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Mackinnon, Jessica

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Jessica Mackinnon

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University of Bath
Department of Psychology

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Abstracts

Critical Review of the Literature

Mental Contamination (MC) refers to internal sensations of dirtiness and shame that do not relate to a tangible, external source (Rachman, 1994). The research base in the main looks at the relation with OCD although there is emerging evidence for a relationship to PTSD, as well as trauma exposed individuals who do not reach diagnostic threshold. This review aims to synthesise what is understood about MC following trauma, and the extent to which PTSD should be considered a clinical correlate. A systematic search of EMBASE, APA PsychNET and Web of Science, as well as grey literature led to 14 studies for inclusion. A narrative review identified five key research areas: MC and PTSD; MC and form of trauma; MC and risk; cognitive mediating factors and affective mediating factors. Findings confirm a relationship between MC and trauma, particularly in, but not limited to those experiencing PTSD. Peri-traumatic cognitive and affective processes should be attended to within treatment. Further research avenues include research with complex trauma and forensic populations as well as treatment studies. Results are limited by the homogeneity of study populations, the complex taxonomy of trauma and the lack of longitudinal data.

Keywords: Mental Contamination, PTSD, Sexual Trauma, Trauma

Service Improvement Project

Non-Violent Resistance (NVR) is a systemic approach to working with young people presenting with violence and aggression. The work draws on the non-violent protest movements of the 20th Century, focusing on the role of the carer to increase their presence through acts of resistance and care. This paper aims to contribute to the research by

investigating the experiences of professionals using NVR in one UK residential care home. Eight participants took part in semi-structured interviews which were analysed thematically leading to four themes; NVR is both a Set of Processes and a Way of Being, NVR and Transformation, NVR and the Personal / Professional Divide, NVR and Organisational Support. The findings point to NVR's potential utility in the care context. Further research is required to investigate the liminal role of professional / parent and the challenge of managing resistance both within and around the organisation.

Main Research Project

Intimate Partner Violence (IPV) represents a significant public and social health concern and may present particular complexities in military veteran relationships. These may be subject to unique stressors including periods apart, the transition to civilian life and the increased risk of PTSD. Public understanding is vital in terms of ensuring timely access to services, and appropriate professional support. However, little is known about the public perception of IPV in a military veteran context. This study sought to address the gap in the literature by assessing how public recognition and discourse is affected by military veteran status and a diagnosis of PTSD. Community participants (N=269) were randomly allocated to one of four conditions and presented with a story containing IPV in which the job role (military veteran / civilian worker) and diagnostic status (PTSD/ No PTSD) were manipulated. All participants rated the extent to which the story contained IPV, and half (n=123) took part in a story completion task designed to elicit qualitative data with regards to public discourse. Quantitative results indicated a small interaction between job role and PTSD ($F[1,265]=7.888$, $p < 0.01$, partial $n^2 = 0.029$) meaning that the public are more likely to recognise IPV when it is perpetrated by a military veteran than a civilian with PTSD, and less likely to recognise abuse perpetrated by a civilian with PTSD, than

without. Qualitative data indicated that the public are less likely to acknowledge controlling behaviour compared to threats of violence and that PTSD may be cited as a mitigating factor for IPV. Training is required to ensure professionals recognise non-physical forms of abuse, and campaigning should address discourses which prioritise the needs of a military veteran perpetrator with PTSD, over those of the victim.

Key Words: Domestic Abuse, Intimate Partner Violence, Military Veterans, PTSD, Trauma,

Critical Review of the Literature

Mental Contamination and Trauma: A Systematic Review of the Literature

Author:	Jessica Mackinnon
	Jm2561@bath.ac.uk
Internal Supervisors:	Professor Catherine Hamilton-Giachritsis (University of Bath)
	Dr Rachel Paskell (University of Bath)

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Mental Contamination and Trauma: A Systematic Review of the Literature

Mental contamination (MC) was introduced by Rachman (1994) to conceptualise feelings of dirtiness that are experienced in the absence of an external contaminant. The condition is understood as distinct from contact contamination in which sensations of dirtiness are attributable to a tangible stimulus (Rachman, 2004; 2006). With contact contamination the contaminant is usually an inanimate object or environment, but with MC it is usually human and potentially the individual themselves (Rachman, 2006). MC has traditionally been considered in relation to OCD. However, more recently questions have arisen as to the extent to which MC may relate more widely to trauma, both where a person does and does not reach diagnostic threshold for PTSD (Brake, Adams, Hood, & Badour, 2019; Brake, Jones, Wakefield, & Badour, 2018; Fairbrother & Rachman; 2004).

Mental contamination

MC describes a diffuse, internalised sensation of dirtiness, unlike the external, localised sensations associated with contact contamination and includes feelings of anxiety, shame and disgust (Coughtrey, Shafran, Lee, & Rachman, 2012b; Rachman, 2006). A person may use washing, neutralisation and avoidance behaviours to ameliorate their distress (Coughtrey et al., 2012b; Rachman, 2006; Radomsky, Coughtrey, Shafran, & Rachman, 2018).

Rachman (2006; 2010) argued that MC is strongly associated with betrayal, be this the acts of another or self-inflicted through a breach of one's own moral codes (Rachman, 2006; Coughtrey et al., 2012b). As such, it exists as an internalisation of violation by self or other and includes a moral appraisal of the self as shameful, worthless or bad (Herba & Rachman, 2007). This factor has been demonstrated experimentally using the Dirty Kiss Paradigm by which feelings of MC are invoked through the imagined scenario of a non-consensual kiss (Fairbrother, Newth, & Rachman, 2005).

The Dirty Kiss paradigm has been further manipulated to demonstrate that MC can be induced in a general population by imagining *perpetrating* an unwanted kiss (Rachman, Radomsky, Elliott, & Zysk, 2012; Waller & Boschen, 2015). Again, the element of betrayal appears significant with people who imagined kissing their best friend's sister experiencing greater levels of MC than those who imagined kissing a stranger (Rachman et al., 2012). More recently, though, Millar, Salkovskis and Brown (2016) manipulated the betrayal component in the experiment to demonstrate that it may be the physical nature of the kiss over betrayal that predicts MC. As such the role of betrayal remains unclear.

Other mediating factors that have been explored in the literature include appraisals of the contaminating source related to dirtiness, responsibility and violation (Elliot & Radomsky, 2013; Kennedy & Simonds, 2017; Rachman, Shafran, Coughtrey, & Radomsky, 2015; Radomsky & Elliott, 2009), metacognitions (Fergus, Clayson, & Dolan, 2018), tolerance of negative emotions (Fergus, 2018; Fergus & Bardeen, 2016), thought-action fusion (Fergus & Rowatt, 2018), disgust (Herba & Rachman, 2007; Poli, Melli, & Radomsky, 2019; Travis & Fergus, 2015), religiosity (Berman, Wheaton, Fabricant, & Abramowitz, 2012; Bilekli & Inozu, 2018), and parenting experiences (Berman et al., 2012).

Clinical Contexts

The extant literature focuses predominantly on the OCD population which seems unsurprising given the logical parallels both in causation and behavioural response (i.e. washing and neutralisation rituals) with MC. Indeed, one scoping study found that 46% of participants with a diagnosis of OCD (N=177) reported MC with a positive association found between the two (Coughtrey, Shafran, Knibbs, & Rachman, 2012a). Fear of contamination from contact with a physical source, a common symptom in OCD, has also been shown to relate to MC. Recalling a physical contaminant may trigger MC, (Elliot &

Radomsky, 2012) and levels of contact contamination fear may predict levels of MC (Herba & Rachman, 2007; Radomsky & Elliot, 2009) meaning that there may be a generalised vulnerability to contamination fears.

A smaller body of work has considered the role of MC across a range of other psychopathologies including schizotypal personality disorder (Mohammadzadeh, Rezaie, Yaghoubi, & Pirkhaefi, 2011), anorexia nervosa, (Warin, 2003), and anxiety and depression (Coughtrey, Shafran, Bennett, Kothari, & Wade, 2018). Most advanced is the literature regarding MC and PTSD, perhaps due to overlap between the washing behaviours found in PTSD and experience of trauma found in OCD (Elliott & Radomsky, 2013). A number of studies point to the correlation of MC and PTSD across trauma types (Brake et al., 2019; Brake et al., 2018) and particularly in the context of sexual assault (Badour, Feldner, Babson, & Blumenthal, 2013a; Fairbrother & Rachman, 2004; Olatunji, Elwood, Williams, & Lohr, 2008). MC may therefore exist as a transdiagnostic phenomenon (Blakey & Jacoby, 2018; Jacoby & Blakey, 2018) and certainly maintaining only a discrete focus on OCD risks overlooking its clinical relevance elsewhere (Coughtrey et al., 2018; Radomsky et al., 2018).

Furthermore, there is some limited evidence to indicate that diagnostic focus in general may limit the identification of MC. In both Fairbrother and Rachman (2004) and Ishikawa, Kobori and Shimizu (2015) it was possible to induce MC in individuals who had experienced sexual trauma but did not reach cut-off for PTSD. There also appear to be distinct predictors for the cognitive and behavioural elements meaning that the former could be present without the latter (Herba & Rachman, 2007). This implies that MC may be experienced by a wider population than those who present with the overt behavioural symptoms seen in OCD and PTSD.

Treatment

Recommendations for treatment are informed by the apparent role of appraisals in MC. This indicates a cognitive approach in which symptoms are addressed via restructuring of appraisals related to the contaminating source (Rachman et al., 2015; Radomsky et al., 2018). However, MC appears less responsive to treatment in the context of posttraumatic stress (PTS) (Fairbrother et al., 2005; Olatunji, Forsyth, & Cherian, 2007), and treatment studies are scant and limited to case studies (Coughtrey, Shafran, Lee, & Rachman, 2013; Warnock-Parkes, & Rachman, 2012).

Current Review

Should MC as a construct have clinical utility beyond the diagnostic limitations of the predominant research (particularly in work with people who have experienced trauma), clinicians may benefit from a greater understanding of the construct and its correlates. This in turn may promote the development of a more substantive evidence base for treatment. As such, a review of the literature pertaining to MC and trauma is required in order to clarify the relationship and synthesise information for dissemination. This study will therefore be the first of its kind, and aims to:

- Systematically review and synthesise current understanding with regards to MC and trauma.
- Evaluate the extent to which PTSD in particular is a key clinical correlate
- Make recommendations for clinical practice

Method

The review was conducted in three stages; systematic data search; quality appraisal and synthesis of the data.

Search Strategy

In January 2020, a PILOT search identified three electronic databases with the greatest study relevance and least overlap (EMBASE, APA PsychNET and Web of Science). Cochrane Central was also used in order to identify any registered trials in progress. Title, abstract and keywords were searched in line with the specific framework provided by each database:

- PsychNet & Cochrane Central = title, abstract, keywords (database defined)
- Web of Science = Topic (database defined including title, abstract & keywords)
- EMBASE = title, abstract, author key words.

The search used the truncated terms ('Mental* AND Contamin* OR Mental* AND Pollut*) AND (Trauma* OR Posttrauma*), taking into consideration the interchangeability of mental pollution and MC in the literature. The exception was EMBASE where a scoping search identified that the database thesaurus terms for Trauma* did not meet the needs of this review. The search Mental* AND Contamin* OR Mental* AND Pollut* alone led to a feasible return for manual screening. The date for searches was 1994 and onwards, taking Rachman's "Pollution of the Mind" (1994) as the point of departure for MC as a construct. Reference lists of included papers were searched for further relevant studies and finally, key authors in the field were contacted in order to identify any as yet unpublished studies of relevance. This search strategy was reviewed and approved by a subject specialist librarian.

Eligibility Criteria

Studies were considered eligible for inclusion if they: a) included MC as a key construct; b) included trauma as a key construct (operationalised as involving a trauma exposed population as defined in DSM-5 [APA, 2013] in order to give clear parameters in line with clinical practice,) and clear focus on trauma in design and discussion; and c) were

written in English. All empirical, theoretical and grey literature which clearly met the above criteria was included. Studies were excluded if: a) MC was not a key construct, or the term was used to describe a clearly unrelated phenomenon; b) trauma was not a key construct; c) they were not published in English; or d) in the case of a dissertation the findings were subsequently published in a journal paper meeting inclusion criteria (see Table 1.1 for summary).

Table 1.1

Eligibility Criteria

Domain	Inclusion Criteria	Exclusion Criteria
Population	Any trauma exposed child or adult, clinical or non-clinical population	Non-trauma exposed population
Location	Any	N/A
Language	Published in English	Not published in English
Timeframe	1994+	Pre 1994
Methodology	Empirical, theoretical or case study Qualitative and quantitative	Dissertation subsequently published in included study
Publication	Peer Reviewed Journal Grey Literature	N/A
Content	MC, trauma	MC not key construct / describes unrelated phenomena. Trauma not key construct.

Study Selection

The initial search identified 513 papers. Study titles and abstracts were imported into an online review site and automatically sorted for duplicates (n=61). A title check and/or abstract review led to the exclusion of a further 416 papers. Following that, 36 papers were subject to full text review, of which 14 met the inclusion criteria for this review (See Appendix B for details of papers excluded following full text review). No additional papers were identified from the reference lists. Three of the five key authors who were contacted responded to confirm that they were not aware of any upcoming studies of relevance, another confirmed that there were a number of studies in preparation

but not at review stage, and the final author did not respond. Therefore, in total, 14 papers were included in this review (Figure 1.1).

Inter-rater reliability was established at two screening points: a) title/abstract, and b) full text. In both instances, 10% were reviewed by an independent reviewer with 100% inter-rater agreement, likely due to the broad terms of the review.

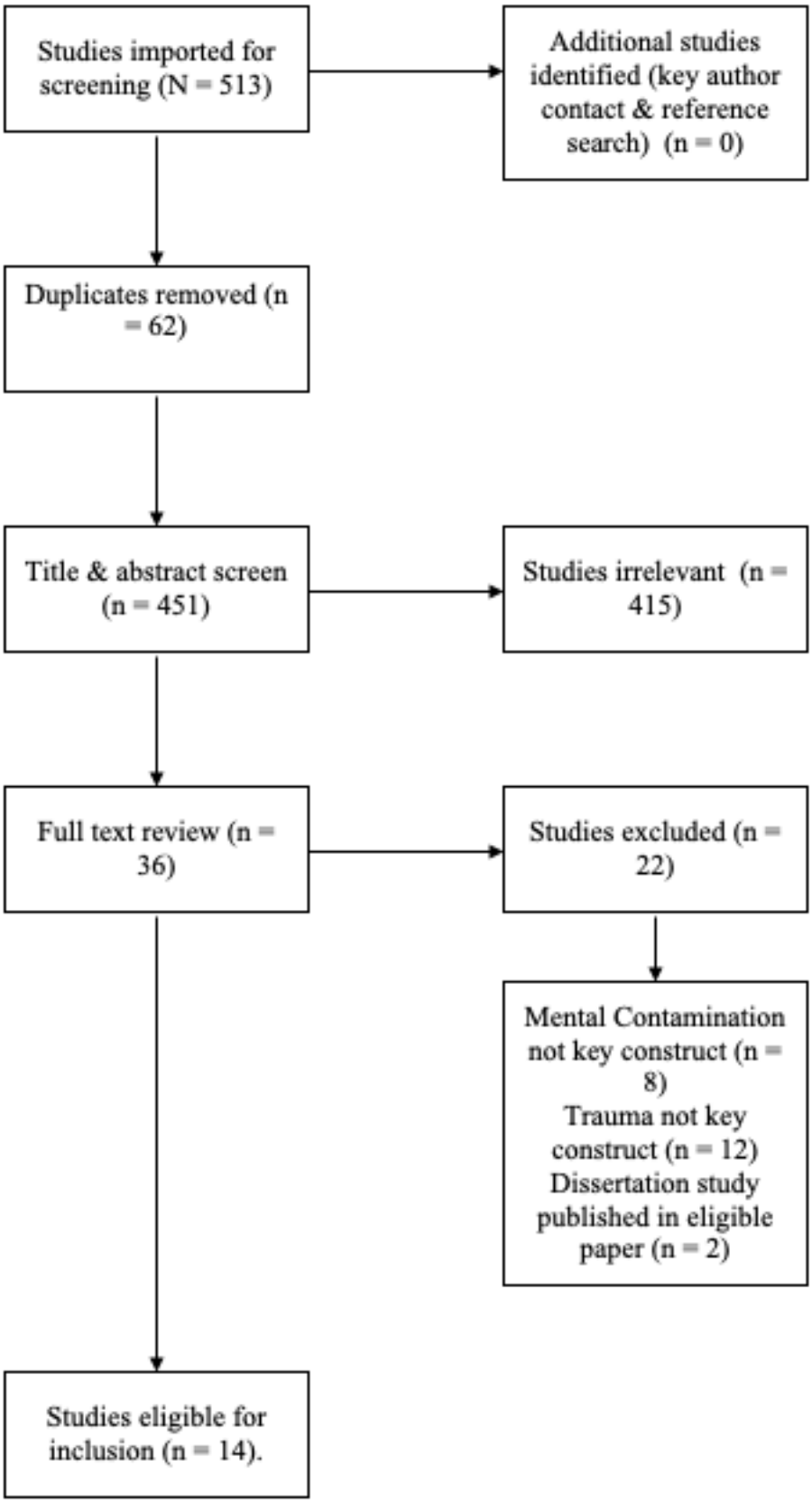

Figure 1.1 Study selection process.

Data Extraction

Data was extracted by the first author in order to identify study characteristics including author, publication, population and key findings (Table 1.2).

Quality Assessment

The quality of the included studies was reviewed using The Critical Appraisal Skills Programme (CASP, n.da) which provides eight checklists for assessing various study designs and was specifically intended to advance the quality of reviews in healthcare (CASP, n.db). The review utilised the Case Control and Cohort Study Checklists as the most appropriate templates (Appendix C & D). Question 9 (believability) and Section C (local utility) were removed from both and Questions 6 (follow-up) and 7 (content of results) removed from the Cohort checklist, in order to allow a scoring system to be applied for ease of comparison. Papers were scored 0 where a criterion was assessed as not met, 1 partially met and 2 fully met, and scores converted into a percentage (See Appendix E and F).

Table 1.2

Data extraction.

Authors	Publication	Population Sample	Demographics	Key Measures	Focus & Relevant Findings	Quality Assessment
Badour Research Group						
1a. Adams, Badour, Cisler, Feldner (2014) USA*	Cognitive Therapy and Research	Community sample of adult women meeting criterion A of DSM-V criteria for PTSD following sexual or physical trauma. N = 50 (26 sexual trauma / 24 physical trauma).	'Average' age: 27.86. Ethnicity: 82.0 % Caucasian/non-Hispanic, 6.0 % African American, 4.0 % American Indian/Alaska Native, 6.0 % bi- or multi-racial, and 2.0 % Other.	AIHI, CAPS, CAS, VOCI	Relationship of contamination aversions and MC in PTS following sexual or physical trauma. • MC accounts for 51% of variation in PTS symptoms in sexual trauma group ($F[3, 22] = 5.73$, $p<.01$)but no significant effect in physical trauma group • MC has significant moderate correlation with direct & indirect contamination across trauma types (all $ps<.05$). • Direct and indirect contamination aversion significantly predict MC ($\beta=.96$, $p<.05$, $sr^2=.24$) & ($\beta=1.44$, $p<.01$, $sr^2=.33$) in context of sexual trauma. • Direct and indirect contamination aversion have a significant indirect effect on PTS via MC ($\beta=.82$, $p<.05$, BC 95% CI [.13, 2.46]) and ($\beta=1.12$, $p<.05$, BC 95% CI [.30, 1.31]) in context of sexual trauma.	88%
1b. Badour, Feldner, Babson, Blumenthal & Dutton (2013a) USA*	Journal of Anxiety Disorders	Community sample of adult women meeting criterion A of DSM-V criteria for PTSD following sexual or physical trauma. N	Mean age: 28.18. Ethnicity: 10.0% Hispanic. 80% Caucasian, 7.5% African American, 2.5% American Indian/Alaska Native,	AIHI (modified), CAPS, MCR, OCI-R Disgust & Anxiety & Script reactivity	Relationship of disgust and MC symptoms & PTS following sexual or physical trauma. • PTS severity predicts increase in feelings of dirtiness ($sr^2 = .32$, $p < .001$) and urges to wash ($sr^2 = .26$, $p<.001$) in sexual trauma group but not physical trauma group.	81%

		= 40 (22 sexual trauma / 18 non-sexual trauma).	7.5% multi-racial, 2.5% Other	= study specific measures.		
1c. Badour, Feldner, Blumenthal & Bujarski (2013b) USA*	Cognitive Therapy and Research	Community sample of adult women reporting one or more DSM-IV-defined sexual trauma. N = 38.	Mean age: 32.34. Ethnicity: 7.9 % Hispanic/Latina, 73.7 % Caucasian, 7.9 % African American, 5.3 % Asian, 7.9 % bi- or multiracial, and 5.3 % Other	AIHI (modified), CAPS, DPSS-R, SARA	Relationship between disgust sensitivity, MC & PTS severity following sexual trauma. • Disgust sensitivity correlates with MC (r=.43, p<.01) and PTS (r=.52, p<.01). • Disgust sensitivity & MC positively correlated with PTS severity in omnibus regression (β = .29, p = .04) & (β = .54, p < .001). • Disgust sensitivity predictive of PTS severity via association with MC (indirect effect = 44.9% of total effect).	73%
1d. Badour, Ojserkis, McKay & Feldner (2014) USA*	Journal of Anxiety Disorders	Community sample of adult women reporting one or more sexual assault. N = 72.	Mean Age: 31.15. Ethnicity: 7% Hispanic, 79.2% Caucasian/non-Hispanic, 9.7% African American, 4.2% Asian, 4.2% bi- or multi-racial, and 2.8% Other.	CAPS, DPSS-R, OCI-R, PTCI, VOCI-MC Peritraumatic disgust & fear = study specific measure	Relationship of disgust propensity, peritraumatic self-focused & perpetrator-focused disgust with MC. • Disgust propensity and self-focused disgust correlate with MC, (r=.57, p<.001) & (r=.48, p<.001) but perpetrator focused disgust does not • Disgust propensity positively associated with MC (sr_2=.06, p<.05). • Self-focused disgust but not perpetrator-focused disgust associated with MC (sr_2=.08, p<.01)	73%
2. Berman, Wheaton, Fabricant & Abramowitz (2012) USA	Journal of Obsessive-Compulsive and Related Disorders	Undergraduate students. N = 265.	F: 72.5%, M: 27.2%, Mean Age: 19.46. Ethnicity: 76.4% Caucasian, 4.9% Hispanic, 9.6% African American, 5.3% Asian, 3.8% Other.	CTQ-SF, MPQ,	Role of religiosity, parenting practices & childhood trauma in adult MC. • Childhood trauma explains variance in MC (washing rituals) (ΔR_2=.16, p<.001) with sexual trauma emerging as the only significant predictor within the trauma subscale (β=.25, p<.001). • Childhood trauma explains MC (inward contamination) (ΔR_2=.06, p<.05) with emotional abuse emerging as the only significant predicator within the trauma subscale (β=.28, p<.05).	41%

3. Brake, Adams, Hood & Badour (2019) USA	Cognitive Therapy and Research	Community adult sample reporting one or more DSM-V Criterion A trauma. N = 183	F: 60.4%. Mean age: 40.65. Ethnicity: 83% Caucasian, 7.1% African American, 0.5% Native Hawaiian/Other Pacific Islander, 4.9% Asian, 1.1% American Indian/Alaska Native, 2.7% Multi-racial.	INQ, PCL-5, SBQ-R, THQ (modified), VOCI (contamination subscale), VOCI-MC,	Relationship between MC & suicide risk following trauma. • MC has no significant direct effect on suicide risk but relates to suicide risk indirectly via PTS symptoms (β=.18, p<.05 BC95% CI [0.03,0.40]).	82%
4. Brake, Jones, Wakefield & Badour (2018) USA	Journal of Obsessive-Compulsive and Related Disorders	Undergraduate students reporting one or more DSM-V- Criterion A trauma. N = 232.	F: 76.7%. Mean Age: 18.67. Ethnicity: 85.2 % Caucasian, 7.6 % African American, 1.3% Asian, 0.4% American Indian or Alaska Native, 3.8% Multi-Racial, 1.7% Other.	ATSPH-SF, LEC-5, PCL-5, RBQ, VOCI (contamination subscale), VOCI-MC,	Relationship between MC, PTS, Mood related risk behaviours & help-seeking attitudes following trauma. • MC positively correlates with PTS symptoms (r = .35, p<.001) • MC directly predictive of negative mood related risk behaviours (β=.16, p<.05) • MC indirectly predictive of increased mood related risk behaviours (positive & negative mood) via increased PTS symptoms (β=.05 , p<.05) for both • MC associated with negative help seeking attitudes though increased PTS symptoms may counteract this. (sr = − 0.16, p = 0.01).	82%
5. Clayson (2019) USA	Baylor University	Female undergraduate students reporting sexual trauma on DSM-V Life Events Checklist. N = 88.	Mean age: 19.4. Ethnicity: 59.1% White, 17%, Latino, 9.1 % Black, 9.1% Multi-Racial, 3.4% Asian, 2.3% Other.	ACS, BRIEF-A, DPSS-R, LEC-5, PCL-5, STICSA, VOCI-MC	Relationship between executive control, MC & disgust following sexual trauma. • MC unrelated to self-reported executive function. • Higher MC negatively correlated with cognitive flexibility performance: Perseverative Errors - (β = .32,37, p = .017) Perseverative Responses (β = .35, p = .025) in sexual trauma group only.	82%
6. Fairbrother & Rachman (2004)	Behaviour Research and Therapy	Community sample of adult women (mainly recruited	'Average' age: 24.5 Ethnicity: 78% Caucasian, 8% East	AIHI (modified),	Relationship between MC & Sexual trauma. • MC likely following sexual trauma (34/50 participants at least 1 item on MPI).	59%

Canada		on university campus) reporting unwanted sexual experience. N = 50.	Asian, 4% First Nations Canadians 4% South East Asian or Pacific Islander, 4% South Asian, 2% Middle Eastern.	CAPS, MPI, PSS-R, SARA	• Most common experiences of MC = internal and emotional feelings of dirtiness (n=27, n=23 respectively). • MC significantly correlates with PTS (CAPS: r=0.59, P<0.001, PSS-SR: r=0.53, P<0.001). • Attending to trauma memory significantly increases MC (t-tests conducted but not reported).	
7. Fergus & Bardeen (2016) USA	Journal of Psychopathology and Behavioral Assessment	Community sample of adult women reporting unwanted sexual experience. N = 101.	'Average' age: 32.5. Ethnicity: 87.1 % White, 94.1 % not Hispanic or Latino, 6.9% African American, 3% Asian, 3% Other.	DTS, LEC-5, PCL-5, VOCI-MC	Relationship of MC & tolerance of negative emotions to PTS. • MC correlates with PTS in general (β = 0.32, p<.01) and specifically with symptoms of intrusion (β = 0.44, p<.01) and arousal (β = 0.31, p<.01) • Tolerance of negative emotions moderates association between MC & PTS total (ΔR_2=.04, p<.05), intrusions (ΔR_2=.04, p<.05) and cognitions (ΔR_2=.03, p<.05).	73%
8. Fergus, Clayson & Dolan (2018) USA	Frontiers in Psychology	Female undergraduate students reporting sexual assault or other unwanted or uncomfortable sexual experience on the LEC-5. N = 102.	'Average' age: 19.4 56.9% White, 16.7% Latina, 9.8% Multi-Racial, 8.8% Black, 5.9% Asian, 1.9% Other.	DPSS-R, MCQ-30, PCL-5, SMCS	Relationship of meta-cognitive beliefs & MC. • Meta-cognitive beliefs generally correlate with MC (small rs) • Meta-cognitions related to uncontrollability of thoughts and danger of thoughts predictive of MC (ΔR_2=.08, p<.01)	64%
9. Ishikawa, Kobori & Shimizu (2015) Japan	Behavioural and Cognitive Psychotherapy	Female, Japanese undergraduate students reporting one or more unwanted sexual experience. N = 148.	'Average' age: 18.45. No further ethnicity details reported.	MCR, OCI, IES-R	Relationship between type of unwanted sexual experience & MC, and relationship between cognitive appraisals and MC. • MC can be induced by recalling unwanted sexual experience • Rape / attempted rape leads to significantly higher feelings of dirtiness (all p≤ .01) and urges to	68%

					wash following recall compared to other unwanted sexual experiences • Cognitive appraisal of violation particularly predictive of MC: Feelings of dirtiness (β = .36, p = .01), Urge to wash (β = .21, p = .03); Internal negative emotions (β = .41, p < .001); External negative emotions (β = .41, p < .001). • Responsibility cognitions relate to feelings of dirtiness only (β = .22, p < .02). • Immorality of perpetrator does not relate to MC.	
10. Ojserkis, McKay & Lebeaut (2018) USA	Journal of Obsessive-Compulsive and Related Disorders	Undergraduate students reporting lifetime traumatic event. N = 250.	F: 71.2%, M: 28%. Mean age: 20.38. Ethnicity: 76% White, 11.2% Asian, 3.2% Black, 1.2% Native American/Alaska Native, 0.8% Native Hawaiian/Pacific Islander, 11.6% Other. Hispanic: 19.2% Non-Hispanic: 78%.	VOCI-MC, DPSS-R, OCI-R, PCL-5	Relationship between MC, disgust (propensity & sensitivity) & obsessive compulsive (OC) symptoms following trauma. • MC correlates with disgust propensity (r=.51, p<.001) & disgust sensitivity (r=.47, p<.001) • MC predictive of OC symptom severity (β = .49, p < .001) (ΔR^2= .13, p<.001) in a trauma population but disgust propensity & sensitivity are not. • Disgust sensitivity strengthens the effects of disgust propensity on MC. Interaction (β = .04, p = .004)	77%
11. Olatunji, Elwood, Williams & Lohr (2008) USA	Journal of Cognitive Psychotherapy	Female, undergraduate students reporting rape or attempted rape on Sexual Experiences Survey. N = 48.	Mean age 19.52. Ethnicity: 90% White. No further ethnicity details reported.	MPQ, PPTS, PTCI, SARA, SES (modified)	Relationship between MC, PTSD cognitions & PTSD symptoms following sexual trauma. • MC correlates with PTSD symptoms (r=.39, p<.01). • MC correlates significantly with overall PTSD cognitions (r=.45, p<.01) and particularly with self-blame (r=.52, p<.01), negative beliefs about the self (r=.44, <.05) but not negative beliefs about the world. • Relationship between MC & PTSD symptoms mediated by PTSD cognitions (MC β reduced from .40 - .14 after controlling for cognitions).	68%

ACS = Attentional Control Scale (Derryberry & Reed, 2002). AIHI = Assault Information and History Interview (Foa & Rothbaum, 1998). ATSPH-SF = Attitudes Toward Seeking Professional Help – Short Form (Fischer & Farina, 1995). BRIEF- A = Behavior Rating Inventory of Executive Function- Adult version (Roth, Isquith, & Gioia, 2005). CAPS = Clinician-Administered PTSD Scale for DSM-IV (Blake et al., 1995). CAS = Contamination Aversion Scale (Adams, Cisler, Brady, Olatunji, & Lohr, 2013). CTQ-SF = Childhood Trauma Questionnaire – Short Form (Bernstein et al., 2003). DPSS-R = Disgust Propensity and Sensitivity Scale-Revised (van Overveld, de Jong, Peters, Cavanagh,& Davey, 2006). DTS = Distress Tolerance Scale (Simons, & Gaher, 2005). IES-R = Impact of Event Scale-Revised (Weiss & Marmar, 1997). INQ = Interpersonal Needs Questionnaire (Van Orden, Cukrowicz, Witte, & Joiner, 2012). LEC-5 = Life Events Checklist (Weathers et al., 2013). MCR = MC Report (Herba & Rachman, 2007). MCQ-30 = Metacognitions Questionnaire-30 (Wells & Cartwright-Hatton, 2004). MPI = Mental Polution Interview (Fairbrother, 2002). MPQ = Mental Pollution Questionnaire (Cougle, Lee, Horowitz, Wolitzky-Taylor, & Telch, 2008). OCI-R = Obsessive–Compulsive Inventory-Revised (Foa et al., 2002). PCL-5 = PTSD Checklist for DSM-5 (Weathers et al. 2013). PPTS-R = Purdue PTS Scale-Revised (Lauterbach & Vrana, 1996). PSS-SR = PTSD symptoms scale–self-report (Foa, Riggs, Dancu, & Rothbaum, 1993). PTCI = Posttraumatic Cognitions Inventory (Foa, Ehlers, Clark, Tolin, & Orsillo, 1999). RBQ = Risky Behavior Questionnaire (Weiss, Tull, Dixon-Gordon, & Gratz, 2018). SARA = Sexual Assault and Rape appraisals (Fairbrother & Rachman, 2004). SES = Sexual Experiences Survey (Koss & Oros, 1982). SBQ-R= Suicide Behaviors Questionnaire-Revised (Osman et al. 2001). SLESQ = Stressful Life Events Screening Questionnaire (Goodman, Corcoran, Turner, Yuan, & Green, 1998). SMCS = State MC Scale (Lorona, Rowatt, & Fergus, 2018). STICSA = State Trait Inventory for Cognitive and Somatic Anxiety (Ree, French, MacLeod, & Locke, 2008). THQ =Trauma History Questionnaire (Hooper, Stockton, Krupnick, & Green, 2011). VOCI = Vancouver Obsessional Compulsive Inventory (Thordarson et al. 2004). VOCI -MC = Vancouver Obsessional Compulsive Inventory-MC Scale (Rachman, 2005)

* Sample drawn from same population pool.

Results

Of the 14 studies included in the review 13 were completed in the USA or Canada with four appearing to be generated by the same research group. Sample sizes were small ranging from 38–265. Most used a majority Caucasian (n=13), female only (n=10) sample and half utilised undergraduate populations (n=7). The research group above appeared to use the same community pool to sample from in each study, meaning that only three community pools were used in total, with the highest mean age being 40.65. Eight of the studies used participants who had experienced sexual trauma. Of the rest, four involved a generic trauma population and two compared results between survivors of sexual and physical trauma.

MC was assessed using a total of seven measures, most commonly the VOCI-MC (Rachman, 2005) (n=6). All of the studies bar one assessed trauma according to a validated measure of PTS, with most using either the CAPS (Blake et al., 1995) (n=5) or PCL-5 (Weathers et al., 2013) (n=6). The quality score for the papers ranged from 41% to 88%.

Data Synthesis

Data synthesis led to the identification of five research areas in the extant literature regarding MC and trauma: MC and PTSD (n=13); MC and form of trauma (n=6); MC and risk (n=1); cognitive mediating factors (n=4) including recommendations for treatment; and affective mediating factors (n=7) including recommendations for treatment, with most papers reporting results relevant to multiple areas. Findings from the data synthesis are summarised in Table 1.3.

Table 1.3

Summary of findings from data synthesis.

Research Area	Study Focus	Included Papers	n	Findings
MC & PTSD	MC & total PTSD	**All except Berman et la., 2012.**	13	**Small to moderate relationship between MC & PTSD symptoms (n=12) (ST, PT & GT)** Fergus et al., (2018) find no relationship (n=1)
	MC & PTSD symptom clusters	**Brake et al., (2019); Fergus & Bardeen, (2016);** Olatunji et al., (2008)	3	
			1	**Small – moderate zero order correlations between MC & all PTSD symptom clusters (ST & GT)**
		Fergus & Bardeen, (2016)		**Relationship between total PTSD, Intrusions & Arousal. No relationship with Negative Cognitions or Avoidance (ST)**
MC & Form of Trauma	MC & PTS comparison between sexual & physical trauma	**Adams et al., (2014); Badour et al., (2013a)**	2	**Relationship between MC & PTS specific to sexual trauma (ST&PT comparison).**
	MC & sexual trauma	Fairbrother & Rachman, (2004); Ishikawa et al. (2015)	2	MC can be induced by attending to a sexual trauma memory. (ST)
		Ishikawa et al. (2015)	1	Rape / attempted rape predicts higher MC compared to other forms of sexual trauma (ST).
	MC & childhood trauma	Berman et al. (2012)	1	Childhood sexual abuse predicts MC washing behaviours (GT). Childhood emotional abuse predicts MC internal contamination (GT).
MC & Risk	MC & Suicide	**Brake et al., (2019)**	1	**MC has indirect positive effect on suicide risk via PTS (GT).**
	MC, risk behaviours & help seeking.	**Brake et al., (2018)**	1	**MC has direct impact on risk taking in a negative mood state. MC has a negative impact on help seeking.**
MC & Cognitive Mediating Factors	Peri-traumatic cognitions	Ishikawa et al., (2015)	1	Sense of violation relates to MC (but not responsibility or immorality of perpetrator) (ST). Self-blame, and negative beliefs about self, relate to MC (ST).
	PTS cognitions	Olatunji et al. (2008)	1	
	Meta-cognitions	Fergus et al., (2018)	1	Meta-cognitive beliefs about thoughts as dangerous and uncontrollable predicts MC (ST).
	Cognitive function	**Clayson, (2019)**	1	
		Ishikawa et al., (2015); Olatunji et al. (2008)	5	

	Treatment Recommendations	Fergus et al., (2018) **Clayson, (2019)**		**MC has negative relationship with cognitive flexibility (ST).** Cognitive restructuring of peri-traumatic and PTS cognitions related to violation, self-blame & negative beliefs about the self. Cognitive restructuring of meta-cognitive beliefs related to thoughts as dangerous & uncontrollable **Developing cognitive flexibility to be able to discriminate between trauma & here and now.**
MC & Affective Mediating Factors	Disgust	**Badour et al., (2014); (Clayson, 2019)** **Badour et al., (2013b); (Clayson, 2019)** **Badour et al., (2013b)** **Ojserkis et al., (2018)** **Badour et al., (2014)**	5	**Disgust propensity positively relates to MC (ST).** **Disgust sensitivity positively relates to MC (ST).** **Disgust sensitivity has indirect effect on PTS via MC (ST).** **Disgust sensitivity bolsters impact of disgust propensity on MC (GT).**
	Baseline contamination aversion	Fergus et al., (2018)	1	**Peri-traumatic self-focused disgust relates to MC (but perpetrator focused disgust does not) (ST).**
		Adams et al., (2014)		No zero order relationship between
	Tolerance of negative emotions		1	MC & disgust (ST)
	Treatment Recommendations	**Fergus & Bardeen, (2016)**	5	Direct & indirect contamination aversion predict MC (ST) Direct & indirect contamination aversion have indirect impact on PTS via MC (ST)
		Adams et al., (2014) **Badour et al., (2013b); Badour et al., (2014);** Ojserkis et al., (2018) **Fergus & Bardeen, (2016)**		**Tolerance of negative emotion has small moderating effect on the relationship between MC & PTS (ST).** **Cognitive treatment should be adapted to consider the affective processes specific to MC.** **Cognitive treatment should be adapted to include developing tolerance of negative emotions.**

Text in bold indicates higher quality study (quality score ≥73%) indicating more robust findings. ST = sexual trauma population; PT = physical trauma population; GT = generic trauma population.

MC and PTSD

In all but one study (Berman et al., 2012) (n=13) clinical impact of trauma was measured according to DSM criteria for PTSD, with scores used as a continuum rather than cut off for inclusion. Most took a single measure of MC and symptoms of posttraumatic stress (PTS) (n=10) finding a significant positive relationship that was small to moderate in size ($r=.35\text{-}.66$, $p< .01$).[1] The remaining three used an invivo task to induce MC. Two took pre and post measures and found that the changes across a number of indices of MC again showed a small to medium correlation with PTS (p's$<.05$) (Badour et al., 2013a; Ishikawa et al., 2015). However, Fergus et al. (2018) found no significant relationship. Whilst unexpected given similar methodologies, this study was overall of a lower quality, particularly in comparison to Badour et al. (2013a) scoring 64%. It may be important that the authors used a unique measure of MC, the SMCS (Lorena et al., 2018). This attempted to capture state MC by rephrasing the VOCI-MC (Rachman, 2005) into the present tense but in doing so lost five of the original measure items thereby reducing sensitivity and so reliability.

Three studies reported on zero order correlations between separate indices of PTS, again consistently finding a small to moderate relationship with MC (Brake et al., 2019; Fergus & Bardeen, 2016; Olatunji et al., 2008). One study (Fergus & Bardeen, 2016) examined the relationship between MC and symptoms of PTS in more detail, looking at correlations across symptom clusters as defined on the PCL-5 (Weathers et al., 2013). They found that in multiple regression the relationship held with total PTS symptoms, ($\beta=0.32$, $p<.01$), intrusion ($\beta=0.44$, $p<.01$) and arousal ($\beta=0.31$, $p<.01$) but the relationship with cognitive symptoms, and avoidance was no longer significant. MC may

[1] Note the finding was only significant in the sexual trauma group in Adams et al. (2014).

therefore be particularly related to intrusive trauma memories, and the heightened arousal and anxiety associated with PTSD.

MC and Form of Trauma

Six studies had a primary focus on the relationship between MC and the form of trauma experienced by participants. This included comparison of MC between sexual and physical trauma populations (n=2), MC in a sexual trauma population (n=3) and MC following childhood trauma (n=1).

Two higher quality between-group studies (scoring 88% and 81% respectively) examined differences between people who had experienced a sexual trauma and non-sexual physical trauma such as robbery or assault (Adams et al., 2014; Badour et al., 2013a). Adams et al. (2014) compared scores across MC and PTS finding that MC accounted for 51% of variance in PTS in the sexual trauma group ($F[3, 22]=5.73$, $p<.01$) but that there was no significant interaction in the physical trauma group. Badour et al. (2013a) measured changes in MC, captured as feelings of dirtiness and urges to wash following trauma recall and found that PTS severity had a large and significant impact on MC increase but only in those recalling a sexual trauma (feelings of dirtiness [$sr^2=.32$, $p<.001$] and urges to wash [$sr^2=.26$, $p<.001$]).

Together these studies indicate a bi-directional relationship between MC and PTS severity *specific* to people who have experienced sexual trauma. The finding is bolstered by the descriptives from two further studies which used generic trauma populations but found significantly higher levels of MC reported by those who had experienced sexual trauma; ($t[60.76]=2.46$, $p=.02$), (Brake et al., 2019) and ($t[230]=-2.89$, $p=.004$), (Brake et al., 2018).

Three studies focused specifically on the relationship between MC and sexual trauma. Fairbrother and Rachman (2004) was the first. In this study MC was first screened

for, and then included participants (n=35/50) were assessed via semi-structured interview, with answers converted into a score. The vast majority (n=34/35) scored at least one out of a possible six (mean = 3.1, SD = 1.5) indicating some level of MC, with the most frequently endorsed indices being internal and emotional feelings of dirtiness (n=27, n=23 respectively). Whilst demonstrating some level of MC in most survivors of sexual trauma, the figures may be an underrepresentation given that urge to wash was the single MC screening tool, thereby excluding those who may have scored items such as emotional dirtiness at interview. The study also included an experimental element in which MC was found to be significantly higher following recall of sexual trauma, compared to rates following recall of a pleasant memory (statistics not reported).

Ishikawa et al. (2015) extended the findings of Fairbrother and Rachman (2004) by discriminating between forms of sexual trauma. Traumas were grouped according to classifications particularly relevant to Japanese women (verbal, visual, forcible touching / frottage or attempted / actual rape) and pre and post measures of MC (feelings of dirtiness, urges to wash, internal negative emotions [INE] such as shame and external negative emotions [ENE] such as anger towards the perpetrator) following trauma recall, were compared across groups.

ANOVAs indicated a significant main effect of time (pre and post trauma recall) ($F[1,144]=50.13$, $p<.001$), trauma type ($F[3,144]=3.60$, $p=.02$) and interaction ($F[3,144]=5.31$, $p=.01$) on feelings of dirtiness. In post-hoc analysis significant differences were found following trauma recall across all groups (all p's$\leq$ 5) with the scores for rape or attempted rape being significantly higher than the other groups (all $p\leq .01$). Only the interaction of time and trauma form was significant with regards to urges to wash ($F[3,144]=2.79$,$p=.03$) with simple effects indicating that only those in the attempted / actual rape group reported significant increase in urges to wash ($p=.02$). A significant

main effect of trauma recall was found on INE ($F[1,144]=60.42$, $p<.001$) and ENE ($F[1,144]=49.12$, $p<.001$) but there was no main effect of trauma form or interaction. Taken together these findings replicate and extend those of Fairbrother and Rachman (2004). They demonstrate that MC can be provoked through recall of a sexual trauma, and furthermore people who experience attempted or actual rape are likely to experience particularly high levels of MC compared to victims of other sexual traumas.

Berman et al. (2012) was the only study to look specifically at the role of childhood trauma in MC. Participants completed a battery of measures including indices of childhood trauma (CTQ-SF; Bernstein et al. 2003) and the Mental Pollution Questionnaire (MPQ) (Cougle et al., 2008), which discriminates between washing behaviours and internal feelings of contamination. All five types of childhood trauma correlated significantly with MC, with sexual ($r=.49$, $p<.001$) and physical abuse ($r=.46$, $p<.001$) being most strongly related to washing behaviours, and sexual ($r=.22$, $p<.001$) and emotional abuse ($r=.25$, $p<.001$) with internal contamination. In hierarchical regression childhood trauma accounted for 16% of the variance in washing behaviours, ($\Delta R_2=.16$, $p<.001$) with sexual trauma emerging as the only significant predictor ($\beta=.25$, $p<.001$). With regards to internal sensations of dirtiness (inward contamination) childhood trauma accounted for 6% of variance ($\Delta R_2=.06$, $p<.05$) with emotional abuse emerging as the only significant predicator within the trauma subscale ($\beta=.28$, $p<.05$). The paper therefore adds to the evidence for the specific role of sexual trauma in MC, as well as emotional abuse. However the study had a number of methodological concerns with regards to the range of IVs, and the measures employed scoring 41% at quality assessment.

Risk

Two higher quality studies both scoring 82% at quality review looked at the relationship between MC and risk of harm to self across trauma types. Brake et al., (2019)

looked at MC as a potential risk factor for suicide in PTS. Having controlled for co-variates including sexual trauma there was no significant direct relationship between MC and suicide risk. However, a significant indirect effect was found via overall PTS (β=.18, p<.05 BC95% CI [0.03,0.40]) and all individual PTS symptom clusters.

Brake et al. (2018) investigated the relationship of MC to risk behaviours in positive and negative mood states and help-seeking behaviour. Mediation analysis demonstrated that after controlling for PTS MC only impacted directly on risk in a negative mood state (β=.16, p<.05). In line with Brake et al. (2019) the authors conclude that MC may in the main relate to risk behaviours via an increase in PTS. However, caution should be taken given that the reverse model in which PTS relates to risk in a negative state via MC also reached significance (p<.05), again indicating the lack of clarity as to the direction of relationship between MC & PTS.

Interestingly a positive relationship was also found between MC and help-seeking via PTS. However, once PTS was controlled for the direct impact was negative (sr=−0.16, p=0.01). MC may therefore limit help-seeking, perhaps because of fears about efficacy of treatment or shame.

Cognitive Mediating Factors

In total four papers considered cognitive factors that may mediate or be mediated by MC, all in the context of sexual trauma. These were peri-traumatic cognitions (n=1), PTS cognitions (n=1), meta-cognitions (n=1) and cognitive function (n=1). All of these studies bar Clayson (2019) were considered lower quality papers (scores < 73%) and none reported confidence intervals meaning it was not possible to confirm the accuracy of the findings.

Ishikawa et al. (2015) investigated the role of peri-traumatic cognitions linked to MC in the wider literature taking subjective measurements of feelings regarding

responsibility, violation and perpetrator immorality. Appraisals with regards to the extent of violation emerged as the only cognitive factor with predictive validity across the MC indices (Feelings of dirtiness [β=.36, p=.01], Urge to wash [β=.21, p=.03]; Internal negative emotions [β=.41, p<.001]; External negative emotions [β=.41, p<.001]). Responsibility only related to variance in feelings of dirtiness (β=.22, p<.02), and perpetrator immorality did not relate with any of the indices. They note their findings contrast with those of Radomsky and Elliot (2009), where morality and responsibility were found to have a more important role.

Given that Radomsky and Elliot (2009) used a generic (rather than sexual trauma) population and an imagined (as opposed to actual) sexual assault scenario these differences may indicate important population differences such as difficulty with imagining violation. As such the experience of violation may have a role in predicting MC specific to sexual trauma.

Olatunji et al. (2008) examined whether MC may relate to PTS specific appraisals (internal and external focused negative cognitions and self-blame) (Foa et al., 1999). MC was found to have a significant, moderate relationship with self-blame (r=.52, p<.01), and negative beliefs about the self (r=.44, p<.05) but no significant relationship with negative beliefs about the world. In mediational analysis the direct effect of MC on PTSD symptoms was greatly reduced once controlling for PTS appraisals (β from .40 to .14). This would suggest that the relationship between MC and PTSD is predicated upon cognitive rather than behavioural symptoms which contradicts the findings of Fergus and Bardeen, (2016) when controlling across PTS symptoms. Although the overall quality of the study (68%) was not considered dissimilar to Fergus and Bardeen (2016) (73%) the latter used the PCL-5 which only has one item with regards negative beliefs about self and the world, and as such would have been less sensitive to cognitive content. As such the

measure may simply have missed cognitions which would in turn have heightened other behavioural symptoms. However, replication is required to clarify this.

Fergus et al. (2018) looked at the relationship between meta-cognitions and MC following an induction task with a sexual trauma population. Overall, they found small to moderate positive correlation between meta-cognitions and all indices of MC post-induction (all ps<.05). In hierarchical regression only metacognitions regarding the uncontrollability and danger of thoughts emerged as a significant predictor of MC, accounting for 8% of variance post-induction (ΔR^2=.08, p<.01). However, some caution should be taken given concerns regarding the measures used in this study including the sensitivity of the SMCS (Lorena et al., 2018), as previously discussed, and the MCQ-30 (Wells & Cartwright-Hatton, 2004) which has limited test-retest validity meaning again that replication is required.

Clayson (2019) drew together the literature on executive function and PTS, and PTS and MC to investigate any direct relationship between executive function and MC. This study was scored 82% at quality review, appearing well designed with good consideration of confounds, and well validated measures used throughout. No relationship was found with self-report measures. However, MC was found to have a negative relationship with cognitive flexibility performance according to perseverative errors (β=.32, p=.017) and perseverative responses (β=.35, p=.025) on the Wisconsin Card Sort Test (Grant & Berg, 1948) specifically in those who had experienced a sexual trauma. Extrapolating from this the author suggests that MC following sexual trauma, and associated distress may leave people unable to respond with flexibility to safer environments post-trauma.

Recommendations for Treatment. Both Ishikawa et al. (2015) and Olatunji et al. (2008) support the use of cognitive restructuring as per the cognitive model (Ehlers &

Clark, 2000) to address the distressing cognitions associated with MC and subsequent PTS. Fergus et al. (2018) suggest treatment should focus less on the content of appraisals, and rather meta-cognitive beliefs regarding the danger and uncontrollability of these thereby reducing the distress that they cause. However, given that the study did not compare between the roles of cognitions and meta-cognitions, there does not appear enough quality evidence to discount the former. Finally, Clayson (2019) suggests developing cognitive flexibility may be useful, in terms of enabling people to differentiate between a trauma memory, and their safety in the here and now.

Affective Mediating Factors

In total, seven studies looked at affective mediating factors in MC. The factors considered were disgust (n=5), baseline contamination aversion (n=1), and tolerance of negative emotions (n=1).

Disgust was the most explored affective mediator with five studies reporting on correlation with MC. Disgust was conceived according to the Disgust Propensity and Sensitivity Scale-Revised (DPSS-R; van Overveld et al., 2006), which discriminates between disgust propensity (how likely a person is to respond with disgust) and disgust sensitivity (how distressing a person finds disgust). All except Ojserkis et al. (2018) used a sexual trauma population.

Clayson (2019), reporting on zero order correlations only, found a small interaction between MC and combined scores on the DPSS-R ($r=.26$, $p<.05$). Badour et al. (2014) assessed disgust propensity finding a significant, moderate correlation with MC ($r=.57$, $p<.001$) which held in multiple regression accounting for 6% of variation in MC ($sr^2=.06$, $p<.05$). Badour et al. (2013b) looked specifically at disgust sensitivity finding significant zero order correlation with MC ($r=.43$, $p<.01$). Ojserkis et al. (2018) again found moderate zero order correlations with both disgust propensity and sensitivity and in regression

analysis found a significant interaction by which the impact of disgust propensity (β=.37, p=.02) on MC was bolstered by disgust sensitivity (interaction: β=.04, p=.004).

All of these studies were considered to be of a higher quality (≥ 73%) and together provide good evidence for a moderate relationship between both propensity for and sensitivity to disgust and MC. It may be that vulnerability to experiencing disgust makes a person more likely to feel disgust during a trauma leading to MC, with sensitivity to this feeling furthering the impact. However, given that there is no data as to pre-trauma disgust ratings, such a causal relationship cannot be assumed. Some caution should be taken given that two studies drew from the same population pool (Badour et al., 2013b; Badour et al., 2014). It is also of note that Fergus et al. (2018) found no relationship, although again possible concerns with regards to the sensitivity of the measure of MC (SMCS) may be important here.

Badour et al. (2014) also looked at the role of peritraumatic disgust with regards to self and perpetrator following sexual assault. Self-focused disgust emerged as having a significant moderate effect on MC (sr^2=.08, p<.01) whilst the effect of perpetrator focused disgust was non-significant. They conclude that locating the disgust internally may be particularly important to the development of MC. However, as peri-traumatic disgust was measured via a subjective unit based on recall the reliability of this finding should be considered.

In another higher quality study (scoring 88%) Adams et al. (2014) examined the role of baseline contamination aversion (both direct and indirect) in the relationship between MC and trauma, comparing sexual and physical trauma groups, whilst controlling for OC related contamination fears. Mediation analysis carried out in the sexual trauma group found that both direct and indirect contamination aversion significantly predicted MC (β=.96, p<.05, sr^2=.24) and (β=1.44, p<.01, sr^2=.33) respectively. Both were also

found to have a significant indirect effect on PTS via MC (β=.82, p<.05, BC 95% CI [.13, 2.46]) and (β=1.12, p<.05, BC 95% CI [.30, 1.31]) respectively. Mediation analysis was not carried out in the physical trauma group due to non-significant zero order correlations with study variables not relevant to this review. None-the-less, given that MC and contamination aversion correlated in both groups it is possible that the findings from mediation analysis may also be relevant across trauma types.

The authors hypothesise that underlying contamination aversion may lead to greater affective response during trauma, such as disgust, associated with MC in turn leading to maladaptive coping strategies to manage negative affect in PTS. However, given the lack of baseline measure it is also possible that MC may lead to increased contamination aversion. Again, it is important to note that these findings draw from the same population pool as other papers from the Badour study group, and replication is required in order to ensure that the relationship between disgust and MC found across papers, is not specific to this population.

Fergus and Bardeen (2016) considered the way in which the capacity to tolerate negative emotions might have bearing on the relationship of MC and PTS following sexual trauma. They found that tolerance of negative emotions moderated the association between MC & PTS total (ΔR^2=.04, p<.05), intrusions (ΔR^2=.04, p<.05) and cognitions (ΔR^2=.03, p<.05) although all effects were small. They suggest that difficulty tolerating the negative effect of trauma via MC may maintain a sense of threat and so the problematic coping strategies associated with PTSD.

Recommendations for Treatment. Recommendations for treatment in this area also drew on the cognitive model of PTSD (Ehlers & Clark, 2000). Badour et al. (2013b), Badour et al. (2014) and Ojserkis et al. (2018) all identified the clinical challenge of working with sexual trauma populations using the exposure interventions recommended

for PTSD and suggest that the unique interplay of disgust and MC as affective experiences may require a different treatment approach. Similarly Adams et al. (2014) recommend that cognitive treatment be adapted to look at affective processes. Finally, Fergus and Bardeen (2016) suggest a development of exposure therapy to include increasing distress tolerance would be appropriate.

Discussion

This study was the first of its kind to bring together the literature pertaining to MC and trauma with the aim to systematically review and synthesise current understanding, including evaluating the extent to which PTSD in particular is a key clinical correlate.

All of the studies in this review captured the clinical impact of trauma using a measure of PTSD. All but one study found a significant zero order correlation with MC that was small to medium in size, and which held where follow up procedures were conducted. The relationship was positive meaning that as MC increases so does PTS indicating that MC is likely to be particularly relevant in the context of PTSD. The consistency of this finding provides strong evidence of PTSD as a key clinical correlate and confirms that the weighting towards OCD in the literature may unnecessarily limit understanding (Coughtrey et al., 2018; Radomsky et al., 2018).

It is also important that PTSD measures were used as a spectrum rather than clinical cut-off, meaning that many participants evidenced symptoms of MC without meeting diagnostic threshold. As such, an absence of PTSD does not indicate an absence of MC, and it may be the trauma that is most important. However, what remains unclear is the functional impact of MC independently of diagnosable psychopathology and therefore the implications for clinical input.

Limited, though mainly high-quality comparison studies (Berman et al., 2012; Brake et al., 2019; Brake et al., 2018) indicated that MC is particularly related to sexual

trauma confirming findings in the general population (Fairbrother et al., 2005). The exclusive focus within the taxonomy of PTSD is therefore surprising given the relationship between complex trauma experiences and interpersonal difficulties seen throughout mental health services (Bierer et al., 2003; MacIntosh, Godbout & Dubash, 2015), which may not be adequately captured within DSM-V dimensions of PTS (Pai, Suris, & North, 2017; Resick et al., 2012).The relationship between MC and personality disorder warrants exploration and further research may also speak to NICE (2018a) research recommendations regarding treatment for complex PTSD.

Two studies indicated that risk of harm to self is a significant consideration with regards to MC. Whilst one study (Brake et al., 2019) found that MC increased risk of suicide via its association with PTS severity, a second (Brake et al., 2018) found that MC contributed to a range of high-risk behaviours aside from any relationship with PTS. Furthermore, once controlling for PTS, MC was found to have a negative relationship with help-seeking (Brake et al., 2018). Whilst the reasons for this remain unclear the authors suggest that shame or fears about the efficacy of treatment may impact here.

The studies broadly confirm the role of peri-traumatic appraisals in MC identified in the wider literature. However, important differences were found in one study with regards to the most salient cognitions where sexual trauma is *experienced* rather than *imagined* (Ishikawa et al., 2015; Radomsky & Elliot, 2009) with violation proving more relevant to MC following trauma exposure than either morality or responsibility. This finding underscores the importance of replicating analogue research in clinical populations.

In line with the extant literature, Olatunji et al. (2008) drew on PTS specific cognitions and found 'self-blame' was related to MC, alongside internalised negative beliefs. Some level of convergence between the measure of responsibility in Ishikawa et al., (2015) and 'self-blame' in Olatunji et al. (2008) seems likely and so the differing

results with regards to MC are of note. Whilst this may be a function of different assessment tools, it is also possible that important sample differences are at play. Ishikawa et al., (2015) included participants with a range of sexual trauma experiences whilst Olatunji et al. (2008) only included those who had experienced attempted or actual rape. Given that the latter elevates MC (Ishikawa et al, 2015) it may be that responsibility appraisals emerge more strongly in this population, than in those who have experienced other forms of sexual trauma.

A surprising find was that no study was identified which measured cognitions related to betrayal despite this being a key factor in the theoretical model (Rachman, 2006; 2010), with increases in betrayal shown to increase MC in a general population (Fairbrother et al., 2005). Given that a large majority of rapes or attempted rapes are carried about by someone known to the victim, (Office for National Statistics, 2018) it seems likely that a sense of relational betrayal would be important. Further research is required in order to understand the role of betrayal in MC post-trauma, which may in turn help clarify the role of betrayal more widely (Millar et al., 2016).

The studies confirm the relationship between disgust, trauma and MC found in the general population (Herba & Rachman, 2007; Travis & Fergus, 2015) demonstrating that a greater propensity for and / or sensitivity to disgust may make a person more vulnerable to MC through the affective processing of trauma and post-trauma cues (Badour et al., 2014; Badour et al., 2013b; Clayson, 2019). An additional finding is that the locus of disgust may be important, with self-focused disgust being particularly related to MC and subsequent PTS (Ojserkis et al., 2018). Finally, it was confirmed that an overarching fear of contact contamination related to increases in MC in a trauma population (Adams et al., 2014) replicating findings in the wider literature (Herba & Rachman, 2007; Radomsky & Elliott, 2009).

Recommendations for Clinical Practice

The review has identified a number of recommendations for clinical practice. The strong evidence of a relationship between trauma and MC indicates that the latter should be assessed for in all those presenting to services with a trauma background and in particular those who have experienced sexual assault. The evidence indicates that PTSD is likely to be a strong correlate, but lack of clinical threshold should not preclude assessment. Indeed, clinicians should be mindful that people who have experienced trauma, and concurrent MC but do not experience high levels of PTS may be particularly likely to avoid help whilst continuing to present with clinical need and risk. Greater clinician awareness and normalisation of MC may be useful in order to address this.

Clinicians seeking to treat MC post-trauma are advised to draw on the cognitive model of PTSD (Ehlers & Clark, 2000; NICE, 2018b) to consider modifying peri-traumatic cognitions. Beliefs regarding violation but also self-blame are likely to be particularly pertinent. The cognitive model may also require adaptation in order to address affective experiences of disgust, which may be strengthened by individual differences in responses to contamination more widely. Finally, in line with developments in the wider cognitive field (e.g. Wells, 2011) meta processes such as beliefs about the danger of thoughts (Fergus et al., 2018), cognitive flexibility (Clayson, 2019) and tolerance of negative emotion (Fergus & Bardeen, 2016) may also prove fruitful targets for change.

Further Research

The findings of this review confirm that the relationship between MC and trauma deserves attention. Given that most of the studies here were the first of their kind with a trauma exposed population replication is required to substantiate findings. Little is known about the specific clinical experience of MC post-trauma, outside of a PTSD paradigm. As such it is difficult to assess the extent to which clinical input may be required where this is

lacking. Qualitative investigations as to the particular experiences and functional impact of MC would be of benefit as would studies involving participants presenting with other trauma related psychopathologies such as borderline personality disorder.

A clear area for development is the role of cognitive mediators and any convergence with the cognitive symptoms of PTS. Currently conflicting findings make this unclear. Cognitions with regards to betrayal may be particularly pertinent, and studies which consider this whilst controlling for the relationship with the perpetrator would contribute both clinically and to the theoretical model. Given the clear recommendations for treatment, case examples and treatment studies are now required in order to assess the extent to which these recommendations hold up in clinical practice.

A final, intriguing area for development is the extension of findings in the general population with regards to MC following *perpetration* of a sexual assault (Rachman et al., 2012; Waller & Boschen, 2015) into a clinically relevant population. The possibility that sexual offenders may experience shame through the phenomenon of MC may be both theoretically and clinically significant, particularly given the evidence that perpetrators can experience offence related PTS in line with victims (Evans, Ehlers, Mezey & Clark, 2007). However, no studies involving a forensic population were identified in this review.

Study Limitations

A number of limitations were found across the literature. The characteristics of the study populations were relatively homogenous in terms of ethnicity, age and location and sample sizes were small. Only four included male as well as female participants despite findings that MC may be equally relevant in a male trauma population (Brake et al., 2018; 2019).

This is particularly pertinent given that individuals and nation-states hold different personal and legal definitions of trauma incidents like sexual assault, even within

seemingly clear concepts such as rape (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002). Further, socio-cultural and demographic variables impact understanding of sexual assault including attribution of responsibility, and recourse to victim blaming narratives (Johnson, Kuck, & Schander, 1997; Nayak, Byrne, Martin, & Abraham, 2003; Schneider, Mori, Lambert, & Wong, 2009) theoretically effecting peri and post-traumatic sense making, and potential psychopathology, including MC. As such the homogeneity of the research locations and participants means that any socio-cultural specificities with regards to MC may not be captured.

Although all studies included a trauma exposed population, the taxonomy of trauma is complex. Forms of trauma rarely happen in isolation (Kilpatrick & Acierno, 2003). Not all studies reported or controlled for whether the trauma was observed or directly experienced, nor was age at time of index trauma, time since index trauma or number of traumas consistently controlled for. All of these factors may impact upon experience and expression of MC and so warrant further detailed investigation.

The majority of studies were based on retrospective, self-report with clear implication for validity. All of the studies were cross-sectional meaning that no firm conclusions can be drawn with regards to causality, as evidenced by the number of studies that found bi-directional relationships between MC and PTS. Notwithstanding the clear challenge of prospective design, longitudinal and experimental research is required to more clearly identify temporal and causal factors in the relationship.

Review Limitations

Whilst enabling useful comparison across included papers, the quality assessment presents some limitations. This was carried out by the primary author only and inter-rator review would be of benefit. Furthermore the review adapted templates designed for

qualitative analysis and created a unique scoring system. As such scores are not valid comparison tools beyond this review.

Conclusion

The aim of this study was to systematically review and synthesise current understanding with regards to MC and trauma with a mind to recommendations for clinical practice and future research. The review identified a significant relationship between MC and trauma, particularly sexual trauma and within a PTSD framework thereby confirming findings in the general population. A number of cognitive and affective mediators were also identified.

It is recommended that clinicians familiarise themselves with the literature pertaining to MC and that MC is assessed as standard where a person has experienced trauma. Treatment may need to include a focus on affective peri-traumatic experiences alongside appraisals relating to both MC and PTS. However, treatment studies are required. Research with those experiencing complex trauma, and in forensic populations would be of benefit. Findings are limited by the homogeneity of research participants, the complex taxonomy of trauma, the reliance on self-report and the lack of prospective or longitudinal data.

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Service Improvement Project

Staff Experiences of Using Non-Violent Resistance in a Residential Care Home for Young People with High Risk Behaviours

Author:	Jessica Mackinnon
	j.mackinnon@bath.ac.uk
Internal Supervisor:	Dr Claudia Kustner (University of Bath)
External Supervisor:	Dr Peter Jakob (Partnership Projects)
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Staff Experiences of Using Non-Violent Resistance in a Residential Care Home for Young People with High Risk Behaviours

In the UK, parenting programmes underpinned by social learning theory (Bandura, 1977; Gavazzi, 2011) are recommended as a key intervention for young people presenting with aggression and violence (NICE, 2017). These programmes hold that the young person's behaviour can be modified through reinforcement and modelling. However, the evidence base is mixed with a recent meta-analysis finding that no one approach is consistently superior (Bakker, Greven, Buitelaar, & Glennon, 2017). Furthermore, the complex needs of families using services as well as the potential impasse of young people refusing to engage, means that practitioners may require alternative interventions (Coogan, 2014; Jakob, 2018b; Newman, Fagan, & Webb, 2014).

One systemic alternative is Non-Violent Resistance (NVR) (Omer, 2004). Drawing on the socio-political protest movements of the 20th Century, NVR positions itself in contrast to mainstream models by suggesting that to try to change the behaviour of the young person is an erroneous endeavour (Lebowitz, Omer, Hermes, & Scahill, 2014; Weinblatt & Omer, 2008). Instead NVR aims to reassert the presence and agency of the caregiver in relationship to the young person so that they can peacefully resist the violence (Jakob, 2018b; Omer, 2004; Weinblatt & Omer, 2008). Primarily this resistance enables the caregiver to better manage their responses to violence, but by experiencing a more present, boundaried and loving caregiver, the young person's behaviour may also change (Jakob, 2018b; Lebowitz et al., 2014; Weinblatt & Omer, 2008).

NVR is comprised of 'positive action methods' including the 'Announcement' in which the family formally announce to the young person that they will no longer accept their violence; the 'Sit-in' where caregivers sit peacefully in the young person's room in

protest at their actions, and the 'Campaign of Concern' in which the wider network around the young person makes coordinated contact in order to express concern or pride regarding specific behaviours (Omer, 2004; Partnership Projects, 2013). Thus, NVR positions violence in its social context (Omer & Lebowitz, 2016) and invites caregivers to draw on the support of wider networks to acknowledge the violence, and bear witness to changes made within the family (Omer, 2004). Other key processes include 'deferred responsiveness' by which the caregiver addresses their own escalatory patterns and delays their response to aggression and 'Reconciliation Gestures', small acts of unconditional care such as leaving a cup of tea or bringing a young person their favourite snack (Omer, 2004; Partnership Projects, 2013).

The Evidence Base

The NVR literature is rapidly growing. RCTs with families of young people with behavioural difficulties (Lavi-Levavi, 2010; Ollefs, Von Schlippe, Omer, & Kriz, 2009; Weinblatt, & Omer, 2008), anxiety (Lebowitz, Marin, Martino, Shinshoni, & Silverman, 2019) and with foster parents (Van Holen, Vanderfaellie, Omer & Vanschoonlandt, 2018) as well as accounts of work with OCD (Lebowitz, 2013), threats of suicide (Omer & Dolberger, 2015), multi-stressed families (Jakob, 2018b), and in residential services (Van Gink et al., 2019; Van Gink et al., 2017) all point to the potential for NVR to positively impact upon caregiver agency and the behaviour of young people in various contexts (see Omer and Lebowitz, 2016 for full review).

NVR appears to have high rates of acceptability (Weinblatt & Omer, 2008), with uncomplicated processes (Coogan, 2014) and parents and professionals alike feeling more positive about their caring role (Golan, Shilo, & Omer, 2016; Newman et al., 2014; Van Gink et al., 2018). These findings are qualified by reports of structural challenges such as organisational change (Van Gink et al., 2019) and engaging a supporters network

(Attwood et al., 2019), alongside mixed professional responses (Van Gink et al., 2018), ongoing parental distress (Weinblatt & Omer, 2008) and a lack of confidence in some processes (Van Gink et al., 2017). Therefore, whilst the clinical utility is clear much more is needed in terms of understanding the experience of working with NVR in order to aid dissemination and application.

Aims

This study aims to contribute to the evidence base by qualitatively exploring the experiences of staff using NVR, in one residential care home for young people presenting with high risk behaviours including aggression and violence and addresses two research questions:

- What are the staff experiences of working with NVR?
- How could staff experiences of working with NVR be improved?

Method

Service Context

The study was designed alongside a third sector organisation that runs a residential unit for young people presenting with high risk behaviours. Through consultation with a UK based agency the organisation had integrated NVR into all aspects of service delivery. The management team now wished to consolidate this integration, and in particular increase the autonomy and confidence of staff by evaluating their experiences of NVR and investigating how these could be improved.

Participants

In line with recommended numbers for qualitative research (Mason, 2010) eight participants were recruited via email and on-site advertising. Participants were self-selecting thereby protecting their anonymity and promoting uncensored feedback. They

represented a range of experience and position. Given the relatively small sample pool, and in order to protect anonymity it is not possible to report on further participant characteristics. All participants were offered a £10 voucher in recognition of their time.

Design

The study was qualitative with the aim of gaining rich in-depth data and took a critical realist perspective, meaning that it held that evidence could be gathered, and generalised from the participant accounts whilst acknowledging that this evidence would be mediated by the socio-cultural context in which it was constructed (Willig, 2013).

Procedure

Data was gathered via semi-structured interview in order to both address the questions of the participating organisation and explore novel areas introduced by the participants. The interview schedule was designed collaboratively with the organisation and consulting agency and aimed to gather data related to staff understanding of the principles and functions of NVR, the impact of working with this approach, and the role of the organisation, with particular focus on staff recommendations for improvement (Appendix H). Each interview lasted approximately 60 minutes and was conducted, audio recorded and transcribed verbatim by the primary researcher.

Analysis

The data was analysed using thematic analysis (Braun & Clarke, 2006) which is well suited to the epistemological stance of critical realism. In line with Braun and Clarke (2006) the primary author first immersed themselves in the data, before identifying extracts relevant to the research questions and drawing together initial codes. These codes were grouped into potential themes which were cross referenced with the original data. A mind mapping exercise was used to organise and refine the themes bearing in mind their saliency across the data set, and to the research questions (example in Appendix I). Final

themes were identified for the purposes of this paper (Appendix J) with further refinements occurring during the writing process.

Since thematic analysis is inevitably a process of construction, secondary coding is not considered to necessarily add to research validity (Terry, Hayfield, Clarke, & Braun, 2017). Instead the primary author participated in supervisions with the second and third authors and used a reflective diary in order to consider the experiences that may have impacted.

Ethics

Particular attention was given to issues of informed consent and right of withdrawal, confidentiality, renumeration and participant wellbeing. Ethical approval was obtained from The University of Bath Psychology Ethics Committee (reference no. 18-103) and the consulting agency's Ethics Committee.

Findings

Data analysis lead to four main themes; NVR is both a Set of Processes and a Way of Being, NVR and Transformation, NVR and the Personal / Professional Divide, NVR and Organisational Support, each with a number of sub-themes (Table 2.1). Recommendations for service improvement, informed by participant suggestions and formalised in collaboration with the consulting agency are captured in Table 2.2.

Table 2.1.

Study themes, sub-themes and supporting interview data.

Theme	Sub-themes	Supporting Participant Quotes
NVR is both a Set of Processes and a Way of Being	NVR is a set of processes	P6: It's so simple and it's formulaic [...] so it's an easy formula to follow. P3: It is hard not to be that robotic response of one, two, three steps. P2: People get sloppy and lazy about it. P2: The supporters networks got so tokenistic and it was just basically the staff in the homes spamming all the other staff to send messages about young people that they barely knew or hadn't worked with. P7: You've gotta feel what's behind it and why you're doing it. It's not just like you're on shift and you gotta go and do that.
	NVR is a way of being	P7: I don't think you do NVR, I think you be NVR. P6: I see the NVR approach more of a philosophy, of a way of living than a model. P1: It's more of a mentality than any other psychological or therapeutic approach I've ever had before. P8: It's about [...] showing [...] the young people, that no matter where you come from, what you do, [...] how you go about it, we're still gonna love and care about you because you're important and you mean something. P4: NVR becomes almost like an internal moral compass.
NVR and Transformation	NVR is different	P4: We have had to spend a long-time unlearning. P5: It's just something so different to what you've ever done.
	Organisational Transformation	P2: It's completely transformed. P6: We started realising that it was gonna completely revolutionise how we look after the children. P1: We were very much consequence based led [...] "They smashed it up, how much shall we charging [sic] them" and then [...] we would often feel so powerless [...] they really didn't care about their pocket money. P1: NVR is very much about [sic] you can only control you, like you can't control the traffic, you can't control the kids, you can't control like the abusive parent, you just have to do you. P2: That was a [sic] next shift where it's like [...] let's give them [the young people] what they have a right to and that's real parents. P3: When you are doing a campaign and the house occupation type things you are all in it together and it reminds you, you're actually a team. P5: They're [new staff] doing it without even realising because [...] they're just watching what us more senior [staff] are doing.
	Professional Transformation	P2: That's what people have got from it [NVR philosophy] which enables [staff] to continue with work and dig in when it's really hard. P3: It makes you feel more like you're doing enough. P4: We're sitting there with our kids and going "we have done everything, we are burnt out, we have nothing left" [...] NVR gave us something structurally when talking about those people to continue to use so [...] you can do what you do then you leave work and you go "I've done my bit for that kid today". P3: NVR helped me just go "no I need to do something" and be proactive with it now whereas before I would have waited to be asked to. P3: People are scared of going away from the mould and then not being able to call it NVR.

		P7: I've gotta wash up, I gotta take the kids school, I've gotta go and do the shopping, then I've gotta come back [...] It's really hard to kind of juggle it all together.
	Transformation for Young People	P2: Every single intervention I have ever done has created movement. P5: It's amazing actually the difference. P8: It has its place and that's really good that we've sent them that really nice letter going "this needs to stop" but actually [...] where the kids are smashing up the house and it's constantly being smashed and we're doing nothing about it but actually we're trained to restrain and we're not doing it. Why are we not doing it?
	Working with Wider Systems	P6: It's like pulling teeth sometimes and it's like "oh god we're gonna have a session with them and they're gonna be really resistant, we're gonna have to say these same things over". P4: Because we're at the vanguard of it [...] that makes it a very lone voice so that's really hard when you're the lone voice. P6: Local authorities are still in the old tradition of working [...]most of them [...] that kind of punishment-reward thing.
NVR and the Personal / Professional Divide		P1: At the start it was like this is just something I do at work and then before you know it it's your life.
	Use of Self	P1: You kind of just all fit into the roles, you get the cool one, the quirky one, the one who does the cleaning. P1: NVR [...] connects you to the young person a lot more [...]because you're more present in that young person's life rather than just being there on shift, you're quite present with their family, with their friends, with everything that they do.
	Personal Change	P1: My [partner says] I'm a completely different person. P8: NVR's allowed me to [...] take some control back [sic] my own life. P6: I don't argue with my mum as much and I'm much better at reconciliation and overcoming that old sense of justice of "I'm going to withdraw my love now to punish you for whatever argument we've had [...] so I'd say my relationships are better.
	Personal and Professional Boundaries	P1: You come in on your own time and you support your team so even planning that or being part of that, it feels quite nice to be able to help. P4: It becomes all-consuming. P4: I don't wanna lose myself in this. When do I stop doing NVR and feel okay? P4: It's a community thing; you either buy into it or you don't so how do you half buy into it?
NVR and Organisational Support	Training	P1: It was just completely alien. P2: We'd said "this is all wrong". P4: We all thought it was gonna be some kind of sit in, hippy peace thing. P3: I couldn't get my head around that ['Reconciliation Gestures']. I was like "why am I then being nice to somebody that's just hit me?". P1: Everyone just wants to learn more about NVR and you just get this buzz. P5: We had to do this dissertation and stories and [...] that was nerve wracking for me. P6: You have to work NVR in order to really gain as much as possible from the training.

Management	P3: They are really good at helping you if you tell them you need help. P6: It focuses the management more on empowering the staff. P7: If they can [...] find out “well this home really has been going through it at the moment. We need to step in and maybe suggest some things”.
Team	P7: We are all quite supportive and we remind each other about NVR. I've been in the car with a colleague and the kid was in the back like really not being very good and I remember [name] looking at me and we looked at each other and we were like “NVR”. P8: That's what your teammates are there for [...] “Oh my god, can't believe they've just said this to me.” P1: You can't really expect some people to just kind of be NVR if they're not willing to.

Table 2.2.

Recommendations for service improvement.

Concern	Recommended Service Improvement
Tokenistic use of NVR Processes	Develop short prompts (e.g. key words) and facilitate ongoing discussions/ supervisions/ trainings to remind staff about the intention of each intervention, and the theoretical underpinnings. Provide opportunities for staff to practice translating NVR templates into their own words. When repeating an intervention support staff to make adjustments according to the changing circumstances, taking into consideration the needs of both staff and the young person. Offer extra supervision and support with persistent repetition of an intervention, where change in the young person is not apparent.
Staff Confidence	Consider ways in which daily discussions regarding NVR could be imbedded across whole organisation (not just some staff) in order to normalise the processes. Identify more opportunities to practice interventions including using role-plays. Provide further training / supervision / support with 'positive action methods'.
NVR as Time Heavy	Consider review of time required to effectively implement NVR and compare this to any changes in terms of time taken to manage and follow up serious incidents. Consider staffing changes in line with findings of review recommended above. Provide protected time on shift to plan NVR interventions. Staff to create individual short prompts (e.g. key words) which remind them of NVR to use during busy or challenging periods. Employ a full time NVR consultant / lead within the team. Where placements terminate prematurely consider opportunities for NVR processes to be maintained e.g. key staff to remain part of a 'Supporters Network'.
Sense of 'doing nothing' to address some young people's behaviour.	Use supervision / training to explore the way in which 'positive action methods' may be considered 'doing something' recognising that NVR outcomes are not contingent on change in the young person. Consider increasing 'positive action methods' where staff have a sense of 'doing nothing'. Address concerns within the team as to whether restraints should be used to manage the behaviour of some young people. Address concerns within the team as to whether the criminal justice route should be used to address the behaviour of some young people.
Working with Wider Systems	Separate the role of working with a young person and working with their family. Provide training to wider systems around the young person including schools, the police, local authorities. Develop a clearer induction process for families of young people coming into the service so that they are aware of NVR and their role. Employ a full-time coordinator for NVR family work.
Forgetting the 'Gestures'	Use training / supervision to explore the challenge for staff of using 'Gestures' in their practice.
Participating in NVR Interventions During Time Off	Only contact staff who are on shift to request participation in interventions. Expand the support network for 'Campaign of Concern' messages beyond staff, for example wider family, social workers, teachers.

Training as Academic	Consider varying the learning materials to include more visual aids e.g. instead of written examples of interventions provide filmed examples using actors as necessary. Consider ways in which staff with additional needs can be supported to complete advanced NVR training. Provide more training including regular refreshers.
Accessing Managerial Support with NVR during Difficult Periods.	Management to review home recordings in order to identify when a core team may be experiencing a difficult period. Management to take proactive approach to offering NVR support during difficult periods for individual homes. Management to work shifts in homes in order to ensure full understanding of home staff experience.
Split in Team as to Relationship with NVR	Use training / supervision / team meetings / away day to explore team split with regards to NVR. Consider the needs of both those who are and are not currently invested in NVR as a way of working. Change shift patterns to allow staff more time off. Increase pay.

NVR is both a Set of Processes and a Way of Being

Participants described NVR as both a set of processes and a way of being in the world.

Set of processes. Participants noted that NVR provided a clear set of processes, a concrete plan of action in the face of challenging work. Some suggested that it was helpful that many of these processes such as the 'Announcement' were formulaic, even scripted, and so could be easily followed and put into practice.

P6: It's so simple and it's formulaic [...] so it's an easy formula to follow.

However, three of the participants expressed concern that the availability of set formulas could lead to 'robotic' (P3), 'lazy' (P2) or disingenuous interventions, for example mobilising a 'Supporters Network' becoming 'spamming' anyone on shift (P2). It was agreed that in order for NVR to be effective the practitioners needed to be creative with the processes and also understand and invest in the meaning behind them since the young people could easily recognise when this was lacking.

Participants recommended personal or team prompts to remind staff of the meaning behind interventions. Another suggestion was for staff to practice translating NVR templates into their own language in order to reduce tokenistic replication. Finally, one participant suggested that interventions should not be regularly repeated if they do not generate change in the young person.

Way of being. Alongside a concrete methodology, NVR was also described as an overarching way of being in the world.

P7: I don't think you do NVR, I think you be NVR.

NVR was a ‘philosophy’ (P6), a ‘mentality’ (P1) and an embodied practice. Particularly striking was the repeated description of NVR as a way of demonstrating love for the young people. As such NVR was understood as an ethical as well as functional practice.

NVR and Transformation

Participants described ways in which NVR had transformed the organisation, the professional role and the experience of the young people in their care.

NVR is Different. The participants positioned NVR as an entirely different way of working compared to mainstream models of care meaning that staff had to ‘unlearn’ (P4) previous experience.

Organisational transformation. NVR marked a distinct shift in the organisation.

P2: It's completely transformed.

Participants described the organisation as previously ‘entrenched’ in practices which normalised violence and used a consequential model to try and control the young people’s behaviour.

P1: We were very much consequence based led [...] “They smashed it up, how much shall we charging [sic] them” and then [...] we would often feel so powerless [...] they really didn’t care about their pocket money.

This practice was now seen as ‘punitive’ and ineffective with NVR offering an alternative in which changing the young person was no longer the imperative.

NVR had fundamentally changed the role of the organisation from a residential unit to a family home. In line with an embodied practice, participants noted the way in which

NVR had transformed the language of the organisation in a shift towards a less institutional vocabulary, a shift which was apparent across interviews with 'team' as 'family, 'colleagues' as 'friends' and 'staff' as 'parents'.

Participants also described how NVR had led to an increased togetherness in the team. NVR was seen as imbedded with staff using it with each other as well as the young people, and newer members practising prior to official training.

Professional Transformation. Participants consistently noted that NVR had transformed their professional role for the better. Both the processes and the philosophy were seen to have enabled staff to better manage an extremely challenging role. Two participants in particular noted that by moving the focus away from the young people's behaviour NVR provided clearer therapeutic boundaries so that they knew that they were 'doing enough' (P3).

P4: We're sitting there with our kids and going "we have done everything, we are burnt out, we have nothing left" [...] NVR gave us something structurally when talking about those people to continue to use so [...] you can do what you do then you leave work and you go "I've done my bit for that kid today".

One participant wondered whether this might lead to a decrease in professional burnout, and another felt that NVR had improved staff retention.

Participants noted that NVR had led to an increase in their professional autonomy with a new impetus on them to initiate pieces of work. Whilst some positioned this autonomy as welcome, a consistent theme was the confidence NVR demands. Participants explained how challenging it was not to respond to abuse in the moment and NVR was described as seeming 'complicated' (P8) and 'scary' (P5), at odds with descriptions of its

simple, formulaic processes. Limited opportunities to practice the larger interventions, fear of experimentation and personal anxieties were all sited as barriers. Ongoing practice including role-plays and further imbedding NVR within daily discussions across the organisation were both sited as opportunities to develop confidence.

Finally, participants described NVR as time heavy with increased workloads and difficulty integrating interventions into the day to day running of a home. Whilst participants acknowledged the reality of organisational pressures, protected time to plan NVR interventions, increased staffing and a full-time NVR consultant within the team were all suggested as ways to address this challenge. Short NVR 'prompts' were also raised as potential aids during busy periods.

Transformation for Young People. Whilst the majority of participants noted that NVR did not focus on changing the young person, none the less change appeared significant.

P2: Every single intervention I have ever done has created movement.

Participants described how NVR had improved their relationships with the young people, led to a reduction in violence, an increase in therapy uptake and longer placements. Significantly, this transformation could take time which some participants acknowledged could be extremely challenging, a challenge compounded for one participant whenever placements were terminated prematurely.

In contrast to descriptions of transformation, participants also expressed concern that NVR could feel inactive. For some this meant talking about NVR more than doing it. However, one participant described NVR as 'doing nothing' (P8) when the young person's behaviour did not change, a frustration which they believed others shared. The solution for

this participant was recourse to potentially more restrictive methods such as restraint or involving the police. The latter was raised by two other participants as a dilemma when working with NVR.

Working with Wider Systems. The transformation of organisation and staff was seen to have had significant implications for working with the wider systems around the young person.

Many participants focused on work with families. For some NVR had improved this by centering the family's role through 'Announcements' or 'Supporters Networks'. However, participants also described difficulties with resistance, explaining NVR and managing the needs of both young people and their families alongside limited time and resources.

P6: It's like pulling teeth sometimes and it's like "Oh God we're gonna have a session with them and they're gonna be really resistant, we're gonna have to say these same things over".

Some participants also described the way in which working with NVR separated the organisation from other statutory services who continued to endorse behavioural models of care. This had led to the organisation feeling like a 'lone voice' (P4) and conflict as to how to best support young people.

Participants suggested that separating the role of working with a young person and their family, clarifying the induction process for families so that they have a better understanding of NVR and their role, and employing a full-time coordinator for family work could all improve the way in which the organisation engaged families. Developing the understanding of key statutory organisations including schools, the police and local

authorities through NVR training was also identified as a way to improve collaborative work with wider systems.

NVR and the Personal / Professional Divide

A repeated theme running throughout all interviews was the way in which NVR challenged the divide between the participants' personal and professional worlds.

P1: At the start it was like this is just something I do at work and then before you know it it's your life.

Use of the Self. NVR was seen to harness each individual's personality in the therapeutic endeavour. Emotional investment was positioned as key and NVR was seen not simply to demonstrate but to generate love and care.

P1: NVR [...] connects you to the young person a lot more [...]because you're more present in that young person's life rather than just being there on shift, you're quite present with their family, with their friends, with everything that they do.

Conversely three of the participants noted that at times 'Reconciliation Gestures' could be forgotten.

Personal Change. Just as NVR was seen to have transformed the organisation, it had transformed the participants, with many explaining that they felt calmer. All described using NVR outside of work and most gave examples of where they had found it helpful with friends and family.

P8: NVR's allowed me to [...] take some control back [sic] my own life.

Personal and Professional Boundaries. Whilst the role of NVR in participants' own lives was seen as positive, the dismantling of traditional work / home boundaries did pose some complexities and contrasted with accounts of NVR providing clear therapeutic limits. In particular participants described the way in which staff were asked to contribute to NVR interventions during their time off, for example via a 'Campaign' message or 'Sit In'. Whilst one participant spoke positively about this in terms of feeling able to 'support your team' (P1) two others expressed concern about NVR becoming 'all consuming' (P4).

P4: I don't wanna lose myself in this. When do I stop doing NVR and feel okay?

Participants appeared to find it difficult to think of solutions to this dilemma, noting the way in which the use of the whole self was part of what enabled NVR to function.

P4: It's a community thing; you either buy into it or you don't so how do you half buy into it?

However, one practical improvement was for the organisation to only contact those on shift to participate in an intervention.

NVR and Organisational Support

Participants identified a number of ways in which the organisation had impacted on their experience of NVR through training, managerial and team support.

Training. All but one participant described strong, initial resistance to NVR. NVR seemed 'alien' (P1), 'all wrong' (P2) and a 'hippy peace thing' (P4) with the 'Reconciliation Gestures' seeming particularly problematic.

Despite early concerns the participants were extremely positive about the training with role-plays and stories seen as particularly helpful. Some concerns were raised about the length of training and the amount of information contained. The training could be 'academic', with two participants explaining that the written element of more advanced training had been a challenge.

Alongside training, participants described how seeing NVR in action and putting it into practice had been important in their understanding.

P6: You have to work NVR in order to really gain as much as possible from the training.

Participants consistently recommended further training and opportunities to practice their skills. Questions were also raised about the potential for visual alternatives to written training materials and more diverse assessment methods in order to address the risk of academic elements becoming a barrier.

Management. Participants consistently reported feeling well supported by their management. They noted how there was a large amount of supervision and that the management were also available on an ad hoc basis should staff require support with an NVR intervention. For two participants NVR explicitly directed management attention towards staff needs.

P6: It focuses the management more on empowering the staff.

However, the demands of the job meant that some participants can forget or feel unable to ask for support. A significant theme was the need for management to recognise when staff were struggling and at those times be more proactive in suggesting NVR interventions.

Team. Participants explained that there were a large number of opportunities to meet as a team and these were framed as a useful way in which to share practice. Working together was seen as crucial. For one participant positive relationships ensured that the team could function well as a 'Supporters Network'. Team members could also 'remind each other' about NVR.

P7: We are all quite supportive and we remind each other about NVR. I've been in the car with a colleague and the kid was in the back like really not being very good and I remember [name] looking at me and we looked at each other and we were like "NVR".

For another, their team helped them to contain the strong feelings provoked by abusive interactions with young people, rather than escalating in the moment. However, some participants reported that not all staff are invested in NVR with the risk of individuals feeling 'unsupported' or it being the same few participating in interventions in their own time. For one participant the experience of NVR as a 'way of being' compounded this challenge.

P1: You can't really expect some people to just kind of be NVR if they're not willing to.

Participants suggested that improvements to pay and working hours might help to address this split.

Discussion

The aim of this study was to contribute to the growing evidence base for NVR and in particular investigate professional experiences of NVR in the care sector with a mind to improving its use in the participating service. The participants described NVR as both a set of processes and a way of being in the world thus clearly reproducing the socio-political fundaments of NVR as both directed acts of resistance and embodied, loving practice (Omer & Lebowitz, 2016). A novel finding is the risk of NVR's seeming formulaic simplicity leading to unthinking replication which was seen to undermine the underlying principles and so efficacy.

Concern was raised regarding the repetition of interventions where there is no apparent change in the young person's behaviour. This is at odds with the premise that NVR is not contingent upon the young person, (Weinblatt & Omer, 2008) and further that it is *through* persistent repetition that change may occur (Omer, 2004). The finding points to the potential challenge for caregivers of looking beyond change in the young person for measures of success and increased supervision and support when repeating interventions may be of benefit.

NVR was described as transformative for the organisation, the staff and the young people. It was seen to have clear clinical utility and was positioned as a welcome alternative to behavioural models of care thus replicating findings elsewhere (Omer & Lebowitz; 2016; Newman et al, 2014; Weinblatt & Omer, 2008) Reports of increased 'togetherness' also add to the evidence that NVR can improve the workplace environment in the care sector (Van Gink et al., 2018; Van Gink et al., 2017).

Staff, like parents (Atwood et al., 2019) reported increased autonomy. However, this was problematised by issues of confidence particularly when planning larger interventions, again a concern found elsewhere (van Gink et al., 2018). As such

organisations may need to consider more focused training and support with 'positive action methods' such as the 'Sit In' and 'Announcement'.

An interesting finding is the concern that despite providing concrete plans for action, at other times NVR can feel like 'doing nothing'. The recourse to restraining requires careful thought and appears to exemplify Van Gink et al's (2017) finding that during challenging periods professionals are more likely to revert to historic practices.

The challenge of engaging with the wider system is a repeated difficulty (Attwood et al., 2019; Hicks, Jakob, & Kustner, 2019; Omer et al., 2013). Participants echoed recommendations made elsewhere that all organisations around the young person should be trained in NVR (Van Gink, 2019; Van Gink et al., 2017) which speaks to the tensions of transforming practice in the context of underfunded and fractured services.

The participants' accounts of the personal / professional dilemma add a number of novel findings to the literature including the use of individual personalities in the therapeutic endeavour and the importance of emotional investment. The capacity of NVR to generate loving feelings replicates the experiences of parents (Newman et al., 2014) and reflects the child-focused NVR practices introduced in the organisation (Jakob, 2018a). Given this finding it is perhaps surprising that the 'Reconciliation Gestures', a key process by which caregivers demonstrate their unconditional love (Jakob, 2018a; Omer, 2004) were forgotten by some. Since parents have reported finding 'Reconciliation Gestures' particularly helpful (Hicks, Kustner, & Jakob, 2019) this 'forgetting' may point to the complexity of translating NVR into the workplace where parenthood is consciously constructed and necessarily framed by conditions of employment. Further consideration may therefore need to be given to the meaning of 'Reconciliation Gestures' for professionals and how these are integrated into their NVR practice.

The participants described multiple ways in which NVR had impacted on their sense of self and their personal relationships. Particularly significant was the finding that NVR challenged the traditional boundary between work and home. This appeared an ongoing tension without a clear solution given the fundamental premise of NVR as a 'way of being'.

Overall the findings here suggest that NVR creates a liminal role between professional and parent and it is interesting that a similar experience of shifting boundaries has been reported by supporters (Hicks, Jakob, & Kustner, 2019). This third space which challenges normative ideas of best practice invites further investigation in order to understand the therapeutic function and personal implications.

Participants described a range of ways in which the organisation had impacted on their experience of NVR. The reports of initial resistance in training are consistent with experiences elsewhere (Van Gink et al., 2019) suggesting that early scepticism may be an expected part of the trajectory, perhaps because of the contrast with mainstream models. Whilst participants spoke enthusiastically about their training, a significant concern was the potential for academic components to disadvantage or turn some away and organisations may need to consider how to support those with additional needs to pursue advanced training.

Participants consistently noted the support of their management. However, just as parents can find it difficult to seek support in the face of abuse (Coogan, 2014), participants explained that they require more proactive input during difficult periods. An interesting finding is NVR seeming to focus management on staff needs and further research into how NVR impacts upon leadership is of interest.

Team support was seen as central to working with NVR, particularly in terms of having somewhere to contain the strong feelings provoked by aggression. This points to

the unique difficulties that may be experienced by parents who do not necessarily have such immediate sources of support.

Finally, a significant finding was the reported split within the team with regards to the use of NVR. It is important to consider the impact of simultaneously working with resistance from young people, from the wider systems and also from teammates. Goodwill and enthusiasm may not be enough (Van Gink et al., 2019) and organisations may need to consider significant, ongoing investment in teams in order to manage these challenges.

Limitations

The small sample size limits the generalisability of the findings. Although it has not been possible to report on participant characteristics it is important to note that these were limited in terms of age, ethnicity and gender. The study was designed as a service improvement project which necessarily directed the interview framework. Whilst the experiences reported were consistently positive both in terms of NVR and the organisation, more critical experiences were alluded to and capturing these would no doubt complexify the findings. The fact that this was an opt in study, with participants requested to take part in their own time is likely at play here. Finally, data analysis was conducted by one researcher and firm conclusions should be tempered by appreciation for the personal and socio-political context in which they were constructed.

Reflections

I conducted this piece of research as a white, middle class British woman with no lived experience of negotiating the British care system either as a young person, parent or professional. I do have experience of working in the forensic sector where professional boundaries are positioned as paramount to best practice, thereby heightening my attention

to the ways in which NVR challenges these boundaries. Just as the participants described a transition in their relationship with NVR, I too found I shifted from a position of uncertainty to enthusiasm as I was moved by the political fundaments and the commitment expressed by the participants. Finally, it is interesting to note that the analysis was conducted in the context of non-violent resistance re-emerging in public consciousness through the climate change movement, and again my political alignment here likely affected this research.

Conclusion

The aim of this study was to contribute to the growing evidence base for NVR and in particular investigate professional experiences of NVR in the care sector. Findings indicate that NVR is experienced as both a clear set of processes and a way of being in the world. NVR was seen to have transformed the organisation, the professional role and the experience of the young people and to challenge the traditional boundaries of the personal and professional, creating a third space which warrants further investigation. Training, managerial and team support were all seen as central to working in this way with ongoing tension as to managing resistance both within and outside the organisation.

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Main Research Project

‘Danny’s not well’; Public Understanding of Intimate Partner Violence in the Context of Military Veteran Status and PTSD

Author:	Jessica Mackinnon Jm2561@bath.ac.uk
Internal Supervisors:	Dr Rachel Paskell, Professor Catherine Hamilton-Giachritsis (University of Bath)
Word Count:	5059

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‘Danny’s not well’; Public Understanding of Intimate Partner Violence in the Context of Military Veteran Status and PTSD

Intimate Partner Violence (IPV) is a significant public health concern, causing profound psychological and physical harm (Home Office, 2019) and effecting approximately 4.2% of working age adults in England and Wales (Office for National Statistics, 2019a). The extent to which rates of IPV are higher in the military remains unclear (Rentz et al., 2006; Sparrow et al., 2018; Taft, Wadsworth & Riggs, 2011a). However, there is strong evidence that where it does occur the risk of physical harm is greater (Aronson, Perkins & Olson, 2014; Hoyt, Wray, & Rielage, 2014).

Military relationships may be subject to unique stressors such as long periods of separation, frequent relocation and financial dependency (Jones, 2012) which can continue to play out long after a person has retired from service (Burland & Lundquist, 2013; Sparrow, Kwan, Howard, Fear, & MacManus, 2017) not least due to the challenge of transitioning into civilian life (Binks & Cambridge, 2018; Williamson, 2012). As a necessity military culture normalises the use of instrumental violence (Bradley, 2007), which may generalise across contexts (Jones, 2012; Lysova, Alexandra, & Straus, 2019). Hypermasculine ideals may also foster aggression and abuse (Herrero, Rodriguez & Torres, 2017; Taft, Watkins, Stafford, Street, & Monson 2011b).

A further complexity is the role of post-traumatic stress disorder (PTSD), which occurs at a higher rate in the military than in the general population, and at higher rates in veterans than serving personnel (NHS Digital, 2014; Stevelink et al., 2018). PTSD describes a cluster of symptoms including reexperiencing of trauma incidents, heightened arousal, and distress (APA, 2013). A relationship between PTSD, particularly symptoms of hyperarousal (Savarese, Suvak, King & King, 2001) and IPV has been consistently

demonstrated both in the military (Gerlock, Szarka, Cox & Harel, 2016; Hoyt et al., 2014; Taft et al., 2011b) and more generally (Bell & Orcutt, 2009; Shorey, Febres, Brasfield & Stuart, 2012).

The interplay between PTSD and IPV has significant implications for intervention. Mental distress may be particularly stigmatised in military culture, preventing people from accessing treatment (Aronson et al., 2014; Greene-Shortridge, Britt, & Castro, 2007) with trauma symptoms in turn limiting the efficacy of IPV intervention (Taft et al., 2011a). Military personnel may be most likely to disclose psychological difficulties to family and friends (Stevelink et al., 2019) and so the social network around a military couple can be vital in facilitating access to services (Aronson et al., 2014).

In 2018 the Ministry of Defence published their Domestic Abuse Strategy. This identifies the need for awareness raising to ensure that both military personnel, and community agencies are aware of the specificities of IPV within military relationships. The strategy sits alongside the Domestic Abuse Bill 2019-21 (Home Office, 2020a), which will broaden the definition of abuse to include elements such as control and provide funding to improve public understanding (Home Office, 2020b). Public understanding is therefore central to current policy, both in the military and beyond.

There is a well-established evidence base with regards to public understanding of IPV. Physical and sexual abuse in particular are recognised as unacceptable (Carlson & Worden, 2005). Demographics such as age, gender, ethnicity, and experience of abuse may have some bearing on beliefs, although findings are inconsistent and risk stereotyping groups (Carlson & Worden, 2005; Copp, Giordano, Longmore & Manning, 2019; Gracia & Tomás, 2014; Wagers, Wareham & Boots, 2017; Worden & Carlson, 2005).

More convincing is the evidence that understanding is mediated by contextual factors leading to what Lelaurain et al. (2003) term 'conditional logics' by which the

public navigate ambivalence regarding abuse by citing factors which minimise or legitimise behaviour. People may site substance use or psychological factors (Worden & Carlson, 2005), prioritise physical risk, (Taylor & Sorenson, 2005), minimise female violence (Carlson & Worden, 2005; Sorenson & Thomas, 2009) and blame victims for remaining in violent relationships (Worden & Carlson, 2005). As such, myths that legitimise abuse remain latent if not overt in public discourse (Lelaurain et al., 2003; Refuge, n.d.). This is significant given that victims may internalise myths effecting their capacity to seek help (Barnett, 2001) and rely more on personal networks than the law in taking action (Copp et al., 2019).

Public discourse is also reproduced across health and social care settings by professionals who inevitably act from within their social context. For example, health care professionals may find it difficult to recognise IPV (Bradbury-Jones, Taylor, Kroll, & Duncan, 2014), feel unable to manage disclosure (Buck & Collins, 2007; Ramsey et al., 2012) or frame abuse as a private, even asked-for event (Saletti-Cuesta, Aizenberg & Ricci-Cabello, 2018) and the police may focus on physical harm (Robinson, Pinchevsky & Guthrie, 2018). The reproduction of public beliefs in professional contexts again limits disclosure (Barnett, 2001; Bradbury-Jones et al., 2014).

Taken together these findings indicate the significant role of public understanding in enabling disclosure and so reducing IPV. However, little is known about understanding with regards the specific issues facing military veteran couples. Conceivably abuse may be reframed through the lens of trauma (Worden & Carlson, 2005); equally ideas regarding military culture as aggressive (Taft et al., 2011b) may align with wider discourses about who perpetrates violence and why. Public discourse will impact upon the support network around a relationship but is also likely to be reproduced by professionals and within relationships themselves. This is particularly pertinent given the role of civilian services

who are required to support veterans but may lack understanding of military context (Home Office, 2020a). Research is therefore needed in order to inform campaigning and intervention with this community.

Current Study

The current study aims to address this need by comparing IPV recognition and discourse across PTSD and no PTSD diagnosis, and across military veteran and civilian status in a general sample. As a scoping study, no prediction as to direction of effect was possible. Instead two broad hypotheses were made:

- The extent to which the public recognised an incident of IPV would be affected by whether the perpetrator is a military veteran with a diagnosis of PTSD compared to a military veteran without PTSD; a civilian worker with PTSD and a civilian worker without PTSD.
- Military veteran status and diagnosis of PTSD would impact on public discourse regarding an incident of IPV.

The study also considered variance due to participant demographic factors and relevant experience in line with the wider literature (Carlson & Worden, 2005). However, given the mixed findings no hypotheses were made regarding presence or direction of an effect.

Method

Ethical Approval

The study received ethical approval from the University of Bath Psychology Research Ethics Panel (reference 19-282) (Appendix L).

Design

The study employed a cross-sectional, between groups, mixed methods design in which all participants completed a quantitative measure and half completed a qualitative task.

Participants

Adults aged 18+ currently residing in the UK were recruited via participation panels and social media (N=269). Demographic data was collected with regards to age, gender, ethnicity and sexual orientation (see Table 3.1). Age ranged from 20-75 (mean 38.7, SD 11.5) and was normally distributed. Ethnicity (85.5% White British) was somewhat representative, where 80.5% of the population in England and Wales are recorded as White British (Office for National Statistics, 2019b) but did not adequately capture the range of ethnic identities in the UK. Sexual Orientation was reasonably well matched (82.2% heterosexual) (Office for National Statistics, 2020). There was a clear overrepresentation of female participants (79.9%).

Table 3.1.

Demographic Data (N=269)

Category	**R, M, SD**
Age (n=268)	20 – 75, 38.72, 11.475
Gender	**n (%)**
Male	52 *(19.3)*
Female	215 *(79.9)*
Other	2 *(.7)*
Ethnicity (n=268)	
White – Welsh / English / Scottish / Northern Irish / British	230 *(85.8)*
White – Irish	1 *(.4)*
Any Other White Background	21 *(7.8)*
Asian or Asian British - Chinese	1 *(.4)*
Asian or Asian British – Indian	8 *(3)*
Asian or Asian British - Pakistani	1 *(.4)*
Arab	1 *(.4)*
Mixed White & Black Caribbean	2 *(.7)*
Mixed White & Asian	2 *(.7)*
Any Other Mixed Background	1 *(.4)*
Sexual Orientation (n=267)	
Heterosexual	221 *(82.8)*

Gay / Lesbian	21 *(7.9)*
Bisexual	22 *(8.2)*
Other	3 *(1.1)*

Questions about relevant experience (Appendix M) were used to capture professional, direct personal and indirect personal experience of IPV, PTSD and military service. Summary statistics (Table 3.2) showed that participants had a high level of professional experience across IPV, PTSD and military service. This was particularly notable in terms of professional experience of working with someone who has experienced IPV (50.6%) and PTSD (43.9%). However, there was also a high level of 'indirect' personal experience (i.e., supporting someone) with 52.8% for IPV and 39% for PTSD respectively, plus direct experience of IPV (29.7%) and of PTSD (18.6%) were both notably higher than population estimates (NHS Digital, 2014; Office for National Statistics, 2019).

Table 3.2.

Summary of participant relevant experience (N=269)

		Experienced IPV N(%)	Perpetrated IPV N(%)	Experienced PTSD N(%)	Partner experiencing PTSD N(%)	In the military N(%)	Partner in the military N(%)
Professional Experience	Yes	136 *(50.6)*	80 *(29.7)*	118 *(43.9)*	54 *(20.1)*	63*(23.4)*	44 *(16.4)*
	No	131 *(48.7)*	184 *(68.4)*	149 *(55.4)*	210 *(78.1)*	205 *(76.2)*	224 *(83.3)*
	Prefer not to say	2 *(.7)*	5 *(1.9)*	2 *(.7)*	5 *(1.9)*	1 *(.4)*	1 *(.4)*
Indirect Personal Experience	Yes	142 *(52.8)*	37 *(13.8)*	105 *(39)*	42 *(15.6)*	46 *(17.1)*	41 *(15.2)*
	No	127 *(47.2)*	231 *(85.9)*	162 *(60.2)*	225 *(83.6)*	222 *(82.5)*	228 *(84.8)*
	Prefer not to say	0 *(0)*	1 *(.4)*	2 *(.7)*	2 *(.7)*	1 *(.4)*	0 *(0)*
Direct Personal Experience	Yes	80 *(29.7)*	10 *(3.7)*	50 *(18.6)*	25 *(9.3)*	3 *(1.1)*	119 *(7.1)*
	No	184 *(68.4)*	257 *(95.5)*	215 *(79.9)*	242 *(90)*	265 *(98.5)*	250 *(92.9)*
	Prefer not to say	5 *(1.9)*	2 *(.7)*	4 *(1.5)*	2 *(.7)*	1 *(.4)*	0 *(0)*

Measures

A rating scale and a story completion task were designed for specific use in this study (Table 3.3).

Table 3.3.

Study measures

Measure	Aim	Content
Intimate Partner Violence (IPV) Rating Scale	To test the hypothesis that the status of a perpetrator as a military veteran experiencing PTSD would impact upon public recognition of IPV.	A visual Likert style sliding scale of 0 – 10 recorded to one decimal place which asked participants to rate the extent to which they thought that behaviour described in the study story constituted IPV (Appendix N)[2]
Story Completion Task	To test the hypothesis that military veteran status and diagnosis of PTSD would impact on public discourse with regards to an incident of IPV with a mind to the ways in which this data might contextualise the quantitative findings.	Instructions to complete the study story imagining that participants were a friend of the victim offering advice (generating text data for qualitative analysis) (Appendix O).

Procedure

The study was hosted online by Qualtrics. Participants were recruited via The University of Bath Psychology Department Research Community Participation Panel, social media (Twitter and Facebook), and using snowballing (See Appendix P for Recruitment Poster). The study focus was described as 'work, wellbeing and relationships' in order to limit priming with regards to IPV content. An information page provided further limited details (Appendix Q) including a warning that participants would be requested to read an account of an argument in which a man becomes very angry bearing in mind the potential to cause distress. Following informed consent, demographic

[2] Domestic abuse was used in the study text recognising that this is more commonly used in lay parlance than intimate partner violence.

information was collected. Participants were then randomly allocated to one of the four conditions:

- Condition 1: Military Veteran, PTSD (COND1 MVET PTSD)
- Condition 2: Military Veteran, No PTSD (COND2 MVET NPTSD)
- Condition 3: Control (Construction Worker), PTSD (COND3 CW PTSD)
- Condition 4: Control (Construction Worker), No PTSD (COND4 CW NPTSD)

Construction work was identified as the civilian role (control) with parallels in terms of being a male dominated industry with positions across social class and educational attainment.

In each condition all participants were first asked to read the study story. The story described a married heterosexual couple, Danny and Naomi having an argument during which Danny, having hidden Naomi's phone, then punched a wall and threw the phone in her direction. The story ended with Naomi describing the incident to her friend Steph and asking for advice. The story thus contained clear evidence of IPV, namely control (hiding the phone) and physical threats (punching the wall and throwing the phone). In each condition the story was identical except for the job role and diagnostic status of Danny, which were manipulated as previously outlined. (Appendix O).

Half of the participants in each condition were next randomly allocated to the story completion task. Story completion is a novel method for generating qualitative data. It is well suited to between groups comparison as IVs can be manipulated within story prompts. It also provides a distancing effect allowing sensitive subjects to be more safely explored and potentially limiting desirability affects which can be a concern in the wider IPV literature (Clarke, Hayfield, Moller, Tischner, & the Story Completion Research Group, 2017; Visschers, Jaspaert, & Vervaeke, 2017). Participants were asked to complete the

story as if they were Steph, responding to Naomi's request for advice and were instructed to write at least ten lines in order to generate rich data for qualitative exploration.

All participants were then requested to complete the IPV rating scale and relevant experience questionnaire. At every stage an 'exit study' button was available, redirecting participants to a debrief which included details of relevant agencies, thereby ensuring that it was possible to access support without needing to complete the study. The debrief (Appendix R) was provided to all participants following study completion.

Data Analysis Plan

Quantitative data. A power calculation was completed using G*Power. Based upon Cohen's (1992) standard effect sizes and alpha of 0.05 G*Power recommended a sample of 65 for a medium effect and 390 for a small effect. As such the study was adequately powered to identify a small-medium and medium effect.

Exploratory analysis identified outliers in Conditions 1 and 3, negative skew across all four conditions, and kurtosis in Condition 1. As such assumptions of normal distribution were not met. However, given the mixed evidence as to the requirement of normal distribution when calculating an F-statistic (Field, 2018) and debate as to acceptable levels of skew and kurtosis (Bandalos, 2018; Morgan, Griego, & Gloeckner, 2000) a 2 X 2 ANOVA was employed to calculate main and interactive effects of Job Role (Military Veteran / Construction Worker) and Diagnostic status (PTSD / No PTSD) (independent variables) on IPV rating (dependent variable). In order to enhance robustness parameter estimates were based on 1000 bootstrapped resamples (Field, 2018). Simple effects were then calculated using independent t-tests, bootstrapped at 1000.

A secondary analysis was completed in order to identify any significant impact of demographic or relevant experience variables on IPV rating. An ANCOVA (with parameter estimates bootstrapped at 1000) was performed with each variable entered into

the model separately. Again significant findings were followed up with a calculation of simple effects using independent t-tests bootstrapped at 1000.

Qualitative data. Approximately half of participants across conditions (n=123) were randomly allocated to the story completion task in line with numbers recommended for this method (Clarke et al., 2017).

Data was uploaded to NVivo and analysed first using thematic analysis as outlined by Braun, Clarke and Hayfield (2015) in order to explore public discourse with regards to IPV and any impact of military veteran status and PTSD diagnosis. The first author immersed themselves in the data before identifying initial extracts across all four conditions relevant to the research question and labelling initial codes. Codes were then drawn together into themes and sub-themes. The data was next split according to condition and cross-referenced with the initial themes to check that meaning was adequately captured and no condition specific themes were missed. This was an iterative process in which codes were also discussed with the secondary supervisor in order to reflect upon data representation and relevance. Finally, frequency analysis of coding was completed in order to identify any differences between groups in terms of the prominence of themes.

Results

Results with regards to quantitative analysis of the IPV rating and qualitative analysis of the story completion task are presented below.

IPV Rating

Summary statistics for the IPV rating are provided in Table 3.4. The highest mean IPV rating was found in COND4 (CW NPTSD) (8.84/10 where 10 means the behaviour is 'definitely domestic abuse'; Range; 4.7-10; SD 1.45) but in all conditions means were weighted towards IPV recognition (COND1 MVET PTSD: Mean 8.74; Range 2.8-10; SD

1.63, COND2 MVET NPTSD: Mean 8.46; Range 4-10; SD 1.56, COND3 CW PTSD: Mean 7.93; Range .9-10, SD: 2.19) leading to data skew, as previously discussed. In all conditions the maximum IPV rating (10/10) was given indicating that some participants in each recognised that the behaviour definitely constituted abuse.

Table 3.4

Summary statistics (N=269)

		COND1 MVET PTSD N=67 *(24.9%)*		COND2 MVET NPTSD N=67 *(24.9%)*		COND3 CW PTSD N=66 *(24.5%)*		COND4 CW NPTSD N=69 *(25.7%)*	
		Statistic	Std. Error	Statistic	Std. Error	Statistic	Std. Error	Statistic	Std. Error
Mean		8.736	.1988	8.461	.1901	7.933	.2699	8.842	.1749
95% Confidence Interval for Mean	Lower Bound	8.339		8.082		7.394		8.493	
	Upper Bound	9.133		8.841		8.472		9.191	
Median		9.300		8.800		8.200		9.800	
Variance		2.648		2.422		4.807		2.111	
Std. Deviation		1.6273		1.5564		2.1924		1.4530	
Minimum		2.8*		4.0		.9*		4.7	
Maximum		10.0		10.0		10.0		10.0	
Range		7.2		6.0		9.1		5.3	
Skewness		-1.500	.293	-.921	.293	-1.062	.295	-1.040	.289
Kurtosis		2.039	.578	.189	.578	.652	.582	.044	.570

*Significant outliers as identified by box plots.

A 2X2 ANOVA showed no significant main effect of Job Role ($F[1, 265]=1.002$, $p>0.05$) or Diagnostic Status ($F[1,265]=2.265$, $p>0.05$) on IPV rating (Table 3.5). However, a significant though small interaction between Job Role and Diagnostic Status accounted for 2.9% of variance ($F[1,265]=7.888$, $p<0.01$, partial $n^2=0.029$). Overall the fit of the model was weak ($r^2=.040$) meaning that the large majority of variance was due to factors not accounted for in the study design.

Table 3.5.

Analysis of main and interactive effects.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	33.091[a]	3	11.030	3.697	.012	.040
Intercept	19398.641	1	19398.641	6501.806	.000	.961
Job	2.988	1	2.988	1.002	.318	.004
Diagnosis	6.758	1	6.758	2.265	.134	.008
Job*Diagnosis	23.536	1	23.536	7.888	.005	.029
Error	790.648	265	2.984			
Total	20248.790	269				
Corrected Total	823.739	268				

[a]R Squared = .040 (Adjusted R Squared = .029)

A test of simple effects (Table 3.6) indicated that job role had no significant impact on IPV rating where there was no diagnosis of PTSD ($t[1,134]=-1.476$, $p>0.05$) meaning that participants were equally likely to recognise IPV across job roles where there was no diagnosis of PTSD. However, the impact was trending towards significance (using Bonferroni corrections) where there was a diagnosis of PTSD ($t[1,131]=2.399$, $p=0.018$) with participants giving a higher IPV rating where the perpetrator was a MVET. This means that participants were more likely to recognise IPV when the perpetrator was a MVET with PTSD than a CW with PTSD.

Diagnostic status had no significant impact in the MVET group ($t[1,132]=0.998$, $p>0.05$) meaning that participants were equally likely to identify IPV perpetrated by a MVET whether or not they had a diagnosis of PTSD. However, in the CW group a significant difference was found ($t[1,133]=-2.850$, $p=0.005$) with participants giving a higher IPV rating where there was no diagnosis of PTSD. This means that when the perpetrator was a CW the participants were more likely to recognise IPV when there was no diagnosis of PTSD.

Table 3.6

Tests of simple effects.

	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Job Role							
PTSD	2.399	131	.018	.8025	.3345	.1409	1.4641
NPTSD	-1.476	134	.142	-.3808	.2581	-.8913	.1297
Diagnostic Status							
MVET	.998	132	.320	.2746	.2751	-.2695	.8188
CW	-2.850	133	.005	-.9087	.3188	-1.5393	-.2781

Covariates

The secondary analysis (ANCOVA) indicated that none of the demographic variables impacted significantly on variance in IPV rating. In terms of relevant experience, only professional experience of working with people who have experienced IPV (PEWPIPV) was shown to have a significant impact on IPV rating, accounting for 2.7% of variance ($F[1,262]=7.398$, $p=0.007$, partial $n^2=0.027$). The significant interaction of Job Role and Diagnostic Status held ($F[1,262]=10.316$, $p=0.001$, partial $n^2=0.038$). The model fit though improved, remained weak ($r^2=.071$) (Table 3.7.).

Table 3.7

Analysis of covariance with professional experience of working with people who have experienced IPV as a covariate.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	57.265[a]	4	14.316	4.982	.001	.071
Intercept	8828.748	1	8828.748	3072.342	.000	.921
PEWPIPV	21.260	1	21.260	7.398	.007	.027
Job	2.619	1	2.619	.912	.341	.003
Diagnosis	6.009	1	6.009	2.091	.149	.008
Job*Diagnosis	29.645	1	29.645	10.316	.001	.038
Error	752.889	262	2.874			
Total	20172.370	267				
Corrected Total	810.154	266				

[a]RSquared = .071 (Adjusted R Squared = .056)

An independent t-test (bootstrapped at 1000) was performed in order to identify the direction of the relationship between PEWPIPV and IPV rating. It was found that people who did have professional experience provided a significantly higher rating (t[265,1]=-2.527, p=0.012). Assumption of homogeneity of regression slope was met. This means that participants who had professional experience in the IPV field were more able to recognise IPV.

Story Completion Task

Thematic analysis led to the identification of three superordinate themes: a) Description of the Behaviour; b) Causes of the Behaviour; and c) Solutions to the Behaviour. Each superordinate theme had a number of subthemes. In line with the study hypothesis a key point of interest was similarities and differences across the conditions. Notably, similar themes were found in all four and no unique sub-themes were identified within conditions. However, important differences were found in the frequency of sub-themes between conditions. Findings from the thematic and frequency analysis are summarised as a mind map in Figure 3.1 and discussed below. Data extracts are provided in Tables 3.8 - 3.10 and summaries of frequency coding in Figures 3.2 - 3.4.

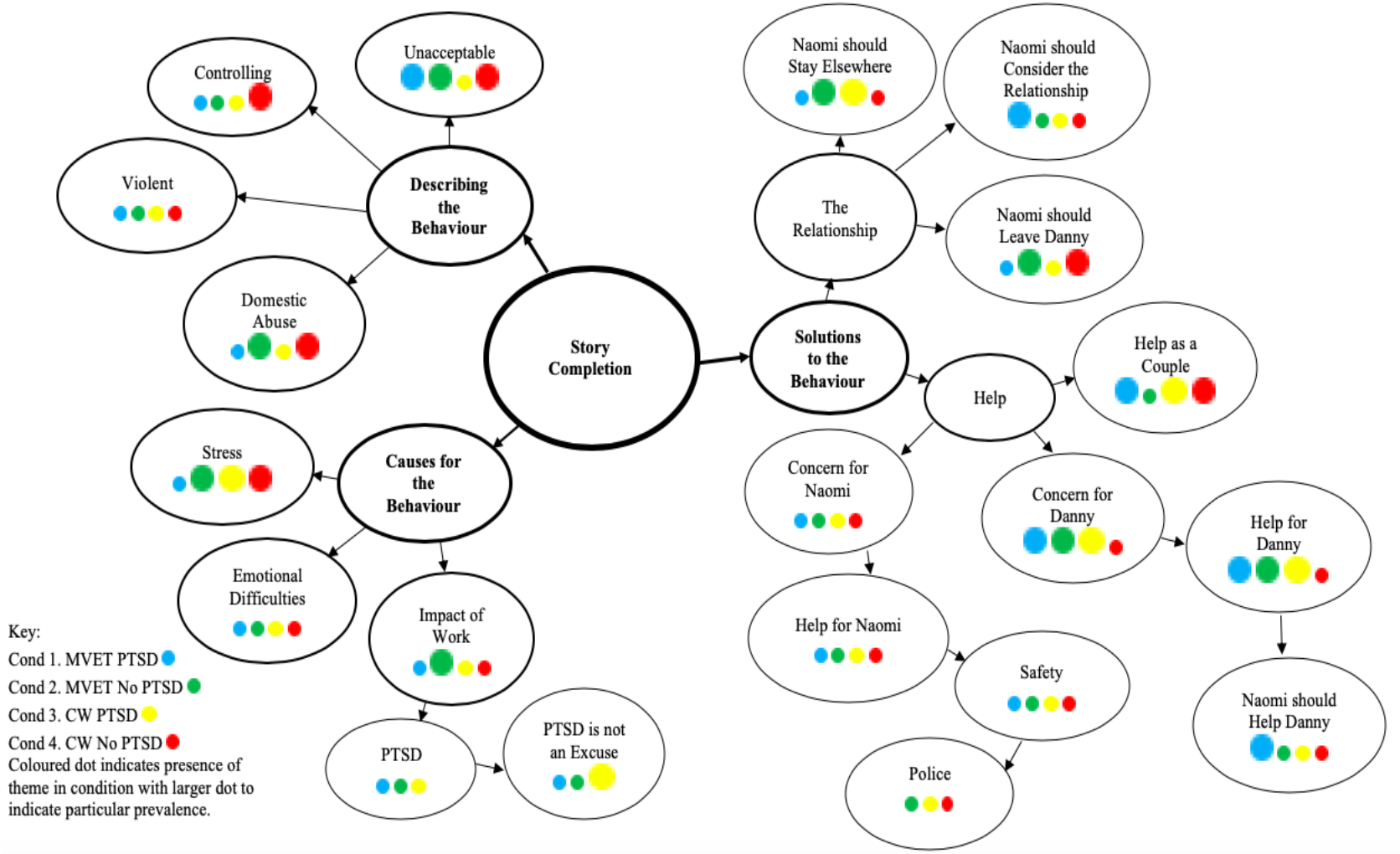

Figure 3.1. Mind map of themes identified from story completion task (N=123).

Describing the Behaviour

Participant responses consistently included a description of Danny's behaviour with four sub-themes identified with regards to this description: Danny's behaviour was a) unacceptable; b) violent; c) controlling; and d) domestic abuse.

Table 3.8

Data extracts for 'Describing the Behaviour'.

Theme	Sub-Theme	Example data extract for each sub-theme	Coding Frequency*
Describing the Behaviour	Unacceptable	COND1 P104 'It is never acceptable to use violence against someone whether it is verbal or physical.'	10
		COND2 P206 'You need to recognise this isn't OK.'	9
		COND3 P68 'Does he know what he's done is wrong and that he cannot continue to behave this way?'	5
		COND4 P5 'Naomi should sit him down and ask him what makes him think that such behaviour is remotely acceptable.'	12
	Violent	COND1 P117 'Arguments are a normal part of any relationship, but reacting to them violently is not.'	5
		COND2 P15 'It sounds as if Danny has a really violent temper'	9
		COND3 P31 'You [...] can't allow him to hurt you physically or emotionally any longer.'	6
		COND4 P257 'She is unhappy about his outbursts and their increasing violence.'	7
	Controlling	COND1 P198 'Hiding your phone from you is very controlling and worrying in itself.'	5
		COND2 P111 'The fact that he has hidden her phone shows that he is trying to control her.'	3
		COND3 P50 'She would ask why he was hiding her phone and whether that had happened much in the past because it's a strong sign of controlling behaviour in a relationship.'	5
		COND4 P29 'Steph says that she thinks Danny is exhibiting "coercive control" by hiding the phone (she saw a government funded advert about it and a storyline on a soap).'	9
	Domestic Abuse	COND1 P126 'This is domestic violence'	3
		COND2 P164 'She highlights to Naomi that this behaviour is abusive.'	6
		COND3 P115 'Naomi should [...] free herself from what appears to be an abusive relationship.	2
		COND4 P64 'You are being abused.'	5

*Indicates the no. of responses coded for this theme in each condition

Participants described Danny's behaviour as 'unacceptable' although this was less common in COND3 (CW PTSD). Participants commented upon the aggression, and 'violence' displayed by Danny. Some also reflected on the element of control. Interestingly participants in COND4 (CW NPTSD) commented more on control than on

violence. A few participants used 'domestic abuse' or a related term to directly label the behaviour, though this was slightly more frequent in COND2 and COND4 where there was no diagnosis of PTSD.

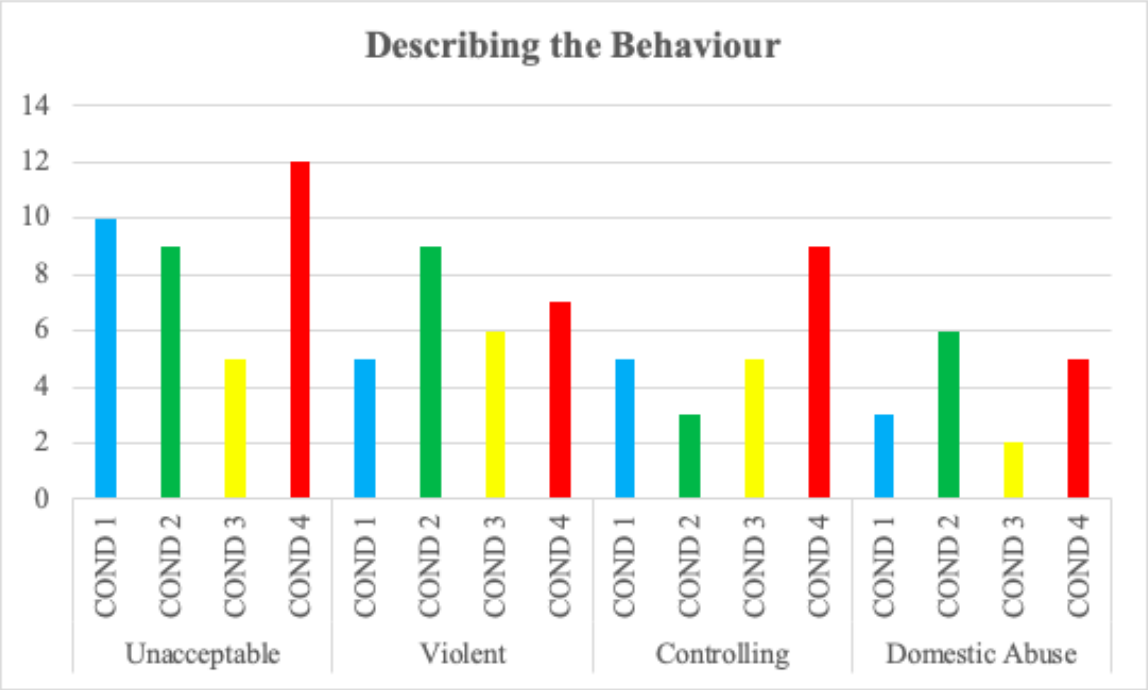

Figure 3.2. Frequency of coding between groups for 'Describing the Behaviour'.

Causes of the Behaviour

Participants attempted to contextualise Danny' behaviour, drawing on the story to identify a cause. Sub-themes were: a) stress; b) emotional difficulties; c) the impact of work; d) PTSD; and e) PTSD is not an excuse.

Table 3.9

Data extracts for 'Causes of the Behaviour'.

Theme	Sub-Theme	Example Data Extract	Coding Frequency*
Causes of the behaviour	Stress	COND1 P193 'He is clearly struggling with [...] how to cope with the stress that's occurring.'	1
		COND2 P195 'Naomi tells Steph it is just because Danny is stressed.'	4
		COND3 P231 'Steph responds saying that [...] she knows he's been under a lot of stress lately.'	3
		COND4 P134'He's obviously under a lot of stress and I get that, but he's taking it out on you.'	5
	Emotional Difficulties	COND1 P156 'I imagine he doesn't want to take it out on you but without proper support his feelings are being misdirected?'	3
		COND2 P30 'Men tend to bottle things up as it's a macho image to not whine and cry.'	7
		COND3 P31 'He seems to have a lot of anger built up and you're his only outlet.'	5
		COND4 P158 'He needs help with his anger.'	3
	Impact of Work	COND1 P233 'I know that Danny finds things hard because of his experiences in the Army.'	2
		COND2 P78 'I hate the army it does horrible things to people.'	10
		COND3 P92 'If he has only really known one work environment from a very young age, and probably a male dominated industry to suddenly find himself without a job, at home lacking purpose and focus [sic] very difficult.'	3
		COND4 P158 'Danny reveals that he has struggled to come to terms with leaving the construction industry.'	3
	PTSD	COND1 P198 'Danny isn't well my love'	14
		COND2 P30 'Naomi you should sit down and talk to him calmly without having shouting session. Perhaps, he's living through some trauma you don't know about.'	9
		COND3 P50 'Steph would also recognise that the PTSD diagnosis might have something to do with their arguments.'	12
		COND4 No data coded	0
	PTSD is not an Excuse	COND1 P245 'His behaviour, whilst being a product of his trauma, is unacceptable.'	3
		COND2 P67 'Steph is very clear that no amount of PTSD or any other issue is an excuse for Danny's behaviour.'	2
		COND3 P92 'That doesn't excuse Danny's reaction and aggressive behaviour but his diagnosis of PTSD can give an insight into why he may be reacting and behaving the way he is.'	6
		COND4 No data coded	0

*Indicates the no. of responses coded for this theme in each condition

In all four conditions participants described how Danny's behaviour should be understood in the context of 'stress'. Responses suggested emotional difficulties such as 'anger' or a 'difficulty expressing feelings' might also be a root cause. The impact of work

was again suggested in all four conditions though particularly in COND2 (MVET NPTSD). In COND1 (MVET PTSD), 2 (MVET NPTSD) and 3 (CW PTSD) participants described how PTSD, trauma and mental ill-health may be causing IPV. However, in each, and most frequently in COND3 (CW PTSD), a smaller number also suggested that PTSD should not be considered an 'excuse'.

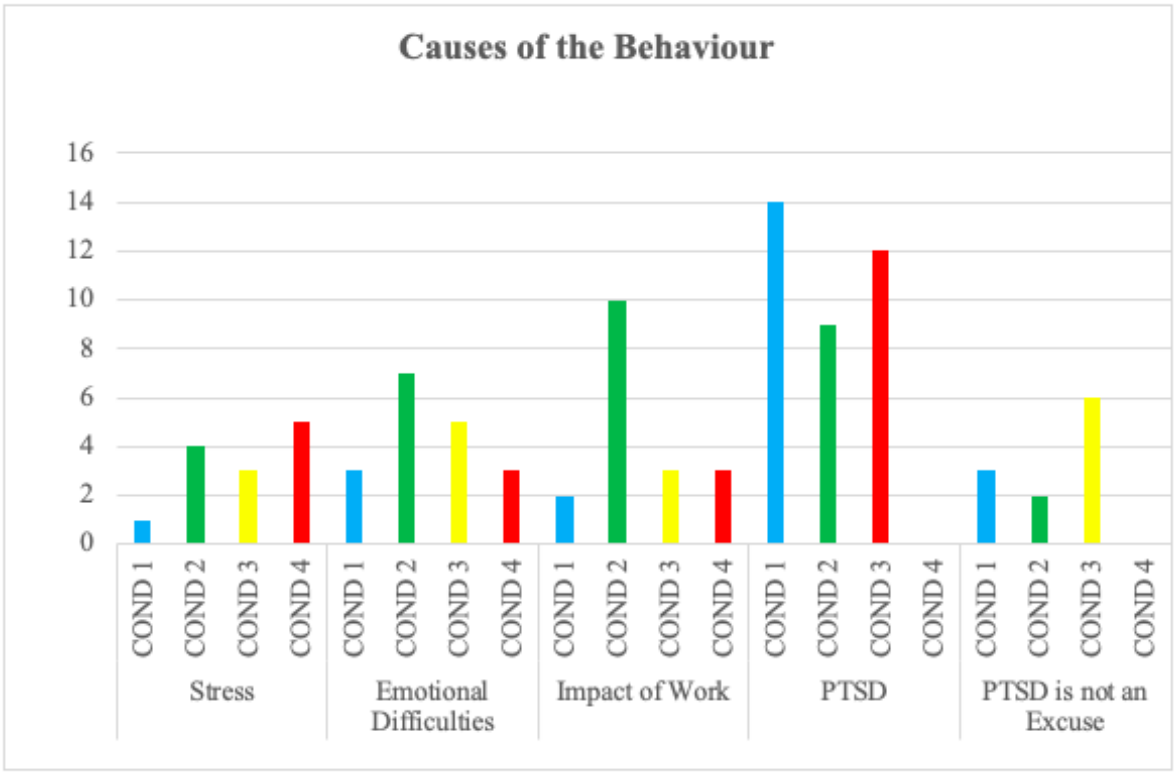

Figure 3.3. Frequency of coding between groups for 'Causes of the Behaviour'.

Solutions to the Behaviour

Participants offered solutions to Naomi according to two themes: a) The Relationship, and b) Help. Further subthemes identified within 'The Relationship' were 'Naomi should Stay Elsewhere'; 'Naomi should Consider the Relationship' and 'Naomi should Leave Danny'. Within the theme of Help, sub-themes were Help as a Couple; Concern for Danny; Help for Danny; Naomi should Help Danny; Concern for Naomi; Help for Naomi; Safety and Police.

Table 3.10

Data extracts for 'Solutions to the Behaviour'.

Theme	Sub-Theme	Example Data Extract	Coding Frequency*
Solutions to the Behaviour	Naomi should Stay Elsewhere	COND1 P245 'Maybe it would be a good idea to take some time apart to give each other space.'	9
		COND2 P206 'If you need to leave, but you don't want to split up, that's allowed. You can maintain a safe distance and still make clear to him you love and support him and want to come back as soon as he is getting help.'	13
		'COND3 P165 'Some time apart will give you both some space to think; you can consider how you feel about his behaviour and what it means to your relationship.'	15
		COND4 P113 'Why don't you come and stay with me for a few weeks to allow some cooling off time and space.'	6
	Naomi should Consider the Relationship	COND1 P19 'Do you still love him? Do you want to stay with him?'	5
		COND2 P45 'You should really evaluate your relationship.'	2
		COND3 P12 'Steph asks Naomi whether she still loves her husband and whether they still assume they have a future together.'	3
		COND4 P236 'You need to take yourself away from the situation and think about whether you feel safe and secure in the relationship.'	2
	Naomi should Leave Danny	COND1 P19 'Do you want to stay with him? If you don't, either come and stay with me for a bit or find a women's refuge if necessary. Just leave.'	4
		COND2 P241 'You need to leave him. He will do this again. You can stay with me or I can help you find a woman's shelter.'	7
		COND3 P2 'If he cares enough for you he will understand and seek help; if not I think you should leave.'	5
		COND4 P5 'her gut feeling is that Naomi should plan a safe exit, and get the hell out of it, before she falls pregnant, or he actually harms her physically.'	14
	Help as a Couple	COND1 P104 'Maybe use a mediator, a professional.'	7
		COND2 P188 'Steph says that if she doesn't leave then they should at least see a councillor.'	2
		COND3 P185 'Steph suggests they go to relate.'	5
		COND4 P236 'You should think about couple therapy if you decide that you want to stay with Danny.'	5
	Concern for Danny	COND1 P171 'You shouldn't have to go through this and neither should he. He seems to be getting worse. He has been through so much but this can't keep happening.'	6
		COND2 P15 'He needs to know that he is not alone, and that lots of people who served in the Army are affected, and that there are ways to recover.'	3
		COND3 P92 'It's clear your [sic] are BOTH going through a very difficult time at the moment.'	4
		COND4 P134 Honey, I'm worried about you. But also worried about him.'	1

Help for Danny	COND1 P54 ‘Encourage Danny to see a mental health specialist and look into longer term therapy that can support him to manage his triggers.’	19
	COND2 P15 ‘Have you considered asking for help? […] Could you [...] ask Danny to go to his GP? He might even let you go with him. He needs to know that he is not alone, and that lots of people who served in the Army are affected.’	19
	COND3 P20 ‘He should ask the G.P to send him for anger management classes.’	21
	COND4 P257 ‘If he can’t talk to her, then suggest another friend, therapist or similar third party to help him work out his troubles.’	11
Naomi Should Help Danny	COND1 P26 ‘Try to always show that you can be open to talk about anything and that it's better to talk than let things get out of hand. Think about what seems to trigger the arguments and his reactions. If he's open to it try and talk to him about the PTSD and whether he feels that's what is causing his strong reactions. Show understanding.’	14
	COND2 P15 ‘I really must get him help.....perhaps I can get in touch with the Army and see what they can offer.'	7
	COND3 P200 ‘Naomi speaks to Danny and he agrees to get help. Naomi supports him by taking him to and from appointments with a therapist, and helping him to avoid stressful situations as much as possible.’	10
	COND4 P66 ‘If he is willing at this point to seek help then they should together look at what help he needs.’	6
Concern for Naomi	COND1 P245 ‘Whilst he’s suffering with PTSD, you are also carrying some of the burden.’	7
	COND2 P121 ‘Naomi I'm worried about you and for you.’	7
	COND3 P47 Steph responds ‘by acknowledging this must have been very scary and upsetting for Naomi.’	10
	COND4 P134 ‘Honey, I'm worried about you.’	9
Help for Naomi	COND1 P41 ‘Naomi should consider if she requires additional help in helping Danny or counselling herself. A partner with mental health difficulties can be a strain on both parties and both parties may require support to overcome the issues.’	10
	COND2 P164 ‘Steph explained that there was [sic] lots of helplines in which Naomi could call and they would be able to offer further support.’	7
	COND3 P92 ‘Maybe you could speak to your GP for any advice or service to support spouses who are struggling with their partner’s mental health issues? It might be helpful to have advice on how to diffuse these situations and not engage in arguments with Danny while he is recovering and have advice on the best way to support his and your needs during this difficult time.’	7
	COND4 P267 ‘If he becomes angry/violent back off and speak to family/friends and seek specialist advice.’	5
Safety	COND1 P248 ‘There is a genuine concern for Naomi's safety as these actions could lead to more physical ones.’	14
	COND2 P140 ‘Steph is concerned for Naomi’s welfare, particularly Danny’s violent behaviour. She warns Naomi that if the situation continues, she thinks she Naomi is at risk of physical harm.’	13
	COND3 P125 ‘Danny’s exhibiting some dangerous behaviour, that may, if it hasn’t already escalate.’	15
	COND4 P49 ‘Leave him. This is unsafe. Stay here I will get your things.’	14

Police	COND1 N/A	0
	COND2 P258 'She might discuss whether Naomi has ever considered calling the police when Danny's anger escalates.'	2
	COND3 P86 'Let her know [...] that if she wishes she can get help from the police.'	1
	COND4 P5 'Steph tells Naomi that [...] she should go to the police to report that she fears for her safety, and that this has happened before.'	2

*Indicates the no. of responses coded for this theme in each condition

The Relationship. Participants across the conditions suggested that Naomi should consider staying elsewhere, most indicating that this should be temporary, in order to have time to think. A smaller number suggested that Naomi should consider the future of the relationship, and more explicitly that she should consider permanently leaving Danny, particularly in COND4 (CW NPTSD).

Help. Some participants suggested that Naomi and Danny should attend couples' therapy. More often however, responses expressed concern for Danny and indicated that he required individual support, usually via a GP or therapist, though these themes were less frequent in COND4 (CW NPTSD). Again, in all conditions but particularly COND1 (MVET PTSD) participants suggested that Naomi should take some responsibility for helping Danny either directly, or by accessing him professional input.

Concern was expressed for Naomi across all four conditions, with the suggestion that she too should access support such as therapy or via domestic abuse charities. However, help for Naomi was a less frequent theme than help for Danny and it was not always clear whether the help should be for her own needs, or to improve her capacity to support Danny. In all four conditions participants questioned Naomi's safety, often noting the risk of escalating violence. A small number of participants, except in COND1 (MVET PTSD) indicated that Naomi should contact the police.

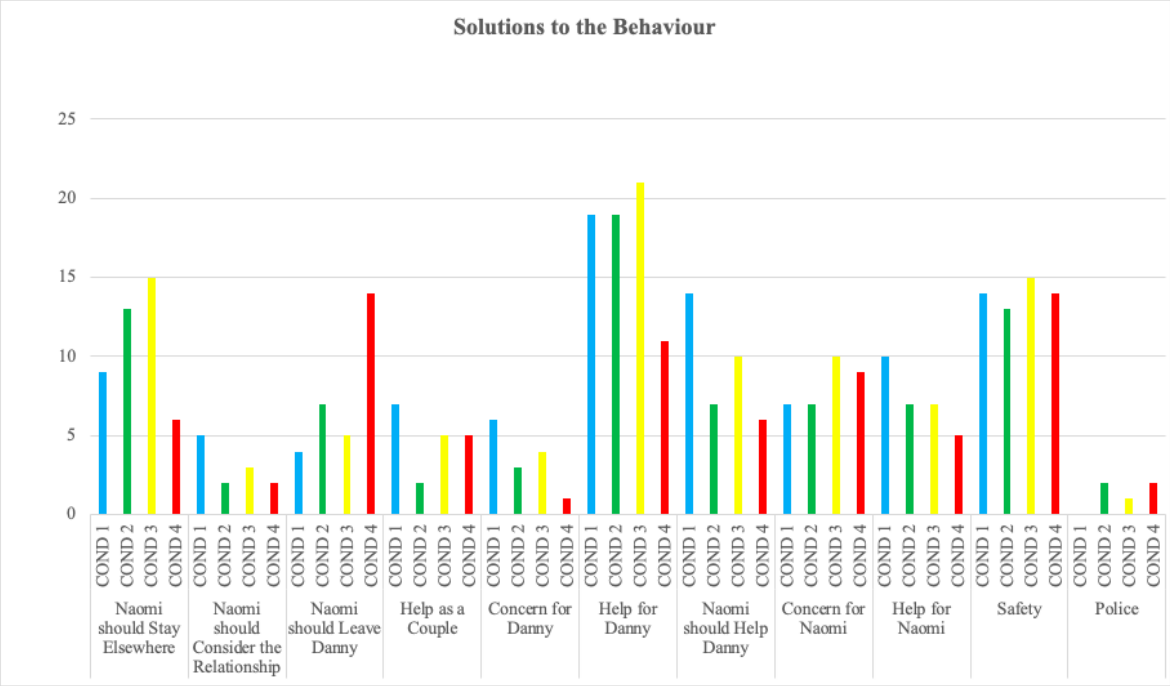

Figure 3.4. Frequency of coding between groups for 'Solutions to the Behaviour'.

Discussion

The aim of this study was to investigate public understanding of IPV in the context of military veteran status and a diagnosis of PTSD. The study predicted that the extent to which the public recognise an incident of IPV would be affected by whether a perpetrator is a military veteran with a diagnosis of PTSD when compared to a military veteran without PTSD, a civilian worker with PTSD and a civilian worker without PTSD. This prediction was only partially met.

Whilst job role and PTSD diagnosis were not found to impact independently, a small interaction between the two was found. Although only trending towards significance it is interesting to note that where an individual has a diagnosis their status as a military veteran makes it more likely that the public will recognise IPV. Assumptions may be made about the abusive potential of veterans, perhaps drawing on discourses regarding aggression in the military (Taft et al., 2011b), in spite of the evidence which indicates

equal rates of IPV in the general population. In turn this stigmatisation may lead to a stereotyping effect by which abuse is normalised within the cohort.

The presence of PTSD made no difference to recognising abuse perpetrated by a military veteran. This was unexpected given the evidence elsewhere that mental ill-health may be used to minimise abuse (Lelaurain et al., 2018). However, the story completion responses indicated that trauma was assumed even where not indicated meaning that the experimental manipulation may not have been effective. As such the public perhaps make assumptions about military service leading to PTSD, and further that this then explains IPV. An effect of PTSD diagnosis was found in the construction worker condition with participants more able to recognise IPV in the absence of PTSD diagnosis. This is an important finding indicating that the public may conceive of the diagnosis as a mitigating factor in terms of recognising and so reporting abuse in civilian relationships.

The findings add to the growing evidence that demographic factors may not significantly impact upon understanding of IPV (Carlson & Worden, 2005) and demonstrate that this finding holds true in the context of military veteran status and PTSD. The only experiential factor shown to relate was professional experience of working with people who have experienced abuse. Interestingly this is distinct from the work of Carlson and Worden (2005) who grouped both professional and indirect personal experience together, and found a correlation with abuse recognition. It is of note that professional experience of working with PTSD or in a military context did not improve recognition, given the intersection of needs. This may highlight limited understanding in these professions, as has been more widely researched in health and social care sectors (Bradbury-Jones et al., 2014; Buck & Collins, 2007; Johnson, Sigler., & Crowley, 1994; Ramsey et al., 2012; Robinson et al., 2018; Saletti-Cuesta et al., 2018).

The secondary hypothesis of this study was that military veteran status and diagnosis of PTSD would impact on public discourse with regards to IPV. Again, this hypothesis was only partially met. Thematic analysis of the story completion task did not lead to any themes unique to the interaction of military veteran status and a diagnosis of PTSD. Nonetheless findings contribute to the more general literature and furthermore the frequency analysis identified themes that may be particularly pertinent to discourse regarding IPV in this cohort.

In line with Carlson and Worden (2005) findings indicated that the public identify threatening and controlling behaviour (perpetrated by a husband towards his wife) as unacceptable. However, seen alongside the IPV rating analysis, lack of acceptability does not necessarily tally with recognition that behaviour constitutes abuse. This discrepancy confirms findings elsewhere (Carlson & Worden, 2005) and is concerning given the evidence that victims may require social and professional support in order to identify experiences as domestic abuse (Barnett, 2001; Bradbury-Jones et al., 2014).

A related concern is that participants tended to focus more on the acts of physical aggression than the controlling behaviour, particularly where a diagnosis of PTSD was indicated or assumed. This suggests that both in the military veteran context and more widely a diagnosis of PTSD may lead people to focus on physical risk as has been found elsewhere (Robinson et al., 2018; Taylor & Sorenson, 2005) and helps to make sense of the uncertainty many participants demonstrated on the IPV rating scale. Given that abuse rarely begins with overt physical harm (Barnett, 2001) the finding suggests that the public, including professionals may not recognise early indicators of abuse and act on them prior to escalation.

In terms of understanding the cause of IPV the study found clear evidence of 'conditional logic' (Lelaurain et al., 2018) by which participates contextualised abuse. A

new finding is the extent to which PTSD is used to frame IPV both in military relationships and more generally as borne out in the significantly lower IPV recognition when the perpetrator was a construction worker with PTSD compared to one without. Furthermore, in a military context the public appear less likely to consider current stressors or acknowledge that PTSD cannot justify abuse. Victims of IPV in military relationships may therefore be particularly vulnerable to discourses which prioritise the victim status of the perpetrator. This aligns with emerging evidence that military partners can feel obliged to support perpetrators experiencing post-conflict distress (Finley, Baker, Pugh, & Peterson, 2010; Gray, 2015) thereby limiting social support and help-seeking.

Public discourse regarding solutions to IPV is an under-researched area (Taylor & Sorenson, 2005) and the findings here offer a number of useful insights. PTSD diagnosis (stated or assumed) appeared to focus participants on the needs of the perpetrator meaning that victims in military veteran relationships may be particularly vulnerable to having their needs overlooked. It is also interesting to note that recognition of the stigma associated with mental ill health, particularly in a military context was largely absent from the findings suggesting that the public may not appreciate the impact that this can have on help-seeking (Aronson et al., 2014; Greene-Shortridge et al., 2007).

Victim safety was raised by participants across conditions and so it is interesting to note that contacting the police was rarely mentioned even where they were clearly able to identify IPV according to the IPV rating scale. The extent to which this may reflect concerns regarding the efficacy of police intervention (Leisenring, 2012) or a lack of understanding with regards to IPV and the law is unclear. Again, this may be particularly pertinent in a military context where veterans and their family manage a transition from internal to civilian jurisdiction.

Limitations

There were a number of limitations to the study that should be borne in mind. Men and older adults were not adequately represented, nor did the ethnic identities of participants adequately represent the British population. In addition, the questions used to determine relevant professional and personal experience may not have adequately differentiated between the two. In spite of efforts to minimise priming the study clearly recruited an expert sample which may go some way to explain the heavy skew towards greater recognition of IPV and the link made between IPV and PTSD in both military conditions. Finally, most participants wrote less than the ten lines requested for the story completion task meaning that the level of nuance hoped for was not achieved.

Future Research

IPV may be associated with a range of psychopathology (Shorey et al., 2012) and so research into the ways in which other diagnoses impact upon understanding of IPV is of interest. Important evidence is emerging regarding bi-directional violence as well as PTSD as a risk factor for being victim to IPV in military relationships (Misca, & Forgey, 2017; Sparrow et al., 2017; Tharp, Sherman, Bowling, & Townsend, 2016). The minimisation of female violence in public discourse (Carlson & Worden, 2005; Sorenson & Thomas, 2009), the role of mental distress in mitigating violence found in this study and the promotion of hyper-masculine ideals (Taft et al., 2011b) may have particularly toxic implications for male victims of abuse in the military which warrants investigation.

Recommendations for Practice

The findings in this study confirm that public awareness campaigning needs to move beyond basic condemnation for IPV (Carlson & Worden, 2005). Campaigns may do well to focus on less overt behaviours including threats, control and coercion making clear that these constitute IPV and demand action which can include police involvement. Professionals working in mental health and military contexts would benefit from training

to identify these forms of IPV particularly given the greater prevalence of escalation to high risk behaviours (Aronson et al., 2014) and the importance of early intervention as identified by the Ministry of Defence (2018). Public and professional perception of PTSD as a mitigating factor in IPV should be addressed. Targeted campaigning should be sensitive to the ways in which the victim status of the perpetrator may be prioritised in military relationships.

Conclusion

This study was the first to look specifically at public understanding of IPV in the context of military veteran status and PTSD and adds a number of new findings to the literature. Results indicated that the public are more likely to recognise IPV when it is perpetrated by a military veteran than a civilian with PTSD, and they are less likely to recognise abuse perpetrated by a civilian with PTSD, than without. Both public and professionals are less likely to acknowledge controlling behaviour. PTSD may be seen to mitigate IPV and in a military context prioritise the needs of the perpetrator in public consciousness. Awareness campaigns are advised to focus on clarifying what constitutes IPV and to consider the particular vulnerabilities of partners of abusive military veterans to discourses which prioritise the needs of the perpetrator.

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Executive Summary

Critical Review of the Literature

Mental contamination (MC) (Rachman, 1994) refers to internal feelings of dirtiness and shame that do not relate to having touched anything physical. Although most research looks at MC in people who experience obsessive compulsive disorder (OCD) there is some evidence that it may also be experienced by people following trauma. In this study we aimed to systematically review and synthesise the literature with regards to MC and trauma in order to make recommendations for practice and research.

A systematic database search identified 14 relevant papers. Studies were of a mixed quality and mainly used small samples of young, white, women. We grouped the data into five areas: MC and PTSD; MC and form of trauma; MC and risk; cognitive mediating factors and affective mediating factors. Most studies found a significant positive relationship between MC and PTSD. This means that MC may be particularly relevant to PTSD. However, diagnostic threshold is not necessary for MC to be present. The studies showed that MC is particularly high following sexual trauma. MC largely related to risk behaviour via its association with PTS. MC may be particularly related to thoughts regarding violation and self-blame, and feelings of disgust during and following trauma.

In conclusion we recommended that clinicians assess for MC following trauma and that treatment use cognitive behavioural techniques (Clark & Ehlers, 2000) which should be adapted to include focus on peri-traumatic emotional experiences. However, more clinical studies are needed to test this. Further research into how MC may relate to other mental health difficulties following trauma would also be of interest. Longer term studies are needed to confirm the direction of the relationship between MC and PTS. The study

findings are limited by the complexity of distinguishing between types of trauma, and controlling for elements such as when, and by whom the trauma is perpetrated as well as the reliance on self-report measures.

Service Improvement Project

This project was commissioned by a care home for young people presenting with high risk behaviours such as violence and self-harm. The service had introduced a novel approach to care; Non-Violent Resistance (NVR) (Omer, 2004) and wished to evaluate and improve staff experiences of working in this way. NVR is a therapeutic model which unlike mainstream approaches does not try to change the behaviour of the young person. Instead it focuses on increasing the presence of the care-giver, enabling them to better manage and peacefully protest problematic behaviour.

Eight staff members participated in one-to-one semi-structured interviews during which they were asked about their understanding of NVR, the impact of the approach, the role of the organisation, and how these experiences could be improved. These interviews were then analysed using thematic analysis (Braun & Clarke, 2006) which lead to 4 main themes.

'NVR is both a Set of Processes and a Way of Being' described how participants found that NVR both provided a set of specific tools but was also a way of being in the world. Staff suggested that further training would be of benefit to improve confidence and prevent tokenism. They also noted that NVR was time heavy and suggested increased staffing, and dedicated time to complete NVR work.

'NVR and Transformation' captured how participants felt NVR had transformed the organisation and their experiences with young people for the better. They noticed how

the approach made them unique as an organisation and suggested training partner agencies would improve joined up working.

'NVR and the Personal/Professional Divide' described the way in which NVR broke down the boundaries between work and home. For some this was problematic and suggestions were made about ways the organisation could promote a better work/life balance. Equally, participants described the positive impact NVR had had in their personal life.

In 'NVR and Organisational Support' participants described their positive experience of training and the support they had experienced from management. They reiterated the need for further training, as well as training which did not disadvantage those who may have additional learning needs.

Findings were shared with the service management who confirmed that they would be discussed across the whole team, and suggestions considered.

Main Research Project

This study investigated public understanding with regards to Intimate Partner Violence (IPV) in the context of military veteran relationships and PTSD. IPV is a significant public health concern (Home Office, 2019) and may be particularly complex in military veteran relationships due to stressors including transition to civilian life and rates of PTSD. Public understanding is vital as it effects the extent to which people report abuse, and the way in which professionals respond.

We looked at public understanding by comparing recognition and beliefs about IPV perpetrated by a 1) military veteran with PTSD; 2) military veteran without PTSD; 3) civilian with PTSD; and a 4) civilian without PTSD.

In total, 269 UK adults took part in the online study. All were randomly allocated to one of the four groups described above. First they read a story about an incident of IPV with only the job and PTSD diagnosis changed. All participants were asked to rate the extent to which the story described IPV which was analysed using statistical analysis of variance. Half of the participants were also asked to complete the story imagining that they were a friend giving advice to the abuse victim. This data was analysed thematically (Braun, Clarke & Hayfield, 2015).

We found that participants were more likely to recognise IPV when it was perpetrated by a military veteran than a civilian with PTSD, and less likely to recognise abuse perpetrated by a civilian with PTSD than without PTSD although the difference was small. The story responses showed that participants were less likely to acknowledge controlling behaviour than violence. PTSD was used to contextualise IPV and in the context of military veterans, participants were thus more likely to think more about the needs of the perpetrator. Awareness campaigns are needed to ensure public understanding of IPV and prevent the needs of victims being overlooked in abusive military veteran relationships.

Acknowledgements

At the heart of training has been the experience of sitting with people navigating hugely difficult experiences. Thank you to you all. I have learnt a great deal. A particular thanks to those who allowed me to write up our work into case studies. It's a really generous act and I truly appreciate it. Throughout training I have been supervised by warm and generous clinicians. I have learnt so much from your different approaches, your insights and your questions. It is such a privilege to have had this time to witness others' practice and I know I will carry it with me.

I am indebted to everyone who participated in my research projects. I particularly want to mark the thoughtfulness and passion of those who participated in my SIP. Thank you for giving me your time and words. It was a really moving experience.

I want to thank all of the research supervisors that have been involved in my projects, both those that landed, and those that did not. Thank you to Dr Catherine Butler, Dr Olga Santos, Dr Sarah Stacey, Dr Megan Wilkinson-Tough and Rob Williams for your early involvement in projects. A particular thank you to Dr Claudia Kustner for the supervision of my SIP. I so appreciated your enthusiasm and support managing the dynamics of service and university requirements and your thought-provoking questioning. To Dr Peter Jakob, having the opportunity to learn about NVR from you, and reflect on its application has been a huge part of my training experience and I have so appreciated you giving your time and insights. A huge thank you to Dr Rachel Paskell who took on supervision of my Literature Review and MRP. Your knowledge and enthusiasm across practice and research, and responsiveness to questions have been so appreciated, and made managing my final year of training so much smoother. I have really enjoyed puzzling out these projects with you. And finally, a giant thank you to Professor Catherine-Hamilton Giachritsis who has been involved in the evolution of my Literature Review and MRP

from the first year. I have so appreciated your knowledge and expertise and the warmth with which you have shared these with me. Thank you too for containing my stats fear, the last minute questions and managing my untoward application of a comma. I've felt really lucky to have had the opportunity to learn from you. Thank you.

Thank you to Dr James Gregory, who has been my clinical tutor throughout training. I have so appreciated your consistently supportive stance and your kindness, recognising the potential wobbling behind an email, and my discomfort at acknowledging the wobbles. Thank you for helping me navigate the course post-child. And thank you too for the discussions about practice and future hopes, the interesting questions and space to think. I always came out of meetings feeling full up with things to think about.

Thank you to the department admin team, particularly Rachel Nee and Dan Clifford who have been so brilliant at answering multiple questions and are a huge part of making the department feel as supportive and welcoming as it does.

It's a strange thing to be thanking two cohorts. Cohort 2016 I feel so lucky to have started training with such a thoughtful, sensitive bunch of brilliant women who are now out there, and can feedback their knowledge of the other side. And to Cohort 17 who have been so incredibly welcoming. Sharing teaching with you has been such a brilliant experience. A particular thank you to Gemma. You are such a warm and witty woman, full of thoughtful questions and sharp observation, pushing me to think and making me laugh. Navigating the dynamics of training and new motherhood with you has made all the difference. Thank you.

Thank you to my family who have been so supportive, giving both your time to listen to me enthuse and grumble, and practical support along the way. A particular thankyou to my mum. I grew up fascinated by your work and look what happened!

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Appendices

Appendix A

Clinical Psychology Review – Guide for Authors

Article structure

Manuscripts should be prepared according to the guidelines set forth in the Publication Manual of the American Psychological Association (6th ed., 2009). Of note, section headings should not be numbered.

Manuscripts should ordinarily not exceed 50 pages, *including* references and tabular material. Exceptions may be made with prior approval of the Editor in Chief. Manuscript length can often be managed through the judicious use of appendices. In general the References section should be limited to citations actually discussed in the text. References to articles solely included in meta-analyses should be included in an appendix, which will appear in the on line version of the paper but not in the print copy. Similarly, extensive Tables describing study characteristics, containing material published elsewhere, or presenting formulas and other technical material should also be included in an appendix. Authors can direct readers to the appendices in appropriate places in the text.

It is authors' responsibility to ensure their reviews are comprehensive and as up to date as possible (at least to 3 months within date of submission) so the data are still current at the time of publication. Authors are referred to the PRISMA Guidelines (http://www.prisma-statement.org/) for guidance in conducting reviews and preparing manuscripts. Adherence to the Guidelines is not required, but is recommended to enhance quality of submissions and impact of published papers on the field.

Appendices
If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly for tables and figures: Table A.1; Fig. A.1, etc.

Essential title page information

Title. Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible. **Note: The title page should be the first page of the manuscript document indicating the author's names and affiliations and the corresponding author's complete contact information.**

Author names and affiliations. Where the family name may be ambiguous (e.g., a double name), please indicate this clearly. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name, and, if available, the e-mail address of each author within the cover letter.

Corresponding author. Clearly indicate who is willing to handle correspondence at all stages of refereeing and publication, also post-publication. **Ensure that telephone and fax numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address.**

Present/permanent address. If an author has moved since the work described in the article was done, or was visiting at the time, a "Present address"' (or "Permanent address") may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

Highlights

Highlights are mandatory for this journal as they help increase the discoverability of your article via search engines. They consist of a short collection of bullet points that capture the novel results of your research as well as new methods that were used during the study (if any). Please have a look at the examples here: example Highlights.

Highlights should be submitted in a separate editable file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point).

Abstract

A concise and factual abstract is required (not exceeding 200 words). This should be typed on a separate page following the title page. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separate from the article, so it must be able to stand alone. References should therefore be avoided, but if essential, they must be cited in full, without reference to the reference list.

Keywords

Immediately after the abstract, provide a maximum of 6 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

Abbreviations
Define abbreviations that are not standard in this field in a footnote to be placed on the first page of the article. Such abbreviations that are unavoidable in the abstract must be defined at their first mention there, as well as in the footnote. Ensure consistency of abbreviations throughout the article.

Acknowledgements
Collate acknowledgements in a separate section at the end of the article before the references and do not, therefore, include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).

Footnotes
Footnotes should be used sparingly. Number them consecutively throughout the article. Many word processors can build footnotes into the text, and this feature may be used. Otherwise, please indicate the position of footnotes in the text and list the footnotes themselves separately at the end of the article. Do not include footnotes in the Reference list.

Electronic artwork
General points
• Make sure you use uniform lettering and sizing of your original artwork.
• Embed the used fonts if the application provides that option.
• Aim to use the following fonts in your illustrations: Arial, Courier, Times New Roman, Symbol, or use fonts that look similar.
• Number the illustrations according to their sequence in the text.
• Use a logical naming convention for your artwork files.
• Provide captions to illustrations separately.
• Size the illustrations close to the desired dimensions of the published version.
• Submit each illustration as a separate file.
• Ensure that color images are accessible to all, including those with impaired color vision.

Figure captions
Ensure that each illustration has a caption. Supply captions separately, not attached to the figure. A caption should comprise a brief title (**not** on the figure itself) and a description of the illustration. Keep text in the illustrations themselves to a minimum but explain all symbols and abbreviations used.

Tables

Please submit tables as editable text and not as images. Tables can be placed either next to the relevant text in the article, or on separate page(s) at the end. Number tables consecutively in accordance with their appearance in the text and place any table notes below the table body. Be sparing in the use of tables and ensure that the data presented in them do not duplicate results described elsewhere in the article. Please avoid using vertical rules and shading in table cells.

References

Citations in the text should follow the referencing style used by the American Psychological Association. You are referred to the Publication Manual of the American Psychological Association, Sixth Edition, ISBN 1-4338-0559-6, copies of which may be ordered from http://books.apa.org/books.cfm?id=4200067 or APA Order Dept., P.O.B. 2710, Hyattsville, MD 20784, USA or APA, 3 Henrietta Street, London, WC3E 8LU, UK. Details concerning this referencing style can also be found at http://humanities.byu.edu/linguistics/Henrichsen/APA/APA01.html

Citation in text
Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Any references cited in the abstract must be given in full. Unpublished results and personal communications are not recommended in the reference list, but may be mentioned in the text. If these references are included in the reference list they should follow the standard reference style of the journal and should include a substitution of the publication date with either 'Unpublished results' or 'Personal communication'. Citation of a reference as 'in press' implies that the item has been accepted for publication.

Web references
As a minimum, the full URL should be given and the date when the reference was last accessed. Any further information, if known (DOI, author names, dates, reference to a source publication, etc.), should also be given. Web references can be listed separately (e.g., after the reference list) under a different heading if desired, or can be included in the reference list.

Data references
This journal encourages you to cite underlying or relevant datasets in your manuscript by citing them in your text and including a data reference in your Reference List. Data references should include the following elements: author name(s), dataset title, data repository, version (where available), year, and global persistent identifier. Add [dataset] immediately before the reference so we can properly identify it as a data reference. The [dataset] identifier will not appear in your published article.

References in a special issue
Please ensure that the words 'this issue' are added to any references in the list (and any citations in the text) to other articles in the same Special Issue.

Reference style

References should be arranged first alphabetically and then further sorted chronologically if necessary. More than one reference from the same author(s) in the same year must be identified by the letters "a", "b", "c", etc., placed after the year of publication. **References should be formatted with a hanging indent (i.e., the first line of each reference is flush left while the subsequent lines are indented).**

Appendix B

Papers Excluded following Full Text Review

Papers excluded following full text review.

Paper	Reason for Exclusion
Badour, C. L., Bown, S., Adams, T. G., Bunaciu, L., & Feldner, M. T. (2012). Specificity of fear and disgust experienced during traumatic interpersonal victimization in predicting posttraumatic stress and contamination-based obsessive–compulsive symptoms. *Journal of Anxiety disorders*, *26*(5), 590-598.	MC not a key construct.
Elliott, C. M., & Radomsky, A. S. (2009). Analyses of MC: Part I, experimental manipulations of morality. *Behaviour Research and Therapy*, *47*(12), 995-1003.	Trauma not a key construct.
Elliott, C. M., & Radomsky, A. S. (2012). MC: The effects of imagined physical dirt and immoral behaviour. *Behaviour Research and Therapy*, *50*(6), 422-427.	Trauma not a key construct.
Elliott, C. M., & Radomsky, A. S. (2013). Meaning and MC: Focus on appraisals. *Clinical Psychologist*, *17*(1), 17-25.	Trauma not a key construct.
Fairbrother, N. (2002). *An investigation of the Ehlers-Clark cognitive theory of PTSD and the phenomenon of mental pollution* (Doctoral dissertation). Retrieved from https://open.library.ubc.ca/cIRcle/collections/ubctheses/831/items/1.0092191	Thesis written up into paper included in review.
Fairbrother, N., Newth, S. J., & Rachman, S. (2005). Mental pollution: Feelings of dirtiness without physical contact. *Behaviour Research and Therapy*, *43*(1), 121-130.	Trauma not a key construct.
Herba, J. K., & Rachman, S. (2007). Vulnerability to MC. *Behaviour Research and Therapy*, *45*(11), 2804-2812.	Trauma not a key construct.
Holmes, E. A., Arntz, A., & Smucker, M. R. (2007). Imagery rescripting in cognitive behaviour therapy: Images, treatment techniques and outcomes. *Journal of Behavior Therapy and Experimental Psychiatry*, *38*(4), 297-305.	MC not a key construct.
Ishikawa, R., Kobori, O., Komuro, H., & Shimizu, E. (2014). Comparing the roles of washing and non-washing behaviour in the reduction of MC. *Journal of Obsessive-Compulsive and Related Disorders*, *3*(1), 60-64.	Trauma not a key construct.
Jung, K., & Steil, R. (2012). The feeling of being contaminated in adult survivors of childhood sexual abuse and its treatment via a two-session program of cognitive restructuring and imagery modification: A case study. *Behavior modification*, *36*(1), 67-86.	MC not a key construct.
Jung, K., & Steil, R. (2013). A randomized controlled trial on cognitive restructuring and imagery modification to reduce the feeling of being contaminated in adult survivors of childhood sexual abuse suffering from posttraumatic stress disorder. *Psychotherapy and Psychosomatics*, *82*(4), 213-220.	MC not a key construct.
Kennedy, T. S., & Simonds, L. M. (2017). Does modifying personal responsibility moderate the MC effect?. *Journal of behavior therapy and experimental psychiatry*, *57*, 198-205.	Trauma not a key construct.
Kim, Y., Kim, J., Cohen, A., Backus, M., Arnovitz, M., Rice, T., ... & Coffey, B. J. (2017). Medication nonadherence secondary to choking phobia (phagophobia)	MC not a key construct.

in an adolescent with significant trauma history: addressing the issue of MC. *Journal of child and adolescent psychopharmacology*, *27*(7), 667-672.	
Millar, J. F., Salkovskis, P. M., & Brown, C. (2016). MC in the "dirty kiss": Imaginal betrayal or bodily fluids?. *Journal of Obsessive-Compulsive and Related Disorders*, *8*, 70-74.	Trauma not a key construct.
Müller-Engelmann, M., & Steil, R. (2017). Cognitive restructuring and imagery modification for posttraumatic stress disorder (CRIM-PTSD): A pilot study. *Journal of Behavior Therapy and Experimental Psychiatry*, *54*, 44-50.	MC not a key construct.
Ojserkis, R. B. (2017). *Examining the unique roles of disgust constructs in co-occurring posttraumatic stress and obsessive-compulsive symptoms* (Doctoral dissertation). Retrieved from https://research.library.fordham.edu/dissertations/AAI10254633/	Thesis written up into paper included in review.
Ojserkis, R., McKay, D., & Kim, S. K. (2020). Obsessive-compulsive symptom profiles in individuals exposed to interpersonal versus noninterpersonal trauma. *Bulletin of the Menninger Clinic*, *84*(1), 53-78.	MC not a key construct.
Rachman, S. (2010). Betrayal: A psychological analysis. *Behaviour Research and Therapy*, *48*(4), 304-311.	Trauma not a key construct.
Radomsky, A. S., & Elliott, C. M. (2009). Analyses of MC: Part II, individual differences. *Behaviour Research and Therapy*, *47*(12), 1004-1011.	Trauma not a key construct.
Steil, R., Jung, K., & Stangier, U. (2011). Efficacy of a two-session program of cognitive restructuring and imagery modification to reduce the feeling of being contaminated in adult survivors of childhood sexual abuse: A pilot study. *Journal of Behavior Therapy and Experimental Psychiatry*, *42*(3), 325-329.	MC not a key construct.
Waller, K., & Boschen, M. J. (2015). Evoking and reducing MC in female perpetrators of an imagined non-consensual kiss. *Journal of behavior therapy and experimental psychiatry*, *49*, 195-202.	Trauma not a key construct.
Zysk, E., Shafran, R., & Williams, T. (2018). The origins of MC. *Journal of obsessive-compulsive and related disorders*, *17*, 3-8.	Trauma not a key construct.

Appendix C

CASP Case Control Quality Appraisal Template

www.casp-uk.net
info@casp-uk.net
Summertown Pavilion, Middle Way Oxford OX2 7LG

CASP Checklist: 11 questions to help you make sense of a **Case Control Study**

How to use this appraisal tool: Three broad issues need to be considered when appraising a case control study:

- Are the results of the study valid? (Section A)
- What are the results? (Section B)
- Will the results help locally? (Section C)

The 11 questions on the following pages are designed to help you think about these issues systematically. The first three questions are screening questions and can be answered quickly. If the answer to both is "yes", it is worth proceeding with the remaining questions. There is some degree of overlap between the questions, you are asked to record a "yes", "no" or "can't tell" to most of the questions. A number of italicised prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

About: These checklists were designed to be used as educational pedagogic tools, as part of a workshop setting, therefore we do not suggest a scoring system. The core CASP checklists (randomised controlled trial & systematic review) were based on JAMA 'Users' guides to the medical literature 1994 (adapted from Guyatt GH, Sackett DL, and Cook DJ), and piloted with health care practitioners.

For each new checklist, a group of experts were assembled to develop and pilot the checklist and the workshop format with which it would be used. Over the years overall adjustments have been made to the format, but a recent survey of checklist users reiterated that the basic format continues to be useful and appropriate.

Referencing: we recommend using the Harvard style citation, i.e.: *Critical Appraisal Skills Programme (2018). CASP (insert name of checklist i.e. Case Control Study) Checklist. [online] Available at: URL. Accessed: Date Accessed.*

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Critical Appraisal Skills Programme

Paper for appraisal and reference:.....

Section A: Are the results of the trial valid?

1. Did the study address a clearly focused issue?

Yes	
Can't Tell	
No	

HINT: An issue can be 'focused' in terms of
- the population studied
- Whether the study tried to detect a beneficial or harmful effect
- the risk factors studied

Comments:

2. Did the authors use an appropriate method to answer their question?

Yes	
Can't Tell	
No	

HINT: Consider
- Is a case control study an appropriate way of answering the question under the circumstances
- Did it address the study question

Comments:

CASP
Critical Appraisal Skills Programme

Is it worth continuing?

3. Were the cases recruited in an acceptable way?

Yes ☐
Can't Tell ☐
No ☐

Comments:

HINT: We are looking for selection bias which might compromise validity of the findings

- are the cases defined precisely
- were the cases representative of a defined population (geographically and/or temporally)
- was there an established reliable system for selecting all the cases
- are they incident or prevalent
- is there something special about the cases
- is the time frame of the study relevant to disease/exposure
- was there a sufficient number of cases selected
- was there a power calculation

4. Were the controls selected in an acceptable way?

Yes ☐
Can't Tell ☐
No ☐

Comments:

HINT: We are looking for selection bias which might compromise the generalisability of the findings

- were the controls representative of the defined population (geographically and/or temporally)
- was there something special about the controls
- was the non-response high, could non-respondents be different in any way
- are they matched, population based or randomly selected
- was there a sufficient number of controls selected

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5. Was the exposure accurately measured to minimise bias?

Yes ☐
Can't Tell ☐
No ☐

HINT: We are looking for measurement, recall or classification bias
- was the exposure clearly defined and accurately measured
- did the authors use subjective or objective measurements
- do the measures truly reflect what they are supposed to measure (have they been validated)
- were the measurement methods similar in the cases and controls
- did the study incorporate blinding where feasible
- is the temporal relation correct (does the exposure of interest precede the outcome)

Comments:

6. (a) Aside from the experimental intervention, were the groups treated equally?

HINT: List the ones you think might be important, that the author may have missed
- genetic
- environmental
- socio-economic

List:

6. (b) Have the authors taken account of the potential confounding factors in the design and/or in their analysis?

Yes ☐
Can't Tell ☐
No ☐

HINT: Look for
- restriction in design, and techniques e.g. modelling, stratified-, regression-, or sensitivity analysis to correct, control or adjust for confounding factors

Comments:

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Section B: What are the results?

7. How large was the treatment effect?

HINT: Consider
- what are the bottom line results
- is the analysis appropriate to the design
- how strong is the association between exposure and outcome (look at the odds ratio)
- are the results adjusted for confounding, and might confounding still explain the association
- has adjustment made a big difference to the OR

Comments:

8. How precise was the estimate of the treatment effect?

HINT: Consider
- size of the p-value
- size of the confidence intervals
- have the authors considered all the important variables
- how was the effect of subjects refusing to participate evaluated

Comments:

CASP
Critical Appraisal Skills Programme

9. Do you believe the results?

Yes ☐
No ☐

HINT: Consider
- big effect is hard to ignore!
- Can it be due to chance, bias, or confounding
- are the design and methods of this study sufficiently flawed to make the results unreliable
- consider Bradford Hills criteria (e.g. time sequence, does-response gradient, strength, biological plausibility)

Comments:

Section C: Will the results help locally?

10. Can the results be applied to the local population?

Yes ☐
Can't Tell ☐
No ☐

HINT: Consider whether
- the subjects covered in the study could be sufficiently different from your population to cause concern
- your local setting is likely to differ much from that of the study
- can you quantify the local benefits and harms

Comments:

11. Do the results of this study fit with other available evidence?

Yes ☐
Can't Tell ☐
No ☐

HINT: Consider
- all the available evidence from RCT's Systematic Reviews, Cohort Studies, and Case Control Studies as well, for consistency

Comments:

Remember One observational study rarely provides sufficiently robust evidence to recommend changes to clinical practice or within health policy decision making. However, for certain questions observational studies provide the only evidence. Recommendations from observational studies are always stronger when supported by other evidence.

Appendix D

CASP Cohort Study Appraisal Template

www.casp-uk.net
info@casp-uk.net
Summertown Pavilion, Middle Way Oxford OX2 7LG

CASP Checklist: 12 questions to help you make sense of a Cohort Study

How to use this appraisal tool: Three broad issues need to be considered when appraising a cohort study:

- Are the results of the study valid? (Section A)
- What are the results? (Section B)
- Will the results help locally? (Section C)

The 12 questions on the following pages are designed to help you think about these issues systematically. The first two questions are screening questions and can be answered quickly. If the answer to both is "yes", it is worth proceeding with the remaining questions. There is some degree of overlap between the questions, you are asked to record a "yes", "no" or "can't tell" to most of the questions. A number of italicised prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

About: These checklists were designed to be used as educational pedagogic tools, as part of a workshop setting, therefore we do not suggest a scoring system. The core CASP checklists (randomised controlled trial & systematic review) were based on JAMA 'Users' guides to the medical literature 1994 (adapted from Guyatt GH, Sackett DL, and Cook DJ), and piloted with health care practitioners.

For each new checklist, a group of experts were assembled to develop and pilot the checklist and the workshop format with which it would be used. Over the years overall adjustments have been made to the format, but a recent survey of checklist users reiterated that the basic format continues to be useful and appropriate.

Referencing: we recommend using the Harvard style citation, i.e.: *Critical Appraisal Skills Programme (2018). CASP (insert name of checklist i.e. Cohort Study) Checklist. [online] Available at: URL. Accessed: Date Accessed.*

CASP
Critical Appraisal Skills Programme

Paper for appraisal and reference:.....

Section A: Are the results of the study valid?

1. Did the study address a clearly focused issue?

Yes ☐
Can't Tell ☐
No ☐

HINT: A question can be 'focused' in terms of
- the population studied
- the risk factors studied
- is it clear whether the study tried to detect a beneficial or harmful effect
- the outcomes considered

Comments:

2. Was the cohort recruited in an acceptable way?

Yes ☐
Can't Tell ☐
No ☐

HINT: Look for selection bias which might compromise the generalisability of the findings:
- was the cohort representative of a defined population
- was there something special about the cohort
- was everybody included who should have been

Comments:

Is it worth continuing?

CASP
Critical Appraisal Skills Programme

3. Was the exposure accurately measured to minimise bias?

Yes ☐
Can't Tell ☐
No ☐

HINT: Look for measurement or classification bias:
- did they use subjective or objective measurements
- do the measurements truly reflect what you want them to (have they been validated)
- were all the subjects classified into exposure groups using the same procedure

Comments:

4. Was the outcome accurately measured to minimise bias?

Yes ☐
Can't Tell ☐
No ☐

HINT: Look for measurement or classification bias:
- did they use subjective or objective measurements
- do the measurements truly reflect what you want them to (have they been validated)
- has a reliable system been established for detecting all the cases (for measuring disease occurrence)
- were the measurement methods similar in the different groups
- were the subjects and/or the outcome assessor blinded to exposure (does this matter)

Comments:

CASP
Critical Appraisal Skills Programme

5. (a) Have the authors identified all important confounding factors?

Yes ☐
Can't Tell ☐
No ☐

HINT:
- list the ones you think might be important, and ones the author missed

Comments:

5. (b) Have they taken account of the confounding factors in the design and/or analysis?

Yes ☐
Can't Tell ☐
No ☐

HINT:
- look for restriction in design, and techniques e.g. modelling, stratified-, regression-, or sensitivity analysis to correct, control or adjust for confounding factors

Comments:

6. (a) Was the follow up of subjects complete enough?

Yes ☐
Can't Tell ☐
No ☐

HINT: Consider
- the good or bad effects should have had long enough to reveal themselves
- the persons that are lost to follow-up may have different outcomes than those available for assessment
- in an open or dynamic cohort, was there anything special about the outcome of the people leaving, or the exposure of the people entering the cohort

6. (b) Was the follow up of subjects long enough?

Yes ☐
Can't Tell ☐
No ☐

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Comments:

Section B: What are the results?

7. What are the results of this study?

HINT: Consider
- what are the bottom line results
- have they reported the rate or the proportion between the exposed/unexposed, the ratio/rate difference
- how strong is the association between exposure and outcome (RR)
- what is the absolute risk reduction (ARR)

Comments:

8. How precise are the results?

HINT:
- look for the range of the confidence intervals, if given

Comments:

CASP
Critical Appraisal Skills Programme

9. Do you believe the results?

Yes ☐
Can't Tell ☐
No ☐

HINT: Consider
- big effect is hard to ignore
- can it be due to bias, chance or confounding
- are the design and methods of this study sufficiently flawed to make the results unreliable
- Bradford Hills criteria (e.g. time sequence, dose-response gradient, biological plausibility, consistency)

Comments:

Section C: Will the results help locally?

10. Can the results be applied to the local population?

Yes ☐
Can't Tell ☐
No ☐

HINT: Consider whether
- a cohort study was the appropriate method to answer this question
- the subjects covered in this study could be sufficiently different from your population to cause concern
- your local setting is likely to differ much from that of the study
- you can quantify the local benefits and harms

Comments:

11. Do the results of this study fit with other available evidence?

Yes ☐
Can't Tell ☐
No ☐

Comments:

CASP
Critical Appraisal Skills Programme

12. What are the implications of this study for practice?

Yes	
Can't Tell	
No	

HINT: Consider

- one observational study rarely provides sufficiently robust evidence to recommend changes to clinical practice or within health policy decision making
- for certain questions, observational studies provide the only evidence
- recommendations from observational studies are always stronger when supported by other evidence

Comments:

Appendix E

Quality Assessment of Papers using CASP Case Control Template

Table 1.X

Quality assessment of papers using CASP Case Control template.

Paper	**Score/16 (total)***	**%**	**CASP Item**										
			1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9****	**10****	**11****
1a. Adams, Badour, Cisler, Feldner (2014)	14	88%	2	2	1	2	1	2	2	2	N/A	N/A	N/A
1b. Badour, Feldner, Babson, Blumenthal & Dutton (2013a)	13	81%	2	2	1	2	1	2	2	1	N/A	N/A	N/A

* Yes = 2, Partial = 1, No = 0

** Item excluded from assessment

Appendix F

Quality Assessment of Papers using CASP Cohort Study Template

Table 2.X

Quality assessment of papers using CASP Cohort Study template.

Paper	**Score/11***	**%**	**CASP Item**											
			1	**2**	**3**	**4**	**5****	**6*****	**7*****	**8+**	**9*****	**10*****	**11*****	**12*****
1c. Badour, Feldner, Blumenthal & Bujarski (2013b)	8	73%	2	1	1	2	1	N/A	N/A	1	N/A	N/A	N/A	N/A
1d. Badour, Ojserkis, McKay & Feldner (2014)	8	73%	2	1	1	2	2	N/A	N/A	0	N/A	N/A	N/A	N/A
2. Berman, Wheaton, Fabricant & Abramowitz (2012)	4.5	41%	1	1	1	1	.5	N/A	N/A	0	N/A	N/A	N/A	N/A
3. Brake, Adams, Hood & Badour (2019)	9	82%	2	2	1	1	2	N/A	N/A	1	N/A	N/A	N/A	N/A
4. Brake, Jones, Wakefield & Badour (2018)	9	82%	2	1	2	2	2	N/A	N/A	0	N/A	N/A	N/A	N/A
5. Clayson (2019)	9	82%	2	1	2	2	2	N/A	N/A	0	N/A	N/A	N/A	N/A
6. Fairbrother & Rachman (2004)	6.5	59%	2	1	2	1	.5	N/A	N/A	0	N/A	N/A	N/A	N/A
7. Fergus & Bardeen (2016)	8	73%	2	1	1	2	2	N/A	N/A	0	N/A	N/A	N/A	N/A

8. Fergus, Clayson & Dolan (2018)	7	64%	2	1	1	1	2	N/A	N/A	0	N/A	N/A	N/A	N/A
9. Ishikawa, Kobori & Shimizu (2015)	7.5	68%	2	1	1	2	1.5	N/A	N/A	0	N/A	N/A	N/A	N/A
10. Ojserkis, McKay & Lebeaut (2018)	8.5	77%	2	1	2	2	1.5	N/A	N/A	0	N/A	N/A	N/A	N/A
11. Olatunji, Elwood, Williams & Lohr (2008)	7.5	68%	2	1	1	2	1.5	N/A	N/A	0	N/A	N/A	N/A	N/A

* Yes = 2, Partial = 1, No = 0
+ Yes = 1, No = 0 (CI reported)
** Two-part question
*** Item excluded from assessment

Appendix G

Journal of Family Therapy Author Guidelines.

Author Guidelines

Manuscript Format

1. Manuscripts should allow for 'blind/anonymised' refereeing and **must not** contain author names or any identifiable data.
2. Manuscripts **must** be typed in double spacing throughout, including quotation, notes and references in the following order:

- Title Page: to contain the title of the paper, word count, suggested running head (short title for your paper), key words, author names, affiliations and contact details for the corresponding author.
- Abstract: on a separate sheet, the title to be repeated followed by a summary of not more than 150 words. The suggested running head should also be present. *For tips on optimizing your abstract for search engines please click here*.
- Practitioner Points: two to six bullet points of no more than 180 characters each (including spaces), up to a total of 480 characters.
- Organisation of the text: see copy of Journal for the format currently in use.
- Figures, tables, etc.: All figures and tables should be numbered with consecutive arabic numerals, have descriptive captions and be mentioned in the text. They should be kept separate from the text but an approximate position for them should be indicated. These will need to be uploaded separately. Please supply figures in the format in which they were created, if possible.
- References (in text): These should be indicated by the name and date e.g. 'Carr (2009)'. If more than two authors are listed, cite the reference as 'McHugh et al. (2010)'. Quotations should include page numbers. Websites should also be cited in this way, with a full reference appearing in the References section (see below). Please check all websites are live and the links are correct at time of submission.
- References: Should be listed at the end of the paper in alphabetical order according to the first author and be complete in all details following the APA style of referencing.
    - **Articles**: Altschuler, J. (2015). Whose illness is it anyway? On facing illness as a couple. Journal of Family Therapy, 37(1), 119-133.
    - **Chapters**: Burnham, J. (2012). Developments in the Social GRRRAAACCEEESSS: visible-invisible and voiced-unvoiced. In I.B. Krause (Ed.), Culture and Reflexivity in Systemic Psychotherapy. Mutual Perspectives (pp 139-163). London: Karnac.
    - **Books**: Burck, C., & Daneil, G. (2010). Mirrors and Reflections. Process of Systemic Supervision. London: Karnac.
    - **Web pages** (no author or date identified): Counting the cost: caring for people with dementia on hospital wards. (n.d.) Retrieved from http://alzheimers.org.uk/site/scripts/ documents_info.php?documentID=1199. [Cite in text as (“Counting the costs”, n.d.)]

For further details, please see the APA Style website: (**http://www.apastyle.org/learn/tutorials/basics-tutorial.aspx**)

3. The word limit, excluding abstract and practitioner points will vary depending on the type of paper you are submitting. Please refer to the ‘Advice to Authors’ section below.

4. Style: Whilst Journal style is generally formal, originality in presentation does not

necessarily preclude publication if clarity and readability is thereby enhanced. Sexist language forms are unacceptable.

Your manuscript will be returned to you if you fail to conform to these requirements.

Preprint Policy

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

Case material and Confidentiality

Journal of Family Therapy readers particularly welcome papers which link theory and practice, and such papers are often enhanced by case material.

The Author takes responsibility for anonymising material in order to protect client confidentiality. All possible identifying information must be altered. Another way of protecting confidentiality is by presenting composite case material, made up of different aspects from a number of similar cases.

Do not identify any participants without consent or write about them in any way that identifies them to the public or other participants without consent.

Every paper that contains case material must be accompanied by:-

- A statement in the letter to the Editor from the Author(s) specifying whether the material presented is disguised/generic/composite; or
- A statement in the letter to the Editor that the Author has gained signed consent from patients/clients or teachers/students authorizing publication of the material. Please note that upon signing the Author Agreement the Author becomes liable for any third party information collated and takes complete responsibility for preparing the work and gaining the relevant permissions and consent.

ADVICE TO AUTHORS

Writing is a very enjoyable and satisfying way of being involved in the world of family therapy. The exchange of ideas and experience is important both for the development of our chosen field and for the development of the individual practitioner. We intellectually sustain ourselves by creating a healthy and vibrant literature. Family therapy needs to develop authors and The *Journal of Family Therapy* wants to hear from you.

These are the types of papers that are regularly submitted to the *Journal of Family Therapy*: (The word count for all these papers does not include tables and figures.)

Research Presentation (3,000-6,000 words)

A research paper should include:

- An introduction to the principal concepts and theoretical issues relevant to the study
- Previous work
- Description of methodology including participants
- Results/Findings
- Discussion of results, including implications for future research and practice

Additional Notes to Authors:

- JFT has an international readership, so spell out details that might be unfamiliar to the non UK field.
- JFT welcomes the linking of previous literature in a substantive, explanatory sense and therefore advises authors to reference other papers where possible.

PAPERS EXCEEDING THE SPECIFIED WORD LIMITS (including references) WILL BE RETURNED TO THE AUTHOR

Appendix H

Indicative Interview Schedule

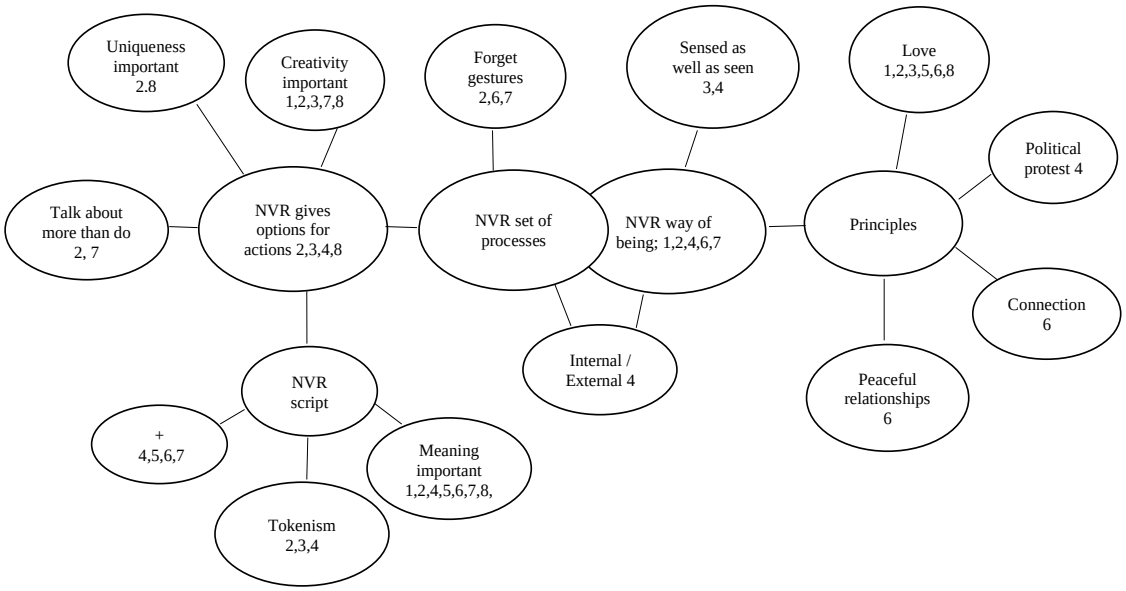
The following interview schedule is designed to give an indication of the questions asked. However, as a semi-structured process not all questions were asked, questions were asked in different orders and new questions were asked in response to the themes brought by each participant.

Research Interest	**Indicative Questions**
Staff understanding of NVR Principles – what does NVR mean to them?	What does the NVR approach mean for you? What are your experiences of the approach? To your mind what is the purpose of the NVR approach? How is your understanding of NVR changing?
NVR & Organisation	How does NVR relate to [organisation's] values as an organisation? How do you see the development of NVR at [organisation]?
Staff experience of training in NVR.	Can you tell me about your experience of training in NVR? How does NVR relate to your previous experiences and training? What further areas of training would be helpful to you?
Staff experience of the NVR principles & methods.	How is NVR impacting upon your relationships with the people you work with? • the young people in your care? • the parents of young people in your care? • other staff? Are there NVR methods that you find particularly helpful / do you feel confident in? • What is it that enables change? What are the challenges for you of this approach? • areas that you feel less confident? / • anything that has undermined your confidence?

	What is your experience of the processes / techniques of NVR? E.g. • the Announcement? • the Campaign of Concern? • the Sit-In? • Tailing? • reconciliation gestures with the young people? • supporting the young people in making acts of reparation?
	What might get in the way of you using NVR principles or methods?
Staff perception of how NVR functions for others.	What do you think the people you work with think of NVR? • the young people in your care? • the parents of young people in your care? other staff?
Staff experience beyond professional identity.	How is it for you as a person working within this approach beyond your professional identity?
	Are you learning anything about yourself through the process of NVR?
	Has the NVR approach transferred into your life beyond work?

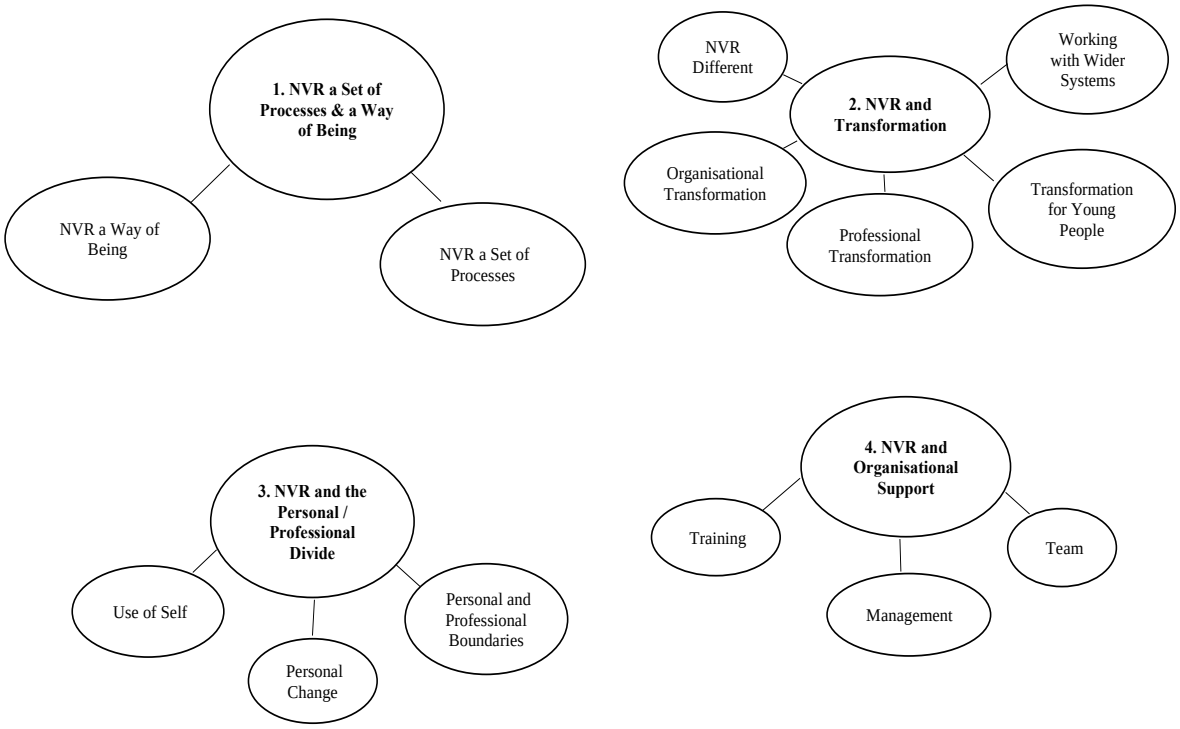
Appendix I

Example ‘Mind Map’ of Initial Themes for ‘NVR as a Set of Processes & A Way of Being’



Appendix J

Mind Map of Final Themes



Appendix K

Instructions for Authors – Military Psychology

About the Journal

Military Psychology is an international, peer-reviewed journal publishing high-quality, original research. Please see the journal's Aims & Scope for information about its focus and peer-review policy.

Please note that this journal only publishes manuscripts in English.

Military Psychology accepts the following types of article:

- research or review articles, research notes, clinical practice notes and communications

The journal publishes behavioral science research articles having military applications in the areas of (1) manpower and personnel issues; (2) testing and measurement; (3) training and human factors; (4) clinical and health psychology; as well as (5) social and organizational psychology. Military Psychology will consider any manuscript that has military application within one or more of these areas so long as it is rigorous scholarship that fosters our understanding of these areas and serves to stimulate the generation of research ideas and theoretical insights. Military Psychology is international in scope and the editors encourage submission of articles that address research being carried out in a variety of national settings.

Preparing Your Paper

research or review articles, research notes, clinical practice notes and communications

- Should be written with the following elements in the following order: title page; abstract; keywords; main text introduction, materials and methods, results, discussion; acknowledgments; declaration of interest statement; references; appendices (as appropriate); table(s) with caption(s) (on individual pages); figures; figure captions (as a list)
- Should contain an unstructured abstract of 200 words.
- Should contain no more than 5 **keywords**. Read making your article more discoverable, including information on choosing a title and search engine optimization.
- Authors should prepare manuscripts for blind review in accordance with the Publication Manual of the American Psychological Association (6th ed.). Articles not prepared for blind review in accordance with the Publication Manual will not be reviewed. Each submission must include (1) an unblinded and (2) a blinded copy of the manuscript (described above). All manuscripts should be prepared so that they have clearly articulated goals that serve to organize the introduction, method, results, and discussions. The introduction should review relevant research and theories and conclude with a clear articulation of a testable research hypothesis or research question. The methodology should include a complete description of demographic characteristics (e.g., gender, age, race/ethnicity, education) and military career information (e.g., occupational field, years of service) of the participants; provide a thorough and concise description of all measures (e.g., lead stem with sample items, response alternatives, scoring procedures, and M, SD,

reliability, and validity information); and include an explicit statement addressing confidentiality safeguards. The results section should include appropriate descriptive and inferential statistical analyses with reports of effect sizes (or strength of relationships) and confidence interval for significant and non-significant findings. The discussion section should elaborate on the unique contributions of the study to include linkages and extension from previous research and theory and address limitations and future directions. Research or Review Articles should not exceed 25 pages; Research and Clinical Practice Notes and Communications should not exceed 15 pages; all pages shall be inclusive of tables, figures, and references. A separate title page should be prepared and include (a) the title of the manuscript; (b) names and institutional affiliations of all authors exactly as they are to be printed; and (c) name, mailing address, telephone and fax numbers, and e-mail address of the corresponding author. An e-mail address must be included on the cover page. Authors should also prepare a cover page that is included with the blind review copy of the manuscript. Public significance statements. As part of your submission, we ask that you prepare an impact statement of two to three sentences that summarizes your study in plain English for the educated public. The statement should be written in simple, nontechnical, and compelling terms that highlight the relevance and implications of your research. Please do not copy the abstract for this purpose. The aim of the statement is to summarize the article's findings and highlight their importance to human behavior within and beyond the military environment (e.g., understanding human thought, feeling, and behavior and/or assisting with solutions to psychological or societal problems). The public significance statement will enable authors to have greater control over how their work will be interpreted by key audiences. A useful guide may be found at: http://www.apa.org/pubs/authors/guidance.aspx. Please include the public significance statement in your manuscript file after the abstract.

Style Guidelines

Please refer to these quick style guidelines when preparing your paper, rather than any published articles or a sample copy.

Please use American spelling style consistently throughout your manuscript.

Please use double quotation marks, except where "a quotation is 'within' a quotation". Please note that long quotations should be indented without quotation marks.

Formatting and Templates

Papers may be submitted in Word format. Figures should be saved separately from the text. To assist you in preparing your paper, we provide formatting template(s).

Word templates are available for this journal. Please save the template to your hard drive, ready for use.

If you are not able to use the template via the links (or if you have any other template queries) please contact us here.

References Please use this reference guide when preparing your paper.

Appendix L

Confirmation of Ethical Approval

From: psychology-ethics <psychology-ethics@bath.ac.uk>
Sent: 18 November 2019 02:05
To: Jessica Mackinnon <jm2561@bath.ac.uk>
Cc: (Redacted)
Subject: 19-282

Dear Jessica

Full title of study: Does military veteran status and diagnosis of PTSD affect the public's perception of do mestic abuse?
PREC reference number: **19-282**

On behalf of the Committee, I am pleased to confirm that you have received full ethical approval for the above proposal from the Psychology Research Ethics Committee.

If you intend to display recruitment posters/materials, please ensure you obtain the appropriate pe rmission to do so from those who manage the location(s) you choose.

Please inform PREC about any substantial amendments made to the study if they have ethical im plications.

Please make sure you quote your unique PREC code, **19-282**, in any future correspondence.

(Redacted)
On behalf of Psychology Research Ethics Committee

Appendix M

Relevant Experience Questions

Please complete the questions below. These will help us know if personal or professional experiences make a difference to the responses people give. The answers here will never be linked to your individual responses to other questions and cannot be used to identify you.

In a professional capacity have you ever worked with (not as colleagues) people who have:

- Experienced domestic abuse? Yes / No / Prefer not to say
- Perpetrated domestic abuse? Yes / No / Prefer not to say
- Experienced PTSD? Yes / No / Prefer not to say
- Been the partner of someone experiencing PTSD? Yes / No / Prefer not to say
- Been in the military? Yes / No / Prefer not to say
- Been the partner of someone in the military? Yes / No / Prefer not to say

In a personal capacity, have you ever supported someone who has:

- Experienced domestic abuse? Yes / No / Prefer not to say
- Perpetrated domestic abuse? Yes / No / Prefer not to say
- Experienced PTSD? Yes / No / Prefer not to say
- Been the partner of someone experiencing PTSD? Yes / No / Prefer not to say
- Been in the military? Yes / No / Prefer not to say
- Been the partner of someone in the military? Yes / No / Prefer not to say

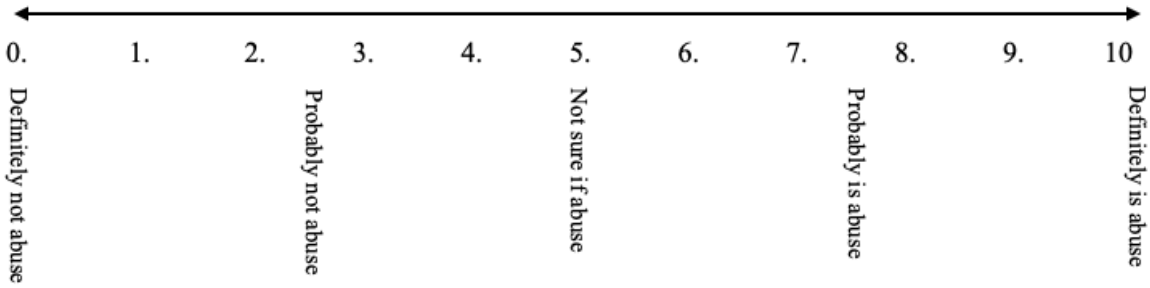
Have you ever:

- Experienced domestic abuse? Yes / No / Prefer not to say
- Perpetrated domestic abuse? Yes / No / Prefer not to say
- Experienced PTSD? Yes / No / Prefer not to say
- Been the partner of someone experiencing PTSD? Yes / No / Prefer not to say
- Been in the military? Yes / No / Prefer not to say
- Been the partner of someone in the military? Yes / No / Prefer not to say

Appendix N

IPV Rating Scale

On a scale of 0-10, to what extent do you think Danny's behaviour is domestic abuse?



Appendix O

Story Completion Task with Four Story Conditions

Below is a short story. I would like you to read the story and then finish it with what you think happens next. Please take your time and write at least ten lines as I'm interested in hearing about your ideas in detail.

Condition 1. Military Veteran, PTSD
Naomi and Danny have been married for five years and live together with their pet dog. Danny has been in the army since he was 16, having served in places like Afghanistan. He recently left the Army. He has been given a diagnosis of post-traumatic stress disorder (PTSD) by his doctor. Last Friday Naomi and Danny had an argument as a result of a number of stressful events. Danny became increasingly upset and would not stop shouting at Naomi. He punched the wall and threw Naomi's phone which he had hidden from her. It narrowly missed Naomi's face. This isn't the first time that the couple have argued and something like this has happened. A couple of days later Naomi talks to her friend, Steph about what happened and asks her what she should do. Steph responds...

Condition 2. Military Veteran, No PTSD
Naomi and Danny have been married for five years and live together with their pet dog. Danny has been in the army since he was 16, having served in places like Afghanistan. He recently left the Army. Last Friday Naomi and Danny had an argument as a result of a number of stressful events. Danny became increasingly upset and would not stop shouting at Naomi. He punched the wall and threw Naomi's phone which he had hidden from her. It narrowly missed Naomi's face. This isn't the first time that the couple have argued and something like this has happened. A couple of days later Naomi talks to her friend, Steph about what happened and asks her what she should do. Steph responds...

Condition 3. Construction Worker, PTSD
Naomi and Danny have been married for five years and live together with their pet dog. Danny has worked in construction since he was 16. He recently left the construction industry. He has been given a diagnosis of post-traumatic stress disorder (PTSD) by his doctor. Last Friday Naomi and Danny had an argument as a result of a number of stressful events. Danny became increasingly upset and would not stop shouting at Naomi. He punched the wall and threw Naomi's phone which he had hidden from her. It narrowly missed Naomi's face. This isn't the first time that the couple have argued and something like this has happened. A couple of days later Naomi talks to her friend, Steph about what happened and asks her what she should do. Steph responds...

Condition 4. Construction Worker, No PTSD
Naomi and Danny have been married for five years and live together with their pet dog. Danny has worked in construction since he was 16. He recently left the construction industry. Last Friday Naomi and Danny had an argument as a result of a number of stressful events. Danny became increasingly upset and would not stop shouting at Naomi. He punched the wall and threw Naomi's phone which he had hidden from her. It narrowly missed Naomi's face. This isn't the first time that the couple have argued and something like this has happened. A couple of days later Naomi talks to her friend, Steph about what happened and asks her what she should do. Steph responds...

Appendix P

Study Recruitment Poster

Appendix Q

Study Information

Work, Wellbeing and Relationships – Study Information

Who am I?
My name is Jess Mackinnon and I am a trainee in the Department of Clinical Psychology at the University of Bath. I am conducting this study with Dr Catherine Hamilton-Giachritsis and Dr Rachel Paskell, clinical psychologists at the University of Bath.

What is this study about?
I am interested in public understanding about certain jobs, mental wellbeing and how these things might impact on personal relationships. We all hold beliefs about the world and the people in it and these beliefs can be affected by our experiences and wider factors like popular culture and the media. The beliefs we have shape what we expect from ourselves and others. Therefore, knowing about these beliefs can help us understand why people behave in the way that they do. I am hoping to find out more about the current beliefs of the general public regarding specific jobs, mental wellbeing and personal relationships by surveying around 300 people aged 18+ currently living in the UK.

What would I need to do?
Taking part in this study will take about 10 – 20 minutes of your time. It is completely anonymous and no identifiable information will be asked for at any point. This means it will not be possible to link any of your responses to you. If you decide to take part, you will be asked:

1. demographic information (gender identity, age, ethnicity, sexual orientation). This helps us know about the groups of people that have taken part in the study and if certain groups are missing. Your demographic information will never be linked to your study responses and cannot be used to identify you. You will have the option 'prefer not to say' if you do not wish to provide this information.

2. to read a short story (one paragraph). This story is about a heterosexual couple having an argument in which the man becomes very angry. If you think that this would be distressing for you then you are under no obligation to participate in this study and can withdraw at any point without having to explain why by clicking 'exit study'.

3. four tick box questions about the story and whether it relates to any experiences you might have had.

Some participants will also be randomly selected to finish the story being as creative as you like. You will be asked to write at least 10 lines as I am interested in hearing in detail how you respond to the story.

You can withdraw from this study at any point by clicking on 'exit study'. You do not have to give any reason for doing this. When you click 'exit study' or submit your responses you will be directed to some more information about the study and details of support services related to the topics discussed which you can keep and print if you wish. You will also be able to contact me or my supervisors if you have further questions.

What will happen to my responses?

Once you have clicked 'submit' you will be given a unique data code which is the only way your responses can be identified. Your responses will be stored online in a secure file along with all of the other responses. Only the research team will have access to this file. The tick box responses will be analysed using a statistical computer programme which will help us identify any patterns in how people respond. The story responses will be analysed using 'thematic analysis' which means we will look at similarities and differences across the stories and group these into themes. If you change your mind and want to withdraw your responses from the study you can contact me up until 29th February 2020 with your unique data code and your responses will be permanently deleted. You do not have to give any reason for doing this. After 29th February 2020 the data will be analysed and written up for the purposes of the primary researcher's Doctorate in Clinical Psychology and potential publication. This means it will not be possible to withdraw your data after this date.

What will happen to the results of this research?
The results of the study will help us know more about public understanding about certain jobs, mental wellbeing and how these things might impact on personal relationships. This in turn might help us to understand more about public expectations and behaviour. The results will be written up as part of my Doctorate in Clinical Psychology and may also be published in an academic journal with potential to inform public discussion and policy. As this study is entirely anonymous I will not be able to contact you about the results. However, if you would like a summary of the results I would be very happy to share these with you. You can contact me via email (redacted) after July 2020 to request this.

What will happen to my responses once this study is over?
In line with the requirements of the British Psychological Society the University of Bath will securely store your anonymous data for ten years.

It is now best practice for research data to be made available to other researchers so that it can be used to its full potential. Before you participate in this study you will be asked whether you give your consent for the University of Bath to make your data available to other genuine researchers. You do not have to consent to this and can still take part in this study.

What do I do if I have any more questions?
If you would like to ask any further questions before deciding whether or not to take part you can contact me via email at (redacted) or you can contact my supervisors Dr Catherine Hamilton-Giachritsis at (redacted) / Dr Rachel Paskell at (redacted). Please be aware that we may not be able to answer a question if the answer might affect your study responses.

If you have any concerns about the ethics of this research study, please contact the Bath University Psychology Department Research Executive Chair
Email: (redacted)

Our address is

Department of Psychology
University of Bath
Claverton Down
Bath, BA2 7AY

Thank you for taking the time to read this. I would be extremely grateful if you were able to take part in this study.

On the next page you will be asked to give your consent to take part in the study.

Appendix R

Study Debrief

Work, Wellbeing and Relationships - Study Debrief

Thank you for taking part in this study investigating public understanding about certain jobs, mental wellbeing and how these things might impact on personal relationships. The study has a particular focus on military veterans, post-traumatic stress disorder and domestic abuse. Over recent years, there has been increased focus on domestic abuse in the media and in public policy. However, we know that this is a complex subject and public understanding of abuse is affected by a range of factors. We are particularly interested in public perceptions of military veterans with and without a diagnosis of post-traumatic stress disorder (PTSD). We want to find out if their professional role and mental health status affect whether people believe that violent behaviour is domestic abuse. Whilst there is no evidence to suggest higher rates of abuse in military relationships, we do know that there are high rates of PTSD in veterans, and there may be a relationship between PTSD and domestic abuse in this group. By finding out about current public understanding we can know more about how to target public campaigns and support people to identify and report abuse. Your participation is really appreciated. Please do not talk to anyone else who might be taking part in the study about the aims of the study until after March 2020 as this might affect the answers they give.

Some people who have taken part in this project may want to access further support or information about the topics discussed.

Military Veterans:

Combat Stress: Mental health support and treatment for military veterans.

W: www.combatstress.org.uk / E: helpline@combatstress.org.uk / T: 0800 138 1619 / Text: 07537 404719

Help for Heroes: Support for people and their families, who have experienced physical or mental illness whilst serving in the military.

W: www.helpforheroes.org / E: getsupport@helpforheroes.org.uk / T: 01752 562179 (West Region) (see website for other regional contact numbers)

Ripple Pond: A self-help support network for the adult family members of physically or emotionally injured military personal and veterans.

W: www.theripplepond.org / E: help@theripplepond.org / T: 01252 913021

The Royal British Legion: Advice and support for military personnel, veterans and their families.

W: www.britishlegion.org.uk / T: 0808 802 8080

The Veterans Gateway: Information and signposting for veterans and their families.

W: www.veteransgateway.org.uk / T: 0808 802 1212 / Text: 81212

Mental Health:

GP: Should you experience ongoing mental distress you may wish to speak with your GP who can advise with regards to mental health services in your area.

The Samaritans: Available 24/7 365 days of a year for anyone who would like someone impartial to talk to.

W: www.samaritans.org / E: jo@samaritans.org / T: 116 123

Mind: A mental health charity providing a range of information and advice

W: www.mind.org.uk / E: info@mind.org.uk / T: 0300 123 3393 / Text 86463

Domestic Abuse:

If you or someone you know is in immediate danger call 999.

GP: Should you or someone you know be experiencing domestic abuse you may wish to speak to your GP who can advise with regards to support services in your area.

The National Domestic Violence Helpline: a freephone National Domestic Violence Helpline (run in partnership between Women's Aid and Refuge) is available 24 hours a day, 7 days a week. The helpline is for woman and children experiencing or who have experienced domestic abuse, or people who wish to support women and children experiencing or who have experienced domestic abuse.

W: www.nationaldomesticviolencehelpline.org.uk E: helpline@womensaid.org.uk / T: 0808 2000 247

Further information, advice and services for women and children can be found at www.refuge.org.uk and www.womensaid.org.uk

Men's Advice Line: Advice and support for men experiencing or who have experienced domestic abuse

W: www.mensadviceline.org.uk / E: info@mensadviceline.org.uk / T: 0808 801 0327

Respect: Advice and support for men and women who are perpetrators of domestic abuse and would like to change their behaviour

W: www.respectphoneline.org.uk / E: info@respectphoneline.org.uk / T: 0808 802 4040

Thank you again for participating. If you would like to speak to us about the project please get in touch with me Jess Mackinnon via email at (redacted) or you can contact my supervisors Dr Catherine Hamilton-Giachritsis at (redacted) / Dr Rachel Paskell at (redacted).

If you have any concerns about the ethics of this research study, please contact the Bath University Psychology Department Research Executive Officer, (redacted) Email: (redacted) Phone: (redacted).

Our address is:

Department of Psychology

University of Bath

Claverton Down

Bath

BA2 7AY