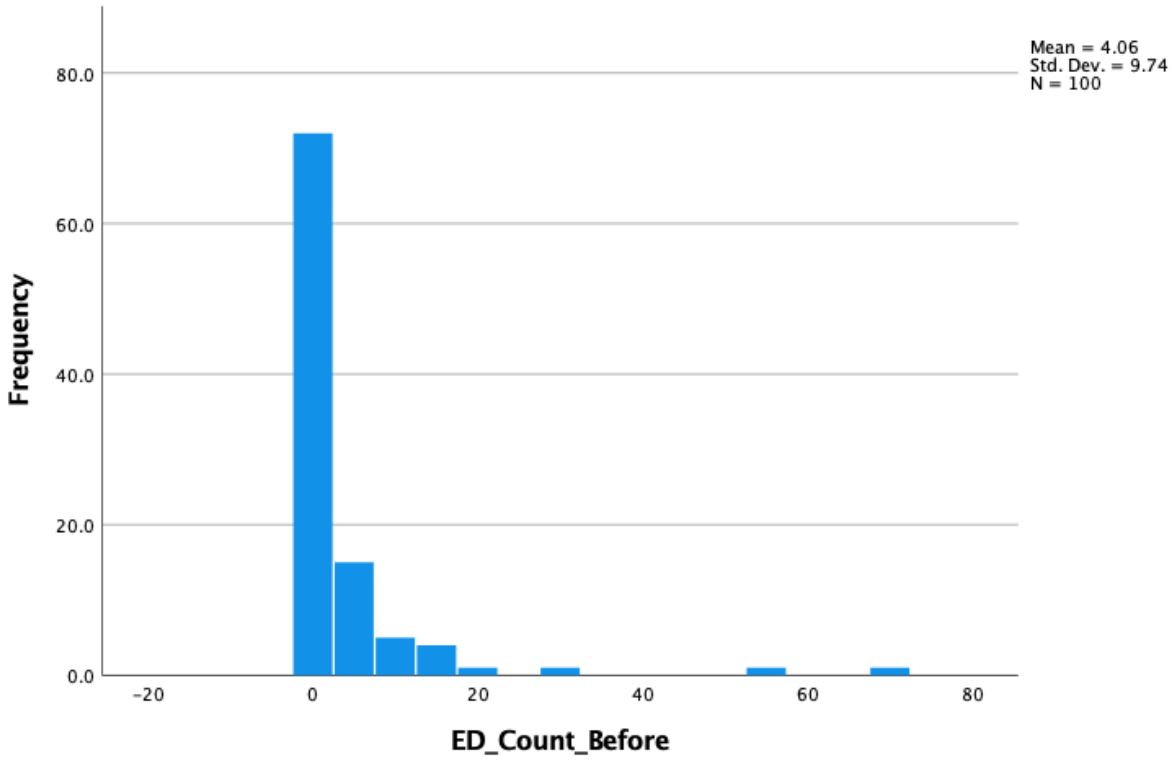
□ A&E	□ Ambulance	□ Friends / family	□ AMHT
□ Police	□ GP	□ Other (please specify)……..	

▶ Would you recommend Oxford Safe Haven to others? Y / N
(This question replaced "would you consider coming to OSH again? Y/N" in April 2019)

▶ Anything else you'd like to add? (Please use other side if needed)

Appendix H. SIP: Additional Statistical Analysis

The figure below is a histogram depicting the spread of the number of A&E attendances across all groups in the year prior to attending OSH (ED_Count_Before). Further tests were performed which confirmed that assumptions were not met in order for an Analysis of Co-Variance (ANCOVA) to be considered. There was not a linear relationship between group (assessed by visual inspection of a scatterplot), and there was not homogeneity of regression slopes, as determined by a statistically significant interaction term, F (3,92) = 2.16, p = .066 . There were also a number of outliers within each group and Levene's test of homogeneity of variance indicated non-homogeneity of variance (p = 0.001).



Appendix I. SIP: Table of Illustrative Quotes from Interviews

Primary Theme	Secondary Theme	Quote
A high quality, precious service. . . but we need more	An invaluable 5* service	*James (G1):* "if I was to give them a star rating it would be a 5-star service" *Alice (G3):* "It really has been a lifeline, like I honestly cannot erm state it enough like it's been really helpful" *Sally (G2):* "I really hope they keep Safe Haven open because it's an invaluable service to this city"
	OSH is different	*James (G1):* "At A&E I was being as lots and lots of questions, which is their job, they have to do that, erm but the questions, the questions themselves left me feeling quite panicky. With Safe Haven there is no pressure to perform, there's no questions, there's no structure to get through. I'm sure if I'd, I'd said I want to leave after half an hour, that would be absolutely no trouble at all so it's, it's the lack of erm, intrusive questioning. Erm, I don't mean to use that word to criticise A&E, they must ask to find out what's happening, erm but Safe Haven is a much gentler landing" *Sally (G2):* "Oh god, yeah, absolutely, one hundred percent [it's different] . . . It's because it takes, [pause] it's calm, erm I mean A&E is so busy, you, you know you wake up on a trolley and think "oh god, I just don't want to be alive", but Safe Haven guides you" *Joan (G1):* "Well, if I, if I would attend A&E, A&E is a totally different, it's a different environment, it's a fast environment, it's loud. . . You go to Safe Haven and it is a haven"
	Knowing they're there. . . or not	*Zara (G3):* "just the fact that they're there, you can phone up anytime you're in crisis" *Sally (G2):* "I'm going through a really good phrase and I haven't had to go down to Safe Haven but it's really, really important knowing that it's there" *Jane (G1):* "it's given me security that I know that they're there" . . . . *Zara (G3):* "I didn't call safe haven before COVID because I didn't know of it" *Sally (G2):* "I don't what the situation is, whether Safe Haven still offering a service at the moment?" *Jane (G1):* "I didn't know if it was open or anything, so and, and I'm vulnerable so I haven't risked [going]"
	The Location	*Zara (G3):* "when I'm low its quite a trek to travel half an hour and I know that sounds really ridiculous because I have a car and I'm very lucky that I can drive but I just get paralysed and just can't face it" *Alice (G3):* "[it's] the thought, the anxiety behind actually getting on the bus, getting on two buses to get there, especially not being able to wear a mask without um without freaking out more"

		Becca (G3): "I live in [name of location] so it's quite a way erm and also in COVID I don't really want to go out of my area. . . . the one thing I have found quite hard is where they're based, erm it's err, like its off the [location] road so it's quiet, it's at times, it's really difficult when you're in a vulnerable place to access and erm last year when I came out of there, I walked down the road and I actually got robbed"
	The Staff	*Sally (G2):* "the staff are just incredible, erm and it's like they know, they know exactly where you are and nothing too much trouble" *Jane (G1):* "I feel they are trained to be supportive and be a listening ear without erm and just advice or criticism so, so that is what makes you feel safe" *Joan (G1):* "they have the gift of helping us, there's no doubt about that" *Becca (G3):* "the members of staff there are amazing. . . they actually care about the individual"
	The Time-Offered	*Sally (G2):* "I mean the only improvement would be to open up more times in the week" *Zara (G3):* "I think it would just be helpful if we had an extra ten minutes so that once twenty minutes were over they could say right we're going to terminate the call in ten minutes and there would be more of gentler closing. Because on twenty minutes it can be sometimes just a bit rushed and I don't always realise that twenty minutes has gone"
What OSH provides	A listening ear and guiding hand	*Alice (G3):* "it was really beneficial because even though we didn't say a lot, um just that listening ear from someone I know who is there for that" *Joan (G1):* "They're life savers. They sit down with you, they have a drink and we go through that initial wave of what's come over me and the tide goes down after talking for a while and you start to calm down and start to look at things in a different way even it is only for a short time" *Sally (G2):* "Safe Haven guides you . . . they talk to you, they guide you, they say right we're here tomorrow night . . . you can you talk about what's going on in your head, and it almost releases the, erm power out of it for you to act upon anything"
	An alternative	*Zara (G3):* "I would have had to phone the mental health team and might have ended up in hospital. I don't know. I mean because I have been really, really desperate. I get really, really desperate" *Sally (G2):* "I would have probably gone back into myself, drank, and probably ended back in A&E if the truth be known" *Chris (G3):* "I dunno how I'd deal with it if I didn't come here, I'd probably umm try to get admitted to get away from it" *Chris (G3):* "I can choose how I go forward with how I'm feeling, whereas for me calling an ambulance or ending up in A&E it's like just a full stop that's all there is, there's, there's no other way"

	Being known and seen	*Chris (G3):* "whatever you say is important, it they don't poo-poo it and think you know oh everything going to be alright, they take it very, very seriously and it that, you know they're concerned eh but in a really professional way" *Chris (G3):* "you kind of develop some kind of working relationship with the staff if you're having ongoing crisis so then they tend to know, you know, if you're having a difficult time and why" *Becca (G3):* "The most helpful would have been erm interaction with the staff like . . . they know me . . they know my name, erm and when I go in, I'm actually a person. . . . When I'm just seen as me, you know for all my good points, my bad points, my mental health issues, erm the parts of me that work, the parts of me that don't work, erm like when I'm seen like that, erm it really helps me . . . being noticed for who I am and not being judged by anybody"
	Choice	*James (G1):* "With Safe Haven there is no pressure to perform, there's no questions, there's no structure to get through. I'm sure if I'd, I'd said I want to leave after half an hour, that would be absolutely no trouble at all so it's, it's the lack of erm, intrusive questioning" *Sally (G2):* "You can talk as much [you need] or you can just be quiet. . . it's very, very easy" *Joan (G1):* "There are a number of things you can do in there. You can book a one to one, you know you can have a drink or you can have a little bite to eat or there's sort of different game areas that are going on, the quiet room, erm it all depends you know what you want to go down there for, is it that you want a quiet room but want to feel somebody's around you or do you want to join and just try and use that as distraction for how you're feeling"
	Social contact	*James (G1):* "I spent about an hour and a half there just, just chatting with people, it was an informal, erm, chinwag basically but it's really what I needed" *Sally (G2):* "it's like a community. So, you are supporting one another" *Becca (G3):* "I went in it was erm it really just like I wasn't feeling great, so I just went in for some support and erm a lot of the time it's because I want to be erm like around other people"
	Crisis prevention	*Zara (G3):* "Well just that they erm manage to ground, ground me sufficiently so that I don't take of like a helicopter. . . it's a huge crisis prevention" *Sally (G2):* "it's nipping it in the bud before it gets too big in your mind. That's what they do" *Sally (G2):* "Safe Haven help you solve, almost help you, get out of the danger. It stops you going into too much self-danger and isolation"
	Safety	*Sally (G2):* "[it's a] very safe environment, because you know they don't have too many people in, and you're given that one to one" *Chris (G3):* "sometimes I'm really shaky from what's going on at home, I mean physically shaking like a leaf, then I just need to get away from it and be around people that . . . you know are safe"

		Joan (G1): "You've got a quiet room, you've got a comfortable sofa and you can just talk away and feel, feel safe. That's what it is" *Becca (G3):* "if there's no, no member of staff in one of the rooms that can be unhelpful erm and I don't know, it might be that they can't or don't have enough people there to have somebody in both rooms but erm personally for me if there isn't one member of staff in one of the rooms it can feel not so safe and that it, it can almost feel like erm there's nobody sort of keeping an eye on what's happening . . . and then something can happen and . . . nobody notices and it can, it can cause like a problem"
The impact of what OSH provides	I'm not alone	*Sally (G2):* "if you're going through something and somebody else has experienced it, then you don't feel like you're doing mad" *Joan (G1):* "I suppose it's comforting to know you're not the only one going that's through that" *Becca (G3):* "just being around other people erm knowing that I'm not alone in sort of what I go through and, and I find all the people that attend Safe Haven have all got different mental health diagnosis . . . it's all different but we just, erm we respect each other erm and that, you know when I'm at home on my own I feel like no one, no one out there has got any problems but me and that isn't reality"
	I don't use other services as much	*Sally (G2):* "I feel that erm I'm not a drain on social, on the NHS anymore as I've now got somewhere to go" *Chris (G3):* "I mean [family] know me well but they can't, they can't sort of always be there, sometimes they're not, and it takes a, takes a big burden off their shoulders. . . [when I have] a place that I can get support" *Becca (G3):* "I think I'd been to A&E erm probably every two or three weeks from self-harm or overdosing, but from October to December, in those three months I attended [OSH] I think I'd only been [to A&E] once or twice. So it shows like a massive change"
	I feel much better	*Sally (G2):* I always feel much better. I've always felt much better, and I come home and I think I'm going to get through this, you know, it was a difficult time, erm, but it's really it's, it's one day at a time *Sally (G2):* "I've now been well for over a year, and I mean, that, that says it all doesn't it really. I mean I'm going to work, I'm a carer. I've just arranged my, as you've heard about my father, his care, he's in palliative care and I've organised all that, I wouldn't have been able to do anything like that. So, it's given me a new lease of life, you know so precious service, precious service"

Appendix J. SIP: Mental Health Review Journal author guidelines

Aim and Scope

MHRJ focuses on the delivery and evaluation of mental health services, with particular attention to innovation, implementation and service user experience. International contributions are welcomed where these apply innovation and best practice to, or draw out the context for, the UK.

Content includes research and practitioner papers, discussion/commentary papers, policy reviews, case studies and book reviews covering but not limited to:

- Contemporary issues in the mental health field
- The design and management of services
- Service evaluation, research and methodology
- Innovations in service developments
- New practice models (including clinical practice) and their implications
- Good practice in relation to issues of ethnic diversity
- Contributions from mental health service users and carers

MHRJ is a valuable source of information for everyone involved in mental health service research and delivery, including academics, researchers, students, commissioners, front-line practitioners, policy-makers, managers, health boards, education providers, local authorities, NHS and primary care trusts, the voluntary and community sectors, service users and carers.

Before you start

For queries relating to the status of your paper pre decision, please contact the Editor or Journal Editorial Office. For queries post acceptance, please contact the Supplier Project Manager. These details can be found in the Editorial Team section.

Author responsibilities

Our goal is to provide you with a professional and courteous experience at each stage of the review and publication process. There are also some responsibilities that sit with you as the author. Our expectation is that you will:

- Respond swiftly to any queries during the publication process.
- Be accountable for all aspects of your work. This includes investigating and resolving any questions about accuracy or research integrity

- Treat communications between you and the journal editor as confidential until an editorial decision has been made.
- Read about our research ethics for authorship. These state that you must:
    - Include anyone who has made a substantial and meaningful contribution to the submission (anyone else involved in the paper should be listed in the acknowledgements).
    - Exclude anyone who hasn't contributed to the paper, or who has chosen not to be associated with the research.
- If your article involves human participants, you must ensure you have considered whether or not you require ethical approval for your research, and include this information as part of your submission. Find out more about informed consent.

Research and publishing ethics

Our editors and employees work hard to ensure the content we publish is ethically sound. To help us achieve that goal, we closely follow the advice laid out in the guidelines and flowcharts on the COPE (Committee on Publication Ethics) website.
We have also developed our research and publishing ethics guidelines. If you haven't already read these, we urge you to do so – they will help you avoid the most common publishing ethics issues.

A few key points:

- Any manuscript you submit to this journal should be original. That means it should not have been published before in its current, or similar, form. Exceptions to this rule are outlined in our pre-print and conference paper policies. If any substantial element of your paper has been previously published, you need to declare this to the journal editor upon submission. Please note, the journal editor may use Crossref Similarity Check to check on the originality of submissions received. This service compares submissions against a database of 49 million works from 800 scholarly publishers.
- Your work should not have been submitted elsewhere and should not be under consideration by any other publication.
- If you have a conflict of interest, you must declare it upon submission; this allows the editor to decide how they would like to proceed. Read about conflict of interest in our research and publishing ethics guidelines.
- By submitting your work to Emerald, you are guaranteeing that the work is not in infringement of any existing copyright.

Transparency and Openness Promotion (TOP) Guidelines

We are a signatory of the Transparency and Openness Promotion (TOP) Guidelines, a framework that supports the reproducibility of research through the adoption of transparent research practices. That means we encourage you to:

- Cite and fully reference all data, program code, and other methods in your article.

- Include persistent identifiers, such as a Digital Object Identifier (DOI), in references for datasets and program codes. Persistent identifiers ensure future access to unique published digital objects, such as a piece of text or datasets. Persistent identifiers are assigned to datasets by digital archives, such as institutional repositories and partners in the Data Preservation Alliance for the Social Sciences (Data-PASS).
- Follow appropriate international and national procedures with respect to data protection, rights to privacy and other ethical considerations, whenever you cite data. For further guidance please refer to our research and publishing ethics guidelines. For an example on how to cite datasets, please refer to the references section below.

Prepare your submission

Manuscript requirements

Before you submit your manuscript, it's important you read and follow the guidelines below. You will also find some useful tips in our structure your journal submission how-to guide.

Format	Article files should be provided in Microsoft Word format While you are welcome to submit a PDF of the document alongside the Word file, PDFs alone are not acceptable. LaTeX files can also be used but only if an accompanying PDF document is provided. Acceptable figure file types are listed further below**.**
Article length / word count	Articles should be between 4000 and 7000 words in length. This includes all text, for example, the structured abstract, references, all text in tables, and figures and appendices. Please allow 350 words for each figure or table.
Article title	A concisely worded title should be provided.
Author details	The names of all contributing authors should be added to the ScholarOne submission; please list them in the order in which you'd like them to be published. Each contributing author will need their own ScholarOne author account, from which we will extract the following details: Author email address (institutional preferred). Author name. We will reproduce it exactly, so any middle names and/or initials they want featured must be included. Author affiliation. This should be where they were based when the research for the paper was conducted. In multi-authored papers, it's important that ALL authors that have made a significant contribution to the paper are listed. Those who have provided support but have not contributed to the research should be featured in an acknowledgements section. You should never include people who have not contributed to the paper or who don't want to be associated with the research. Read about our research ethics for authorship.
Biographies and acknowledgements	If you want to include these items, save them in a separate Microsoft Word document and upload the file with your submission. Where they are included, a brief professional biography of not more than 100 words should be supplied for each named author.
Research funding	Your article must reference all sources of external research funding in the acknowledgements section. You should describe the role of the funder or financial sponsor in the entire research process, from study design to submission.

Structured abstract	All submissions must include a structured abstract, following the format outlined below. These four sub-headings and their accompanying explanations must always be included: Purpose Design/methodology/approach Findings Originality The following three sub-headings are optional and can be included, if applicable: Research limitations/implications Practical implications Social implications You can find some useful tips in our write an article abstract how-to guide. The maximum length of your abstract should be 250 words in total, including keywords and article classification (see the sections below).
Keywords	Your submission should include up to 12 appropriate and short keywords that capture the principal topics of the paper. Our Creating an SEO-friendly manuscript how to guide contains some practical guidance on choosing search-engine friendly keywords. Please note, while we will always try to use the keywords you've suggested, the in-house editorial team may replace some of them with matching terms to ensure consistency across publications and improve your article's visibility.
Article classification	During the submission process, you will be asked to select a type for your paper; the options are listed below. If you don't see an exact match, please choose the best fit: Research Paper Discussion Piece Review Practitioner/Policy Paper Review Case Study Book Review You will also be asked to select a category for your paper. The options for this are listed below. If you don't see an exact match, please choose the best fit: Research paper. Reports on any type of research undertaken by the author(s), including: The construction or testing of a model or framework Action research Testing of data, market research or surveys Empirical, scientific or clinical research Papers with a practical focus Viewpoint. Covers any paper where content is dependent on the author's opinion and interpretation. This includes journalistic and magazine-style pieces. Technical paper. Describes and evaluates technical products, processes or services. Conceptual paper. Focuses on developing hypotheses and is usually discursive. Covers philosophical discussions and comparative studies of other authors' work and thinking. Case study. Describes actual interventions or experiences within organizations. It can be subjective and doesn't generally report on research. Also covers a description of a legal case or a hypothetical case study used as a teaching exercise. Literature review. This category should only be used if the main purpose of the paper is to annotate and/or critique the literature in a particular field. It could be a selective bibliography providing advice on information sources, or the paper may aim to cover the main contributors to the development of a topic and explore their different views. General review. Provides an overview or historical examination of some concept, technique or phenomenon. Papers are likely to be more descriptive or instructional ('how to' papers) than discursive.
Headings	Headings must be concise, with a clear indication of the required hierarchy. The preferred format is for first level headings to be in bold, and subsequent sub-headings to be in medium italics.

Notes/endnotes	Notes or endnotes should only be used if absolutely necessary. They should be identified in the text by consecutive numbers enclosed in square brackets. These numbers should then be listed, and explained, at the end of the article.
Figures	All figures (charts, diagrams, line drawings, webpages/screenshots, and photographic images) should be submitted electronically. Both colour and black and white files are accepted. There are a few other important points to note: All figures should be supplied at the highest resolution/quality possible with numbers and text clearly legible. Acceptable formats are .ai, .eps, .jpeg, .bmp, and .tif. Electronic figures created in other applications should be supplied in their original formats and should also be either copied and pasted into a blank MS Word document, or submitted as a PDF file. All figures should be numbered consecutively with Arabic numerals and have clear captions. All photographs should be numbered as Plate 1, 2, 3, etc. and have clear captions.
Tables	Tables should be typed and submitted in a separate file to the main body of the article. The position of each table should be clearly labelled in the main body of the article with corresponding labels clearly shown in the table file. Tables should be numbered consecutively in Roman numerals (e.g. I, II, etc.). Give each table a brief title. Ensure that any superscripts or asterisks are shown next to the relevant items and have explanations displayed as footnotes to the table, figure or plate.
References	All references in your manuscript must be formatted using one of the recognised Harvard styles. You are welcome to use the Harvard style Emerald has adopted – we've provided a detailed guide below. Want to use a different Harvard style? That's fine, our typesetters will make any necessary changes to your manuscript if it is accepted. Please ensure you check all your citations for completeness, accuracy and consistency. A few other style points. These apply to both the main body of text and your final list of references. When referring to pages in a publication, use 'p.(page number)' for a single page or 'pp.(page numbers)' to indicate a page range. Page numbers should always be written out in full, e.g. 175-179, not 175-9. Where a colon or dash appears in the title of an article or book chapter, the letter that follows that colon or dash should always be lower case. When citing a work with multiple editors, use the abbreviation 'Ed.s'. At the end of your paper, please supply a reference list in alphabetical order using the style guidelines below. Where a DOI is available, this should be included at the end of the reference.

Main Research Project Appendices

Appendix K. MRP: List of recruiters

Name of group, individual or place	Description	Location	Method of contact	Outcome	Number of times re-posted
General Maternity					
ChannelMums.com	Parenting site with a dedicated section for journalists and researchers who out looking to recruit members.	UK wide	Email	Thread started on website	Refreshed thread 4 times
NetMums	UK parenting website offering local info, expert parenting advice, support, competitions.	UK wide	Email	Thread started on website.	Refreshed thread 4 times
Mumsnet	Internet forum pooling knowledge, advice and support on everything from conception to childbirth, from babies to teenagers.	UK wide	Email	Thread started on their website	Refreshed thread 4 times
Oxford Mumbler	Online parenting community - Information for families about days out, events, classes & playgroups, support & services, pregnancy classes & birth preparation in Oxford.	Oxford	Via email	Post shared to Facebook group 200 word advertisement, incl. image and link posted on website.	Once
National Childbirth Trust	UK's leading charity for parents, for the	UK wide	Email	Declined for local groups to be contacted	n/a

	First 1000 Days - through pregnancy, birth and beyond.			as unable to review research given limited volunteer numbers. A number of personal contacts shared study within their own NCT groups via whatsapp.	
Positive Birth Movement	Charity working to improve women's experience of birth.	UK Wide	Email	Post shared on group Facebook page	Once
Oxfordshire Breast Feeding Support	Breastfeeding support charity	Oxfordshire	Email	Post shared on group Facebook page	3 times
La Leche League (LLL)	Non-profit helping mothers to breastfeed their children through mother-to-mother support led by trained and accredited LLL Leaders.	Oxfordshire	Personal Contact	Post shared on Facebook page	3 times
Wallingford Baby Bar	An independent charity supporting parents in feeding their baby, their way.	South Oxford	Individual offered an additional share to this page.	Post shared on Facebook page	Twice
Kathryn Stagg IBCLC - lactation consultant	Provider of holistic sleep support/ breastfeeding support and education at home, group or online.	Salisbury	Personal page of somebody in Facebook peer support group who offered an additional post to their page.	Post shared on Facebook page	Twice

The Daisy Foundation	Pregnancy and baby classes across the UK to support women on their motherhood journey	Various groups contacted: - East Southampton - Buckinghamshire - Birmingham - Leicestershire - West Leicestershire - SouthWest Leicestershire - Edinburgh - Midlothian - Telford - Chicester & Havant - Kilmarnock - East Dunbartonshire - Appley Bridge	Facebook messenger	Post shared on Facebook page for 6 groups, no response from other 7	4 groups agreed to second post.
Becoming Families	A non-profit offering a range of pregnancy and postnatal services incl. education, yoga, hypnobirthing, emotional wellbeing and baby massage.	Worcestershire	Email	Shared on Facebook page and Twitter	Once
Mummy Camp	Local exercise groups for new Mums, providing post-natal health check and exercise classes for Mums where babies are welcome at classes	Oxford	Personal contact	Post shared on group Facebook page	Twice
Grow Together	Baby massage and yoga	Derby	Facebook messenger	Post shared on Facebook page	Twice
Mama Flow Yoga	Baby massage and yoga	Oxfordshire	Personal contact	Post shared on Facebook page	3 times
Brummie Mummies	Local news for Mums and social support forum	Birmingham	Email	Post shared on Facebook page	Twice
Café Babble	Local Café for young mums	Oxfordshire	Email	No longer meeting	n/a

Institute of Health Visiting	Charitable organisation aiming to improve health outcomes for children, families and communities by doing and using research to strengthen health visiting services across the UK.	Thames Valley area	Direct emails to attendees who able to promote the study through their connections to non-NHS groups.	Attended IoHV Thames Valley conference to present research. Information about the study and how to take part added to conference minutes and circulated across Thames Valley	n/a
Parish Nursing parenting support group	Local church parenting support group	Southampton	Personal Contact	Agreed to share with parents attending the group	n/a
Peer-led Social Media Groups					
London Mums Group	An online group for Mums to ask questions, seek advice, share experiences and join a supportive community.	London (Groups UK wide however London chosen as the largest, most diverse membership)	Email	Facebook post shared on private page and public group.	4-month subscription paid for – 2 posts per month allowed.
Mums in Mind	Online support group	Southampton	Personal contact	Post shared on group Facebook page	3 times
Bumps On Lockdown	Online support group for new and expectant Mums	Suffolk/Norfolk	Facebook messenger	Post shared on group Facebook page	Twice
Amser Babi Cymraeg - abc - Activities for Babies and Children	Offering online support for families who want to raise their children bilingually in Wales. Sessions available upon request.	North Wales	Whatsapp messenger (provided on Facebook page)	Post shared in English and Welsh on group Facebook page. Group co-ordinator also shared on private local groups.	Twice
Becoming Mums	Online support group for new mums	Reading	Email	Post shared on group Facebook page	3 times

				Also invited to take part in Becoming Mums podcast about maternal anxiety – podcast shared on the study's Twitter page, personal social media pages and by Becoming Mums	
New and Expecting Mums	Baby photographer who, whilst unable to work through COVID set up a support group for new mums.	Herefordshire	Email	Post shared on group Facebook page	Twice
Pregnant or a new mum during Covid-19	Online support group for new and expecting Mums	Bath & Bristol	Facebook messenger	Shared in Facebook group. Founder of group also posted in personal "photography by Fiona" group (Newborn photography)	Once
Parents 1st	Volunteering and peer support in pregnancy, birth and becoming a parent.	Essex	Facebook messenger	No response	n/a
Open House	Parenting support group	Nottingham	Email	No response	n/a
Bumps, Babies, Toddlers & Mums UK	Online support group	UK wide	Facebook messenger	Declined to post	n/a
Mental Health (MH) specific groups					
Maternal Mental Health Alliance	Charity and coalition of UK organisations to provide women	UK wide	Email	Shared on Twitter	Once

	with consistent support.				
Light Peer Support	Emotional wellbeing and MH support during pregnancy, birth and post-birth	Sheffield	Email	Post shared on group Facebook page and website	Twice
MotherKind Café	Postnatal wellbeing and support group.	Oxford	Email	Post shared on group Facebook page	3 times
Mums Aid	Counselling for MH during pregnancy.	London	Email	Post shared on group Facebook page and website	Once
From Fear to Freedom - for Mums with Anxiety	Peer-led support group for Mums with anxiety	UK wide	Facebook messenger	Post shared on group Facebook page	Twice
Juno PMHS Edinburgh	MH peer support and befriending for new mums	Edinburgh	Email	Post shared on group Facebook page	3 times
OXPIP (Oxford Parent-Infant Project)	Charity offering intensive theraputic help to parents and babies in the first two years.	Oxfordshire	Email	Shared on Facebook and Twitter	Once
Hampshire Lanterns	Peer-led support group for women who have experienced MH difficulties during pregnancy	Hampshire	Email and Facebook messenger	No response	n/a
Perinatal Mental Health Partnership	Charity founded by women with lived experience of maternal mental illness which seeks to provide support and information for families and health care professionals as well as	UK wide	Email	No response	n/a

	increasing awareness of maternal MH.				
More Than a Tick Box	Perinatal MH advocacy charity	UK wide	Email	No response	n/a
Smile Group	Perinatal MH charity	Cheshire	Email	No response	n/a
Mums v Anxiety	Peer-led MH support and advice for new mums with anxiety	UK wide	Email	No response	n/a
Association for peri-natal illness	Mental health support group	London	Email	No response	n/a
New Mum Struggles	Parenting tips	UK wide	Facebook messenger	No response	n/a
BAME specific groups					
Acacia Family Support	Charity working with BAME women to raise awareness for PND	UK wide	Email	No response	n/a
The Motherhood Group	Support for BAME mothers	London	Email and Facebook messenger	No response	n/a
Approachable Parenting	Support for Muslim parents	Birmingham	Email and Facebook messenger	No response	n/a
Non-maternity groups					
Personal Facebook page requesting shares from family and friends				183 additional shares (total over 2 posts) with further unknown secondary shares from this.	Twice
Twitter page created and dedicated to the study				Regular updates posted and re-shares of relevant articles thus increasing profile of the study's Twitter page.	
Next door	An app for neighbourhoods where you can get local tips, buy and sell items, and more.	UK wide (shared to groups in Lancashire, Oxfordshire and Hampshire yet marked as UK wide study)	Shared directly to website	-	Once

The Botley Notice Board (Oxon) advertising and selling Page	Local neighbourhood notice board	Oxford	Shared directly to page	Post approved by group admin.	Once
Daily Info	Online local news page	Oxford	Email	Advert shared on website	Once
Perinatal mental health research group	Facebook group for sharing research studies related to perinatal mental health	UK wide	Shared directly to page	Post approved by group admin.	Twice
Research Survey Exchange Group	Facebook group for sharing research studies	UK wide	Shared directly to page	Post approved by group admin.	Twice
UK Crossfit coaches forum	Personal trainers and crossfit gym owners	UK wide	Personal contact	Shared in forum and requested that coaches pass on to their gyms/ personal contacts	Once
Donnington Doorstep	Local community centre where groups are held for new mums and families	Oxford	Request to put up poster	No response	n/a
Flo's The Place in the Park	Local café	Oxford	Email	Poster printed and put up at the café and playpark	Once
Hardmoor Early Years Centre	Nursery education and childcare centre	Southampton	Personal contact	Post shared on Facebook page	Twice

Thesis submitted in partial fulfilment of the degree of Doctor of Clinical Psychology

Appendix L. MRP: Recruitment poster and example social media post

Title: What is the relationship between perceived stress, social support and anxiety in first time mothers during the post-partum period?
CI: Louise Johns Ethics Approval Reference: R71786/RE001

ARE YOU A FIRST TIME MUM OF A BABY UNDER 10 WEEKS?

We are interested to learn more from you about your experiences of stress, anxiety and social support in the first few months of motherhood.
Participating in the research will involve 2 online questionnaires:

- Survey 1 = 25 minutes when your baby is between 6 & 10 weeks old
- Survey 2 = 3 minutes when your baby is between 14 & 18 weeks old

Can you help us?
To join the research please email joanna.maher@hmc.ox.ac.uk so that the link to the study can be sent to you
OR
Link directly to the study via the link or QR code
Link: tinyurl.com/newmumstudy

UNIVERSITY OF OXFORD

Mum and Baby Research
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Example social media post

******First time Mums needed******
Are you a UK-based Mum? Is your baby under 10 weeks old?

Please consider taking part in this online questionnaire study about stress, anxiety and social support after giving birth.

It is hoped that this research will help us better understand how to support new Mums during such an important and precious time in your child's life.

Please follow the link below to take part

tinyurl.com/newmumstudy

OR contact joanna.maher@hmc.ox.ac.uk for more details

To help us reach more new Mums:
- Please share this post □
- Pass on the link to friends and family □□□
- Follow us on Twitter @NewMumsStudy and RT our pinned post

Appendix M. MRP: Details regarding changes to procedure

Errors in the Qualtrics programming

In January 2021, three months after recruitment began, a number of emails were received from women who had taken part in the study stating that they were receiving "it's time to take T2" emails daily. Understandably this was causing frustration amongst participants and, after failing to locate the problem with support from the Qualtrics technical support team, it was agreed that the software programme request would be terminated and T2 emails be sent manually by the first author. Given that email addresses were stored separately to questionnaire data, anonymity was able to be maintained.

This Qualtrics issue also resulted in a number of women being sent the T2 reminder immediately after T1, rather than after eight-weeks. Therefore, 21 complete T1-T2 datasets needed to be excluded from analysis given the short period between the two time points. An email was sent to all participants apologising for the mistake and any inconvenience caused. The email also asked whether those who had completed T2 early may consider re-taking this at the correct time when they received another email. As detailed in Figure 1 (p.84), it appeared that 12 women re-did the T2 questionnaire.

Changes to procedure

In order to link T1 and T2 questionnaires anonymously, instructions were provided at both time points for women to create a unique four-letter code. Codes were periodically reviewed in order to ascertain the number of matching data sets and need for ongoing recruitment (minimum of 73 required). In March 2021 it was noted that a significant number of T2 codes did not match T1 codes, thus data could not be included in the analysis.

A request to simplify the coding instructions was submitted to CUREC. In addition, given that child date of birth (DOB) was already needed at T1, it was requested that this be entered again at T2 in order to corroborate codes that were similar yet not identical. The impact of these changes is outlined the table below. Whilst drop out remained consistent, the number of T2 surveys that could not be matched to T1 data reduced to zero. Following these changes, 11 'similar codes' (see below for definition) were able to be confirmed through checking child DOB.

Data collection drop out and code faults across Time 1 and Time 2.

	Number of T1 codes without matching T2+	Number of T2 codes without T1	T2 code error	T2 drop out
Original code instructions	22	17	17	5
Simplified code instructions	4	0	0	4

+ This includes drop out *plus* the number of individuals whose time 2 code could not be matched to their time 1 code. Therefore, T2 code error + T2 drop out = number of T1 codes without matching T2.

Procedure for matching similar codes

The format of the code instructions was to use the first and last letter of two stable participant characteristics (mother's maiden name and road name), thus the code consisted of two letter pairs. Criteria for including similar pairs was considered with this in mind. Similar pairs were included if they met any of the below criteria *and* there was the correct length of time between T1 and T2. All such pairs were reviewed and agreed by the research team (trainee and supervisors).

1) There was one letter different in the four-letter code (e.g. ADHT and ASHT)

2) There were the correct four letters but either letter pair was in the wrong order (e.g. ADHT and DAHT or ADTH or DATH. AHDT would not have been considered as the centre two letters were attributable to two separate characteristics)

After the addition of child DOB to T2 questionnaire, similar codes were also permitted if only one letter pairing was the same, as long as child DOB also matched (e.g. ADHT and ADKA)

Appendix N. MRP: Demographic questionnaire

What is your age?

18-21	26-30	36-40
21-25	31-35	40+

What is your child's date of birth? D M 2020/ 2021

What is your ethnic origin?

White or Cauasian	Mixed – Asian and White
Black or African American	Mixed – Black and White
Asian	Mixed – Other
Hispanic	Other (specify)

What is your highest level of education you have completed?

High school (GCSE)	Bachelor's Degree
College (A-Level)	Master's Degree
Vocational/ trade qualification	Doctoral level or higher

Are you a single parent?
YES/NO

Was this pregnancy planned?
YES/NO

Were there any unexpected complications at the birth of your child?
YES/NO

In the past have you ever experienced a miscarriage, still birth or terminated a pregnancy?

Yes, once Yes, more than once No

Have you ever *received a diagnosis* of anxiety; including but not limited to generalised anxiety disorder (GAD), social anxiety, panic disorder, obsessive compulsive disorder (OCD). If you have had multiple episodes of anxiety, please consider your most recent experience.

Yes: current diagnosis Yes: in the past No

Have you ever *received a diagnosis* of depression. If you have had multiple episodes of depression, please consider your most recent experience.

Yes: current diagnosis Yes: in the past No

Appendix O. MRP: The Perinatal Infant Care Social Support (PICSS) instrument (moderator variable)

"The following statements ask about the support that is available to you once your baby is born. After reading each statement, please circle the number that you feel is most appropriate. There are no right or wrong answers. Please answer each of the 19 questions"

The rating scale is as follows:

1 Strongly Disagree
2 Disagree
3 Agree
4 Strongly Agree

1) I can get information on feeding
2) I can get information on changing/dressing
3) I can get information on comfort/settling
4) I can get information on bathing
5) I can get information on taking care of my body after childbirth
6) I can get consistent information regarding infant care
7) I can get 'hands on help' with feeding my baby
8) I can get 'hands on help' with changing/dressing my baby
9) I can get 'hands on help' with comfort/settling my baby
10) I can get 'hands on help' with bathing my baby
11) I have someone to help me with routine housework
12) I won't be on my own taking care of my baby
13) I have people to count on when things go wrong
14) I have someone to care and comfort me
15) I have someone to talk to about how I feel
16) If I need advice there is someone who will assist me to work out a plan for dealing with the situation
17) I have people to talk to and share my experiences with
18) I have people who will show me appreciation for the care I give to my baby
19) People close to me understand that it is ok for me to need help

Practical Support sub-scale = questions 1-10; Supporting Presence sub-scale = questions 11-19

Appendix P. MRP: Post-natal Perceived Stress Inventory (PNPSI; independent variable)

The below wording is the translation used in this study, *not* the original English translation provided by Razurel and colleagues (for further detail see p. 87)

"Here is a list of worries and concerns that you may be experiencing as stressful.

Read each phrase carefully. For each one, you have the choice of five possible responses. Please choose the one that corresponds most closely to how you are feeling at this moment in relation to each issue (choose only one response to each item). If you feel an item does not apply to you, please rate as best you can."

The rating scale is as follows:

0 I don't feel stressed at all by this
1 I feel a little bit stressed by this
2 I feel moderately stressed by this
3 I feel very stressed by this
4 I feel hugely stressed by this

1) My tiredness or sleep deprivation
2) Feeling overwhelmed and having little time for myself
3) My baby's behaviour (e.g., crying a lot, needing a lot of attention from me....)
4) Not being able to do what I was doing beforehand (e.g., going out, travelling....)
5) My baby's physical health
6) Fear of sudden infant death syndrome or cot death
7) Having to take care of my baby's physical needs (e.g., bathing, nappy changes, keeping the umbilical cord clean...)
8) Believing/feeling that I am not up to the job of taking care of my baby
9) My episiotomy scar or other wounds related to childbirth (the feeling of not recognising my body anymore)
10) Pain from my scar (e.g., episiotomy or caesarean section)
11) Recovering / rediscovering my sexual appetite and relationship / sexuality
12) Not being able to tell whether my baby is eating enough
13) Painful breastfeeding

14) The mismatch between what I had imagined things to be like/my expectations, and the reality: of breastfeeding, of the baby's rhythms/behaviour, of running the household (select any that apply to you)
15) Receiving contradictory and inconsistent advice from healthcare providers
16) Thinking about finding childcare for my baby for when I return to work
17) Going back to work, or re-engaging with my usual activities
18) My relationship with my partner
19) The father's role in relation to the baby

Appendix Q. MRP: The Depression Anxiety Stress Scale 21 (DASS-21; main outcome variable and control)

"Please read each statement and select a number 0, 1, 2 or 3 which indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement."

The rating scale is as follows:
0 Did not apply to me at all
1 Applied to me to some degree, or some of the time
2 Applied to me to a considerable degree or a good part of time
3 Applied to me very much or most of the time

1) (s) I found it hard to wind down
2) (a) I was aware of dryness of my mouth
3) (d) I couldn't seem to experience any positive feeling at all
4) (a) I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion)
5) (d) I found it difficult to work up the initiative to do tings
6) (s) I tended to over-react to situations
7) (a) I experienced trembling (e.g. in the hands)
8) (s) I felt that I was using a lot of nervous energy
9) (a) I was worried about situations in which I might panic and make a fool out of myself
10) (d) I felt that I had nothing to look forward to
11) (s) I found myself getting agitated
12) (s) I found it difficult to relax
13) (d) I felt downhearted and blue
14) (s) I was intolerant of anything that kept me from getting on with what I was doing
15) (a) I felt so close to panic
16) (d) I was unable to become enthusiastic about anything
17) (d) I felt I wasn't worth much as a person
18) (s) I felt that I was rather touchy

19) (a) I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat)

20) (a) I felt scared without any good reason

21) (d) I felt that life was meaningless.

(a) = anxiety subscale, (d) = depression subscale, (s)= stress subscale

Appendix R. MRP: The Journal of Perinatal and Neonatal Nursing author guidelines

Scope

The purpose of *The Journal of Perinatal & Neonatal Nursing* (JPNN) is to provide nurses caring for perinatal and neonatal patients and their families with evidence-based information that is cutting-edge and relevant to clinical practice. We publish manuscripts that have clinical implications for perinatal and neonatal practice. These manuscripts are focused around a central theme for each issue, with one issue a year dedicated to various selected topics. The topics of the issues are determined by the editorial board members based on their collective assessment of the most important issues relevant to practice.
We welcome authors to submit clinically focused, academically sound articles that (1) add new knowledge to the field of perinatal/neonatal nursing, (2) challenge and/or confirm existing knowledge or (3) provide information that ensures practice is evidence-based and uniformly excellent across the perinatal and neonatal care spectrum. Papers achieving these goals may be original research, systematic or scoping reviews, state of the science or practice reports, or quality improvement reports. All manuscripts are peer-reviewed. Acceptance or rejection of manuscripts is based on the peer-review process and how well matched the manuscript is with the scope of the journal as assessed by the editor.

Manuscript Preparation

Manuscripts that do not adhere to the following instructions will be returned to the corresponding author for technical revision before undergoing peer review.
Each manuscript must include the following, each on its own page:

Title page including
(1) title of the article
(2) author names (with highest academic degrees) and affiliations (including titles, departments, and name and location of institutions of primary employment)
(3) corresponding author's name and complete address including email, and
(4) any acknowledgments credits, or disclaimers.
The title page must also include disclosure of funding received for this work from any of the following organizations: National Institutes of Health (NIH); Wellcome Trust; Howard Hughes Medical Institute (HHMI); and other(s). See the "Conflicts of Interest" section above for more information.

Abstract of 200 words or fewer describing the main points of the article. Limit the use of abbreviations and acronyms, and avoid general statements (e.g. the significance of the results is discussed, etc.)If it is a research article, prepare a structured abstract describing
(1) what was observed or investigated,
(2) the subjects and methods, and
(3) the results and conclusions.

Key Words 3-5 key words that describe the contents of the article like those that appear in the *Cumulative Index to Nursing and Allied Health Literature* (CINAHL) or the *National Library of Medicine's Medical Subject Headings* (MeSH).

Abbreviations Write out the full term for each abbreviation at its first use unless it is a standard unit of measure. Avoid error prone abbreviations as identified by the Institute for Safe Medicine Practices, a complete list is available at: http://www.ismp.org/Tools/errorproneabbreviations.pdf

Precis – A synopsis of the manuscript of 25 words or fewer.
Clear indication of the placement of all tables and figures in text.
Signed and completed copyright transfer and disclosure agreement for each contributor.
Written permission, including complete source, for any borrowed text, tables, or figures.
All forms are available at: http://jpnn.edmgr.com

Manuscript Components

The manuscript will be submitted as a separate file when you are instructed to attach files to your submission. Compose your manuscript using your computer and Microsoft Word software, then attach this file when you reach the "attach files" step in the submission process.

Please note the following guidelines for preparing your manuscript:

- Prepare the manuscript double spaced in Microsoft Word. Leave a one-inch margin on all sides. Do not right justify.
- Type all headings on a separate line
- Number all manuscript pages consecutively in the upper right-hand corner (text and references, followed by illustrations on separate pages).
- All legends for Tables and Figures are to be included with the manuscript; include these at the end of manuscript after the list of references. Tables and Figures are attached as separate files when you reach "attach files" in the submission process. Prepare tables and figures in a format ready for reproduction. Further instructions for preparing figures are given below.
- Manuscript length (excluding all references, tables, figures) should be no more than 16 pages (standard 8.5 x 11 inch page size).
- Use the *American Medical Association Manual of Style*, 10 Edition, Copyright 2007 for citations and references. See examples for citations and references below.
- No identifying information (authors' names) should be included on the manuscript. If you cite your own works, list them as "Author, YYYY" in the citation and the reference list in order to maintain your anonymity for the review process.
- Every manuscript should contain a 'Discussion' section.

References
The authors are responsible for the accuracy of the references. Include the references (double-spaced) at the end of the manuscript. Cite the references in text in the order of

appearance. Cite unpublished data—such as papers submitted but not yet accepted for publication and personal communications, including e-mail communications—in parentheses in the text.
The citations and reference list is to be styled according to the *American Medical Association Manual of Style*, 10 Edition, Copyright 2007, AMA. Examples of citations within the text and reference list style are as follows:

Examples:

Journals: Author. Article title. *Journal.* Year; volume: inclusive pages.
Leidecker, K, Dorman, K. Pulmonary disorders complicating pregnancy: An overview. *J Perinat Neonat Nurs*. 2016; 30(1): 45-5318:41—58.

Books: Author. *Book Title.* Place of publication: Publisher: year.

Sumner J Yaffe MD,Jacob V Aranda MD, PhD, FRCP(C), *Neonatal and Pediatric Pharmacology*, Lippincott Williams & Wilkins, 4th ed. 2010

Simpson KR, Creehan PA. Strategies to develop an evidence-based approach to prenatal care and pregnancy and childbirth practices of selected cultures and religions. *AWHONN's Perinatal Nursing*. 4th ed. 2013.

For multiple authors in journals and books:
If six or fewer, list all authors
If more than six, list the first three followed by et al.

Figures

A) Creating Digital Artwork
Learn about the publication requirements for Digital
Artwork: http://links.lww.com/ES/A42
Create, Scan and Save your artwork and compare your final figure to the Digital Artwork Guideline Checklist (below).
Upload each figure to Editorial Manager in conjunction with your manuscript text and tables.

B) Digital Artwork Guideline Checklist
Here are the basics to have in place before submitting your digital artwork:
Artwork should be saved as TIFF, EPS, or MS Office (DOC, PPT, XLS) files. High resolution PDF files are also acceptable.
Crop out any white or black space surrounding the image.
Diagrams, drawings, graphs, and other line art must be vector or saved at a resolution of at least 1200 dpi. If created in an MS Office program, send the native (DOC, PPT, XLS) file.
Photographs, radiographs and other halftone images must be saved at a resolution of at least 300 dpi.

Photographs and radiographs with text must be saved as postscript or at a resolution of at least 600 dpi.
Each figure must be saved and submitted as a separate file. Figures should not be embedded in the manuscript text file.

Remember:

Cite figures consecutively in your manuscript.
Number figures in the figure legend in the order in which they are discussed.
Upload figures consecutively to the Editorial Manager web site and enter figure numbers consecutively in the Description field when uploading the files.
If a figure has been previously published, in part or in total, acknowledge the original source and submit written permission from the copyright holder to reproduce or adapt the material. Include a source line. Type "Source: Author" on figures that you created. This will help Lippincott Williams & Wilkins identify the status of each figure.
Supply a caption for each figure, typed double spaced on a separate sheet from the artwork. Captions should include the figure title, explanatory statements, notes, or keys; and source and permission lines.

Tables
Tables will be submitted as a separate file when you are instructed to attach files to your submission. Create tables using the table creating and editing feature of your word processing software. Do not use Excel or comparable spreadsheet programs. Group all tables in a separate file. Cite tables consecutively in the text, and number them in that order. Each table should appear on a separate page and should include the table title, appropriate column heads, and explanatory legends (including definitions of any abbreviations used). Do not embed tables within the body of the manuscript. They should be self-explanatory and should supplement, rather than duplicate, the material in the text.
Tables should be on a separate page at the end of the manuscript.
Number tables consecutively and supply a brief title for each.
Include explanatory footnotes for all nonstandard abbreviations. For footnotes, use the following symbols, in this sequence: *, †, ‡, §, ||,**, ††, etc.
Cite each table in the text in consecutive order.
If you use data from another published or unpublished source, obtain permission and acknowledge fully. Type "Source: Author" on tables that you created.