Judging Personality Disorder: A Systematic Review of Clinician Attitudes and Responses to Borderline Personality Disorder; and an Examination of Causal Attributions, Stigmatising Stereotypes and Jury Decision Making Regarding the ICD-11 “Severe Personality Disorder, Borderline Pattern” Criteria

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Thesis Portfolio Abstract

Aims: This portfolio aims to aid understanding of processes of mental health stigma relating to "Borderline Personality Disorder" (BPD), and how developments in the nosology of Personality Disorder may affect the perceptions of laypeople in legal settings. It contains a review of the evidence concerning clinician attitudes and reactions toward BPD, and an empirical investigation of the effect of *International Classification of Diseases-11* (ICD-11) terminology upon jury decision-making and perceptions.

Design: This portfolio consists of an general introduction to the topic, a systematic review of clinician attitudes and responses to BPD, an empirical paper outlining a quasi-experimental study of the effect of the "Severe Personality Disorder, Borderline Pattern" ICD-11 classification upon jury decision-making, an extended methodology, and an overall discussion and evaluation section.

Findings: The systematic review confirms that negative attitudes toward BPD remain a problem in clinical groups and are likely to relate to both unhelpful stereotypes and challenging therapeutic interactions, implicating a need for well-evidenced training programmes. Various methodological limitations of this literature are discussed.

The empirical paper identified significant differences relating to increased perceptions of dangerousness and the need for segregation and coercion when a defendant's mental health problems were described as a "Severe Personality Disorder, Borderline Pattern", although differences in jury-decision making were not observed.

Value of work: This work indicates that BPD remains a particularly stigmatised diagnosis among clinicians, and this is likely to remain the case until well-evidenced training programmes are made a crucial component of ongoing professional development. This work makes a novel contribution to the study of jury perceptions and decision-making and is possibly the first to assess the effect of the new ICD-11 classification upon processes of stigma toward Personality Disorder. It has important implications for the way in which clinicians communicate clinical information in legal settings.

Chapter One: General introduction

This thesis portfolio consists of a systematic review and empirical paper exploring the topic of stigmatising attitudes and responses to individuals with a diagnosis of "Borderline Personality Disorder" (BPD). The systematic review section reviews research from 2000-2019 concerning the attitudes of clinical staff groups to BPD. The empirical paper section investigates the effect of the upcoming *International Classification of Diseases and Related Health Problems* (11th ed.; ICD-11; World Health Organisation, 2019) "Severe Personality Disorder, Borderline Pattern" classification upon mock-juror perceptions of a defendant in relation to the legal question of Diminished Responsibility for murder (DR; Coroners and Justice Act, 2009), as well as causal attributions for their behaviour and endorsement of stigmatising stereotypes.

This introductory chapter aims to provide background information on the central concepts detailed within the portfolio and outline the rationale for both the systematic review and empirical paper components. A guide on terminology concerning personality disorder is provided below for clarity.

Terminology used in this portfolio

This thesis portfolio focuses upon what is currently described as "Emotionally Unstable Personality Disorder" (EUPD) within the diagnostic framework of the *International Classification of Diseases* (10th ed.; ICD-10; World Health Organisation, 1992) and "Borderline Personality Disorder" (BPD) in the *Diagnostic and Statistical Manual of mental disorders* (5th ed.; DSM-5; American Psychiatric Association, 2013). This portfolio refers to BPD (rather than EUPD) within the introduction and systematic review components, and components of the discussion and reflection sections, as this terminology is ubiquitous within the academic literature as well as clinical guidance (National Institute for Health and Care Excellence, 2009). This portfolio also refers to "Personality Disorder" (PD) in a generic sense where referring to works which employ this term. Within the introduction section, bridging chapter, empirical paper, discussion and reflection sections, it uses the term "Severe Personality Disorder, Borderline Pattern" in reference to a part of the new classification

of Personality Disorder introduced by the ICD-11. Where this is used, it is intended to refer to a severe form of BPD as it is described in DSM-5, or EUPD in ICD-10. The bridging chapter of this portfolio explains the development of this classification in more detail.

Borderline Personality Disorder

BPD is a complex mental health disorder characterised by heightened social threat perception, sensitivity to rejection, emotional dysregulation, behavioural impulsivity and an unstable sense of self (Crowell, Beauchaine and Linehan, 2009). Contemporary theories of BPD link these difficulties to complex trauma and its impact upon the faculties of attachment, mentalising, social learning and epistemic trust (Luyten, Campbell and Fonagy, 2020). It has an estimated prevalence of 0.7-2% of the general population (Coid, 2003). Tyrer (2009) suggests that BPD is a misnomer, as “it is neither borderline nor a personality disorder”, instead considering it a form of affective disorder. Some authors have suggested that the diagnosis be abandoned due to stigmatising connotations and considerable heterogeneity (Lewis and Appleby, 1988; Tyrer, 2009).

Mental health stigma, and perpetuation by clinicians

Erving Goffman’s seminal work on stigma described how through processes of attribution and stereotyping individuals come to be “reduced in our minds from a whole and usual person, to a tainted and discounted one” (Goffman, 1963, p.3). Stigma refers to the application of discrediting stereotypes about a person and discriminatory and rejecting behavioural responses (Corrigan and Watson, 2002). Commonly described forms of stigma include public stigma (stigmatising attitudes toward mental health problems by others, including professionals), self-stigma (when these attitudes are internalised by the person) and label avoidance (where persons are keen to avoid potential association with a stigmatised label, and so may avoid services) (Ben-Zeev, Young and Corrigan, 2010). Stigma has considerable detrimental effects for people with mental health problems, affecting employment prospects and income (Sharac et al, 2009), preventing help-seeking and adversely

affecting self-esteem (Clement et al, 2015). Mental health stigma has historically been associated with attributions of personal responsibility and blame for illness, dangerousness, and control over behaviour among others (Corrigan and Watson, 2002; Corrigan et al, 2002). While public education campaigns have resulted in greater mental health literacy concerning the biological correlates of mental health problems, this has not resulted in a greater social acceptance (Schomerus et al, 2012).

Link and Phelan (2001) describe a four-component model of stigmatisation: labelling salient differences from the social norm; the association of these differences with discrediting stereotypes; the delineation of difference between stigmatiser and stigmatised (or "us and them"); and status loss and discrimination. This model of stigma is pertinent to mental health professionals, who are often engaged in identifying and categorising differences outside of the social norm to help determine forms of illness, appropriate treatment and services. Labels are automatically and intuitively linked with stereotypes, drawn from the social or cultural context, as part of an economical heuristic process allowing efficient (though potentially erroneous) judgements (Link and Phelan, 2001; Tversky and Kahneman, 1974).

Unfortunately, mental health professionals appear quite susceptible to the development and perpetuation of mental health stigma (Schulze, 2007; Hansson et al, 2011). Moreover, many service contexts in which mental health professionals operate demand quick, rule of thumb judgements due to chronic service pressures (Crisp, Smith and Nicholson, 2016) which may exacerbate reliance upon commonly held stereotypes. Therefore, mental health professionals may be at particular risk of perpetuating or reinforcing negative stereotypes or stigmatising ideas.

Causal Attributions

Attribution theory provides a framework for understanding stigmatising beliefs regarding mental health problems, and subsequent behavioural responses (Weiner, 1985; Dagnan, Trower and Smith, 1998; Markham and Trower, 2003). Under this framework, it is suggested that people make inferences as to the perceived cause of a behaviour, and that these inferences are readily influenced by stigmatising ideas about mental health problems (Weiner, 1995; Corrigan et al, 2003). Negative

emotional responses may relate to inferences concerning the controllability or perceived responsibility for difficulties or challenging behaviours (Dagnan, Trower and Smith, 1998; Corrigan et al, 2003; Markham and Trower, 2003). Attributions of control over symptomatology and the causes of challenging behaviours in BPD have previously been identified in psychiatric nurses and show associations with decreased sympathy (Markham and Trower, 2003). Causal attributions for behaviour, and their relation to questions of guilt and responsibility for criminal behaviour, are explored in further detail in the empirical paper component of this portfolio.

Stigmatising attitudes toward PD and BPD

A central theme within this thesis portfolio, which is explored in detail within the systematic review and empirical paper components, is the concept of stigma associated with a diagnosis of BPD. Prior reviews on the topic have suggested that BPD may be the most stigmatised form of mental disorder, and that this is particularly pernicious within clinical staff groups, while less is known about stigma towards PD/BPD in the general public (Aviram, Brodsky and Stanley, 2006; Catthoor et al, 2015; Sheehan, Nieweglowski and Corrigan, 2016). The systematic review evaluates and synthesises research concerning the extent to which mental health professionals and other professional groups harbour negative attitudes towards BPD. This was pursued as prior reviews on the topic were out of date and did not include a formal quality appraisal of obtained research (Ociskova et al, 2017; Sansone and Sansone, 2013).

Diminished Responsibility

The empirical paper component of this portfolio explores these issues and their intersection with the legal question of Diminished Responsibility (DR) for murder (Coroners and Justice Act, 2009), as mental health professionals (particularly psychiatrists and clinical psychologists) may be commissioned to serve as expert witnesses as part of criminal proceedings (Crown Prosecution Service, 2019; Nathan and Medland, 2016). This was of significant interest for several reasons. First, as briefly detailed above and explored in detail throughout both papers, PD is thought to be a particularly stigmatised condition in clinicians (who may give expert evidence), though less is known

about how it is perceived in the public (Sheehan, Nieweglowski and Corrigan, 2003), let alone in the specific context of jury service. Secondly, legal frameworks concerning legal questions of mental capacity and DR tend to align well with concepts relating to biologically-based mental illness (i.e. schizophrenia) but less well with difficulties such as BPD, where difficulties may fluctuate (Peay, 2011; Pickard, 2015). Third, these issues may be affected by the new ICD-11 classification of PD, but the nature of this is unclear.

Chapter Two: Systematic Review

Judging Personality Disorder: A Systematic Review of Clinician Attitudes and Responses to Borderline Personality Disorder

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This paper is being prepared for submission to *The Journal of Personality Disorders.*

See Appendix A for author guidelines. There is no specific word limit for this journal, and length of reviews of this type are considered with appropriate justification from authors.

Abstract

Background: The diagnosis of BPD is suggested to have particularly stigmatising connotations, particularly within mental health professionals. This paper aims to synthesise quantitative studies investigating the attitudes and responses of clinicians to BPD, and to appraise their methodological quality.

Methods: A systematic search was carried out using MEDLINE Complete; CINAHL Complete; PsychoINFO; PsychARTICLES; Scopus; Social Sciences Citation Index and Academic Search Complete. Study quality was rated using an adapted tool.

Results: 37 papers were included in the review, spanning 8691 participants and consisting of 21 cross-sectional survey studies, 5 studies assessing training workshops, 5 studies assessing counter-transference and 6 experimental studies. Methodological quality was mixed, with many differing measures used with questionable validity.

Conclusions: Negative attitudes towards BPD continue to be a problem in clinical staff groups to differing degrees. While this is most prominent in psychiatric nurses, this review highlights evidence of negative attitudes across all mental health professions and potentially in professionals working in physical health settings. Various clinician-level factors are considered in the development and maintenance of such attitudes. Greater exposure to BPD patients and attendance at training programmes are associated with improved attitudes. Professionals require regular training concerning BPD which is sufficiently evidence-based.

Background

It is suggested that mental health clinicians may form ideas and attributions as to who is a "good patient" and who is a "difficult patient", and preconceptions regarding this affect the perceived legitimacy of patient difficulties and the provision of services (Keokkeok et al, 2011). Judgements as to who is a "difficult patient" seemingly rely heavily on clinician attitudes relating to certain psychiatric diagnoses, more so than differences in patient behaviour (Keokkeok, van Meijel and Hutschemakers, 2006). Specifically, attributions as to how "difficult" patients should be treated may relate closely to presumed adherence to traditional clinician-patient power structures and clinician beliefs regarding the aetiology and course of mental health problems (Breeze and Repper, 1998; Keokkeok et al, 2011). The labelling of a patient as "difficult", even if an unconscious process, may lead to a self-fulfilling cycle of ineffective and invalidating clinician care (Keokkeok et al, 2011). Sulzer (2015) suggests that such "difficult" patients are excluded from clinical care. It is important, therefore, to consider clinician attitudes which lead to the "difficult patient" labelling process. Where particularly stigmatising ideas exist in clinical culture, this may affect clinicians' a priori expectations of a patient and bias the way in which clinicians may understand their difficulties (Aviram, Brodsky and Stanley, 2006).

Borderline Personality Disorder and clinician attitudes

It has been argued that within clinical practice, Borderline Personality Disorder (BPD) has been synonymous with this "difficult patient" status (Koekkoek, van Meijel and Hutschemakers, 2006; Sulzer, 2015). People with a Personality Disorder (PD) have historically been identified as "the patients psychiatrists dislike" in the title of a seminal paper by Lewis and Appleby (1988). In Lewis and Appleby (1988), psychiatrists judged people within a vignette with a PD as more responsible for their problems, as a "difficult management problem" and annoying, as "in control of suicidal urges", and "less deserving of NHS resources". The question of moral responsibility appears present in the PD concept to a unique extent; indeed it has been argued that certain types of personality disorder, including BPD, have a distinctly moral (rather than clinical) nature and should be treated as such

(Charland, 2006). BPD may be the most stigmatised form of PD, and this appears to exist to the strongest extent among healthcare providers (Sansone and Sansone, 2013; Sheehan, Nieweglowski and Corrigan, 2016; Ociskova et al, 2017).

Aviram, Brodsky and Stanley (2006) describe a pernicious dynamic between clinicians and patients with BPD, wherein clinicians defensively "emotionally distance" themselves from these patients due to therapeutic challenges and come to see patients with BPD as part of a stigmatised stereotype. This is highlighted by the accounts of nurses in working with people with BPD, in descriptions of a progressive loss of optimism and "starting to see them all as a unified group" (Woolaston and Hixenbaugh, 2008). The concept of clinician distancing has a parallel with what Koekkoek et al (2011) describe as "ineffective chronic professional behaviour" towards difficult patients, constituting denial of treatment, inaccessibility, overly rigid interpersonal styles, a lack of therapeutic focus and multiple onward referrals. This is particularly problematic with patients with BPD, as it is resonant with core interpersonal difficulties and sensitivities to rejection that characterise the disorder (Aviram, Brodsky and Stanley, 2006). Contemporary accounts of BPD, which emphasise the role of developmental trauma in attachment problems, mentalising difficulties, and epistemic mistrust (Luyten, Campbell and Fonagy, 2020), further indicate how distancing behaviour is likely to be received as invalidating and threatening.

Staff disciplines and BPD attitudes: an unclear picture

While it has been suggested that mental health professionals harbour stigmatising attitudes towards BPD (Sheehan, Nieweglowski and Corrigan, 2016; Aviram, Brodsky and Stanley, 2006), and that these may vary between mental health nurses, psychiatrists, psychologists and psychotherapists (Sansone and Sansone, 2013; Ociskova et al, 2017), the quality of the evidence supporting this narrative is unclear. Both Sansone and Sansone (2013) and Ociskova et al (2017) have considered this question, but do not include a formal quality appraisal within their reviews of the evidence. Additionally, Ockisova et al (2017) present a narrow focus upon the term "stigma" in their literature

search, limiting the scope of their review by excluding other terminology such as “attitudes”, as well as potentially related concepts such as counter-transference (McIntyre and Schwartz, 1998). A further review incorporating formal quality assessment is required.

Little is known as to how or why stigmatising attitudes may vary between mental health professionals – whether this relates to education and training (Dickens, Hallet and Lamont, 2016), or attendance to the “distancing” dynamic (Aviram, Brodsky and Stanley, 2006) through reflective practice, clinical supervision or theories of counter-transference.

Additionally, mental health professionals work alongside and interface with other professional groups, such as social workers, occupational therapists, physical health nurses and emergency department staff, police and criminal justice staff. If a stigmatising “clinical prototype” of BPD exists in the mind of mental health professionals (Aviram, Brodsky and Stanley, 2006), it is not known whether this also exists in other professional groups.

A changing picture?

A further question relates to whether attitudes toward BPD are changing as a function of ongoing research. Stigmatising attitudes are subject to change over time, reflecting changes in the way mental health problems are described and conceptualised (Schomerus and Angermyer, 2016). BPD is increasingly conceptualised in terms of childhood adversity and maltreatment (Ibrahim, Cosgrave and Woolgar, 2018; Winsper, 2018) and neurobiological mechanisms underpinning differences in the capacities of mentalising and attachment (Fonagy, Luyten and Strathearn, 2011). It is unclear whether stigmatising attitudes in clinicians are changing to reflect developments in the theory and evidence base concerning BPD.

The current review

This paper aims to systematically review the quantitative literature from 2000-2019 relating to the attitudes of clinical and non-clinical staff groups toward BPD, who have contact with these

patients. This will include psychiatrists, General Practitioners (G.P.'s), other medical staff, clinical psychologists, psychotherapists, mental health nurses, social workers, occupational therapists, physical health nurses, emergency department staff, paramedics, police officers, and criminal justice personnel. Data from obtained studies will be extracted to answer the following questions:

1) To what extent do differing clinical and non-clinical professional groups possess negative or stigmatising attitudes toward BPD?
2) Is there any evidence of a change in in stigmatising attitudes to BPD over time?
3) What differing types of quantitative research design and measurement approach have been used by these studies?
4) What is the formal quality of the research in this area?

Methods

This systematic review is reported with reference to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement (Moher et al, 2015). Registration of the review with the International Register of Prospective Systematic Reviews (PROSPERO) was not undertaken.

Search strategy

A systematic review of the literature was conducted using MEDLINE Complete; CINAHL Complete; PsychoINFO; PsychARTICLES; Scopus; Social Sciences Citation Index and Academic Search Complete databases on 03/12/2019. Search terms were refined following scoping searches of the literature and identification of relevant keywords. As BPD can also be referred to as "Emotionally Unstable Personality Disorder" (EUPD) as per the ICD-10 World Health Organisation criteria, this was included within search terms, although scoping searches revealed that EUPD was rarely used within the literature. See Table 1 for search terms used. Hand-searching of reference lists of included studies was also conducted, to determine additional relevant papers.

Table 1
Systematic review search terms.

Borderline Personality Disorder	Stigma/attitudes	Professional groups
personality disorder	stigma	psychia*
borderline personality	attitude	psychol*
borderline personality disorder	stereotype	nurs*
BPD	social distance	social worker
emotionally unstable personality disorder	empathy	occupational therapist
EUPD	exclusion	general practitioner
	mental health literacy	GP
	causal belief	doctor
	causal attribution	police
	stereotype	probation
	social distance	offender
	disattribution	paramedic
	burnout	emergency
	counter-transference	healthcare
	countertransference	NHS
		jury
		judiciary
		criminal justice system
		forensic

Selection criteria

The search aimed to identify quantitative primary research focused upon the attitudes and responses of professional staff groups towards people with a diagnosis of BPD. It included staff groups who may commonly come into contact with these individuals, including mental health clinician groups: psychiatrists, clinical psychologists, psychotherapists, psychiatric nurses, occupational therapists and social workers. It also included other staff groups who may come into contact with people with BPD through other forms of healthcare, as part of the emergency services, or as part of the forensic or criminal justice system: GP's; hospital doctors; physical health nurses; paramedics, police and members of the judiciary. The search incorporated all forms of quantitative research methodology, including mixed methods designs. The search included English-language peer-reviewed articles only.

The following exclusion criteria were applied: qualitative studies; studies where attitudes or responses of staff were not a focus; studies which did not focus upon BPD or its relevant wider

taxonomy (i.e. “Cluster B” personality disorders – APA 2013); studies focusing upon other dimensions of stigma or attitudes – i.e. internalised or “self-stigma” (Corrigan and Watson, 2002). Where there was a lack of specificity concerning personality disorder type (i.e. studies referencing attitudes to “personality disorder” alone), studies were included if deemed directly relevant to BPD following full-text scrutiny. Limits were set to include articles published between January 2000-November 2019. As stigmatising attitudes are hypothesised to change over time (Schomerus and Angermyer, 2016), this range was set to explore clinician attitudes within contemporary practice.

Study selection

Searches were carried out using the above criteria. The screening process progressed through stages of title scrutiny, abstract scrutiny, and finally full-text review (see Figure 1). One reviewer (JB) extracted data from obtained studies. An information extraction table was piloted prior to the search, to guide extraction of relevant demographic and methodological data (See Appendix B). **Synthesis**

A narrative synthesis was performed to summarise the findings of the studies obtained in the review. This review was intended to improve upon the scope of earlier reviews on the topic (Ociskova et al, 2017; Sansone and Sansone, 2013) from terms focusing on “stigma” alone. As it included a greater breadth of concepts relating to clinician attitudes and reactions, a broad range of different studies using variable designs and outcome measures were included. . To aid synthesis of findings and accessibility, the effect direction plot (Thomson and Thomas, 2013) is used to visually display non-standardised effects across broad outcome domains featured within obtained cross-sectional studies.

Risk of bias in individual studies

Methodological quality of obtained papers was determined using the National Institutes of Health Quality Assessment Tool for Observational, Cohort and Cross-Sectional Studies Tool (NIH, 2014). This is used to help assess the risk of potential bias at the study level by assessment of methodological rigour. Modifications were made to the NIH tool to reflect quality appraisal criteria pertinent to experimental studies, with three appraisal items from the JBI Checklist for Randomised Controlled Trials (Joanna Briggs Institute, 2017) included concerning appropriate statistical analysis,

outcome measurement consistency, and study design suitability. Meanwhile, two items were removed from the NIH tool, concerning blinding to exposure status of participants and loss to follow up after baseline, as these were typically not relevant to the research area under study. Much of the research obtained concerned cross sectional survey-based research designs. Modification of the NIH tool was done to attempt to capture relevant appraisal criteria in the absence of an identified best-practice appraisal tool for survey-based research, which is a recognised issue in reviews of attitudinal research in psychology (Protogerou and Hagger, 2019). Adaptation of this kind has been done in similar systematic reviews concerning stigma in mental health professionals (Ellison, Mason and Scior, 2013). Please see Appendix C for the adapted quality appraisal tool used, alongside the original NIH (2014) and JBI (2017) quality appraisal documents.

To aid reliability of the methodological assessment of included studies, 15% of these were second rated by the primary supervisor of the review. Any uncertainties were resolved by discussion. There was substantial agreement on studies rated, $k = .81$ (Landis and Koch, 1977).

Studies included in the review

The literature search returned 2533 articles (excluding duplicates), of which 256 full-text articles were screened for inclusion (Figure 1). 37 studies were included for review (see Table 2).

Figure 1.

PRISMA flowchart of literature searching and study selection.

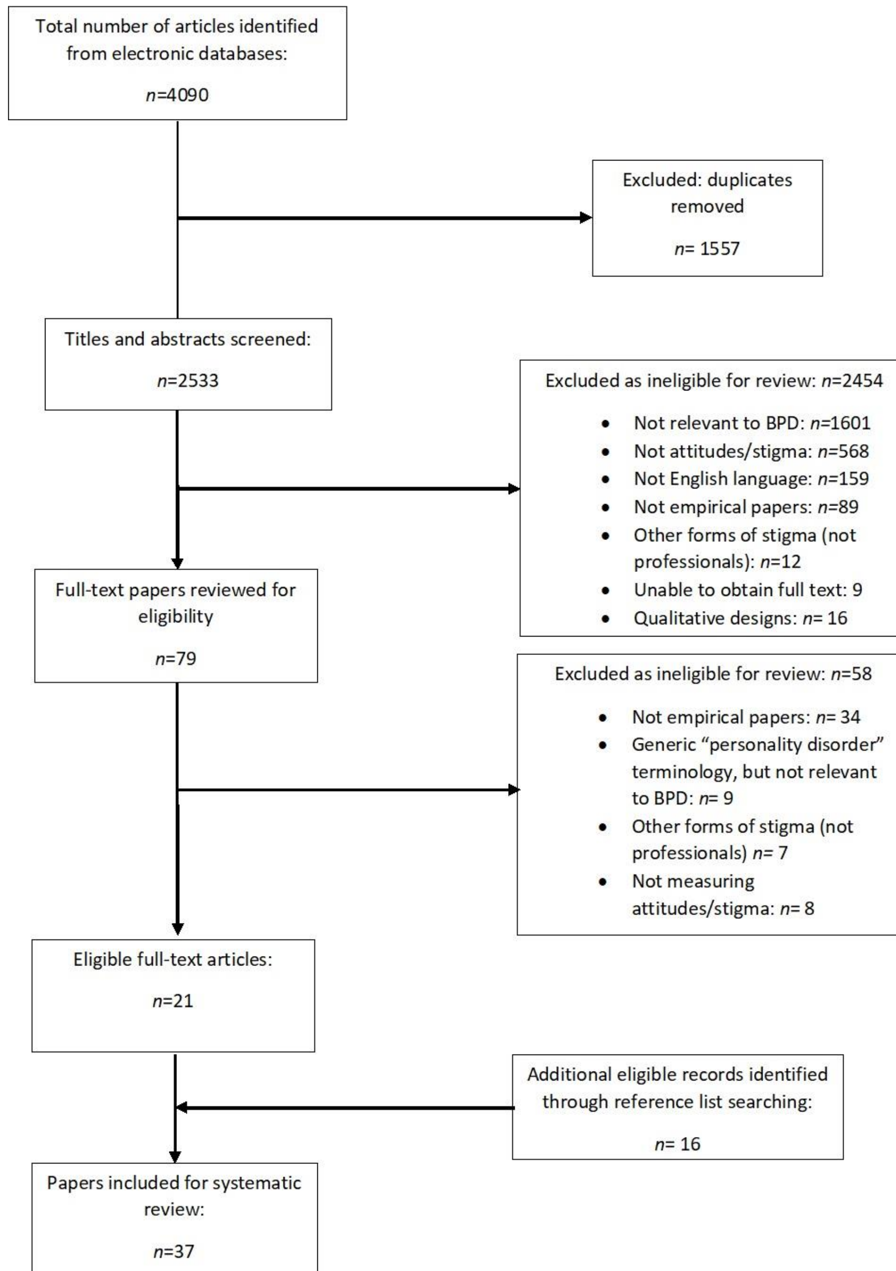

Figure 1: A flow chart documenting the literature searching and screening undertaken for the current systematic review.

Results

Obtained studies and participants

Across the 37 papers identified, estimated total number of participants was 8196 (mean 234, [SD 221], median 132) (see Table 1). Two studies did not report full sample statistics; hence this is a conservative estimate. For summary statistics regarding the professionals featured, please see Table 1. Studies were obtained from a range of countries: the UK (10); Australia (9); the USA (7); Israel (2); Spain, Turkey, Greece, Ireland, Italy, Norway, Denmark, Australia/New Zealand and Nepal (all contributing 1 study). Participants were recruited from a range of settings, including inpatient psychiatry, forensic psychiatry, general hospitals, community mental health clinics, academic centres and training programmes. See Table 2 for studies included within this systematic review.

Table 1. Breakdown of participants across obtained studies by occupational group.

Professional Group	*N*	Number of studies
Psychiatric Nurse	3191	25
Psychiatrist	1372	19
Clinical Psychologist	1425	21
Social Worker	734	14
Psychotherapist	163	3
Occupational Therapist	69	3
General Practitioner	122	3
Adult/General Nurse	189	4
Misc. Allied Health Professions	175	5
Hospital Doctor	56	2
Counsellor	57	2
Student Psychiatric Nurse	145	3
Police	210	1
Unregistered Nursing Staff	21	1

Table 2. Studies investigating aspects of professional stigma toward Borderline Personality Disorder.

Author(s) and date	Country	Study aims	Sample/population	Design and methodology	Aspect of stigma studied	Key findings
Beryl and Völm (2018)	• UK	• Assess attitudes toward personality disorder in staff working in high security and medium security hospitals.	• *n*=132 • Psychiatric Nurse: 70 • Allied Health Professionals: 29 • Psychologists: 23 • Psychiatrists: 3 • Social Workers: 3	• Survey-based design, using the APDQ	• Clinician attitudes toward working with personality disorder (unspecified). • Factors of APDQ: enjoyment, security, acceptance, purpose and enthusiasm.	• Nurses and psychiatrists held the most negative attitudes. • Psychologists, social workers and allied health professionals held more positive attitudes. • Positive attitudes associated with specific BPD training, and non-nursing background.
Black et al (2011)	• USA	• Assess attitudes toward BPD among clinicians across various academic centres in USA	• *n*=706 • Psychiatrist/Psychiatry resident: 353 • Social worker: 98 • Psychiatric nurse: 97 • Psychologist: 89 • Nurse practitioner/physician assistant: 17 • Other: 52	• Survey-based design using proprietary measure: unnamed 30 item inventory	• Attitudes toward treating patients with BPD • Scales of measure: empathy; treatment optimism; caring attitudes	• Nurses had lowest ratings for caring attitudes, empathy and treatment optimism. The remaining professions were optimistic about differing aspects of treatment. • Positive ratings associated with greater number of BPD patients treated in past 12 months.

Bodner, Cohen-Friedel and Iancu (2011)	• Israel	• Develop and factor analyse a measure of attitudes toward BPD; compare attitudes of various clinicians toward BPD	• *n*=57 • Psychiatric nurses: 25 • Psychiatrists: 19 • Psychologists: 13	• Survey based design using proprietary measures: a Cognitive Attitudes Inventory and the Emotional Attitudes inventory	• Attitudes toward treating patients with BPD – clinical judgements (cognitive aspects) and emotional reactions • Identified factors of measure: suicidal tendencies, antagonistic judgement; required treatment (cognitive items); negative emotions; difficulties in treatment; empathy (emotional items).	• Suicidal tendency ratings explained large degree of variance in negative emotion and treatment difficulty scores. While there were some occupational differences regarding antagonistic judgements and empathy, there were no significant main occupational group differences.
Bodner et al (2015)	• Israel	• Assess attitudes of clinicians toward hospitalisation and treatment of patients with BPD, compared with depression or generalised anxiety disorder	• *n*=691 • Psychiatric Nurses: 262 • Psychiatrists: 167 • Clinical Psychologists: 162 • Social workers: 100	• Survey-based design using measures developed in Bodner, Cohen-Friedel and Iancu (2011), and a "Implicit Attitudes Inventory"	• Attitudes toward treating patients with BPD (cognitive and emotional aspects) • Ratings of suitability of hospitalisation (comparison by diagnosis)	• • Nurses rated more negative cognitive attitudes and less empathy than social workers and psychologists. Ratings of empathy were similar across nurses and psychiatrists.

				containing a case vignette with experimental manipulation of diagnosis	• Ratings of perceived traits of patient, i.e. wise-stupid; selfish-unselfish (comparison by diagnosis).	
Bourke and Grenyer (2010)	• Australia	• Examine the emotional and cognitive responses of therapists to patients with BPD compared to those with depression	• *n*=20 • Clinical Psychologists: 20	• Mixed-methods design using categorisation of interview data and quantitative analysis of these categories.	• Responses of clinicians relating to aspects of the therapeutic relationship. Categories of: wishes for self/other for self/other; responses of other for other/self; responses of self for self/other.	• Emotional responses of psychologists were more negative towards patients with BPD, and they felt less satisfied in their work.
Bourke and Grenyer (2013)	• Australia	• Assess the experiences of psychotherapists treating people with BPD, in comparison to people with major depressive disorder	• *n*=20 • Clinical Psychologists: 20	• Mixed-methods design using a questionnaire (PRQ) designed to investigate appraisals of patients and the therapeutic relationship	• Operationalised countertransference responses from therapists to BPD patients. • Factors of PRQ: hostile; narcissistic; compliant/anxious; positive working alliance; avoidant/dismissing and sexualised	• Psychologists expressed greater clinical stress in working with patients with BPD compared to those with depression. • They perceived BPD patients to exhibit higher hostile, narcissistic compliant, anxious and sexualised dimensions of response during psychotherapy.

Castell (2017)	• Spain	• Assess negative attitudes towards BPD patients in clinicians across general and mental health settings.	• *n*= 310 • Primary health nurse: 65 • General Practitioner: 66 • Psychiatric Nurse: 56 • Psychologist: 62 • Psychiatrist: 61	• Survey-based design, using the Emotional Attitudes Inventory from Bodner et al (2011), and a proprietary measure to assess potential use of electronic application	• Attitudes towards treating patients with BPD	• Primary care professionals rated factors of negative emotions and treatment difficulties as higher than the mental health professionals. Empathy was rated similarly across the groups. Psychologists and Psychiatrists scored lowest for negative emotions, and Psychologists were lowest for treatment difficulties.
Chartonas et al (2017)	• UK	• Assess negative attitudes towards patients with BPD in psychiatry trainees	• *n*=76 • Psychiatry trainees with varying years of experience	• Experimental design using case vignettes, with experimental manipulation of diagnosis used and patient race. Attitudes captured using 22 semantic differentials questionnaire from Lewis and Appleby (1988) and APDQ.	• Attitudes towards BPD patients compared to depression	• A weak trend toward more negative attitudes regarding BPD using the APDQ was non-significant. There appeared to be less sense of purpose when working with BPD.

Cleary, Siegfried and Walter (2002)	• Australia	• To assess clinician experiences, knowledge and attitudes toward BPD	• *n*=229 • Psychiatric nurse: 151 • Psychiatrist/psychiatry registrar: 35 • Psychologist: 15 • Social worker: 18 • Occupational therapist: 6 • Other: 3	• Survey-based design using a proprietary questionnaire. Between-group ratings were not compared.	• Knowledge regarding BPD and level of confidence in working with them. Attitudes towards providing people with BPD with services.	• 80% of clinicians surveyed felt that BPD patients were difficult to work with. Most participants held constructive attitudes towards providing people with BPD with services, and to further training.
Commons-Treloar and Lewis (2008)	• Australia and New Zealand	• To assess impact of targeted clinical education on clinician attitudes toward self-harm in BPD	• *n*=99 • Emergency Medicine clinicians: 33 • Mental Health clinicians: 66 • Nursing: 75 • Allied health: 20 • Medical: 4	• Pre-post within-subjects design concerning attendance at an education session. Attitudes toward self-harm captured using ADSHQ measure designed for study.	• Attitudes towards deliberate self-harm in BPD. • Factors of ADSHQ: confidence in assessment/referral; ability to work effectively; use of empathetic practice; confidence in use of policy.	• The education session improved ratings regarding confidence in management. There was minimal impact upon ratings of empathetic treatment, and no differences between occupational areas.
Day et al (2018)	• Australia	• To assess clinician attitudes toward BPD over a 15-year period	• *n*=66 • Psychiatric Nurses (33 in 2000; 33 in 2015).	• Mixed-methods longitudinal design using the short-form APDQ, ADSHQ and the ASQ alongside semi-structured interviews.	• Attitudes towards BPD and deliberate self-harm. • ASQ items: willingness; optimism; enthusiasm; confidence; theoretical knowledge and clinical skills.	• Scores on the ADPQ were significantly more positive in the 2015 sample.

Deans and Meocevic (2006)	• Australia	• Assess clinician attitudes towards BPD.	• *n*=65 • Psychiatric Nurses	• Exploratory survey-based design using a questionnaire developed in an earlier study.	• Attitudes toward BPD, management of patients, and clinician emotional reactions.	• High proportions of the survey sample rated patients with BPD as manipulative, emotionally blackmailing and responsible for their difficulties.
Egan, Haley and Rees (2014)	• Australia	• Assess the attitudes of clinical psychologists toward PD, in relation to training and caseload number	• *n*=81 • Clinical Psychologists	• Exploratory survey-based design using the APDQ. Scores were assessed in relation to training, proportion of caseload with PD, and years of experience using regression.	• Attitudes towards working with PD, incorporating enjoyment/loathing; security/vulnerability; acceptance/rejection; purpose/futility; enthusiasm/exhaustion	• 92% of sample had completed specialist training in the past. However, mean scores were comparable to other studies using the APDQ with other occupational groups. • There were significant positive relationships between positive APDQ ratings, higher caseload numbers recency of training.

Eren and Sahin (2016)	• Turkey	• Assess clinician attitudes and perceived difficulties in working with people with PD.	• *n*=332 • Psychiatrists and psychiatric residents: 70 • Psychiatric Nurses: 140 • Nurses: 88 • Clinical Psychologists: 30 • Social Workers: 4	• Survey-based design using three measures (PIQ, PD-DWS, PD-APS).	• Attitudes towards PD in general, emotional reactions, and perceptions of difficulty while working with people with PD.	• Greater levels of education, length of experience, psychotherapy education, personal experience of psychotherapy and clinical supervision were associated with lower perceived difficulties in working with PD, but did not consistently result in better attitudes
Giannouli et al (2009)	• Greece	• Assess clinician knowledge, attitudes and experience concerning patients with BPD, and compare these across differing hospital settings.	• *n*=127 • Psychiatric Nurses: 127, 64 of which were based in psychiatric hospitals, with 63 based in psychiatric outpatient departments in general hospitals.	• Descriptive survey-based design, using the questionnaire developed by Cleary, Siegfried and Walter (2002).	• Knowledge regarding BPD and level of confidence in working with them. Attitudes towards providing people with BPD with services.	• 80% of those surveyed felt that working with BPD was very difficult. Many rated services as inadequate and displayed contradictory views on whether assessment/treatment was part of their role.

Huack, Harrison and Montecalvo (2013)	• USA	• Assess clinician attitudes toward patients with BPD exhibiting deliberate self-harm.	• *n*=83 • Psychiatric Nurses: 83	• Descriptive survey-based design, using an adapted version of the ADSHQ	• Negative attitudes toward deliberate self-harm in patients with BPD.	• Greater years of experience and a desire to pursue further training were correlated with more positive attitudes towards self-harm.
James and Cowman (2007)	• Ireland	• Assess clinician knowledge, experience and attitudes toward patients with BPD	• *n*=157 • Psychiatric Nurses: 157	• Descriptive survey-based design, using the questionnaire developed by Cleary, Siegfried and Walter (2002).	• Clinician knowledge and confidence toward BPD, and perceived role in assessment/treatment.	• Replicated finding of 80% of clinicians rating care of BPD as difficult. Most felt confident in working with BPD, felt that assessment/treatment was their role and wanted to pursue training.
Keuroghlian et al (2016)	• USA	• Assess the effect of a Good Psychiatric Management workshop upon clinician attitudes toward BPD.	• *n*=297 • Counsellors/Social Workers: 88 • Psychiatrists and Psychiatry Residents: 91 • Psychiatric Nurses: 67 • Psychologists: 37 • Primary care Physicians/Physician Assistants: 14	• Pre-post within subjects design assessing impact of training session on attitudes, using unnamed questionnaire developed by Shanks et al (2011).	• Clinician attitudes toward BPD, it's prognosis and treatment.	• Improved ratings are reported across a range of attitudes toward BPD patients, reflecting increased empathy and awareness of distress.
Krawitz (2004)	• Australia	• Assessing effect of a training workshop on attitudes of clinicians towards BPD	• *n*=418 • Psychiatric Nurses: 192 • Psychologists: 59 • Social Workers: 59 • Occupational Therapists: 33 • Psychiatrists: 21 • 13% of sample unreported	• Pre-post within subjects design assessing impact of training session on attitudes, measured by a proprietary questionnaire.	• Clinician attitudes towards working with people with BPD. • Items related to: willingness; optimism; enthusiasm; confidence; theoretical	• Significant differences found following the workshop. Medium effect sizes are reported for most items, with a large effect noted for optimism.

					knowledge; clinical skill	
Lam, Salkovskis and Hogg (2016)	• UK	• Evaluate experimentally whether clinician judgements about a patient with panic disorder were influenced by a historical BPD diagnosis.	• *n*=265 • Psychiatrists: 30 • Clinical/Counselling Psychologists: 69 • Social Workers: 55 • Psychiatric Nurses: 65 • Mental health students: 46	• Experimental, randomised design with three conditions, assessing impact of BPD descriptive information and diagnostic label on clinical judgements of a video of a woman with panic disorder.	• Clinician judgements relating to optimism, responses to interventions and presumed difficulties, as influenced by superfluous BPD descriptive information and diagnostic label.	• The BPD label was associated with more negative evaluations of the patient and her response to interventions.

Lam et al (2016)	• UK	• Evaluate experimentally whether inclusion of superfluous BPD terminology affects clinician optimism regarding current panic disorder treatment.	• As in Lam, Salkovskis and Hogg (2016a).	• As in Lam, Salkovskis and Hogg (2016a), although clinician optimism was measured qualitatively. Responses were categorised and quantitatively analysed.	• Clinician optimism and pessimism concerning treatment of uncomplicated panic disorder, as influenced by BPD descriptive and diagnostic information.	• Insertion of the BPD label resulted in significantly fewer reasons to be optimistic regarding treatment.
Lanfredi et al (2019)	• Italy	• Assess caring attitudes towards BPD among a large sample of mental health professionals across 70 public health sites.	• *n*=860 • Psychiatrists: 225 • Psychologists and Psychotherapists: 74 • Social Workers: 35 • Psychiatric Nurses: 420 • "Social Health Educators"*: 110	• Exploratory survey-based design using two measures: the BPD-SAS from Black et al (2011), and the MICA 4.	• Clinician attitudes towards BPD, with reference to negative attitudes toward severe mental illness in general. • Specific factor of BPD-SAS described as "Caring Attitudes". • MICA 4 factors described as "negative attitudes toward mental illnesses".	• Social workers and nurses scored significantly lower on caring attitudes toward BPD than psychiatrists, psychologists and SHE's. A higher caseload of BPD patients, attendance at training and moderate clinical experience were associated with higher caring attitudes.

Liebman and Burnette (2013)	• USA	• Assess counter-transference reactions of clinicians towards a vignette describing BPD characteristics, across client and clinician-specific factors.	• *n*=560 • Psychologists: 257 • Psychiatrists: 81 • Psychotherapists/ Social Workers: 231 • 348 of these practitioners had some form of "special training" – i.e. DBT/CBT/Mindfulness	• Quasi-experimental between-subjects design, with client age and gender manipulated. Clinicians assigned a diagnosis (i.e. BPD, Bipolar) and made attitudinal judgements. Clinician reactions measured by proprietary measure based on earlier stigma-based measures.	• Counter-transference/stigma reactions. • Scale items: empathy; chronicity; conduct problems; distrust; interpersonal efficacy and dangerousness.	• The BPD label was associated with negative counter-transference reactions, especially in the adolescent condition. It was associated with lower levels of empathy, lower trustworthiness, and increased dangerousness. • Psychotherapists, psychologists, those with training specific to BPD, and those with higher proportions of BPD clients were more positive. Older clinicians were more negative, as were psychiatrists.

Little et al (2010)	• Australia	• Assess emotional reactions, concerns and attitudes toward management of BPD in police, criminal justice, support and health staff.	• *n*=378 • Police: 210 • Court Official: 6 • General Practitioner: 42 • Nurses: 19 • Social Workers: 19 • Child Protection Workers: 12 • Welfare workers: 10 • Psychiatric Nurses: 34 • Psychiatrists/Medical Officers: 13 • Psychologists: 1	• Exploratory survey-based design using a proprietary measure.	• Attitudes towards people with BPD and their management across a range of service providers including emergency and criminal justice services. • Items within measure: emotional reactions; concerns; management.	• Police were more likely to regard people with BPD as a nuisance and felt responsible for their safety. Mental health staff were more likely to perceive a person with BPD as being responsible for their own actions, i.e. crime or suicide
Lugboso and Aubeeluck (2017)	• UK	• Examine negative attitudes towards BPD in psychiatric nursing students	• *n*=53 • First-year students: 30 • Final-year students: 23	• Quasi-experimental design, with student year as independent variable, measuring attitudes using the APDQ.	• Attitudes towards working with people with BPD.	• First-year students made slightly more positive ratings than final-year students who had recently completed PD education sessions. Enjoyment was significantly less in the final year.

Markham (2003)	• UK	• Assess the effect of the BPD label on staff attitudes and perceptions.	• *n*=71 • Psychiatric Nurses: 50 • Health Care Assistants: 21	• Experimental within-subjects design.Attitudes assessed using three measures from earlier studies, adapted for the study: social distance scale; beliefs about dangerousness scale; staff optimism scale	• Attitudes towards BPD in comparison with those towards schizophrenia and depression. Levels of sympathy across conditions and optimism for change.	• Nurses were more socially rejecting, perceived greater dangerousness, and were less optimistic towards BPD than schizophrenia. HCA's made no distinctions between conditions.
Markham and Trower (2003)	• UK	• Assess effect of BPD label on perceptions and attributions for challenging behaviours.	• *n*=48 • Psychiatric Nurses: 48	• Experimental within-subjects design.Dependent variables were assessed using three measures: a causal attribution questionnaire, and sympathy and optimism measures from Markham (2003).	• Attributions made regarding challenging behaviours in people with BPD, compared to those with depression or schizophrenia. Levels of sympathy towards each patient group, and optimism for change. • Causal attribution dimensions: internality, stability, globality and controllability of behaviour.	• The BPD vignette attracted more negative responses than the other conditions. Causes of negative behaviour were rated as stable, and more controllable in this condition. Clinicians reported lower optimism and negative working experiences with this client group.

Masland et al (2018)	• USA	• Assess whether the effects of a Good Psychiatric Management workshop upon clinician attitudes toward BPD are sustained after 6 months.	• *n*=52 • Psychiatrists: 18 • Social Workers: 18 • Psychiatric Nurses: 6 • Psychologists: 5 • Other mental health workers: 4 • Counsellors: 1	• Pre-post within subjects design assessing impact of training session on attitudes over three time points, using adapted version of unnamed questionnaire developed by Shanks et al (2011).	• Clinician attitudes toward BPD, it's prognosis and treatment.	• While some attitudinal improvements were noted immediately post-workshop, some negative attitudes persisted. However, there was a notable drop in these attitudes at 6 months, with respondents reporting greater comfort and empathy with these patients.
Mason et al (2010a)	• UK	• Assess clinician perceptions of clinical and management issues involving patients with PD (unspecified) in high, medium and low security forensic psychiatric settings.	• *n*=416 • Psychiatric Nurses (various grades): 317 • Dual Qualification Psychiatric - General Nurses: 43 • Dual Qualification Psychiatric - Learning Disabilities Nurses: 56	• Exploratory survey-based design. Clinician perceptions assessed using a 20 item questionnaire designed in an earlier study.	• Clinician perceptions as to whether PD constituted a "management" issue and whether this was "clinically treatable".	• A PD diagnosis led to greater perceptions of being a "management issue" compared to forms of mental illness, which were viewed as more clinically treatable. These factors were more pronounced in medium and high security settings.
Mason et al (2010b)	• UK	• As in Mason (2010a), while examining differences between clinician occupational groups.	• *n*=545 • Psychiatric Nurses (various grades): 416 • Psychiatrists: 33 • Psychologists: 45 • Social Workers: 21 • Occupational Therapists: 30	• As in Mason et al (2010a).	• As in Mason et al (2010a), but across clinician occupational groups.	• People with PD were more of a "management" or security issue, and less clinically treatable, across occupations. There were significant differences between nursing and non-

						nursing professions, with this trend more pronounced in the nursing group.
Noblett, Lawrence and Smith (2015)	• UK	• Examine the attitudes of general hospital doctors towards patients with comorbid mental illness (including PD).	• *n*=52 • Medical staff (foundation doctors years 1 and 2, and core trainees): 52 • 27 of these had experienced a 6 month psychiatry rotation	• Experimental within-subjects design, concerning attitudes towards a series of short vignettes. Attitudes measured using the AMIQ.	• Attitudes of clinicians towards a range of mental health conditions, including PD. • AMIQ scale items: comfortable seeing on own; hard to talk to; dangerous; unpredictable; suspicious of reason for attending.	• The least positive attitudes were toward patients with personality disorder, schizophrenia, and people labelled as “criminals”.
Purves and Sands (2009)	• Australia	• Assess the attitudes of psychiatric triage and crisis clinicians towards people with PD.	• *n*=61 • Allied Health: 12 • Medical: 10 • Psychiatric Nursing: 38	• Exploratory survey-based design. Attitudes towards PD measured with the APDQ.	• Attitudes of clinicians towards PD (unspecified).	• Psychiatric triage and crisis clinicians were found to have negative attitudes towards PD.
Rossberg et al (2007)	• Norway	• Assess differences in counter-transference reactions between cluster A+B (mainly BPD) and C PD’s, and the relation of these	• Psychotherapists *n*=11, rating reactions toward 71 patients.	• Observational design with counter-transference reactions assessed using the FWC-58. These were obtained from therapist	• Counter-transference reactions of clinicians toward patients with various forms of PD. • Dimensions of FWC-58: important; confident; rejected; on guard; bored;	• Psychotherapists reported feeling less confident, more rejected, on guard, overwhelmed and inadequate regarding cluster A+B patients (predominantly BPD). There was greater variance in

		reactions to outcome.		experiences of group psychotherapy.	overwhelmed; inadequate.	this area, indicating disagreement between therapists.
Servais and Saunders (2007)	• USA	• Assess attitudes of clinical psychologists towards people with BPD, depression and schizophrenia	• *n*=306 • Clinical Psychologists: 306	• Exploratory survey-based design. Attitudes toward mental disorders rated using a proprietary measure.	• Attitudes of clinicians towards BPD, depression and schizophrenia. • Scales of measure: effectiveness; understandability; safety; worthiness; desirability; similarity to rater	• Greatest ratings of dissimilarity obtained for BPD and schizophrenia. People with BPD were rated as more dangerous, and as undesirable by 42% of the sample.
Shanks et al (2011)	• USA	• Determine whether attendance at a STEPPS BPD group workshop improved clinician attitudes toward BPD.	• *n*=271 • Does not report full sample statistics • Social Workers: 104 • Counsellors: 56 • Psychologists: 25 • Others included Psychiatrists, Probation Officers, Substance Abuse Counsellors at low proportions of sample	• Pre-post within subjects design assessing the impact of the workshop upon clinician attitudes, using a proprietary measure.	• Clinician attitudes toward BPD, its treatment and likely prognosis. • Items of measure: avoidance of BPD patients; feeling competent in care; whether BPD is an illness that cause distress; helping motivation; prognosis; desire for training.	• Significant improvements are reported across attitudes of clinicians, representing improved awareness, empathy and optimism towards BPD.

Thylstrup and Hesse (2008)	• Denmark	• Assess clinician emotional reactions to personality disorder features.	• Does not report sample statistics • Staff included addiction counsellors, social workers, nurses and psychologists • Patients were users of a substance misuse service.	• Exploratory survey-based design, where patient self-rated PD features and staff reactions were measured using the FWC-58.	• Counter-transference/ emotional reactions of staff members toward features of differing PD's.	• Self-rated BPD features (of patients) were not associated with any emotional reactions (in staff).
Tulachan et al (2018)	• Nepal	• Assess attitudes toward PD in Nepalese psychiatrists.	• *n*=36 • Psychiatrists: 36	• Exploratory survey-based design using a proprietary measure.	• Clinician attitudes toward PD (majority cluster B) concerning behavioural intentions (i.e. avoidance), difficulty in treating and feelings competence.	• Findings paralleled those from Western studies. 75% of participants found PD patients difficult, and that they didn't feel competent in treating them. Two-thirds reported that they wouldn't avoid such patients.

Key: AMIQ: Attitudes to Mental Illness Questionnaire; APDQ: Attitudes to Personality Disorder Questionnaire; ADHSQ: Attitudes toward Deliberate Self Harm Questionnaire; BPD-SAS: Borderline Personality Disorder – Staff Attitude Survey; CAQ: Clinical Assessment Questionnaire; FWC-58: Feeling-Word Checklist – 58; MICA 4: Mental Illness Clinicians' Attitudes Scale 4; PIQ: Personal Information Questionnaire; PD-DWS: Difficulty of Working with Personality Disorders Scale; PD-APS: Attitudes towards Patients with Personality Disorders Scale. See Appendix D for further information regarding measures.

Table 3. Quality appraisal ratings of included studies.

Author(s) and date	Clear research question	Specified population	Participation >50% (survey) OR loss to follow up > 30% (pre-post)	Sample power calculations	Exposure to BPD measured?	Outcome assessed in relation to exposure?	Outcome measures valid/reliable	Accounting for confounds	Consistent measurement of outcomes	Suitable statistical analysis	Study design suitable	Overall quality
Beryl and Völlm (2018)	X	X	O	O	X	X	X	X	X	X	X	High
Black et al (2011)	X	X	O	X	X	X	X	X	X	X	X	High
Bodner et al (2011)	X	X	CD	O	X	X	X	X	X	X	X	High
Bodner et al (2015)	X	X	CD	O	X	X	X	X	X	X	X	High
Bourke and Grenyer (2010)	X	X	N/A	O	X	O	X	X	X	X	X	Medium
Bourke and Grenyer (2013)	X	X	N/A	O	X	O	X	O	X	X	X	Medium
Castell (2017)	X	X	X	O	X	X	X	X	X	X	X	High
Chartonas et al (2017)	X	X	O	O	X	O	X	X	X	X	X	Medium
Cleary (2002)	X	X	O	O	X	O	O	O	X	X	O	Low
Commons-Treloar and Lewis (2008)	X	X	O	O	X	O	X	O	X	X	X	Medium
Day et al (2018)	X	X	O	O	X	X	X	O	X	X	X	Medium
Deans and Meocevic (2006)	X	X	X	O	X	O	O	O	X	O	O	Low
Egan et al (2014)	X	X	O	X	X	X	X	X	X	X	X	High
Eren and Sahin (2016)	X	X	X	O	X	O	X	X	X	X	X	High
Giannouli et al (2009)	X	X	X	O	X	X	O	X	X	O	O	Low
Huack et al 2013	X	X	X	O	X	X	X	O	X	X	X	Medium
James and Cowman (2007)	X	X	O	O	X	O	O	O	X	X	O	Low
Keuroghlian et al (2016)	X	X	CD	O	X	X	O	X	X	X	X	Medium
Krawitz (2004)	X	X	X	O	X	O	O	O	X	X	X	Medium
Lam, Salkovskis and Hogg (2016)	X	X	N/A	O	X	X	X	X	X	X	X	High
Lam et al (2016)	X	X	N/A	O	X	X	X	O	X	X	X	High
Lanfredi et al. (2019)	X	X	X	X	X	X	X	X	X	X	X	High
Liebman and Burnette (2013)	X	X	CD	O	X	X	O	X	X	X	X	Medium

Author(s) and date	Clear research question	Specified population	Participation >50% (survey) OR loss to follow up > 30% (pre-post)	Sample power calculations	Exposure to BPD measured?	Outcome assessed in relation to exposure?	Outcome measures valid/reliable	Accounting for confounds	Consistent measurement of outcomes	Suitable statistical analysis	Study design suitable	Overall
Little et al (2010)	X	O	O	O	O	O	O	O	X	O	O	Low
Lugboso and Aubeeluck (2017)	X	O	X	O	O	X	X	O	X	O	X	Medium
Markham (2003)	X	X	CD	O	X	O	O	O	X	X	X	Medium
Markham and Trower (2003)	X	X	CD	O	X	O	O	X	X	X	X	Medium
Masland et al (2018)	X	X	O	O	O	O	O	X	X	X	X	Medium
Mason et al (2010a)	X	X	O	O	X	O	X	O	X	X	X	Medium
Mason et al (2010b)	X	X	O	O	X	X	X	O	X	X	X	Medium
Noblett et al (2015)	X	X	O	O	X	X	O	O	X	X	X	Medium
Purves and Sands (2009)	X	X	O	O	O	X	X	O	X	O	X	Medium
Rossberg et al (2007)	X	X	X	O	X	X	X	O	X	O	X	Medium
Servais and Saunders (2007)	X	X	O	X	O	O	O	X	X	X	X	Medium
Shanks et al (2011)	X	X	N/A	O	X	O	O	X	X	X	X	Medium
Thylstrup and Hesse (2008)	X	O	CD	X	O	O	X	O	X	X	O	Low
Tulachan et al. (2018)	X	X	O	O	O	O	O	X	X	X	O	Low

Key: X: Yes; O: No; CD: Cannot Determine; N/A: Not Applicable given design of study. Studies rated as "High" score over 9/11 criteria as Yes and do not display obvious confounds, report psychometric validation of measures and use appropriate statistical methods. Those rated as "Medium" score between 6-9 and report adequate statistical methods, some psychometric validation or discussion thereof, and some confounds may be present but accounted for. Those rated as "Low" score <=5 and present with significant methodological issues relating to measures, statistics, unaccounted confounds or are very limited in scope.

Overall Quality Summary

See Table 3 for quality appraisal ratings of the included studies. A main area of weakness in the identified literature concerns the range of measures used to assess stigmatising attitudes, with 24 different measures used. This reflects issues with conceptual clarity, with studies employing a range of terms to describe the reactions, expectations and behavioural intentions of professionals towards BPD. The proliferation of multiple measures is an identified problem in stigma research (Fox et al, 2017). The result of this heterogeneity of measures is an inability to directly compare stigmatising attitudes across many of the studies. Furthermore, ten studies did not report psychometric validation of measures used, undermining the credibility of their stated results. Please see Appendix D for a table outlining the different measures used across featured studies and details of validation for each.

21 studies used cross-sectional survey designs, which aimed to assess the prevalence of negative attitudes towards BPD. 5 studies of this kind are rated as Low quality, primarily due to their use of non-validated measures (Cleary et al, 2002; Deans and Meocevic, 2006; James and Cowman, 2007; Giannouli et al, 2009; Little et al, 2010; Tulachan et al, 2018). 7 studies of this type, rated as Medium in quality, generally employ adequate measures and aim to assess differences in attitudes by function of time (Day and Hunt, 2015), occupation (Purves and Sands, 2009; Mason et al 2010b), experience or setting (Giannouli et al, 2009; Huack, Harrison and Montecalvo, 2013) or patient diagnosis (Servais and Saunders, 2007; Mason et al, 2010a; Mason et al, 2010b). 8 studies, rated as high quality, compared occupational subgroups using validated measures and typically large samples across multiple areas (Beryl and Volm, 2018; Black et al, 2011; Bodner, Cohen-Friedel and Iancu, 2011; Bodner et al, 2015; Castell, 2017; Eren and Sahin, 2016; Lanfredi et al, 2019) or analysed the impact of exposure, experience and training in detail (Eren and Sahin, 2016; Egan, Haley and Rees, 2014). A common weakness amongst all these studies is reliance on clinician self-report and the potential of socially-desirable responding. It may also be that clinicians with the most stigmatising attitudes may have been less likely to participate, with several studies having response rates of less than 50% of those approached.

5 studies assessed attitudes following training workshops for clinicians concerning management of BPD (Krawitz, 2004; Commons-Treloar and Lewis, 2008; Shanks et al, 2011; Keuroglian et al, 2016; Masland et al, 2018). These employed pre-post within-subjects designs to assess the impact of the respective workshops upon attitudes. All of these are rated as Medium in quality. Common issues include use of non-validated measures (Krawitz, 2004; Shanks et al, 2011; Keuroglian et al, 2016; Masland et al, 2018), low participation rate or significant loss to follow up (Commons-Treloar and Lews, 2008); Masland et al, 2018). Additionally, all would have involved clinicians who had signed up to the workshops and may have had better attitudes than others.

5 studies assessed clinician responses to working with people with BPD through the concept of counter-transference (Rossberg et al, 2007; Thylstrup and Hesse, 2008; Bourke and Grenyer, 2010; 2013; Liebman and Burnette, 2013). 4 were assessed as Medium in quality, and 1 as low. Common weaknesses among these included small samples of therapists (Rossberg et al, 2007; Bourke and Grenyer, 2010; 2013). These studies did, however, attempt novel means of operationalising the counter-transference concept through validated measures and make interesting contributions to this literature, in helping to explore how negative attitudes might develop during therapeutic contact. While one study employed an experimental design using a large sample, psychometric validation of their proprietary measure was unclear (Liebman and Burnette, 2013). One study was rated as Low, with multiple methodological issues, unclear reporting of the sample used, and significant unaccounted confounds (Thylstrup and Hesse, 2008).

The 6 remaining studies used experimental designs to assess the impact of BPD diagnostic information on the attitudes and decision-making of clinicians. 2 of these studies were rated high in quality (Lam, Salkovskis and Hogg; 2016; Lam et al, 2016). These related studies used a videotape of a patient as study stimuli and assessed attitudes in a manner less subject to obvious demand characteristics, via clinical judgements of patient complexity. 4 other studies used vignette-based study stimuli, and so were less ecologically valid, and used some measures with unclear validity (Markham, 2003; Markham and Trower, 2003; Noblett et al, 2015; Chartonas et al, 2017). These were rated as Medium in quality.

Cross-sectional studies comparing attitudes of occupational groups

Please see Table 4 for a visual display of non-standardised effects across these studies, and occupation-specific cross-sectional studies. Several high-quality studies across multiple countries used large samples to compare attitudes between occupational groups (Black et al, 2011; Bodner et al, 2015; Eren and Sahin, 2016; Castell, 2017; Lanfredi et al, 2019). Psychiatric nurses reported the most negative caring attitudes toward BPD in both Black et al (2011) and Lanfredi et al (2019), large studies conducted across multiple health and academic centres. In Black et al (2011), they had lower empathy than social workers, psychiatrists and psychologists, and less optimism regarding psychotherapy relative to social workers and psychologists, and regarding medication efficacy relative to psychiatrists. Similarly, Bodner et al (2015) found nurses and psychiatrists reported lower empathy than psychologists and social workers. Interestingly, psychiatric nurses rated suicide risk and treatment difficulty as higher than the other occupations, but rated necessity of hospitalisation as lower, and report more antagonistic evaluations of BPD. Bodner, Cohen-Freidel and Iancu (2011) report similar occupational differences in terms of empathy and found that ratings of suicidality accounted for a large degree of variance in negative emotion and treatment difficulty scores. In contrast to other studies, Eren and Sahin (2016) report no differences between occupational groups on attitudes, although their attitudinal measure refers to all PD types (and so BPD-specific effects may not have been detected). In terms of difficulty, however, general nurses and psychiatry residents found treatment most difficult, followed by psychiatric nurses, psychologists and psychiatrists. Castell (2017) provide a comparison of primary care and mental health professionals, highlighting that primary health nurses and general practitioners expressed more negative reactions and treatment difficulties. Psychologists and psychiatrists displayed the least negative emotional reactions, and psychologists rated lowest for treatment difficulties.

A few medium-quality studies assessed attitudes between professionals in other clinical settings. Beryl and Völm (2018) report that psychologists, social workers and other allied health professionals reported more positive attitudes than psychiatric nurses in medium and high-security hospitals. Indeed, as Mason et al (2010b) suggest, psychiatric nurses in forensic settings may perceive PD patients as less "clinically treatable" and as "management issues". While they observe this trend across professions, it was most pronounced in nurses. In another setting dominated by demands of risk management, Purves and Sands (2009) measured attitudes of psychiatric triage and crisis clinicians using the APDQ. They observed that psychiatric nurses again displayed the most negative attitudes in relation to dimensions of enjoyment, enthusiasm, and purpose, although high proportions of all clinicians (including medical and allied health professions) experienced feelings of rejection and futility.

Finally, 1 low quality study examined emotional reactions, attitudes and management concerns between a small sample of mental health staff and a large sample of police officers and criminal justice staff (Little et al, 2010). Police officers reported that people with BPD were a nuisance and felt responsible for their safety. Meanwhile, psychiatric nursing staff felt that people with BPD were responsible for their own actions, and so felt little responsibility towards them. Unfortunately, they do not adequately report the measure developed for the study, and several other methodological limitations affect the generalisability of this study.

Occupation-specific cross-sectional studies

5 studies of medium quality (Servais and Saunders, 2006; Mason et al, 2010a; Huack, Harrison and Montecalvo (2014); Lugboso and Aubeeluck, 2017; Day et al, 2018), and 1 of high-quality (Egan, Haley and Rees, 2014) examined occupation-specific attitudes towards working with BPD.

As in Mason et al (2010b), Mason et al (2010a) found the forensic psychiatric nurses tended not to view people with PD as "mentally ill" and considered them in terms of behavioural issues and

security. Aspects of this may be a reflection of setting, as Huack, Harrison and Montecalvo (2014) report more favourable attitudes of psychiatric nurses working in a specialist behavioural unit towards self-harm in BPD than nurses in other studies (Bodner, Cohen-Friedel and Iancu, 2011). Lugboso and Aubeeluck (2017) suggest that psychiatric nursing students may be optimistic in their attitudes towards BPD, although they observe lower APDQ scores at a later point in training suggesting some detrimental function of contact or experience. A small sample size limits potential conclusions, as does the possible factor of socially desirable responding in a student sample.

Egan, Haley and Rees (2014) found that clinical psychologists on average had similar APDQ scores to other professional groups in earlier studies. Meanwhile, Servais and Saunders (2007) found that clinical psychologists rated people with BPD as less effective, more dangerous, undesirable and highly dissimilar compared to people with depression, members of the public and themselves. While psychologists tend to come out favourably compared to other disciplines in terms of attitudes in larger comparative research (i.e. Lanfredi et al, 2019), this indicates this is not due to professional training alone.

4 low quality studies investigated the prevalence of negative attitudes towards BPD in psychiatric nurses (Deans and Meocevic, 2006; James and Cowman, 2007;) psychiatrists (Tulachan et al, 2018) and multiple professionals (Cleary et al, 2002; this study did not compare occupational groups). All used non-validated measures and their designs do not allow for demonstration of causality or difference. All report that high proportions of their samples found working with BPD difficult, that generally negative attitudes were found, and that clinicians desired additional training in this area.

Table 4: Effect direction plot summarising non-standardised effects of clinician attitudes in relation to occupational group from cross-sectional studies.

Study	Overall sample	Psychiatric Nurses	Clinical Psych.	Psychiatrists	Social Worker	Psychothera -pists	Misc. Allied Health	Adult/ General Nurses	G.P.'s	Hosp. Doctors	Po
High Quality											
Lanfredi et al. (2019)	860	▼	▲	▲	▼	---	▲	---	---	---	-
Castell (2017)	310	◀▶	▲	▲	---	---	---	▼	▼	---	-
Eren and Sahin (2016)	332	◀▶	◀▶	◀▶	◀▶	---	---	---	---	---	-
Beryl and Völlm (2018)	132	▼	▲	◀▶	◀▶	---	▲	---	---	---	-
Black et al (2011)	706	▼	◀▶	◀▶	◀▶	---	◀▶	---	---	---	-
Bodner et al (2011)	57	◀▶	◀▶	◀▶	---	---	---	---	---	---	-
Bodner et al (2015)	691	▼	▲	◀▶	▲	---	---	---	---	---	-
Egan et al (2014)	81	---	◀▶	---	---	---	---	---	---	---	-
Medium Quality											
Mason et al (2010a)	416	▼	---	---	---	---	---	---	---	---	-
Mason et al (2010b)	545	◀▶	---	---	---	---	◀▶	---	---	---	-
Liebman and Burnette (2013)	560	---	◀▶	◀▶	---	◀▶	---	---	---	---	-
Servais and Saunders (2007)	306	---	▼	---	---	---	---	---	---	---	-
Huack et al (2013)	165	◀▶	---	---	---	---	---	---	---	---	-
Purves and Sands (2009)	61	< >	< >	---	---	---	< >	---	---	< >	-
Low Quality											
Cleary et al (2002)	516	< >	---	---	---	---	---	---	---	---	-
Deans and Meocevic (2006)	65	< >	---	---	---	---	---	---	---	---	-
James and Cowman (2007)	65	< >	---	---	---	---	---	---	---	---	-
Little et al (2010)	387	< >	< >	< >	< >	---	< >	< >	< >	---	\
Tulachan et al (2018)	80	---	---	< >	---	---	---	---	---	---	-

Key: sample size in specified group large arrow ▲ >200; medium arrow ▲ 50-200; small arrow ▲ <50. Effect direction: ▲ = positive effect of occupation upon attitudes; ▼ = detrimental effect; ◀▶ = unclear or conflicting findings. ▲ or ▼ reported where >70% of outcomes report consistent direction and statistical significance. ◀▶ reported where <70% of outcomes report consistent direction of effects and statistical significance. Unshaded arrows indicate descriptive statistics only, or incomplete reporting of other statistical methods. Abbreviations: Clin. Psych = Clinical Psychologists; G.P.'s = General Practitioners; Hosp. Doctors = medical doctors working in acute hospital specialties/settings. Method reported in Thomson and Thomas (2013).

Experimental studies assessing impact of BPD label

2 high quality studies assessed the impact of superfluous historical BPD diagnostic information upon clinician judgements of a video of a patient with panic disorder (Lam, Salkovskis and Hogg, 2016; Lam et al 2016). Lam, Salkovskis and Hogg (2016) compared judgments relating to likely efficacy of treatment, potential risks and complications, and personal attributes of the patient across three conditions. They found that inclusion of the BPD label itself, but not BPD descriptive information, was associated with more negative ratings of the patient and their response to treatment. Interestingly, they found significant group effects for student and qualified psychiatric nurses and psychiatrists, but not for social workers and psychologists. Lam et al (2016) using the same methods found that clinicians reported significantly less reasons to be optimistic when the BPD label was included. Together, these studies suggest that it is the diagnostic label itself that is stigmatising, rather than descriptions of challenging behaviours. Both have strengths in using more ecologically valid methods than other vignette-based studies.

4 medium quality studies explored the impact of the BPD diagnosis upon clinician perceptions of patients (Markham, 2003; Markham and Trower, 2003; Noblett et al, 2015; Chartonas et al, 2017). Markham (2003) assessed ratings of social rejection and perceived dangerousness towards BPD in psychiatric nurses and health care assistants, finding that nurses expressed higher ratings of both towards BPD than depression and schizophrenia. Markham and Trower (2003) examined the impact of the BPD diagnosis upon causal attributions for challenging behaviour, compared to depression and schizophrenia, using a manipulated patient vignette. They found that a

diagnosis of BPD resulted in clinicians judging the patient as more in control of challenging behaviour, and that the causes of this were rated as more stable. In both studies, clinicians were less optimistic regarding BPD than other diagnoses. Noblett et al (2015) explore the attitudes of general hospital doctors, using a vignette-based study comparing a variety of mental health and non-mental health presentations. While negative attitudes were observed towards mental illness as a whole, the most stigmatising attitudes were observed for PD, schizophrenia and criminal behaviour, with people with PD rated as unpredictable and having suspicious motives for presentation. Prior psychiatry rotation did not make a significant difference to these attitudes. Finally, Chartonas et al (2017) assessed the attitudes of psychiatry trainees towards PD in comparison to depression in an online vignette-based study. They found more negative attitudes towards PD using the semantic differential measure from Lewis and Appleby (1988), but only weak trends towards the same using the APDQ. Specifically, they highlight feelings of futility from clinicians. All 4 studies are limited by use of vignette-based stimuli, self-report of clinicians, and measures requiring comprehensive validation. However, together they appear to further indicate that the presence of the label itself provides a stigmatising effect, galvanising the negative reactions of clinicians.

Attitudes in relation to contact, experience and training

Eighteen studies identified relationships between numbers of BPD patients treated, overall clinical experience and specific training regarding BPD and subsequent attitudes. Please see Table 5 for a visual display of non-standardised effects across these studies. There was a consistent trend across studies toward more favourable attitudes in clinicians with greater contact with BPD patients, and specific training on BPD (Black et al, 2011; Egan, Haley and Rees (2014); Huack, Harrison and Montecalvo, 2014; Eren and Sahin, 2016; Beryl and Völm, 2018; Lanfredi et al, 2019). The exception to this was in psychiatric nurses in Bodner et al (2015), where higher caseload numbers related to increased negative attitudes. For the remaining 4/5 professions included within their study, increased contact was associated with more positive attitudes.

Meanwhile, a few studies assessed potential relationships between restrictive care settings and attitudes (i.e. psychiatric hospital settings: Beryl and Völm, (2018); Eren and Sahin, (2016); Giannouli et al (2009); and a forensic hospital setting in Mason et al (2010a)). There was not a clear pattern of effects in this area, and this requires further study.

Expanding on clinician experiences, Eren and Sahin (2016) found that greater levels of overall education, specific psychotherapeutic education, regular clinical supervision and personal experiences of psychotherapy were associated with reduced difficulties in working with people with BPD, but that these factors were not associated with improved attitudes toward BPD. Liebman and Burnette (2013) similarly report that greater contact with BPD patients is associated with more positive attitudes. This was the only study to assess attitudes in clinicians across psychotherapy modalities (i.e. specialised CBT, DBT, EMDR, mindfulness), observing that clinicians with these types of training displayed greater empathy, perceived less chronicity and felt people with BPD were more trustworthy than clinicians without psychotherapy training.

Across all obtained studies aiming to assess length of clinical experience and attitudes, there was a mixed pattern of effects. Liebman and Burnette (2013) report that younger clinicians were more likely to perceive BPD patients as presenting with conduct problems, but that they perceived them as less dangerous than more experienced clinicians. Eren and Sahin (2016) report increased difficulties in working with BPD in younger clinicians, but better overall attitudes towards them. Meanwhile, Castell et al (2017) and Black et al (2011) report no clear pattern of differences between novice and experienced clinicians. Lanfredi et al (2019) observe positive associations between caring attitudes and low and medium length of experience, while reporting more negative attitudes among more experienced clinicians.

5 studies of medium quality assessed training workshops regarding BPD and its management, and their impact upon attitudes (Krawitz, 2004; Commons-Treloar and Lewis, 2008; Shanks et al, 2011; Keuroglian et al, 2016; Masland et al, 2018). Shanks et al (2011) provided

education as part of a cognitive-behavioural group model, STEPPS (Systems Training for Emotional Predictability and Problem Solving), while Keuroglian et al (2016) and Masland et al (2018) provide a GPM (Good Psychiatric Management) model. The remaining studies provide a more general model of education concerning BPD for public mental health and substance misuse workers (Krawitz, 2004) and emergency and mental health clinicians (Commons-Treloar and Lewis, 2008) respectively. All demonstrate improvements in clinician attitudes towards BPD, including optimism for treatment, confidence in working with these patients, personal dislike and avoidance of BPD patients, and improved attitudes towards self-harm in Commons-Treloar and Lewis (2008). Common weaknesses in these studies include use of measures requiring validation, with just Commons-Treloar and Lewis (2008) reporting on internal consistency of the ADSHQ. Another common problem is participant loss to follow-up, which is particularly prominent in Masland et al (2018) and undermines a conclusion that attitudes improved over 6 months post workshop. It may be that clinicians with more positive attitudes to BPD were both more likely to attend these workshops, and to complete follow-up measures.

Table 5. Effect direction plot summarising non-standardised effects of clinician attitudes in relation to types of training, exposure, and types of experience.

Study	Overall sample	BPD training (short)	MH experience	Exposure to BPD patients	Level of education	Psychotherapy training	Restrictive setting
High Quality							
Lanfredi et al. (2019)	860	▲	◀▶	▲	—	—	—
Castell (2017)	310	—	◀▶	▲	—	—	—
Eren and Sahin (2016)	332	—	—	—	◀▶	◀▶	◀▶
Beryl and Völlm (2018)	132	▲	◀▶	▲	—	—	◀▶
Black et al (2011)	706	—	◀▶	▲	—	—	—
Bodner et al (2015)	691	—	—	▲[1]	—	—	—
Egan et al (2014)	81	▲	—	▲	—	—	—
Medium Quality							
Liebman and Burnette (2013)	560	▲	◀▶	▲	—	▲	—
Huack et al (2013)	165	—	◀▶	◀▶	◀▶	—	—
Day et al (2018)	66	◀▶	◀▶	—	◀▶	—	—
Keuroghlian et al (2016)	297	▲	—	—	—	—	—
Mason et al (2010a)	416	—	—	—	—	—	▼
Shanks et al (2011)	271	▲	—	—	—	—	—
Commons-Treloar and Lewis (2008)	99	▲	▲	▲	▲	—	—
Giannouli et al (2009)	127	—	—	◀▶	—	—	◀▶
Purves and Sands (2009)	61	—	—	—	▲	—	—
Lugboso and Aubeeluck (2017)	53	—	◀▶	—	—	—	—
Krawitz (2004)	669	▲	—	—	—	—	—

Key: sample size in specified group large arrow ▲ >200; medium arrow ▲ 50-200; small arrow ▲ <50. Effect direction: ▲ = positive effect of factor upon attitudes; ▼ = detrimental effect; ◀▶ = unclear or conflicting findings. ▲ or ▼ reported where >70% of outcomes report consistent direction and statistical significance. ◀▶ reported where <70% of outcomes report consistent direction of effects and statistical significance. Method reported in Thomson and Thomas (2013).

[1]Bodner et al (2015) report consistent positive effect direction for 4/5 professional groups for BPD exposure; however, in psychiatric nurses they report a negative effect for exposure.

Studies examining counter-transference

3 studies of medium quality (Rossberg et al, 2007; Bourke and Grenyer, 2010; 2013;), and 1 of low quality (Thylstrup and Hesse, 2008) examined counter-transference reactions to BPD. Three of these studies examined ratings from therapeutic contact with patients. Rossberg et al (2007) compare the emotional valences of counter-transference reactions from group therapists towards patients with DSM-IV cluster A+B PD's (primarily BPD) compared to cluster C PD's. Therapists reported more negative reactions towards cluster A+B patients, including feeling less confident, overwhelmed, inadequate, rejected and on guard. Bourke and Grenyer (2010) compared responses of clinical psychologists to patients with depression and BPD by categorising and then quantitively analysing therapist narratives. Therapists described BPD patients as withdrawing, critical and rejecting, leading them to feel incompetent and futile, and needing to effortfully control their emotions. The authors expand upon this in Bourke and Grenyer (2013), where further comparisons of therapy experiences with these two patient groups were made. Clinical psychologists rated more hostile, narcissistic, compliant, anxious and sexualised interpersonal responses from BPD patients, and experienced greater stress. Common weaknesses among these studies include convenience/snowball sampling, and small sample sizes of participating therapists/psychologists, with each making multiple ratings within a larger sample of patients from their caseloads. This dovetails with failure to examine the clinician's pre-existing attitudes toward BPD, another weakness of all three. These studies make a valuable contribution to this literature, through examining challenging interpersonal processes in working with BPD in detail. Together, they suggest that clinicians require a framework of self-reflection to enable recognition of these processes and prevent adverse therapeutic outcomes. This is considered in more detail within the discussion section of this paper.

Finally, Thylstrup and Hesse (2008) examined counter-transference ratings of clinical staff in relation to patients with substance abuse problems. They found that BPD features were associated

with clinician feelings of helpfulness, but that cluster B PD features (predominantly BPD were associated with feelings of distance. Serious limitations affect these interpretations. They did not employ patients with actual diagnosed PD (asking them to self-rate against criteria), and their sample size is not reported.

Discussion

This systematic review of quantitative literature from 2000-2019 indicates that negative attitudes toward BPD continue to be a problem within professional populations, despite long-term recognition of this issue. This review drew together a breadth of literature concerning professional reactions to BPD, linking the attitudes literature with the nascent empirical counter-transference literature and experimental studies of clinician judgement. These highlight differing potential components of the stigmatisation process. Clinician feelings of futility, difficulty and rejection in therapeutic interactions were a consistent feature across professions. A feature of prejudicial attitudes, present to differing degrees among professions, appeared to be a separate component. Consideration of non-standardised effect directions from cross-sectional studies highlights a potential trend toward this being more prevalent in psychiatric nurses compared to other featured occupations. In the featured experimental studies, negative attitudes were found to be induced by application of the BPD label itself, rather than descriptions of the difficulties it denotes.

On face value, these components may interact with and reinforce each other, although further high-quality research is required in this area. Implications of these elements are discussed in further detail, together with strengths and limitations of this review and directions for future research.

Strengths and Limitations

This review updates and expands upon earlier reviews of the topic (Sansone and Sansone, 2013; Ockiskova et al, 2017) through updated evidence and quality appraisal of the literature. This quality appraisal provides indications for necessary development of the field in future research, as many issues were identified in relation to dominance of exploratory cross-sectional designs and use of

non-validated measures. However, the review did not systematically appraise the measures used. The review offers strengths and limitations in terms of the breadth of studies included. As studies in this field considered professional responses to BPD using differing, poorly demarcated concepts (attitudes, stigma, emotional reactions, counter-transference), synthesis of these differing areas allows for consideration of this issue across diverse professional groups, where prior reviews have featured mental health professionals alone. This has also meant that the focus of this review is more diluted. This review only included English language articles, but despite this it obtained evidence from various international samples. This review did not synthesise effect sizes for relevant study designs, due to the range of outcomes and measures used, although it presents non-standardised summaries of effect directions within obtained cross-sectional studies, to aid interpretation of tentative trends of effect. Finally, qualitative research was excluded from this review, which may have provided detail as to how difficult clinical experiences may intersect with stigmatising attitudes.

Professional stigma across occupations

Psychiatric nurses, as the most studied professional group, have previously been recognised as displaying the most negative attitudes towards BPD (Sansone and Sansone, 2013; Dickens, Hallet and Lamont, 2015), a finding that was partially supported by the evidence obtained within this review (see Table 4), with generally negative or conflicting patterns of effects across studies. This finding is partly contested by the evidence from other health specialties, such as General Practitioners, primary health nurses and hospital doctors (Noblett et al, 2015; Eren and Sahin, 2016; Castell, 2017) who appeared to report very negative BPD. Only two high-quality studies compared mental health and non-mental health specialties directly (Eren and Sahin, 2016; Castell, 2017) and therefore there is insufficient evidence to make conclusions in this area, highlighting a substantial need for research. The implications of these nascent findings are that people with this diagnosis may encounter barriers to effective healthcare.

Furthermore, literature relating to the other mental health professions depicts a more nuanced and unclear picture. In higher-quality cross-sectional studies comparing professional attitudes, there is no clear trend of effects for social workers or clinical psychologists (Table 4). In Black et al (2011),

Bodner et al (2015) and Beryl and Volm (2018) social workers and psychologists seemed most optimistic about treatment, and most empathetic towards BPD, () although social workers were less empathetic in Lanfredi et al (2019), and psychologists were similarly capable of prejudicial attitudes in Servais and Saunders (2007) and Egan, Haley and Rees (2014). Furthermore, psychologists show a range of difficult emotions in therapeutic treatment of BPD (Bourke and Grenyer 2010; 2013). Historically, psychiatrists have been identified as holding particularly negative views of BPD (Lewis and Appleby, 1988), though Chartonas et al's (2017) study of psychiatric trainees did not comprehensively confirm this finding, and in Black et al (2011) they were most optimistic regarding medication and overall treatment efficacy. Most featured studies including psychiatrists reported no clear direction of effects relating to positive or negative attitueds (Table 4). Taken together, this would suggest that occupational training does not wholly determine the nature of professional attitudes to BPD.

Clinician attitudes in relation to types of training, exposure, and types of experience.

Studies which explored associations between attitudes and clinician-level factors (training, exposure, and types of experience) were more illuminative. Less negative attitudes were frequently found among clinicians with higher BPD caseload numbers/overall exposure, and regular or recent BPD training (Black et al, 2011; Huack, Harrison and Montecalvo, 2014; Egan, Haley and Rees, 2014; Eren and Sahin, 2016; Beryl and Völm, 2018; Lanfredi et al, 2019) (see Table 5). Either of these factors, or both, could help to dispel negative stereotypes about the diagnosis. These were the factors with the clearest trend of effects (Table 5). Other factors, relating to mental health experience, level of education, psychotherapy training and experience of restrictive treatment settings, displayed conflicting findings and no clear pattern of effects. For example, Eren and Sahin (2016) highlight that clinicians found inpatient work with BPD more difficult, compared to community-based work, but

that this corresponded to more favourable attitudes. Meanwhile, Liebman and Burnette (2013) found that younger clinicians displayed more positive reactions to BPD patients, linking this to recency of training and intensity of supervision, although they perceived greater conduct problems than more experienced clinicians.

Liebman and Burnette (2013) propose the importance of the theoretical perspective by which professionals conceptualise BPD, suggesting that psychiatrists (and perhaps psychiatric nurses) are more likely to adhere to a medical model of conceptualisation, with more emphasis upon prototypical diagnostic features and difficult elements of risk. Supporting this view, Lam, Salkovskis and Hogg (2016) observed that psychiatrists and psychiatric nurses endorsed statements of treatment complexity and non-adherence to the greatest extent when a BPD label was applied to a patient. In Mason et al (2010a; 2010b) PD appeared to be very conceptually distinct from clinically treatable "mental illness" in these staff groups. The findings of Markham and Trower (2003) suggest that the result of this distinction is attributions of greater control over behaviour, and therefore a greater degree of perceived responsibility for difficulties. Endorsement of differing conceptualisations of BPD and the relationship to endorsement of negative stereotypes of BPD is not clear and requires further study.

An interesting question arises as to what experiences help clinicians make sense of the "interpersonal ambivalence" and "push-pull" features of the therapeutic dynamic (Bourke and Grenyer, 2010). This could be clinical experience and specialist training (Liebman and Burnette, 2013; Egan, Haley and Rees, 2014), long-term psychotherapy training/supervision or personal psychotherapy experience (Eren and Sahin, 2016). This may provide a personal framework for recognition and management of negative emotional reactions that occur during treatment (Bourke and Grenyer 2010; 2013) and prevent defensive "therapeutic distancing" of clinicians which, it has been suggested, maintains negative attitudes over time (Aviram, Brodsky and Stanley, 2006). Keokkeok et al (2011) found that if therapeutic contact is perceived as interpersonally challenging, patients are labelled as "difficult", leading to distant and invalidating clinician care.

Further research is required to establish what clinician-level factors determine an ability to sensitively and skilfully navigate challenging aspects of the therapeutic relationship in treating BPD.

This could include study of clinician training, theoretical orientation, propensity toward reflective practice, use of clinical supervision, personality traits, age, clinical experiences and personal experience of mental health difficulties.

Training programmes

Perceptions of personal futility, ineffective treatment and a need for training were a common finding among staff groups, indicating a need for high-quality training programmes for professionals. While the workshops reviewed show promise, there was insufficient evidence to support the conclusion that the workshop-based educational interventions featured are effective in improving attitudes, given the methodological limitations shared by this literature. Across the literature featured, training demonstrated a positive effect upon attitudes to BPD (i.e. Egan, Haley and Rees 2014), and so it seems clear that well-evidenced educational programmes are required as part of ongoing professional development. It is not clear whether short-term workshops of this type produce enduring changes in attitudes, due to problems with attrition. Further research in this area should focus upon comparison of educational interventions against suitably matched controls and provide longer-term follow-up.

Implications: development of a particularly stigmatising label?

Across studies comparing attitudes to BPD and other diagnoses, BPD attracted more negative responses (Markham, 2003; Markham and Trower, 2003; Servais and Saunders, 2007; Noblett et al 2015; Chartonas et al, 2017). This confirms prior assertions that BPD is a particularly stigmatised diagnosis (Sansone and Sansone, 2013; Sheehan, Nieweglowski and Corrigan, 2016). Furthermore, aspects of negative judgment may be induced by the label itself, rather than descriptions of its symptomatology (Lam, Salkovskis and Hogg, 2016; Lam et al, 2016). If the label, not the difficulties it denotes, is a source of negative preconceptions, should the mental health professions continue to adopt it? Tyrer (2009) suggests abandonment of the terminology, suggesting it is “neither borderline nor a personality disorder”.

With development of the ICD-11 classification of personality disorders, this terminology is instead evolving (Tyrer et al, 2019). PD will be described using levels of severity, from "personality difficulty", to "Mild", "Moderate" and "Severe". It will also use trait-specifiers including, after some controversy, "borderline pattern" (Tyrer et al, 2019). Speculative implications of this development: more people may be diagnosed with a form of PD or "difficulty" (Tyrer et al, 2014); and people with the highest levels of difficulty may be diagnosed with "Severe Personality Disorder" incorporating a "Borderline Pattern". As the ICD-11 framework becomes established within clinical practice, future research must explore the potential effect of this terminology upon clinician attitudes and responses to patients with this diagnosis.

Recommendations

- Research into stigmatising attitudes in clinicians must utilise standardised, psychometrically validated measures and use these consistently to allow comparison of outcomes.
- These studies should employ ecologically valid methods (i.e. Lam, Salkovskis and Hogg, 2016) to avoid common limitations concerning self-report.
- Studies should explore clinician-level variables and their impact upon management of therapeutic difficulty in patients with BPD, reflection upon personal emotional states, and endorsement of unhelpful clinical stereotypes.
- Research concerning attitudes toward BPD in general health professionals and other areas of the public sector should be prioritised.
- Rigorous research is required to establish the effect of existing educational interventions for clinicians, and to aid their development.
- Where validated by evidence, educational programmes should form a regular and mandatory component of ongoing professional education, across occupational groups who have contact with BPD patients. This should particularly be the case for psychiatric nursing staff, who are regularly identified as having the most negative attitudes.

Conclusions

Stigmatising attitudes towards BPD continue to be a problem across clinical populations. . The clearest trend for this appears to be in psychiatric nurses, with unclear and conflicting evidence commonly reported among other professions which have contact with these patients. Greater exposure to BPD patients and recent training regarding their care is associated with positive attitudes. Negative attitudes appear to be both a function of labelling effects that emanate from the terminology itself, and challenges in skilfully and sensitively managing the interpersonal dynamic while working with this patient group. Well-evidenced educational interventions which can provide a framework for skilfully managing this dynamic and its effect on clinicians are needed.

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Chapter Three: Bridging Chapter

The systematic review establishes that BPD, as it has been described, possesses stigmatising connotations in clinical staff groups to different extents, and that a degree of this appears to relate to presence of the label itself, rather than the difficulties described by the diagnosis. The diagnostic classification of PD is set to change in the upcoming ICD-11 diagnostic manual, with potential implications for the stigmatising connotations of this condition.

Diagnostic classification of PD

The empirical paper uses an element of the upcoming ICD-11 classification of PD in its design. Therefore, it is pertinent to provide a brief outline of how this disorder has been conceptualised, to provide a frame of reference for the changes introduced by ICD-11. This will in turn aid understanding of the rationale for elements of the design of the study detailed within the empirical paper.

ICD-10 presents a categorical system of classification outlining 11 types of PD, listing Paranoid, Schizoid, Dissocial, Emotionally Unstable (i.e. EUPD/BPD), Histrionic, Anankastic,

Anxious, Dependent, Other, PD Not Otherwise Specified, and Mixed types (World Health Organisation, 1992). Within these, EUPD is listed as having two subtypes: impulsive, "characterised predominantly by emotional instability and lack of impulse control"; and borderline, "characterised in addition by disturbances in self-image, aims, and internal preferences, and by a tendency to self-destructive behaviour, including suicide gestures and attempts" (World Health Organisation, 1992).

The DSM-5 uses a similar categorical system of classification, listing 10 PD types according to three clusters (American Psychiatric Association, 2013):

- Cluster A (odd or eccentric disorders): Paranoid, Schizoid and Schizotypal PD
- Cluster B (dramatic, emotional or erratic disorders): Antisocial, Borderline, Histrionic and Narcissistic PD
- Cluster C (anxious or fearful disorders): Avoidant, Dependent and Obsessive-Compulsive PD

Within each classification, each PD is defined by a non-weighted series of items, a subset of which must be met in order to meet threshold for diagnosis (Trull and Durrett, 2005). Categorical systems of PD classification used by ICD-10 and DSM-5 (and their earlier iterations) have come under considerable criticism, due to problems of substantial overlap between various categories of PD, problematic reliability, and considerable heterogeneity (Livesy et al, 1994; Trull and Durrett, 2005; Dahl, 2008; Kim and Tyrer, 2010). Dimensional models of personality pathology based upon trait models, such as the Five-Factor Model, have been suggested as having substantial advantages over categorical classifications (Trull and Durrett, 2005). A variant of such a system was considered during the development of DSM-5 and is included as an alternative "hybrid" dimensional/categorical model, although the categorical system listed above was retained as the main classification due to concerns about complexity (Oldham, 2015).

Development of the ICD-11 classification was informed by the potential advantages of dimensional trait-based systems, as well as an aim to provide enhanced specificity and utility of PD classification (Tyrer et al, 2019). It is purported to improve clinical practice in the diagnosis of PD

through basing this on “a global evaluation of personality functioning” (Bach and First, 2018). Within this classification, a diagnosis of PD can be made with accompanying levels of severity (personality difficulty, mild, moderate and severe) and trait-specifiers (negative affectivity, anankastia, detachment, dissociality and disinhibition) (Tyrer et al, 2019). Following controversy and debate within the ICD-11 working group, BPD was retained within this new classification as a “borderline pattern” trait-specifier (Tyrer et al, 2019). All other forms of categorical PD were removed from the classification as part of this new system. Another notable feature of this classification is the ability to diagnose PD from 14 years of age (Tyrer et al, 2014; Tyrer et al, 2019), with the Royal College of Psychiatrists’ recent position statement concerning PD encouraging diagnosis in this age group (Royal College of Psychiatrists, 2020). Preliminary research into its use has indicated greater utility of this classification due to the specification of severity, additionally, it appears that that a higher proportion of people are diagnosed with a form of PD using this system compared to that of ICD-10 (Tyrer et al, 2014; Bach and First, 2018).

While this preliminary research has explored the utility of this classification, no research currently exists to the knowledge of the author which explores how the ICD-11 diagnostic terminology might be understood by clinicians, or how this terminology might intersect with questions of mental health stigma. This is important, because PD has been identified as a particularly stigmatised mental disorder, as confirmed by the systematic review. If the BPD label itself is stigmatising, could elements of the ICD-11 terminology itself also have stigmatising connotations in a public sample? The empirical project sought to explore this question, by comparing aspects of jury decision-making, causal attributions for behaviour and endorsement of stigmatising stereotypes when the presence of this terminology was experimentally manipulated.

Chapter Four: Empirical Paper

An Examination of Causal Attributions, Stigmatising Stereotypes and Jury Decision Making Regarding the ICD-11 "Severe Personality Disorder, Borderline Pattern" Criteria

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See Appendix A for author guidelines. The word limit for this journal is 12000.

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Abstract

Borderline Personality Disorder is a stigmatised condition awaiting revision within the new ICD-11 classification. Professional and public stigma could have implications for people with Personality Disorder encountering the criminal justice system. These concepts have not been studied in relation to jury decision-making and the legal question of Diminished Responsibility.

The study depicted a simplified recreation of a homicide trial. Mock-juror endorsement of stigmatising beliefs, causal attributions and ratings of Diminished Responsibility were assessed between two groups, with an experimental manipulation concerning presence of the ICD-11 diagnosis "Severe Personality Disorder, Borderline Pattern".

Participants in the "Severe Personality Disorder" condition rated the defendant as more dangerous, and more in need of segregation and coercive treatment, relative to controls. Ratings of Diminished Responsibility and causal attributions were unchanged between groups.

The ICD-11 "Severe Personality Disorder, Borderline Pattern" diagnosis appears to possess intuitively stigmatising connotations. Implications for mental health and legal contexts are discussed.

Background

Juror judgements of the moral responsibility of defendants are significantly influenced by psychiatric information (Berryessa et al, 2015). Psychiatrists and Clinical Psychologists are frequently commissioned to provide expert witness testimony as to the nature of a defendant's mental health condition, and how differing diagnostic entities intersect with legal questions of the controllability of criminal behaviour and individual culpability. This is a complex area, as nuanced and shifting clinical descriptors of mental health problems such as "borderline personality disorder" (BPD) meet more rigid, black and white legal conceptualisations of reduced culpability better aligned with models of biologically-based mental illness (Peay, 2011). The legal question pertaining to Diminished Responsibility (DR) in cases of homicide (Homicide Act, 1957, as amended by s.52 Coroners and Justice Act, 2009) illustrates this complexity.

Diminished Responsibility and expert testimony

Diminished Responsibility (Homicide Act, 1957, as amended by s.52 Coroners and Justice Act, 2009) is a partial legal defence in cases of homicide by persons with an identified mental health condition. Should its criteria be met, a defendant is to be convicted of manslaughter rather than murder. This is of practical importance since following the successful application of this defence, options for disposal include potential hospital treatment under Section 37 of the Mental Health Act (1983) as part of sentencing, as opposed to a mandatory sentence of life imprisonment.

The Diminished Responsibility (DR) defence requires the presence of an "abnormality in mental functioning" which:

A) arose from a recognised medical condition
B) substantially impaired the defendant's ability to do one or more of:
    1. understand the nature of their conduct
    2. to form a rational judgement
    3. exercise self-control
C) provides an explanation for the defendant's acts and omissions in doing or being a party to the killing

(Homicide Act, 1957; as amended by s.52 Coroners and Justice Act, 2009)

When the issue of diminished responsibility is considered by a court, the 'burden of proof' is on the defendant (the person accused of the crime) to prove to the jury on the balance of probabilities that the above criteria are met. Clinicians commissioned to provide expert testimony are required to provide a clinical opinion as to whether the defendant may meet the above criteria. In doing so, they must make specifications as to the nature and severity by which a defendant may have been unable to understand their conduct, to form a rational judgement, and/or to exercise self-control in the course of their actions (Mackay, 2018). For the criteria of the defence to be satisfied, the degree of impairment must be "substantial" as opposed to "total" (*R v. Golds,* 2016; Mackay, 2017).

Diminished Responsibility and personality disorder

Mackay (2017; 2018) presents a review of 90 DR pleas made since the amendments of the Coroners and Justice Act (2009), and report that schizophrenia, personality disorder, psychosis and depression were the four most common diagnoses cited, in that order. Of these 90 cases, 15 cases cited a form of personality disorder, and 11 of these cases were convicted of murder with these receiving mandatory life sentences, while 3 further cases received discretionary life sentences. In the cases studied within the review period, there were no hospital or restriction orders made. For reference, of 34 cases citing schizophrenia in relation to the DR defence, 7 were given mandatory or discretionary life sentences, and 24 were given Section 37/41 restriction orders (Mental Health Act 1983/2007). Within the report, the generic form "personality disorder" is used, and no specifications as to particular type of personality disorder are made. Mackay (2018) notes that in these DR pleas concerning diagnoses of personality disorder, expert witnesses giving testimony often disagreed as to whether the criteria were satisfied, speculating that this led to contested trials which evidently failed to persuade juries on the issue of DR, leading to murder convictions.

Professional inconsistency in judging personality disorder

In considering this variance of clinical opinion, it is useful to consider questions of application of the Mental Capacity Act (MCA, 2005) in persons with personality disorder in clinical settings, which has received marginally more attention and presents a form of clinical analogue to the questions that DR poses to clinicians. Ayre, Owen and Moran (2017) argue that assessment of people with borderline personality disorder under the MCA is often inconsistent, due to ongoing uncertainty and debate concerning the nosological status of personality disorder. In forms of mental disorder thought to occupy more clearly delineated boundaries of biological "illness" such as schizophrenia, clinical judgment of rationality of thought and understanding of consequences is (seemingly) more straightforward (Szmukler, 2009). Meanwhile, borderline personality disorder has historically occupied a much more contested, controversial position within the minds of clinicians, who might

find it hard to make distinctions between "the nature of the pathology" and "the nature of the individual" (Aviram, Brodsky and Stanley, 2006). Debate has ranged widely as to what personality disorder "is" – from a developmental disorder of attachment and mentalisation relating to adversity and trauma (Luyten, Campbell and Fonagy, 2019) – to much more moralistic conceptualisations relating to deviance (Charland, 2006). The latter account speaks to a failure to recognise the core features of severe emotional dysregulation, impulsivity and heightened threat perception (Crowell, Beauchaine and Linehan, 2009) which are increasingly supported by neurobiological evidence (Leichsenring et al, 2011), and which clearly have implications relating to the faculties of understanding and weighing information (Ayre, Owen and Moran, 2017).

In addition, Szmukler (2009) highlights how, as a function of the interpersonal dynamic between a clinician and patient with personality disorder, it can be tempting for clinicians to "raise" or "lower" the threshold of capacity in relation to the severity of consequence should the individual be found to "have" capacity. Peay (2011) argues that it is difficult to reconcile such a "sliding scale" of mental capacity in the clinical world, with a much more rigid legal conceptualisation of this in relation to DR and cases of homicide.

Questions as to how clinicians may judge moral responsibility and culpability are further illuminated by a consideration of mental health stigma towards people with borderline personality disorder in professionals.

The stigma of personality disorders

People with a personality disorder have historically been identified as "the patients psychiatrists dislike" (Lewis and Appleby, 1988). A person with a personality disorder may be more likely to be viewed by professionals as morally culpable for their problems, as manipulative and in control of their symptoms and behaviour, and as less likely to recover (Lewis and Appleby, 1988; Markham and Trower, 2003; Chartonas et al, 2017; Lam, Salkovskis and Hogg, 2016). Within a highly stigmatised category of mental disorder, borderline personality disorder may be the most

stigmatised disorder (Catthoor et al, 2015; Sheehan, Nieweglowski and Corrigan, 2016). This is a function of challenging interpersonal dynamic between patients and clinicians (Aviram, Brodsky and Stanley, 2006) whereby the attachment and mentalising difficulties inherent to the disorder provide challenges to typical clinician-patient power structures and adherence to the "sick role", resulting in labelling of patients as "difficult" (Luyten, Campbell and Fonagy, 2019; Koekkoek et al, 2011). This perpetuates a cycle of interpersonal rejection, precipitating further emotional distress in patients and the continuance of stigmatising views in clinicians (Aviram, Stanley and Brodsky, 2006).

Public stigma towards borderline personality is not well studied, although public awareness of the disorder itself is considered to be low (Sheehan, Nieweglowski and Corrigan, 2016; Furnham, Lee and Kolzeev, 2015). Further research into potential stigma towards personality disorder in the public is needed, and this would be pertinent to the issue of DR as stigmatising beliefs can include perceptions of the necessity for incarceration, dangerousness, segregation and punishment (Corrigan et al, 2003).

In summary, mental health professionals may conceptualise the difficulties inherent in personality disorder in different ways, due to nosological debate, lack of knowledge or the existence of stigmatising attitudes. This could bear significant implications for the ways in which clinicians judge the faculties of understanding information and rationality, as well as determining overall moral responsibility for criminal behaviour.

Of equal importance is the way in which laypeople in juries understand this information and use this to make their own inferences concerning guilt and criminal responsibility. Attribution theory (Weiner, 1985) provides a potential framework for understanding these processes.

Causal Attributions

Psychological theories of attribution (Weiner, 1985) suggest that the way in which a mental health condition is portrayed may have significant effects upon the manner in which elements of individual responsibility are conceptualised by people, in turn affecting their propensity for

sympathetic or punitive behaviour. While a full consideration of the extensive field of study into judgement and decision-making biases is beyond the scope of this paper, Weiner's (1985; 1986) attribution-action-emotion framework is used here to conceptualise processes of causal attribution in relation to criminal behaviour and psychiatric information.

Causal attributions are inferences made by an observer regarding the cause or nature of the behaviour of another person. People continually make such attributions to enable them to make sense of the social world in the face of incomplete information, as a means of reducing complexity to manageable predictability (Auerhahn, 2007). Using Weiner (1985) as a framework, salient forms of causal attribution include:

A) whether a behaviour is a function of a cause which is perceived to be internal or external to a person (*locus*)
B) how stable this cause is perceived to be (*stability*)
C) whether this cause is perceived to be under volitional control (*controllability*)
D) Whether this cause is deemed to operate under a specific set of circumstances, or many different ones (*globality*)

(Weiner, 1985)

Internal attributions, responsibility and personality

The attribution of an internal locus of cause, in particular, corresponds to perceptions of responsibility for and controllability of criminal behaviour (Murray et al, 2011). A common example of this is the attribution of a cause of behaviour as being an inherent part of an individual's personality (Murray and Thompson, 2009), which may indicate that the personality disorder terminology in and of it itself may precipitate stigmatising attitudes. Meanwhile, external causal attributions (such as a perceived situational or environmental origin) correspond to perceptions of low responsibility (Murray et al, 2009). Mental health professionals themselves employ the same attributional processes when making sense of violent or criminal behaviour (Murray, 2009), such that structured assessment measures of forensic risk may fall subject to their influence (Murray et al, 2014).

It is not known whether the way in which borderline personality disorder is described by clinicians could affect the nature of the causal attributions made by laypeople, including jury members. However, conceptually there are reasons to believe that it might; Murray (2009) found that internal attributions regarding criminal responsibility could be consistently induced in laypeople and forensic psychiatric experts, with the introduction of information which outlined negative character traits. There is substantial potential variance in the manner in which clinicians may describe borderline personality disorder. A clinician could describe borderline personality disorder in a manner reflecting emotional dysregulation (Crowell, Beauchaine and Linehan, 2009) and support this with neurobiological evidence suggesting the presence of a dysfunctional frontolimbic network impacting the faculties of emotional control and behavioural inhibition (Leichsenring et al, 2011), framing the difficulties of borderline personality disorder in terms of neurological difference. This could correspond to juror attributions of diminished individual choice and criminal responsibility, as people with illnesses with a biological or neurological component have been judged as less blameworthy in prior jury research, due to attributions of lessened control over behaviour (Berryessea et al, 2015; Gurley and Marcus, 2008).

A clinician could also outline the impact of developmental trauma upon the faculties of attachment, mentalising and epistemic trust (Luyten, Campbell and Fonagy, 2019); capacities which facilitate social communication and cognition, detriments to which would necessarily have significant downstream effects upon interpersonal relating, and making sense of the emotions, intentions and perspectives of other people. This would frame borderline personality disorder in terms of the experience of abuse, neglect or other forms of psychological and social adversity. The effect of such a framing upon juror attributions relating to defendant understanding, faculties of judgement and self-control are not known.

In both cases however, it seems reasonable to suggest that these could be interpreted as constituting a “medical condition” which could represent substantial impairment to the faculties outlined in the Diminished Responsibility criteria (Coroners and Justice Act, 2009). Meanwhile, should other clinical terms or narratives be presented that further couch pathology and behaviour as

being an inherent part of personality, this may result in a greater chance of internal attributions being made by clinicians and jurors.

Shifting diagnostic criteria

The way in which borderline personality disorder is clinically described will soon change, reflecting new diagnostic criteria set out as part of the World Health Organisation's upcoming ICD-11 diagnostic manual (World Health Organisation, 2018). ICD-11 replaces the current categorical system with a core personality disorder diagnosis, classification of four levels of severity (subthreshold "difficulty", "mild", "moderate" and "severe"), and trait domain specifiers ("negative affectivity", "detachment", "disinhibition", "dissociality" and "anankastia") as well as a "borderline pattern" qualifier (Bach and First, 2018). Therefore, people with borderline personality disorder facing the legal question outlined in this paper could be described as having a "Severe Personality Disorder, Borderline Pattern". The inclusion of the "borderline pattern" qualifier was subject to rigorous debate among the ICD-11 personality disorder working group and has generated a significant degree of controversy (Tyrer et al, 2019).

The current study

This paper has outlined factors concerning the varying ways in which mental health professionals conceptualise borderline personality disorder, how jurors might subsequently make attributions about people with this condition and their degree of criminal responsibility, and the implications of these factors upon the Diminished Responsibility legal defence.

If the diagnostic language employed by the new ICD-11 framework of personality disorder precipitates negative perceptions relating to personality in jurors, it may be reflected in causal attributions made for a person's problems and their behaviour, as well as in potentially stigmatising beliefs, both of which may influence jury decision-making. This has not been previously studied.

This study explores questions relating to stigma, causal attributions and jury decision-making regarding people with borderline personality disorder, concerning the legal question of Diminished Responsibility. It investigates whether use of the new "Severe Personality Disorder, Borderline Pattern" diagnosis, presented to a 'mock jury' in a fictional homicide trial affects causal attributions and stigmatising beliefs concerning the defendant, and whether this results in differences in individuals' jurors' ratings relating to Diminished Responsibility.

Hypotheses

The hypotheses detailed below are bidirectional, as many of the questions raised within this paper, their study in public samples, and their relation to the new ICD-11 diagnostic criteria have not been well studied. While some concerns are aired in this paper concerning the potential of stigmatising connotations, or predispositions in jurors towards internal attributions, it may also be argued that more specific diagnostic criteria relating to severity of personality disorder could limit the many ambiguities concerning this clinical entity and legal questions of capacity and responsibility (Peay, 2011).

The study assessed whether the use of the "Severe Personality Disorder, Borderline Pattern" diagnosis in a fictional homicide trial vignette produced differences in stigmatising attitudes, causal attributions and individual ratings of Diminished Responsibility. It compared these with a control condition wherein an identical vignette was presented, with this diagnostic label removed and replaced by a generic diagnostic label which indicated similar apparent "severity".

1st hypothesis: the inclusion of the severe personality disorder diagnosis resulted in differences in the nature of stigmatising attitudes exhibited by participants (mock jurors) toward the defendant.

2nd hypothesis: the inclusion of the severe personality disorder diagnosis resulted in a difference in causal attributions made by participants regarding the behaviour of the defendant.

3rd hypothesis: the inclusion of the severe personality disorder diagnosis resulted in differences in individual ratings made relating to Diminished Responsibility.

Methods

Design

This study aimed to assess causal attributions, stigma-related beliefs and individual ratings regarding Diminished Responsibility for homicide by use of a case-simulation methodology. This methodology presents a filmed trial reconstruction wherein a fictional defendant with mental health problems is tried for homicide, with study participants forming a mock-jury.

The study used a between-subjects design, with quantitative data collected to evaluate potential differences between two differing study conditions: one where the defendant's mental health problems are described as being part of a "severe personality disorder, borderline pattern"; and one where they are described as "complex mental health problems". These are referred to as "Severe Personality Disorder" and "Complex Mental Health" conditions respectively.

Case simulation methodology

Various methods have been used within psychological and jury decision-making research to present an approximation of a legal case or trial. Thomas (2010) and Sommers and Elsworth (2003) outline an array of potential problems which commonly hamper ecological validity and fidelity to the jury trial scenario in studies of this type. Often, these include unrealistic vignette stimuli or study environments, and study procedures that do not present a realistic trial structure (Sommers and Elsworth, 2003). Issues of practicality often dominate research of this type, with studies often using online methods with case material presented via written vignettes (e.g. Mossiere and Maeder, 2016). Thomas (2010) argues that poor fidelity to the jury trial scenario undermines the conclusions of many

such studies, and outlines a case-simulation method based around more realistic filmed trial vignettes based around the typical structure of jury trials.

Case simulation stimuli

This study aimed to provide as realistic an approximation of a homicide trial as possible, using a filmed trial reconstruction. Due to reasons of practicality, the film produced presented a condensed version of such a trial, running to 18 minutes' viewing time between sections containing expert witness testimony, prosecution and defence arguments, and instructions to the jury (the participants of the study). The script for this film was co-produced with author B of this paper, based within the School of Law at the University of East Anglia. The film was subsequently produced using using a mock-court setting within the School of Law, with the assistance of undergraduate law students as actors. A written case scenario outlining the events of the case supported the film, alongside a Diminished Responsibility information sheet detailing the criteria of the defence.

Expert witness testimony

The expert witness testimony presented by a Clinical Psychologist outlined a mental health history and narrative formulation of the mental health problems of the defendant. This narrative formulation was consistent with clinical descriptions of borderline personality disorder (APA, 2013), including features of emotion dysregulation, difficulties with mentalisation and heightened perception of social threat, as well as suicidality and self-harm based risk information. This formulation prominently linked the development of these problems to severe sexual abuse and familial adversity in the defendant's personal history. This clip contained no references to the events of the crime and was shown before the written case scenario was shared with participants, to enable measurement of stigma-related beliefs based solely upon the defendant's clinical characteristics, and not their crime.

Case scenario

The written case scenario describes the circumstances of the killing of the victim, prior events of the day and the characters involved. Briefly, the scenario explains that the defendant met the victim at a neighbourhood BBQ. After the victim behaves in a drunkenly flirtatious way towards the

defendant’s younger sister, the defendant is verbally aggressive towards the victim and leaves. The victim seeks to apologise and, upon arriving at the defendant’s house, is attacked and stabbed in the neck by the defendant during an escalating verbal argument. The circumstances of the case are framed in such as a way as to be relevant to the defendant’s history of trauma and their mental health problems: the victim strongly resembles a historical abuser of the defendant; the defendant believes her younger sister was also abused and is strongly protective of her; the defendant has a history of misperceiving threats, and so could conceivable have perceived severe danger and acted in “self-defence”; the defendant was highly distressed during and afterward when found by police.

Trial reconstruction

The trial reconstruction consists of prosecution and defence arguments concerning the defence of Diminished Responsibility, and a judge’s instructions to the jury (the participants of the study) to decide whether this defence was applicable. The defendant is not shown within the film, to avoid conjecture as to appearance or emotional responses interfering with other aspects of judgement of the case. Given the observations of Mackay (2018) relating to common disagreement between expert witnesses in cases involving Diminished Responsibility, both the prosecution and defence arguments referred to conflicting psychiatric reports commissioned by each respective side. The prosecution argument framed the defendant as manipulative and in control of their actions, and the defence argument portrayed the defendant as a fearful, traumatised individual who thought that she was in severe danger. While their arguments refer to conflicting psychiatric reports, no significant additional clinical information is presented beyond that already presented within the expert witness testimony section.

The judge’s instructions to the jury summed up these arguments and requested that the jury consider the defence of Diminished Responsibility. These instructions outlined that depending on their verdict, the defendant would be found guilty of either murder, or of manslaughter on the grounds

of Diminished Responsibility. Simplified implications of either verdict were presented: either a mandatory “life sentence” of 15 years in prison (guilty to murder); or treatment within a secure psychiatric hospital (guilty to manslaughter by Diminished Responsibility).

(Please see Appendix **E** for the case scenario, script of the film and supporting Diminished Responsibility criteria sheet.)

Experimental Manipulation

The experimental manipulation in this study concerned whether the clinical information presented within the expert testimony and trial reconstruction referred to the “severe personality disorder, borderline pattern” diagnosis, or whether this was removed and replaced with a “complex mental health problems” placeholder term. These are referred to as “Severe Personality Disorder” and “Complex Mental Health” conditions respectively. This was achieved via the creation of two almost identical films. Each condition contained otherwise identical clinical information, with all aspects of the expert testimony and trial reconstruction remaining constant.

Measures

To examine participant attributions made regarding the cause of the behaviour exhibited by the defendant, the Causal Attribution Questionnaire (CAQ) (Dagnan, Smith and Trower, 1998; Markham and Trower, 2003) (see Appendix F) was used. This measure has been used in studies which assess attributions of difficult or challenging behaviour with reference to Weiner’s (1986) cognitive-emotional model of attribution. Dagnan, Trower and Smith (1998) used this measure to assess care staff responses to challenging behaviour in people with learning disabilities. Subsequently, Markham and Trower (2003) adapted this for their study of causal attributions made towards people with borderline personality disorder by psychiatric nurses, and this version is used within this study. It assesses causal attributions regarding four negative events involving a person, such as “X did not

attend an appointment at the job centre", and asks respondents to write a speculative cause (i.e. "she was lazy"; "she suffers from trauma"). Various parameters of potential attribution are then presented, according to dimensions of locus (how internal or external the cause is to the person), stability (whether this feature is stable or unstable), globality (whether the cause occurs in relation to many events, or very specific ones) and controllability (how controllable the cause was). These are rated on 7-point bipolar scales. In Markham and Trower (2003), participants rated the cause of an incident of challenging behaviour. For this study, the question relating to challenging behaviour was changed to "what do you think was a main cause of the crime?", while the others were unaltered. Each attribution dimension is rated 4 times, with scores summed to provide a score up to a maximum of 28 points. Markham and Trower (2003) do not report measures of internal consistency for this measure. However, Russell, McAuley and Tarico (1987) provide Cronbach's alpha scores for the scales of locus (α=0.78) stability (α=0.85) and controllability (α=0.51). From the dataset obtained in this study, the CAQ appeared to have acceptable internal consistency, α = .64.

To examine stigma-related beliefs about the defendant, the Attribution Questionnaire-27 (AQ-27) (Corrigan et al, 2003) (see Appendix F) was used. The AQ-27 asks respondents 27 questions relating to 9 domains of stereotypical belief towards a person with a mental illness. These domains correspond to blame, anger, pity, dangerousness, help, fear, avoidance, segregation and coercion. There are 3 questions concerning each domain, with each rated on 9-point bipolar scales. Within each domain, these scores are summed, providing a score for each out of a maximum of 27 points. Its reliability was established by Corrigan et al (2003) who found Cronbach's alpha coefficients ranging from 0.70 to 0.96 across the nine scales. It has been widely used across international samples (Pingani et al, 2011; Munoz et al, 2015). From the dataset obtained in this study, the AQ-27 appeared to have an acceptable level of internal consistency, α = .67. For illustration purposes, this rose to α = .83 with removal of the (more positive) pity and help subscales, indicating good internal consistency but that the AQ-27 measures variable constructs overall. The AQ-27 typically presents respondents with a short written vignette concerning a man named Harry with Schizophrenia. For the purposes of this study, this vignette was changed to reflect the defendant and their mental health problems. It does not

otherwise refer to the details of the case. It was presented to participants after they have learned about the defendant's mental health problems, but before they had learned the details of the case.

To capture judgements relating to the legal question of Diminished Responsibility, a measure was designed for the purposes of this study (see Appendix F), as no measures exist in the literature. Within the Diminished Responsibility Questionnaire (DRQ), the circumstances of the crime are broken down into four scenarios, with each part rated against each aspect of the legal criteria via 7-point bipolar scales. As an example, one question presented the statement "X then took a kitchen knife from the side, opened her front door and stabbed Y in the neck, causing major injuries". The subsequent scales asked "was this related to a recognised medical condition?" (not related/entirely related), "could she understand her conduct, form a rational judgement, or exercise self-control?" (totally unable/fully able for each) and "do any of the factors explain how she acted?" (these do not/one or more fully explains her actions). In completion of the measure, each factor of the Diminished Responsibility criteria is rated four times, with their scores summed to provide final scores out of a maximum of 28 points for each criterion. The DRQ appeared to have excellent internal consistency, α = .94. This may reflect the fact that it is based on a single legal construct.

Participants

The study population consisted of a mixture of undergraduate and postgraduate students from the University of East Anglia, staff members of varying roles employed at the University of East Anglia, and other members of the public from the Norfolk and Suffolk regions of East Anglia, UK. 50 participants in total took part, comprised of 27 undergraduate and postgraduate students, 17 university employees, and 6 members of the public. Participant ages ranged from 18 to 60. Please see Table 3 for participant characteristics.

The undergraduate/postgraduate proportion of the sample had a diverse range of fields of study, including biological sciences, medicine, IT, English literature, mathematics and law.

Meanwhile, the university employee proportion of the sample consisted of administrative and teaching staff from a varied range of university departments and schools.

Potential participants who had fields of study, teaching positions or occupations relating to psychology or psychiatry were excluded from the study at the recruitment stage. This was to ensure a necessary degree of separation from the mental health professions and to limit prior familiarity with elements of the health and diagnostic information presented in the course of the study.

Table 3.

Participant characteristics

	Complex Mental Health problems	Severe Personality Disorder	Total
Age			
Mean	31	26.9	29
Median	30	23	24
Gender			
Male	8	10	18
Female	17	15	32
Ethnicity			
White British	17	13	30
Black/Asian/Mixed/White Other	8	12	20
Demographic group			
UG/PG student	9	18	27
University employee	10	7	17
General public	6	0	6

Sample size and power

Power analyses undertaken during the planning stage of the study indicated that the minimum number of participants required for the study was 48. This was undertaken using G*Power software. This number would enable the use of MANOVA analyses with a medium effect size of 0.25 and power of 0.8.

Effect size estimates of the presence of the severe personality disorder diagnosis were based upon those obtained by Markham and Trower (2003), who assessed the effect of a borderline personality disorder diagnosis upon causal attributions for behaviour made by psychiatric nursing staff. While some of the effect sizes within their study are very large, more conservative estimates of effect were

made concerning this study, given the differing design and sample type of this study (See Extended Methods section for further discussion of power calculations).

Sampling Procedure

The study was advertised within the university via digital departmental and student newsletters distributed via email, digital screens displayed around the campus and on physical advertisements displayed on communal noticeboards. Potential participants were asked to register their interest via email, wherein their details were registered within a secure database prior to arranging study sessions. In addition to this, on days in which the study was running mobile noticeboards were placed advertising the study and directing potential participants to specific sessions, allowing for more opportunistic sampling of participants.

Study sessions were conducted in blocks of 8-9 participants, to provide an approximation of a jury experience and to allow for discussion and provision of a “jury verdict” at the end of the study. Participants were not randomised to their respective conditions. Many participants of the study were full-time university employees who had to balance time to attend around working hours. Therefore, unfortunately it was impractical to randomise participants to specific conditions, with many participants dropping out or unable to attend sessions when this was attempted. At this point an alternative study design, such as an online format which could have made randomisation more practically achievable, was carefully considered. This could have enabled participants to complete the study tasks at their leisure with random allocation of study conditions but would have removed elements of a mock-court and mock-jury setting. On balance, it was decided that ecological validity and fidelity to a physical “jury” experience should take priority, as this is a common area of weakness in mock-jury research (Sommers and Elsworth, 2003; Thomas, 2010). Therefore, the original study design was retained. Instead, participants were presented with the times and dates of study sessions, which they selected and booked onto. The study conditions were alternated between each study session. The participants were naive as to the nature of the differing study conditions until being debriefed at the end of each session.

While this flexibility of recruitment and arrangement of study sessions enabled a larger sample than would otherwise have been achieved, it affected the degree of matching of participants between groups, forming a significant limitation of the study as the final participant groups are demographically different in terms of average age, ethnicity, and proportion of UG/PG students to university employees and members of the public. This should be borne in mind when interpreting the results of this study. The prospective implications of this limitation are discussed in more detail within the discussion section of this paper.

Recruitment took place between March and October 2019, finishing upon achievement of sufficient participants needed to achieve appropriate statistical power. Participants were each paid £5 for their participation in the study (See Appendix **H** for copies of the study advertisements used).

Study Procedure

Please see Figure 1 for a flowchart of the study procedure. The aim of the study was explained in a participant information sheet as examining jury perceptions and decision making in relation to homicide cases involving complex mental health problems. It outlined that very little is known concerning how jurors weigh up factors of mental illness in relation to culpability for criminal acts, and that this could be affected by factors of stigma. Participants first read this information sheet alongside a consent form before commencement of the study (please see Appendix **F** for copies of the participant information and consent forms). They were required to avoid conferring with each other until being told otherwise. Participants were not aware that the study had differing conditions, and so were naïve as to which condition (label/no label) they were in.

First, participants watched the expert witness testimony section of the film. After this, the film was stopped, and participants were asked to complete the AQ-27 (Corrigan et al, 2003) to assess stigma-related beliefs relating to the clinical information presented. Following the completion of the AQ-27, participants were presented with the written case scenario and Diminished Responsibility information sheet to read, before watching the rest of the film containing the trial reconstruction. After

this had finished, participants completed the CAQ (Dagnan, Trower and Smith 1998; Markham and Trower, 2003) and DRQ created for the study. Participants were then asked to discuss their opinions of the case and come to a collective "verdict". Finally, participants were given a debrief sheet explaining the differing conditions and specific aims of the study. Researcher time was provided afterwards for anyone who wished to discuss the study or its material in more detail.

Between the watching of the film, reading of the case scenario and Diminished Responsibility information sheet and provision and completion of study measures, each study session took approximately 1 hour to complete.

Figure 1:

Procedure Flowchart.

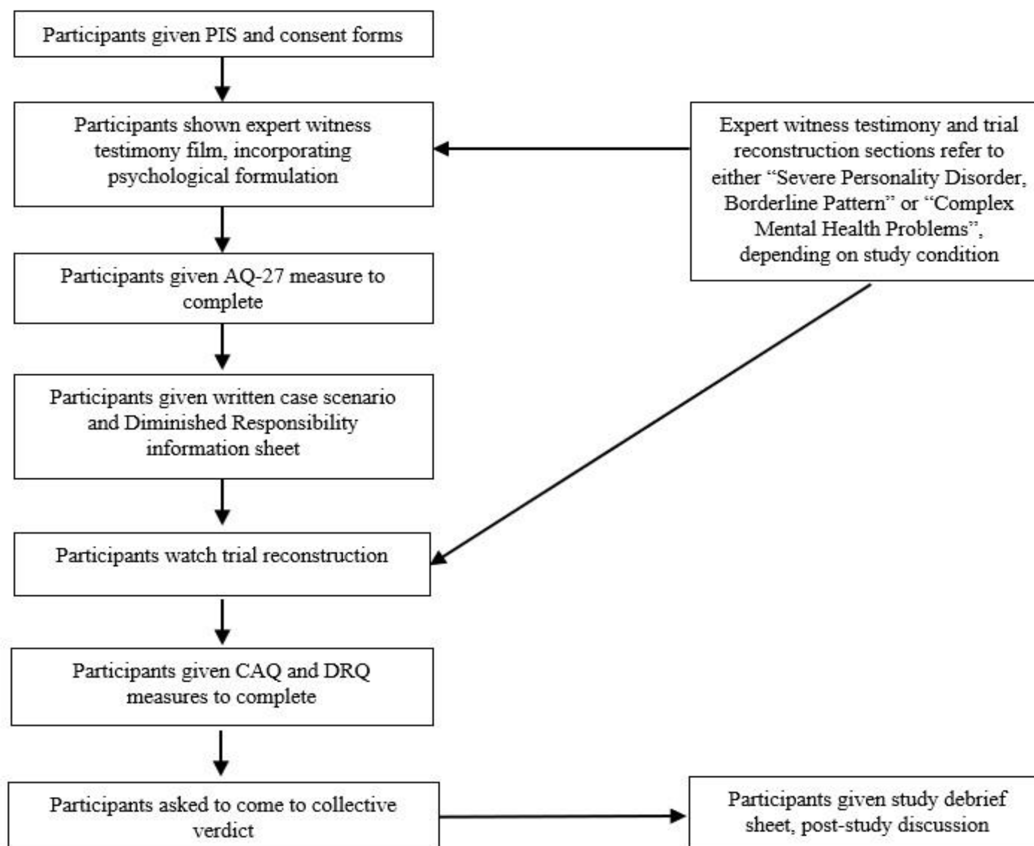

Figure 1: a flow chart documenting the procedures that participants undertook during the study.

Ethical Approval

Ethical approval was gained for this study from the University of East Anglia Faculty of Medicine and Health Sciences ethics panel. Given the nature of the case and graphic descriptions contained within the case scenario, information was provided regarding how participants could seek additional support after the study if they were distressed by the material. No participants felt the need to do so, with many expressing that they had enjoyed the task. Participants were paid £5 for their participation in the study (See Extended Ethics section of this portfolio for further discussion).

Data Analysis

This study design employed a singular independent variable with two levels: the “Severe Personality Disorder” experimental condition and the “Complex Mental Health” control condition. It assessed potential differences in 18 dependent variables: AQ-27 variables of blame, anger, pity, dangerousness, help, fear, avoidance, segregation and coercion (9); CAQ variables of locus, stability, globality and controllability (4); and DRQ variables of recognised medical condition, understanding, rational judgement, self-control, and explaining actions (5).

The analysis plan for this study included use of a one-way MANOVA to assess multivariate differences between the Severe Personality Disorder and Complex Mental Health conditions, with subsequent post-hoc analyses used to assess differences between AQ-27, CAQ and DRQ scores. The minimum sample size and appropriate power to detect effects of the study was planned to use this. However, not all of the assumptions of MANOVA were met during initial stages of the analysis (failing the homogeneity of variance-covariance matrices assumption). Therefore, a series of independent samples *t*-tests are used to compare means for each variable between groups in conjunction with the Holm alpha reduction technique with respect to multiple comparisons (Holm, 1979).

Results

Assessment of the study data using the Shapiro-Wilks test of normality indicated that the data were normally distributed, and so the use of parametric tests was appropriate (see Extended Results section). There were 19 dependent variables included for comparison between the Complex Mental Health and Severe Personality Disorder conditions in this study. Therefore, in order to test the three hypotheses of this study, a series of independent samples *t*-tests were used in conjunction with the Holm alpha reduction technique with respect to the multiple comparisons used within this study (Holm,1979). In the use of this method, p values under .05 are ranked in order of size, smallest first, and critical *p* values for significance are adjusted relative to this rank. Therefore, these are reported where these are below the traditional .05 level but do not meet the adjusted level for significance, to aid interpretation.

The mean causal attribution, stigma-related belief and diminished responsibility ratings are displayed in Table 2, alongside their mean differences and standard error, 95% confidence intervals, *t* statistics and Cohen's *d* effect sizes. Higher numbers for the CAQ causal attribution dimensions indicate greater internal locus of cause, greater stability, greater globality and more control over cause and the event. Higher numbers for the AQ-27 stigma-related beliefs indicate greater endorsement of beliefs in each domain, and greater numbers for the DRQ indicate greater endorsement of each aspect of the Diminished Responsibility criteria.

Causal Attributions

Independent samples *t*-tests were computed to assess the difference between means obtained for the causal attribution dimensions of locus, stability, globality, control over cause and control over event between the Complex Mental Health and Severe Personality Disorder conditions.

On average, participants attributed a slightly more internal locus of cause in the Severe Personality Disorder condition (M=20.44, SD=3.57) then in the Complex Mental Health condition (M=18.64, SD= 5.48). This result (-1.80, 95% CI -4.43, 0.83) was not significant ($t(48)$= -1.37, p=0.175); however, it did represent a small-sized effect (d=0.38). Participants also attributed a greater degree of control over the causes of behaviour in the homicide scenario and other negative events in the Severe Personality Disorder condition (M=15.04, SD=5.89) compared to the Complex Mental

Health condition (*M*=11.88, *SD*=3.50). This result (-3.16, 95% CI -5.91,-0.40) was not significant following Holm alpha reduction (*t*(48)=-2.30, *p*=0.026; critical *p*=0.013 for rank), although it represented a medium-sized effect (*d*=0.65). Participants also rated a slightly greater degree of control over the events themselves in the Severe Personality Disorder Condition (*M*=16.08, *SD*=4.68) compared to the Complex Mental Health condition (*M*=13.88, *SD*=4.76). This result(2.20, 95% CI -4.88,0.48) was not significant (*t*(48)= -1.64, *p*=0.106), although it represented a medium-sized effect (*d*=0.46). There were no differences in the remaining attribution dimensions of stability and globality and negligible measures of effect.

Stigma-related beliefs

Independent samples *t*-tests were used to examine potential differences between means obtained for the 9 domains of stigmatising belief within the AQ-27, across the Complex Mental Health and Severe Personality Disorder conditions.

Within these domains, participants rated the defendant as more dangerous in the Severe Personality Disorder condition (*M*=15.72, *SD*=4.69) than in the Complex Mental Health condition (*M*=11.24, *SD*=4.80). This difference (-4.48, 95% CI -7.18,1.77) was significant (*t*(48)= -3.33, *p*=0.002) and had a large effect (*d*=0.94). Participants also endorsed beliefs concerning the need for segregation to a higher degree in the Severe Personality Disorder condition (*M*=11.80, *SD*=5.52) than in the Complex Mental Health condition (*M*=7.16, *SD*=3.17). This difference (-4.64, 95% CI -5.54,-0.53) was significant (*t*(48)=-3.64, *p*=0.001) , and had a large effect (*d*=1.03). Similarly, participants endorsed beliefs concerning the need for coercive treatment to a greater extent in the Severe Personality Disorder condition (*M*=20.76, *SD*=3.56) than in the Complex Mental Health condition (*M*=17.16, *SD*=4.50). This difference (-3.60, 95% CI -5.91,-1.29) was significant (*t*(48)= -3.13, *p*= 0.003) and represented a large effect (*d*=0.88). Participants also appeared to endorse beliefs concerning personal avoidance to a greater extent in the Severe Personality Disorder condition (*M*=17.72, *SD*=4.22) than in the Complex Mental Health condition (*M*=14.68, *SD*=4.58). This result (-3.04, 95% CI -5.54,0.63) fell short of significance following Holm alpha reduction (*t*(48)= -2.43, *p*=0.019; critical *p*= 0.010 for rank) and this represented a medium effect (*d*=0.68). There appeared

to be a small variation in terms of beliefs concerning fear towards the defendant between the Severe Personality Disorder (*M*=12.28, *SD*=5.45) and Complex Mental Health (*M*=9.80, *SD*=5.49) conditions. This result (-2.48, 95% CI -5.59,0.63) was not significant ($t(48)= -1.60$, $p=0.116$) although it did approach a medium effect ($d=0.45$). This was also the case in the blame domain, where a small variation in mean scores between the Severe Personality Disorder (*M*=14.20, *SD*=4.84) and Complex Mental Health conditions (M=12.32,SD=3.54) (-1.88, 95% CI -4.29, 0.53) was not significant ($t(48)= -1.56$, $p=0.124$) despite a close to medium effect ($d=0.44$). For other domains concerning anger, pitying and helping attitudes toward the defendant, there were no differences between conditions and negligible estimates of effect.

Diminished Responsibility group verdicts

Across both conditions, the mock-jury group discussions consistently returned group verdicts of guilty to Manslaughter by reason of Diminished Responsibility. In most groups this was resolved quickly, and unanimity was reached without substantial debate between participants. Within two of the Severe Personality Disorder groups, unanimity required some debate between participants due to initial differences of opinion. This was, however, resolved quickly and no group required substantial amounts of time to come to a group verdict.

Diminished Responsibility individual ratings

The consistency in group verdicts relating to Diminished Responsibility were reflected in individual ratings made using the DRQ. For each of the DRQ items, there were no significant differences between mean scores for any of the DRQ domains, indicating near-equal endorsement of each element of the Diminished Responsibility criteria between the Severe Personality Disorder and Complex Mental Health Conditions. The only slight variation between means obtained was for the recognised medical condition element of the criteria, with this being rated slightly higher in the Complex Mental Health condition (*M*=19.72, *SD*=3.96) than the Severe Personality Disorder condition (M=18.04,*SD*= 5.07). This result (1.68, 95% CI -0.91,4.27) was not significant ($t(48)= 1.30$, $p=0.198$) though there was a small effect ($d=0.36$)

Table 4.

Between-group Causal Attribution Questionnaire, Attribution-Questionnaire-27 and Diminished Responsibility Questionnaire summary statistics, t-statistics and effect sizes

	Complex Mental Health Problem (n=25)		Severe Personality Disorder (n=25)		Mean Difference	95% Confidence Interval	Standard Error Difference	*t*-test (df), *p* value	Cohen's *d*
	Mean	Standard Deviation	Mean	Standard Deviation					
CAQ Locus	18.64	5.48	20.44	3.57	-1.80	-4.43,0.83	1.30	*t*(48)= -1.37, *p*=0.175	*d*=0.38
CAQ Stability	20.32	3.76	20.08	3.62	0.24	-1.86,2.34	1.04	*t*(48)= -0.23, *p*=0.819	*d*=0.06
CAQ Globality	20.84	3.52	20.48	4.67	0.36	-1.99,2.71	1.17	*t*(48)= 0.30, *p*=0.760	*d*=0.08
CAQ Control Cause	11.88	3.50	15.04	5.89	-3.16	-5.91,-0.40	1.37	*t*(48)= -2.30, *p*=0.026	*d*=0.65
CAQ Control Event	13.88	4.76	16.08	4.68	2.20	-4.88.0.48	1.33	*t*(48)= -1.64, *p*=0.106	*d*=0.46
AQ Blame	12.32	3.54	14.20	4.84	-1.88	-4.29,0.53	1.20	*t*(48)= -1.56 , *p*=0.124	*d*=0.44
AQ Anger	9.28	4.69	10.40	4.99	-1.12	-3.87,1.63	1.37	*t*(48)= -0.81, *p*=0.418	*d*=0.23
AQ Pity	22.76	4.15	22.20	4.21	0.56	-1.82,2.94	1.18	*t*(48)= 0.47, *p*=0.560	*d*=0.13
AQ Help	18.96	4.89	19.16	4.62	-0.20	-2.90,2.50	1.34	*t*(48)= 0.14, *p*=0.883	*d*=0.04
AQ Dangerousness*	11.24	4.80	15.72	4.69	-4.48	-7.18,1.77	1.34	*t*(48)= -3.33, *p*=0.002*	*d*=0.94
AQ Fear	9.80	5.49	12.28	5.45	-2.48	-5.59,0.63	1.54	*t*(48)= -1.60, *p*=0.116	*d*=0.45
AQ Avoidance	14.68	4.58	17.72	4.22	-3.04	-5.54,0.63	1.24	*t*(48)= -2.43, *p*=0.019	*d*=0.68
AQ Segregation*	7.16	3.17	11.80	5.52	-4.64	-5.54,-0.53	1.27	*t*(48)= -3.64, *p*=0.001*	*d*=1.03
AQ Coercion*	17.16	4.50	20.76	3.56	-3.60	-5.91,-1.29	1.14	*t*(48)= -3.13, *p*= 0.003*	*d*=0.88
DRQ Condition	19.72	3.96	18.04	5.07	1.68	-0.91,4.27	1.28	*t*(48)= 1.30, *p*=0.198	*d*=0.36
DRQ Understand	15.44	6.27	15.04	5.58	0.40	-2.97,3.77	1.68	*t*(48)=0.23, *p*=0.813	*d*=0.06
DRQ Rational	19.64	5.71	19.80	4.82	-0.16	-3.16,2.84	1.49	*t*(48)= -0.10, *p*= 0.915	*d*=0.03
DRQ Self Control	20.32	5.77	19.52	5.18	0.80	-2.31,3.91	1.55	*t*(48)= 0.51, *p*=0.800	*d*=0.14
DRQ Explain	20.64	5.03	21.04	4.53	-0.40	-3.12,2.32	1.35	*t*(48)= -0.29, *p*=0.076	*d*=0.08

*Significant *p* value following application of the Holm method of correction for multiple comparisons (Holm, 1979)

Discussion

The purpose of this study was to assess whether the manipulation of diagnostic terminology resulted in differences in the way in which a defendant was perceived by mock-jury participants within a homicide trial scenario. The experimental manipulation consisted of calling a defendant's mental health problems a "Severe Personality Disorder (Borderline Pattern)" or "Complex Mental Health Problems", in the context of otherwise identical trauma-focused clinical information. The study hypotheses predicted potential differences in causal attributions for behaviour, differing levels of endorsement of various stigma-related beliefs, and differences in judgements relating to the criteria of the Diminished Responsibility legal defence.

Taken together, the results of this study indicate that use of the Severe Personality Disorder term resulted in greater endorsement of particular stigmatising beliefs regarding the defendant, although it did not significantly affect attributional inferences made by participants regarding defendant behaviour, or aspects of their decision making concerning the applicability of the Diminished Responsibility legal defence. Indeed, participants endorsed judgements of manslaughter by Diminished Responsibility, as opposed to murder, to a universal extent in group verdicts and signalled strong agreement with the criteria in their individual ratings across both groups. The results and their bearing upon the study hypotheses, limitations of the study, potential implications and future directions for research are discussed.

Stigma-related beliefs

The hypothesis that the manipulation of diagnostic terminology would result in differences in stigma-related beliefs, as measured by the AQ-27 (Corrigan et al, 2003), was supported by the results. There were significant differences between the Severe Personality Disorder and Complex Mental Health groups within the domains of Dangerousness, Coercion and Segregation, for which there were large effects. One further domain, Avoidance, fell just short of significance following alpha reduction techniques although a medium sized effect is observed for greater scores in the Severe Personality

Disorder condition. This appears to show that referring to the defendant's difficulties as a Severe Personality Disorder resulted in them being perceived as more dangerous, as more in need of coercive psychiatric treatment, and more in need of segregation from the public. This measure was taken after exposure to the psychological formulation, but before the events of the case were described, indicating that these results are the effect of the diagnostic terminology itself, and not attitudes developed in response to an account of a homicide. This would appear to bear significant implications for the way in which laypeople in juries may perceive defendants described as having this disorder, when the ICD-11 framework for describing personality disorder becomes established.

Taking a broad view across all AQ-27 domains highlights that Higher AQ-27 scores for overtly negative domains such as these are not mutually exclusive with other domains of belief which should intuitively also generate sympathetic responses. It appears that regardless of diagnostic terminology, participants felt that the defendant was highly pitiable and in need of help, as reflected by consistent high scores in these domains. While the domain of Segregation was endorsed to a greater degree in the Severe Personality Disorder condition, scores in both conditions are relatively low, as are those for Anger (which was unaffected by diagnostic terminology) and Fear (which showed a non-significant medium effect). Therefore, while important differences are shown between the groups within more negative domains, it appears that in this scenario, generally participants felt that the defendant required support and potentially coercive treatment, rather than punishment and retribution. This is a nuanced picture of effects which requires further study.

Stigma towards people with personality disorder has, for the most part, been studied in mental health professionals rather than the public (Sheehan, Nieweglowski and Corrigan, 2016). Within professional samples, BPD is associated with therapeutic pessimism (Lam, Salkovskis and Hogg, 2016), greater desired social distance (Markham, 2003; Aviram, Brodsky and Stanley, 2006), outright dislike and discrimination (Lewis and Appleby, 1988) and rejection from services (Sulzer, 2015). Meanwhile, public awareness of BPD appears to be low, which may suggest that this leads to negative reactions to distress, such as seeing sufferers as manipulative (Furnham, Lee and Kolzeev, 2015).

The results obtained here from simple manipulation of diagnostic terminology suggests that there is an intuitive meaning obtained from the term "Severe Personality Disorder" which is inherently stigmatising. It is noteworthy that such a small manipulation led to the large effects observed. "Personality" has a lay meaning that historically relates to character, constitution and self (Berrios, 1993). Where the division between "personality disorder" as a clinical entity (abrogating judgement of moral responsibility) and "personhood" lies is not straightforward for professionals, let alone laypeople (Glas, 2006). Markham and Trower (2003) suggest that the term implicitly communicates there is "something intrinsically 'disordered' about the person". To invoke levels of severity in the new ICD-11 criteria alongside this may provide diagnostic specificity to clinicians (Bach and First, 2018). It may provide clarity in the intersection between clinical information and the legal question of Diminished Responsibility, which appears muddled by conceptual confusion and discrepancy of clinical opinion (Peay, 2011; Mackay, 2018). On this evidence, however, it may also carry stigmatising lay meanings relating to dangerousness, and a need for coercion, segregation and avoidance. These were present within our results even though mock-jurors felt sympathetic enough to the defendant to consistently judge them as having Diminished Responsibility.

To our knowledge, the impact of the new ICD-11 criteria upon potentially stigmatising beliefs has not been assessed. These findings broadly echo those of Markham (2003), who identified greater ratings of dangerousness and desired social distance by nurses towards patients with BPD, relative to patients with schizophrenia and depression. Taken together this would imply that nearly 20 years later, we continue to employ and develop diagnostic terminology which will have stigmatising connotations for people with complex psychological problems. This study makes a novel contribution in demonstrating these biases in a mock-jury context, where they have not been subject to research.

Causal Attributions

The hypothesis that the variation in diagnostic terminology between the two groups would result in differences in causal attributions made for the behaviour of the defendant, as measured by the CAQ (Markham and Trower, 2003) was not supported by the results as none of the differences were significant following alpha reduction techniques. However, the medium effect sizes obtained for the

control over cause and control over event dimensions are of interest and may warrant further investigation with a larger sample. These indicate that participants might have inferred a greater degree of control over both the cause of the events presented (i.e. the defendant's mental health symptoms or emotions) and the events themselves (i.e. violent actions resulting in homicide) in the Severe Personality Disorder condition. There is also a small effect for the locus dimension, indicating that participants might have inferred more internal causes to a modest extent in the Severe Personality Disorder condition. Meanwhile, high mean scores for locus, stability and globality across both groups indicates that generally participants attributed the defendant's behaviour to something internal to them as a person, something that was unlikely to change over time and would likely effect how they would behave in a variety of situations.

Diminished Responsibility ratings

The hypothesis that the differing diagnostic terminology used between the groups would result in differences to ratings made against the Diminished Responsibility criteria, as measured using the DRQ developed for this study, was not supported by the results. However, generally high mean scores across these indicate broad agreement that the defendant met the criteria for the Diminished Responsibility defence.

This finding is of interest as it contrasts with reports of the success of this defence in practice since the amendments of the Coroners and Justice Act (2009). Mackay and Mitchell (2017) report that this defence often fails in cases of personality disorder, returning murder convictions. They describe an arena of clinical debate in trials such as these where expert witnesses often disagree as to the applicability of the criteria. This element was replicated within the case itself through references to conflicting psychiatric reports. While the psychological formulation presented at the beginning of the study did not refer to the events of the case or the applicability of Diminished Responsibility, it may be that this influenced the near unanimous nature of the participant's ratings of this. Further research in this area may consider the processes by which juries make decisions about people with personality disorder in more depth, by considering experimental variation around the presence and form of

psychological formulation used. Furthermore, the potential effects of including a specific narrative of psychological trauma within psychological formulation upon jury should be subject to further study.

Presence of psychological formulation

In both conditions, participants were presented with a narrative formulation of the defendant's psychological difficulties, which placed these in the context of childhood sexual abuse and other forms of early adversity. This placed emphasis upon the effects of these upon the defendant's ability to attain feelings of safety, and that they may misperceive situations as threatening. Psychological formulation, when used with an audience such as clinical teams, is described as ideally increasing understanding and empathy, and decreasing negative perceptions of patients and their problems (Johnstone and Dallos, 2014 p.219). This could account for the consistent finding across both groups that the defendant was perceived as pitiable, that participants would provide them with help, and that participants felt they met criteria for Diminished Responsibility. The role of formulation in this is unclear, however, and requires further study. Evidence as to the mechanisms and efficacy of psychological formulation in general is sparse (DCP, 2011). It is subject to considerable variation, mirroring diverse therapeutic modalities and individual practitioner characteristics (Flinn, Braham and Nair, 2014). Little is known as to whether formulation is effective in changing negative or stigmatising attitudes or increasing audience empathy towards a subject. It may be ineffective in doing so (Wilkinson et al, 2017). Given the effects observed, it appears that formulation of this type may not negate diagnostic stigma.

Limitations

There are several limitations to the present study which should be accounted for when interpreting the results.

One limitation concerns the measures used to collect data. Brown (2008) outlines a six-factor structure of the AQ-27, with factors of fear/dangerousness, helping/interacting, negative emotions and forced treatment demonstrating good internal consistency, test-retest reliability and validity with other

measures of mental illness stigma. The CAQ (Dagnan, Smith and Trower, 1998; Markham and Trower, 2003) has not received psychometric validation in the form used in this study, as it was adapted to reflect aspects of the case scenario. However, internal consistency has been assessed for the dimensions of locus, stability and controllability by Russel, McAuley and Tarico (1987). The DRQ was created for the purposes of this study and has not undergone validation. However, the questions of the DRQ relate to the concepts outlined by the legal framework of the Coroners and Justice Act (2009), and so are not the product of a hypothesised underlying construct.

Aspects of the way the study was described within advertisements and information sheets could have influenced the kinds of participants recruited, and their propensity to make sympathetic judgements of the defendant. The study was clearly described from the outset as being interested in common perceptions of complex mental health problems and how this might affect juror deliberations. Consequently, the study may have attracted participants with an interest in the social issue of mental health stigma (which has been the focus of various public information campaigns in recent years). The study literature could also have primed them to consider the issue of bias or stigma in themselves and influenced the likelihood of socially desirable responding, which may have contributed to the pattern of effects observed here. It is interesting to consider what variables within the study could be particularly influenced by socially desirable responding, if it were present, and whether this could vary according to the prominence or subtlety of each variable and its assessment. The primary focus was on Diminished Responsibility throughout study stimuli, while causal attributions and stigma-related beliefs were presented and assessed more subtly through measures alone.

A main limitation concerns the participant population of this study and differences between the study groups in terms of participant characteristics. This study aimed to recruit a diverse sample of participants within a university population, obtaining a mix of undergraduate and postgraduate students as well as staff members. However, participant randomisation was not possible and more opportunistic sampling was required to obtain some participants, and so participant groups are demographically different. This was a disproportionately female and well-educated sample, which

may have affected perceptions of the female defendant and the events of the case. The respective genders of defendants, victims and jurors appears to impact the way in which jurors appraise defendant-victim power relations, defendant responsibility and believability (Pozzulo et al, 2010; Hodell et al, 2014). Furthermore, female defendants may be less likely to be convicted of homicide in mock-jury studies (Hodell et al, 2014). This may be a factor in why the defendant appeared to be viewed in sympathetic terms, overall. Moreover, the Severe Personality Disorder group is notably younger, and so the results obtained in this group appear somewhat counterintuitive. However, differences in terms of sympathetic or punitive attitudes towards defendants with Borderline Personality Disorder appear to vary more by large generational differences in age, as observed by Taylor, Alner and Workman (2017). It may be that more distinct between-group differences would have been obtained with demographically matched groups, or that the defendant may have been perceived less sympathetically overall if more participants were male.

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It may be possible that the effects observed could have been influenced by other elements of the language used to describe each condition. It is not clear how participants might infer differences between "Severe" and "Complex" descriptors, for instance, and whether it was this difference rather than the inclusion of "Personality Disorder" that influenced the participants' perceptions. A replication or expansion of this study would benefit from closer matching of terminology (i.e. use of "Severe Mental Health Problems") to examine the effect of the "Personality Disorder" label more clearly. A further limitation of this study related to its sample size and subsequent power to detect medium effects of interest. At data analysis, as some assumptions of MANOVA analysis were not met, multiple *t*-tests with correction for multiple comparisons were used. Ultimately, this has detrimentally impacted the ability to detect small or medium effect sizes at conventional levels of significance.

Strengths

This study used ecologically valid methods of conveying study stimuli, with efforts undertaken to provide a realistic approximation of a jury trial through its materials and setting through use of a case-simulation method (Thomas, 2010). Studies concerning jury decision making often utilise written vignettes and omit a trial procedure and jury discussion (i.e. Berryessa et al, 2015; Mossiere and Maeder, 2016) and have attracted criticism concerning authenticity (Sommers and Elsworth, 2003; Thomas, 2010). Similar vignette-based methods are often employed in stigma research (i.e. Chartonas et al, 2017) which may not reflect the complex contextual nature of stigmatising beliefs and interactions (Pescosolido et al, 2008). Studies which employ more immersive, ecologically valid methods may be better placed to assess the nuanced nature of stigma and its influence on decision making in-context (i.e. Lam et al, 2016).

Future directions for research

The results of this study highlight several potential avenues for ongoing research in this area. The study requires replication using a larger sample that more accurately reflects the general public, while also addressing the other methodological limitations outlined. This was, to our knowledge, the first study to investigate the impact of the new ICD-11 criteria upon how personality disorders are perceived and understood by laypeople. The relationship of this terminology to stigmatising beliefs and interactions requires investigation across the numerous contexts in which people diagnosed with personality disorder may encounter them. In the past this has often focused upon mental health professionals in care settings, and this problematic area (Aviram, Stanley and Brodsky, 2006) should be readily pursued. Other areas, such as interactions with police and emergency services, the criminal justice system, employment support, and assessment for disability and social security benefits would be impactful.

The impact of psychological formulation itself in this context requires a body of research of its own, as has occurred in studies of neuroscientific evidence (i.e. Gurley and Marcus, 2008; Greene and Cahill, 2011). Several initial questions emerge in relation to this topic: the impact of psychological formulation upon juror empathy and decision making; whether this exists across differing mental health diagnoses; whether different kinds of formulation have differing effects;

methods of presentation and accessibility to laypersons; and whether individual juror characteristics affect these concepts.

Additionally, the concepts explored in this paper concern a single legal question, Diminished Responsibility for murder. Future research could pursue a whole range of potential legal questions and case scenarios in which mental health problems of defendants are relevant. Furthermore, the methods used to capture aspects of juror decision-making could be substantially developed. This could include validation of measures used, as well as the application of qualitative or mixed methods designs to capture subjective aspects of the decision-making process in detail. An extension of this study could involve the recording and qualitative analysis of the jury debate at the end of the case, as focus-group data.

Conclusion

This paper outlines a unique study assessing the impact of the new ICD-11 Severe Personality Disorder terminology upon stigma-related beliefs, causal attributions and decision-making concerning Diminished Responsibility in a mock-homicide trial scenario. Its results highlight concerning findings that suggest that this terminology alone might influence juror perceptions of dangerousness, and a need for coercive treatment and segregation. This has significant implications for people who may be described using this terminology within legal contexts.

Our conceptualisations of complex mental health difficulties are built on shifting sands, although in these contexts they must meet more rigid legal questions and bear substantial individual consequences. Many questions remain unanswered as to how psychological and psychiatric information may affect juror perceptions of mental health difficulties and the framing of questions of responsibility and guilt. As we adopt a new range of personality disorder terminology more than 30 years after Lewis and Appleby (1988) called for its abandonment, its utility and unintended consequences must be carefully and critically considered.

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Chapter Five: Extended Methods (Empirical Paper)

Initial application to Her Majesty's Courts and Tribunals Service

In the planning stages of the empirical project, an application was made to Her Majesty's Courts and Tribunals Service (HMCTS) to conduct the research project within actual court premises, using dismissed jury members. This was attempted as it was the method used by Thomas (2010), who details the case-simulation method. This was felt to be the most ecologically valid method of conducting the study. Contact was made with this author to establish the possibility of repeating this, but this was not altogether successful. Separately, an application was made to the HMCTS Data Access Panel, although this was returned as not successful at a late stage of project planning (see Appendix I for correspondence).

As this application was unsuccessful, a contingency version of the project was designed which forms the project reported within the empirical paper.

Development of materials

Narrative formulation used as expert witness testimony

There are various forms of psychological formulation (Johnstone and Dallos, 2006). In preparing the scripts and other materials for the case-simulation, a decision needed to be made as to

what kind of formulation to include, and what information would be particularly salient within this. It was decided that this formulation should incorporate features of developmental and relational adversity alongside features of sexual abuse, to frame the symptoms of misperception of threat, feelings of rejection, impulsivity and anger described within the case vignette. This description was influenced by biosocial and social-communicative accounts of the development of BPD, which emphasise complex trauma (Crowell, Beauchaine and Linehan, 2009; Luyten, Campbell and Fonagy, 2020). It was decided that a focus upon these features should provide a necessary degree of nuance in the presentation of the defendant – these symptoms could map onto the Diminished Responsibility criteria (Coroners and Justice Act, 2009), but equally, these do not guarantee a perception of non-fluctuating "illness".

An interesting idea related to whether to incorporate a description of possible neurological differences as a part of the described condition (Crowell, Beauchaine and Linehan, 2009) as people with illnesses with ascribed biological or neurological components have been judged as less in control of their actions in other areas of jury research (Berryessa et al, 2015; Gurley and Marcus, 2008). Ultimately, it was decided that this could form another project in its own right and was not included.

The formulation needed chiefly to be a vehicle for providing an accessible summary of the defendant's mental health problems and history, and to be reasonably well-understood by laypeople. It also needed, at best as possible, to take a form approximating an actual expert witness giving a short testimony within a trial setting, to help ensure fidelity to the case-simulation method (Thomas, 2010). For these reasons, it was decided that this would consist of a video-recorded summary of this formulation, spoken by an actor. The script for this narrative formulation was written by the chief investigator. Please see Appendix E for a copy of the script for this section.

Case-simulation scripts

All scripts for the case simulation were written by the chief investigator, and subject to fidelity checks by the second author of the empirical paper and principal supervisor of the thesis

project. In preparation for this task, online teaching materials from the University of East Anglia (UEA) School of Law were made accessible to the chief investigator as part of the UEA Blackboard online system. This was done to aid the chief investigator in developing an appreciation of what the typical structure of a jury trial might look like, and the structure of the language used within a legal setting of this type. However, the scripts themselves are not based on any other materials and are original.

Part of the final section of the case-simulation script was adapted, following feedback from the UEA Faculty of Medicine and Health Sciences ethics panel. This section describes the judge's instructions to the jury (the participants of the study) to consider Diminished Responsibility. Originally, this section did not have a clear description of what the sentence would be if the defendant were found guilty to murder, or guilty to manslaughter on the grounds of Diminished Responsibility. This was considered to be accurate as part of the fidelity checks performed upon the scripts by the second author of the empirical paper. Following feedback from the ethics submission, this was changed to state a prison sentence of 15 years in the event of murder, or detention to a secure psychiatric hospital in the event of a Diminished Responsibility verdict. It is possible that this might have affected some of the responses of the participants, in knowing that a DR verdict would result in the defendant avoiding prison, even if they felt DR did not apply. Please see Appendix J for initial feedback from ethics submission and final ethical approval following re-submission.

Filming of trial vignettes

To aid realism, filming of the trial took place within a mock-court room within the UEA School of Law (Earlham Hall), using props and costumes belonging to the School. In preparation for the study, volunteers were sought within the School of Law who would be happy to participate as actors. Three undergraduate students agreed to participate, as prosecution and defence barristers and a judge. The Principal Supervisor of this thesis project volunteered to act as the expert witness

psychologist. Filming was conducted by a Media Production and Support Technician working within the Digital Media department at the UEA. All volunteers participated for free.

Extended Ethical Considerations (empirical paper)

Consent for participation and use of data

Participants were asked to express interest in the study as part of study advertisements featured in electronic departmental bulletins, student newsletters and posters placed within common areas of the university. Contact was made via the university email system. At the point of this contact, participants were emailed a copy of the Participant Information Sheet (PIS), which gave information concerning the purpose of the study. Within this form, the purpose of the study was explained as seeking to explore how jury members understand different mental health problems as part of homicide cases and whether these could be subject to factors of stigma. It also informed them that their data would be held securely as part of the General Data Protection Regulation (GDPR) and that their data would be anonymised one week after their participation in the study tasks. They were made aware of their right to withdraw from the study at any time, and to withdraw their data before the point of anonymisation. At the beginning of each study data collection session, participants were asked to once again read the PIS, and to complete a Consent form if in agreement. See Appendix E for copies of these forms.

Deception

Participants were given a broad description of the aims of the study as part of the PIS and study advertisements. No deceptive information was given, although the participants were not informed about the nature of the two differing conditions of the study, the experimental manipulation concerning the diagnostic terminology used, or the specific aim of investigating the effect of the Severe Personality Disorder label. This was provided as a debrief at the end of each study session, through a debrief form (see Appendix E) and opportunity for discussion. It was felt that providing participants with a full explanation of the differing conditions and study hypotheses would bias

responses to the study and impact validity. Participants were reminded as part of the debrief that they had the right to withdraw their data from the study at this point, although none chose to do so.

Confidentiality

Participants were required to get in contact with the Chief Investigator if they wanted to participate, and identifiable personal information was known at this point and throughout arrangement of the study sessions. This was the case until one week after each data collection section, where data from the physical copies of the measures used were entered onto an electronic database. At this point personally identifiable information was removed from their data, including physical copies of the study measures. Receipts for payment for participation, which needed to be retained for a longer period and reviewed with the Principal Supervisor of this project, required a signature only to provide a means of protecting participant confidentiality.

Distress

The study materials incorporated a number of potentially upsetting details, including the features of sexual abuse detailed within the expert witness formulation section, and the description of violence included within the circumstances of the case. The study advertisement made it clear that the study would involve making judgements as part of a homicide case. The PIS reinforced this and stated that the study materials would reference an act of homicide, and features of sexual abuse in the history of the defendant, and asked participants not to participate if they felt they would find this upsetting. The participants were given details of the Chief Investigator, Primary Supervisor and an external contact if they felt they needed to discuss their experiences of the study after participating. Additionally, time was apportioned after each study data collection session to allow time for discussion. No participant expressed distress concerning the study materials, and none chose to make contact after the study had finished.

Chapter Six: Extended Results (Empirical Paper)

Changes in analysis plan

As detailed in the empirical paper, the desired sample size was set following initial power calculations based on use of a MANOVA model. As this study incorporated a large number of dependent variables, MANOVA analysis for each of the study measures with follow-up ANOVA and Tukey's HSD post-hoc testing was planned. This totalled 3 MANOVA tests. Assumptions which are specific to MANOVA are detailed below (taken from Field, 2015).

1. Independence: residuals should be statistically independent.
2. Random sampling: data should be randomly sampled and measured at the interval level.
3. Multivariate normality: each of the dependent variables should be normally distributed for each group of the dependent variable.
4. Homogeneity of covariance matrices: the variances of each group should be roughly equal.

In the early stages of analysis, checking as to whether the assumptions of MANOVA were met revealed that the Box's M test for homogeneity of covariance matrices was not met for the CAQ variables, but was for the AQ-27 and DRQ variables. Following a further review of whether to

proceed with MANOVA analyses (Warne, 2014; Field, 2015) a decision was made to instead proceed with multiple independent samples *t*-tests with Holm alpha reduction techniques (Wright, 1992).

The assumptions of the independent samples *t*-test are detailed below (Field, 2015).

1. Independence of observations. This is met as the study data is obtained from two groups which are independent of each other.
2. The data should be normally distributed. This was confirmed using the Shapiro-Wilks test of normality (see Table 5).
3. Homogeneity of variance. This was confirmed following checks of Levene's test for equality of variances (See Table 6)

Table 5.
Results of the Shapiro-Wilks Test of Normality for each variable by study condition

	Complex Mental Health (n=25)			Severe Personality Disorder (n=25)		
	Shapiro-Wilk statistic	df	Sig	Shapiro-Wilk statistic	df	Sig.
CA Internality	0.942	25	0.167	0.980	25	0.890
CA Stability	0.978	25	0.836	0.974	25	0.740
CA Globality	0.983	25	0.932	0.835	25	0.001
CA Control over cause	0.974	25	0.756	0.976	25	0.785
CA Control over event	0.956	25	0.344	0.967	25	0.575
AQ Blame	0.941	25	0.157	0.970	25	0.634
AQ Anger	0.930	25	0.088	0.915	25	0.039
AQ Pity	0.837	25	0.001	0.903	25	0.021
AQ Help	0.958	25	0.368	0.963	25	0.473
AQ Dangerousness	0.973	25	0.725	0.964	25	0.503
AQ Fear	0.909	25	0.030	0.963	25	0.479
AQ Avoidance	0.953	25	0.288	0.965	25	0.525
AQ Segregation	0.948	25	0.229	0.947	25	0.219
AQ Coercion	0.946	25	0.203	0.955	25	0.331
DR Medical condition	0.955	25	0.331	0.953	25	0.287
DR Understand conduct	0.978	25	0.833	0.927	25	0.075
DR Rational judgement	0.934	25	0.105	0.932	25	0.098
DR Self control	0.926	25	0.069	0.955	25	0.325
DR Explains actions	0.881	25	0.007	0.959	25	0.391

Power calculations

Estimates of the potential effect size of the Severe Personality Disorder diagnosis were based upon those obtained by Markham and Trower (2003), who used the CAQ employed in this paper to determine the effect of the Borderline Personality Disorder label upon the causal attributions of psychiatric nursing staff, compared to diagnoses of Schizophrenia and Depression. These were not

reported in their paper and were estimated. For the 5 scales of the CAQ, effect sizes within their study were estimated as:

- Internality (locus): *d*=0.59
- Stability: *d*=0.64
- Globality: *d*=0.29
- Control over cause: *d*=1.93
- Control over event: *d*=1.94

As the empirical project also used the CAQ, and the concept of Diminished Responsibility was thought to closely relate to the two control constructs, potential effect of presence of the Severe Personality Disorder terminology was made in reference to these figures. As various aspects of this study significantly differed from Markham and Trower (2003), a more conservative estimate of effect was made. Calculations were carried out using G*Power estimating a medium effect size of *f*=0.25 and desired power of 0.8, indicating a required sample size of 48 (see Appendix G).

As detailed in the empirical paper, changes made to the analysis meant the study was insufficiently powered to detect small and medium sized effects, resulting in a study limitation.

Table 6**.**
Results of Levene's test for equality of variances for each variable

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std.Error Difference	Lower	Upper
C.A. Internality	E.V. assumed	2.215	.143	-1.375	48	.175	-1.800	1.309	-4.432	.832
	Not assumed			-1.375	41.256	.176	-1.800	1.309	-4.443	.843
C.A. Stability	E.V. assumed	.012	.914	.230	48	.819	.240	1.045	-1.861	2.341
	Not assumed			.230	47.938	.819	.240	1.045	-1.861	2.341
C.A. Globality	E.V. assumed	.742	.393	.308	48	.760	.360	1.170	-1.993	2.713
	Not assumed			.308	44.599	.760	.360	1.170	-1.997	2.717
C.A. Control Cause	E.V. assumed	7.464	.009	-2.305	48	.026	-3.160	1.371	-5.916	-.404
	Not assumed			-2.305	39.091	.027	-3.160	1.371	-5.933	-.387
C.A. Control Event	E.V. assumed	.030	.863	-1.647	48	.106	-2.200	1.336	-4.886	.486
	Not assumed			-1.647	47.985	.106	-2.200	1.336	-4.886	.486
AQ Blame	E.V. assumed	3.293	.076	-1.565	48	.124	-1.880	1.201	-4.295	.535
	Not assumed			-1.565	43.954	.125	-1.880	1.201	-4.301	.541
AQ Anger	E.V. assumed	.000	.991	-.817	48	.418	1.120	1.371	-3.876	1.636
	Not assumed			-.817	47.821	.418	1.120	1.371	-3.876	1.636
AQ Pity	E.V. assumed	.127	.724	.473	48	.638	.560	1.184	-1.820	2.940
	Not assumed			.473	47.991	.638	.560	1.184	-1.820	2.940
AQ Help	E.V. assumed	.423	.519	-.149	48	.883	-.200	1.347	-2.908	2.508
	Not assumed			-.149	47.487	.883	-.200	1.347	-2.908	2.508
AQ Dangerousness	E.V. assumed	.003	.956	-3.334	48	.002	-4.480	1.344	-7.182	-1.778

	Not assumed			-3.334	47.973	.002	-4.480	1.344	-7.182	-1.778
AQ Fear	E.V. assumed	.024	.876	-1.602	48	.116	-2.480	1.548	-5.592	.632
	Not assumed			-1.602	47.997	.116	-2.480	1.548	-5.592	.632
AQ Avoidance	E.V. assumed	0.36	.851	-2.436	48	.019	-3.040	1.248	-5.549	-.531
	Not assumed			-2.436	47.681	.019	-3.040	1.248	-5.549	-.531
AQ Segregation	E.V. assumed	10.055	.003	-3.643	48	.001	-4.640	1.274	-7.201	-2.079
	Not assumed			-3.643	38.275	.001	-4.640	1.274	-7.218	-2.062
AQ Coercion	E.V. assumed	.305	.583	-3.134	48	.003	-3.600	1.149	-5.910	-1.290
	Not assumed			-3.134	45.572	.003	-3.600	1.149	-5.910	-1.290
DR Medical Condition	E.V. assumed	1.329	.255	1.304	48	.198	1.680	1.288	-.911	4.271
	Not assumed			1.304	45.326	.199	1.680	1.288	-.915	4.274
DR Understand Conduct	E.V. assumed	.629	.432	.238	48	.813	.400	1.680	-2.978	3.778
	Not assumed			.238	47.370	.813	.400	1.680	-2.979	3.779
DR Rational Judgement	E.V. assumed	.316	.577	-.107	48	.915	-.160	1.495	-3.167	2.847
	Not assumed			-.107	46.679	.915	-.160	1.495	-3.169	2.849
DR Self Control	E.V. assumed	.001	.973	.516	48	.608	.800	1.551	-2.319	3.919
	Not assumed			.516	47.452	.608	.800	1.551	-2.320	3.920
DR Explains Actions	E.V. assumed	.036	.850	-.295	48	.769	-.400	1.354	-3.123	2.323
	Not assumed			-.295	47.483	.769	-.400	1.354	-3.124	2.324

Chapter Seven: Discussion and Critical Evaluation

This chapter provides an overall discussion and evaluation of the work conducted as part of this thesis project. It will consider the strengths and weaknesses of the systematic review and empirical study components and consider whether the objectives set out in both were satisfactorily achieved. It will consider the implications of the findings upon clinical practice, and upon future directions for research. Finally, the chief investigator's reflections on the research process are presented.

Overview of results

The study of stigmatising attitudes towards PD/BPD is an area of the research literature with a long history (i.e. Lewis and Appleby, 1988), but is one with continuing relevance to clinical practice and is an area of the research literature which continues to expand. As the system of classification of PD changes to reflect ICD-11, the literature will expand further to reflect new iterations of what appears to be a particularly stigmatising diagnosis. This thesis portfolio aimed to update our understanding of the state of the evidence regarding negative attitudes towards BPD (as it has been understood) within clinical staff groups, and to explore the effect of an aspect of ICD-11 terminology upon stigmatising attitudes and attributions within a specific jury context.

Systematic review

The systematic review incorporated a large body of studies using differing conceptual frameworks and research methods to describe negative reactions and attitudes towards BPD in clinical staff groups, totalling an estimated 8196 participants. Incorporating differing conceptual frameworks under the umbrella of "attitudes and responses" (such as stigma, counter-transference) meant that there was an expected degree of variation between studies that used differing frameworks. However, the review found considerable heterogeneity in studies focusing upon stigma itself. There appeared to be a lack of a unifying or validated theoretical framework. This was reflected in the large amount of differing measures used (24, see Appendix D), many of which had not been comprehensively psychometrically validated. This meant that while a consistent narrative emerged concerning specific staff groups and their attitudes to BPD, comparisons between studies using differing outcomes was difficult.

Overall, the review indicated that while psychiatric nurses (as the most heavily studied professional group) appear to possess the most negative attitudes, aspects of difficulty in working with this population and ensuing negative attitudes are prevalent to some degree in every professional group. Two studies identified significantly negative attitudes in general health specialities that encounter these patients, indicating a need for further research in this area. It was observed that clinician-level factors of training, experience and higher caseload numbers were frequently associated with more favourable attitudes to BPD, while other clinician-level factors such as psychotherapy training, supervision and psychotherapy experience were implicated in one study.

Taken together, the review highlights that research which focuses upon clinician-level factors such as these are likely to help move this area of literature forward. It also indicates that further research is required to establish the efficacy of training programmes upon attitudes. A key recommendation relates to the consistent use of validated measures in studies of this type.

Strengths and Limitations of the review

The scope of the review, in incorporating a large sample of studies and pooled participants, represents a useful contribution to this literature. It summarises evidence relating to a wider range of professional groups than any previous review of the topic. It appears to be one of the first to incorporate quality appraisal of included studies, and in making observations of common methodological weaknesses it should aid the development of more robust studies in this area. It makes several suggestions for priorities in research of this type that will enable this body of literature to move forward.

Limitations of this review similarly relate to its large scope. Due to the heterogeneity of studies and their measures, a meta-analysis was not thought feasible, and estimates of effect across studies are not provided. In conducting scoping searches of the literature, the prevalence of cross-sectional survey designs was noted, which influenced the quality appraisal tool chosen. There did not appear to be a dedicated tool in use for appraisal of cross-sectional survey studies in psychological research. The tool also needed to be equipped to appraise aspects of experimental research. This meant that a tool developed for cross sectional studies of exposure to disease (NIH, 2014) was adapted with inclusion of items for evaluation of randomised controlled trials (Joanna Briggs Institute, 2017). This was done so that cross-sectional studies were not overly penalised by virtue of their design, while crucial elements of experimental studies could be reasonably appraised. However, the resulting appraisal feels less than sensitive. Further adaptions of this tool could include a more detailed scoring system to communicate greater nuance in the quality appraisal of studies. The large scope of the review also meant that it comes across as less focused.

Empirical Paper

Results of the empirical study indicated that inclusion of the “Severe Personality Disorder, Borderline Pattern” diagnosis meant that participants perceived the defendant as more dangerous, and more in need of coercive treatment and segregation relative to controls. There were differences observed relating to beliefs concerning avoidance, and causal attributions relating to control over

causes of behaviour and events, although these fell short of significance following alpha reduction techniques. Meanwhile, no differences were observed relating to ratings of Diminished Responsibility, which were universally in favour of this verdict. These effects were observed in the context of a narrative psychological formulation which may have primed participants to have sympathetic responses to the defendant, and also in the context of a young, well educated and presumably liberally minded sample.

Strengths and Limitations of the Empirical Paper

This study represents an original and novel contribution to the literature. It is possibly the first study to examine the effect of ICD-11 PD classification terminology upon the attitudes of laypeople to PD. It appears to be one of the first studies to examine the effect of mental health diagnosis upon considerations of Diminished Responsibility in mock-juries. As many studies in mock-jury research solely use vignette-based methods, this study aimed to address a common area of methodological weakness through use of a more ecologically-valid case-simulation method (Sommers and Elsworth, 2003; Thomas, 2010). It also indicates numerous avenues for potential future research, which will be discussed further below.

There were several limitations to this research, however. One of the main limitations concerned the participant population of the study and failure to match the participant groups on the basis of their demographics. Participant randomisation was not possible and more opportunistic sampling was used to obtain participants, and this meant that the groups were quite different in terms of age, ethnicity, and proportion of students to university staff and members of the public. Overall, this was a disproportionately female, well-educated sample. Participants were also notably younger in the Severe Personality Disorder condition. That the study obtained the differences that it did, despite these factors, is notable and it invites consideration of what results a replicated study without these limitations would obtain. Another main limitation concerns some of the measures used in the study, two of which (the Causal Attribution Questionnaire and the Diminished Responsibility Questionnaire) required psychometric validation. However, the significant results obtained in this study related to the AQ-27, which has been assessed as having good psychometric properties. Finally, the study ended up

being insufficiently powered to detect small and medium effects, meaning that its conclusions were limited.

Overall Strengths and Limitations of the Thesis Portfolio

This portfolio represents a useful contribution to the literature concerning attitudes to BPD and makes a novel contribution to what will be an emergent literature concerning the ICD-11 PD classification. The systematic review identified problems with measures used to conceptualise stigmatising attitudes and attributions within this literature, and unfortunately, the empirical project partly repeats some of these problems in some of the measures used. However, both papers highlight numerous avenues for future research, and so make valuable contributions to this literature.

Clinical implications

The work contained in this thesis portfolio has various implications for clinical practice. The systematic review raises an awareness that negative attitudes to BPD appear common in various clinical staff groups. This appears to be related to factors of challenging clinical experiences with this client group, and also to unhelpful stereotypes of BPD, which may interact with and maintain each other. The review highlights a need for ongoing training in this area as part of professional development. This is with a view to help bolster skills for working with this client group, and to ideally provide a framework for personal reflection upon difficulties that may commonly arise. It is expected that this would help clinicians to make a distinction between “the nature of the pathology and the nature of the individual” (Aviram, Brodsky and Stanley, 2006) and prevent the development and maintenance of negative attitudes. Additionally, it is suggested that this should be an area of priority of psychiatric nurses, who are consistently identified as reporting the most negative attitudes, possibly as a result of lack of access to training, or as a result of differing models of/lack of clinical supervision.

Another salient clinical implication relates to the small amount of evidence within the review that compared mental health professionals to physical health colleagues, such as general practitioners, hospital doctors and nurses. These identified similar or worse negative attitudes as those of psychiatric nurses. While further research is required, this may indicate that physical health colleagues may have an impression of BPD which is based more upon an unhelpful and negative stereotype. Presumably, these groups have less awareness and training in this area, and so have less information by which they might appropriately contextualise the difficulties described by BPD. This suggests that training should be made routinely available to these staff groups. Additionally, it suggests that mental health professionals should seek to both avoid the perpetuation of stigmatising ideas in their interactions with physical health colleagues, and to contextualise difficult or challenging behaviours with reference to psychological theories of BPD and its development.

There are also various clinical implications arising from the empirical paper. While this did not focus upon clinicians, it suggests that the new ICD-11 PD classification system contains terminology which is inherently stigmatising. The most direct implications of this are for clinicians who act as expert witnesses in this area. As the empirical paper outlines, BPD and PD can be clinically described in various ways, and the results displayed here indicate that the way problems are described can impact upon the way defendants are perceived in juries. Clinicians in this role should carefully consider the use of the new ICD-11 criteria as it becomes mainstream practice, given the large effects that a relatively small experimental manipulation made in this study. While replication and further research is required to make firm conclusions in this area, the most obvious implication is of a need for caution. While there were no differences in ratings of Diminished Responsibility, it is not clear what the impact of the narrative formulation was and whether this could account for a more sympathetic view of the defendant. Speculatively, in the absence of a formulation such as this, the stigmatising connotations of the terminology might affect aspects of jury decision-making. This would be most applicable where professionals other than clinical psychologists present expert testimony. Further research is required to explore this.

Another major implication, tying together the results of the systematic review and empirical paper, is that descriptions of PD are likely to continue to have stigmatising connotations. Although the effect of the new terminology upon clinicians is uncertain, results and recommendations of the systematic review are likely to remain highly relevant.

An important implication relates to the potential impact of the ICD-11 terminology upon the experiences of people with these difficulties. BPD is already associated with exclusion from services and discriminatory experiences from clinicians (Sulzer, 2015), and the experience of diagnosis may be experienced as negative (Horn, Johnstone and Brooke, 2007). Speculatively, one wonders what the subjective experience of being diagnosed with a "Severe Personality Disorder" might be like, and how to sensitively frame this as a clinician. Given indications that negative attitudes might exist towards BPD in physical health clinicians, there may be problems with equitable treatment and access to physical healthcare, as has been identified in mental healthcare.

Research Implications

One of the main strengths of the portfolio lies in its identification of future directions for research. As discussed above, the systematic review highlights the importance of the consistent use of validated measures in future stigma research, the study of various clinician characteristics and their relationship to negative attitudes and responses, and the pursuit of research into the efficacy of training programmes for professionals concerning the management of BPD.

The empirical paper in particular suggests a number of avenues of potential research. One area of variation of this study could be a series of experimental manipulations regarding the narrative formulation presented. This could vary the presence or absence of this, could compare types of formulation and their respective effects, and could vary methods of their presentation. Another area could concern the type of mental health diagnosis presented, and perceptions of these in relation to the question of Diminished Responsibility. Further iterations could consider alternative legal questions, such as responsibility for criminal damage.

In a replication of this study or pursuit of a different research question, it may be useful to utilise mixed-methods and use the collective jury discussion as a form of focus-group data. This would be one of the main ways that the chief investigator would choose to improve the study, in the event of running it again. An online version of this study would potentially lose some the advantages in terms of the ecological validity of grouping participants into mock-jury groups but could potentially obtain a larger sample of participants. Both methods may complement this study through triangulation. A straightforward replication of this study could focus upon more of an educationally and socio-economically typical sample, with respect to the general population.

While the empirical project prioritised aspects of ecological validity in its design and the materials used, this was still quite different to the experience of attending a criminal trial, both in terms of the setting, length of time involved and the inclusion of paper questionnaires to capture aspects of attitude, attribution and decision-making. Participants had also volunteered and were presumably interested in the topics of mental health and law, rather than being required to attend as in real-life jury service. As mentioned in the Extended Methods section, “plan A” for this study involved the use of dismissed jury members and the use of court premises. Following discussion with the author of Thomas (2010), who was able to use such a method, it became clear that this was conducted on the basis of a working relationship that had been cultivated with Her Majesty’s Courts and Tribunals Service over a long period of time. Even so, the empirical project could form part of a proof of concept for a larger study conducted in these settings, which could also address some of the stated limitations.

On a different note, across all of the studies listed in the review, no study mentioned the participation of people with lived experience of BPD at any stage of the research. It is a regret that the empirical study also did not include any form of inclusion of these perspectives in its design.

Researcher reflections

The conclusion of any project within the scope of a doctoral thesis will bring a whole range of reflections and emotions. Consideration of the empirical project, its findings and methods brings a substantial sense of achievement. Its findings have considerable implications for clinicians, legal contexts and people who might be diagnosed under the ICD-11 classification. The systematic review was a challenging, though rewarding process, and its findings also have utility in terms of moving the literature forward. On reflection, both projects share the theme of being quite ambitious in scope – the systematic review sought to synthesise a wide range of research and concepts, and the empirical project ties together a range of clinical and legal concepts.

In terms of the order of completion, the empirical project was designed and largely conducted first, while the systematic review was completed second. The process of systematically reviewing a body of literature forms a process of education for any researcher, particularly when conducting this for the first time. Aspects of the empirical project were planned in a rather ambitious way – multiple measures and associated concepts were introduced, where in hindsight, the project could have benefited from streamlining of some concepts. Conducting the systematic review revealed that the body of research concerning mental health stigma is subject to substantial use of multiple conceptual frameworks and multiple measures with poor validation, producing quite a vague literature. This meant that in the process of conducting the review, more and more of an appreciation developed that the empirical project repeated some of these methodological weaknesses, though not all. Ultimately, many of the features of the study would be repeated if the time were had again, as its topic and results feel important – but various aspects would certainly be fine-tuned.

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Appendix A: Journal Author Instructions

Author instructions for the *Journal of Personality Disorders* and *Psychiatry, Psychology and Law*

Journal of Personality Disorders

Instructions to Authors

Types of Articles

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

Invited Essays and Special Articles: These articles provide an overview of broad-ranging areas of research and conceptual formulations dealing with substantive theoretical issues. Reports of

large-scale definitive empirical studies may also be submitted. Articles should not exceed 40 pages including tables, figures, and references. Authors contemplating such an article are advised to contact the editor in advance to see whether the topic is appropriate and whether other articles in this topic are planned.

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

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

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

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

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

Supplemental Materials: Supplemental materials will run online-only and should be no longer than the manuscript itself. If the material you wish to include is longer than the article, we will instead include a note that all supplemental material can be obtained, by request, from the author. Supplemental materials in the form of tables and figures must comply with the above table and figure

instructions for the main article. Remember to include call-outs for all figures and tables within the supplemental material. Supplemental material files will be uploaded online as supplied. They will not be checked for accuracy, copyedited, typeset or proofread.

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

Psychiatry, Psychology and Law

About the journal

Psychiatry, Psychology and Law 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 .

Psychiatry, Psychology and Law accepts the following types of article: original articles and empirical studies; analyses of professional issues, controversies and developments in these areas; case studies and case commentaries; and book reviews.

Peer review

Taylor & Francis is committed to peer-review integrity and upholding the highest standards of review. Once your paper has been assessed for suitability by the editor, it will then be double blind peer-reviewed by independent, anonymous expert referees. Find out more about what to expect during peer review and read our guidance on publishing ethics.

Structure

At submission, two documents are required:

1) Main document: Your paper should be compiled 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). Please label this file 'Main_document_with_full_author_details'.

2) Anonymised manuscript: Please also upload an anonymised manuscript with a title page and separate tables and figures.

Word count

Please include a word count for your paper. Papers should not usually exceed 12,000 words, including references, figure and table captions and notes.

Style guidelines

Manuscripts should be prepared depending on whether they are psychological or psychiatric in nature or legal, using the following:

Title Page (p.1) should contain the article title, authors' names and complete affiliations, footnotes to the title, and the address for manuscript correspondence (including e-mail, address and telephone and fax numbers), and a note, if applicable, of the conference at which the paper has been presented.

Abstract (p.2) must be a single paragraph that summarizes the main findings of the paper in fewer than 150 words, including where appropriate the research methodology, findings and conclusions. After the abstract a list of up to 10 keywords that will be useful for indexing or searching should be included.

Figures should be in a finished form suitable for publication and should be numbered consecutively with Arabic numbers in order of appearance in the text. Figures can be supplied as hard copy, but are preferred electronically in Adobe Illustrator, EPS or TIFF formats. They should be presented in black and white at a minimum print density of 600 dpi and should not include shaded areas of grey. Instead use repeated patterns of lines or crosses to distinguish, for example, different bars on a graph.

Tables should be numbered consecutively with Arabic numbers in order of appearance in the text. Each table should by saved double-spaced on a separate page, with a short descriptive title typed directly above and with essential footnotes below.

Psychological manuscripts should be prepared in accordance with the format and style specified in the 'Publication Manual of the American Psychological Association', fifth edition. Pages should be numbered consecutively. References should be cited in the text as specified in the Publication Manual of the American Psychological Association, fifth edition. A concise description of APA referencing style can be found here http://www.tandf.co.uk/journals/authors/style/layout/tf_1.pdf . Personal communications should be cited as such in the text and should not be included in the reference list.

Psychiatric manuscripts should be prepared in accordance with the format and style specified in the 'Uniform requirements for manuscripts submitted to biomedical Journals' (which has been reproduced in the British Medical Journal 1982, 12 June; 284:1766–1779; the Medical Journal of Australia 1982;2:590–6; and the Australian Alcohol/Drug Review 1985;4:5–13).

Legal manuscripts should be prepared in accordance with the format and style specified in The Oxford Standard for Citation of Legal Authorities (OSCOLA). OSCOLA is designed to facilitate accurate citation of authorities, legislation, and other legal materials. Pages should be numbered consecutively and organized as follows:

References should be cited in the text as specified in The Oxford Standard for Citation of Legal Authorities (OSCOLA). Titles of Journals should not be abbreviated.

Cases should be cited in the usual English law form with the name of the case and its date in the text and a list of cases in alphabetical order at the end of the article.

End notes should be short, if possible, and relate to the significance of a cited reference, rather than reflect an idea which could go into the text in parenthesis.

Please use British spelling consistently throughout your manuscript.

Appendix B: Information Extraction Checklist

Information Extraction Checklist (example)

Author(s)	R.Beryl and B.Vollm
Year	2018
Study aim	To assess attitudes toward personality disorder in staff working in high security and medium security hospitals, using the APDQ.
Study design	Questionnaire-based design
Study population	Nursing (52.6%) Psychiatrists (2.3%) Psychologists (17.3%) Social Workers (2.3%) Allied health and education professionals (21.8%) – speech and language, art therapists, music therapists, lecturers Various statistics reported regarding ethnicity, experience of PD, training received

Study setting	**Medium and High-secure hospitals in the UK.**
Number of participants	**132**
Measures used	**APDQ**
Reports psychometrics?	**Not directly, though APDQ is an established measure** **Compares results to other samples from other studies**
Results	**Significant differences between groups (lower scores= worse attitudes)** **Nurses and psychiatrists<psychologists and social workers** **Nurses and psychiatrists<AHPs and education** **No difference psychologists and social workers and AHP's/educators**

Appendix C: Quality Appraisal tools used to develop tool used in systematic review.

Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies

Criteria	Yes	No	Other (CD, NR, NA)*
1. Was the research question or objective in this paper clearly stated?			
2. Was the study population clearly specified and defined?			
3. Was the participation rate of eligible persons at least 50%?			
4. Were all the subjects selected or recruited from the same or similar populations (including the same time period)? Were inclusion and exclusion criteria for being in the study prespecified and applied uniformly to all participants?			
5. Was a sample size justification, power description, or variance and effect estimates provided?			
6. For the analyses in this paper, were the exposure(s) of interest measured prior to the outcome(s) being measured?			
7. Was the timeframe sufficient so that one could reasonably expect to see an association between exposure and outcome if it existed?			
8. For exposures that can vary in amount or level, did the study examine different levels of the exposure as related to the outcome (e.g., categories of exposure, or exposure measured as continuous variable)?			
9. Were the exposure measures (independent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?			
10. Was the exposure(s) assessed more than once over time?			
11. Were the outcome measures (dependent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?			
12. Were the outcome assessors blinded to the exposure status of participants?			
13. Was loss to follow-up after baseline 20% or less?			

14. Were key potential confounding variables measured and adjusted statistically for their impact on the relationship between exposure(s) and outcome(s)?			
Quality Rating (Good, Fair, or Poor) (see guidance)			
Rater #1 initials:			
Rater #2 initials:			
Additional Comments (If POOR, please state why):			

*CD, cannot determine; NA, not applicable; NR, not reported

JBI Critical Appraisal Checklist for Randomized Controlled Trials

Reviewer ____________________________________ __________

Date

Author ______________________________________ ___

Year ___ ______ ___ Record Number

	Yes	No	Unclear	NA
1. Was true randomization used for assignment of participants to treatment groups?	☐	☐	☐	☐
2. Was allocation to treatment groups concealed?	☐	☐	☐	☐
3. Were treatment groups similar at the baseline?	☐	☐	☐	☐
4. Were participants blind to treatment assignment?	☐	☐	☐	☐
5. Were those delivering treatment blind to treatment assignment?	☐	☐	☐	☐
6. Were outcomes assessors blind to treatment assignment?	☐	☐	☐	☐
7. Were treatment groups treated identically other than the intervention of interest?	☐	☐	☐	☐
8. Was follow up complete and if not, were differences between groups in terms of their follow up adequately described and analyzed?	☐	☐	☐	☐
9. Were participants analyzed in the groups to which they were randomized?	☐	☐	☐	☐
10. Were outcomes measured in the same way for treatment groups?	☐	☐	☐	☐
11. Were outcomes measured in a reliable way?	☐	☐	☐	☐
12. Was appropriate statistical analysis used?	☐	☐	☐	☐
13. Was the trial design appropriate, and any deviations from the standard RCT design (individual randomization, parallel groups) accounted for in the conduct and analysis of the trial?	☐	☐	☐	☐

Overall appraisal: Include ☐ Exclude ☐ Seek further info ☐

Comments (Including reason for exclusion)

____

Final tool used, after adding items from the JBI checklist

Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies

Cleary, M., Siegfried, N., & Walter, G. (2002). Experience, knowledge and attitudes of mental health staff regarding clients with a borderline personality disorder. *International Journal of Mental Health Nursing*, *11*(3), 186–191. https://doi.org/10.1046/j.1440-0979.2002.00246.x

Criteria	Yes	No	Other (CD, NR, NA)*
1. Was the research question or objective in this paper clearly stated?	X		
2. Was the study population clearly specified and defined?	X		
3. Was the participation rate of eligible persons at least 50%?		x	44% response rate
4. Were all the subjects selected or recruited from the same or similar populations (including the same time period)? Were inclusion and exclusion criteria for being in the study prespecified and applied uniformly to all participants?	x		
5. Was a sample size justification, power description, or variance and effect estimates provided?		x	No power analysis.
6. For the analyses in this paper, were the exposure(s) of interest measured prior to the outcome(s) being measured?	X		Reported as frequencies, not in relation to other outcomes
7. Was the timeframe sufficient so that one could reasonably expect to see an association between exposure and outcome if it existed?	x		
8. For exposures that can vary in amount or level, did the study examine different levels of the exposure as related to the outcome (e.g., categories of exposure, or exposure measured as continuous variable)?		x	Reported as an outcome, not in relation to or varying with

9. Were the exposure measures (independent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?	x		
10. Was the exposure(s) assessed more than once over time?			X N/A
11. Were the outcome measures (dependent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?	x		23 item questionnaire designed for study, some simple face validity
12. Were the outcome assessors blinded to the exposure status of participants?			N/A
13. Was loss to follow-up after baseline 20% or less?	X		
14. Were key potential confounding variables measured and adjusted statistically for their impact on the relationship between exposure(s) and outcome(s)?		x	
15. **(JBI RCT item) Were outcomes measured in the same way between groups?**	X		
16. **(JBI RCT item) Was appropriate statistical analysis used?**		x	Not assessed – simple frequencies reported
17. **(JBI RCT item) Was the trial design appropriate for the purposes of the research?**		x	A lack of assessment of how some variables might vary together means that only very simple information is presented.
Quality Rating (Good, Fair, or Poor) (see guidance): **Poor**			
Rater #1 initials: JB			
Rater #2 initials:			
Additional Comments (If POOR, please state why): Unfortunately, the lack of analysis between potential variables means that the study adds very little.			

*CD, cannot determine; NA, not applicable; NR, not reported

Appendix D: Table of measures used by studies within the systematic review.

Measure (original author)	**Studies using measure**	**Stated scales/items of measure**	**Psychometric validation status**
22 semantic differentials (Lewis and Appleby, 1988))	Chartonas et al (2017)	22 items relate to likely treatment and management factors of a patient in a vignette, as well as character traits of patient and potential emotional reactions from the clinician.	Measures of internal consistency and reliability are not reported in either Lewis and Appleby (1988) or Chartonas et al (2017). Chartonas et al (2017) report a principal components analysis to identify factors of the measure. One factor accounts for a very large amount of the variance in the questionnaire.
APDQ: Attitudes to Personality Disorder Questionnaire (Bowers et al, 2006a).	Beryl and Volm (2018), Chartonas et al (2017), Day et al 2018, Egan, Haley and Rees (2014), Lugboso and Aubeeluck (2017), Purves and Sands (2009).	Enjoyment, Security, Acceptance, Purpose and Enthusiasm (in working with people with PD).	Properties established in Bowers et al (2006a). Confirmatory factor analysis, test-retest reliability in Bowers et al (2006b).
ADSHQ: Attitudes toward Deliberate Self-Harm Questionnaire (Commons	Commons-Treloar and Lewis (2008); Day et al (2018), adapted ADSHQ in Huack et al (2013)	Perceived confidence in assessment and referral of DSH patients; ability to deal effectively with DSH patients; use of an empathetic approach; familiarity with hospital regulations that guide practice.	Commons-Treloar and Lewis (2008) report good internal consistency for scales and total measure, and products of factor analysis.
AMIQ: Attitudes to Mental Illness Questionnaire (Luty et al, 2006)	Adapted version used in Noblett et al (2015)	Judgements of patient's future (good/bad); social distance	Luty et al (2006) report good construct validity, test-retest reliability and alternative test reliability.
ASQ: Attitude and Skills Questionnaire (Krawitz, 2004)	Krawitz (2004); Day et al (2018)	Clinician ability and willingness to work with BPD: willingness; optimism; enthusiasm; confidence; theoretical knowledge; clinical skills.	Day et al (2018) report good internal consistency.
Beliefs about dangerousness scale (Link et al, 1987)	Markham (2003)	Items relate to desired social distance and perceived dangerousness	Link et al (1987) report suitable construct validity and internal consistency. Markham (2003) confirm suitable internal consistency for the three disorders/conditions of their study.
BPD-SAS: Borderline Personality Disorder- Staff Attitude Survey (Shanks et al, 2011)	Shanks et al (2011); Black et al (2011); Lanfredi et al (2019); Keuroghlian et al (2016); Masland et al (2018).	In Black et al (2011), scales are stated as empathy, treatment optimism, and caring attitudes. Lanfredi et al (2019) appear to use caring attitudes items only.	Not reported by Shanks et al (2011), Black et al (2011), Masland et al (2018) or Keuroghlian et al (2016). Lanfredi et al (2019) report acceptable internal consistency.
Causal Attribution Questionnaire (adapted from Dagnan, Trower and Smith, 1998 and Peterson et al, 1982)	Markham and Trower (2003)	Dimensions of attribution for challenging behaviours: internality, stability, globality, controllability (cause of behaviour), controllability (event).	Markham and Trower (2003) cite Russell, McAuley and Tarico (1987) who report good internal consistency for scale of locus (internality) and stability, and moderate internal consistency

			for controllability, on an earlier version of the measure. Validation not carried out for adapted measure used in study.
CAI: Cognitive Attitudes Inventory (Bodner, Cohen-Friedel and Iancu 2011)	Bodner, Cohen-Friedel and Iancu (2011); Bodner et al 2015	Identified factors: treatment characteristics; perception of suicidal tendencies; antagonistic judgements	Bodner, Cohen-Friedel and Iancu (2011) conducted a principle components factor analysis and report good internal consistency for each factor.
CAQ: Clinical Assessment Questionnaire (Lam, Salkovskis and Hogg, 2016)	Lam, Salkovskis and Hogg (2016)	The measure consists of 23 visual analogue scales that relate to clinical judgements of the patient within the vignette, e.g. the likelihood of the patient being a danger to self/others; expected benefit of pharmacotherapy/CBT.	Test-retest reliability is reported as excellent by Lam, Salkovskis and Hogg (2016).
EAI: Emotional Attitudes Inventory (Bodner, Cohen-Friedel and Iancu 2011)	Bodner, Cohen-Friedel and Iancu (2011); Bodner et al (2015); Castell (2017)	Identified factors: negative emotions; experienced treatment difficulties; empathy	As above for the CAI, and the authors report good internal consistency for each factor.
FWC-58 : Feeling-Word Checklist-58 (Rossberg, Hoffart and Friis, 2003)	Rossberg et al (2007)	The measure consists of 58 emotional reactions from the clinician's last encounter with the patient (within clinician). Identified factors of the measure: important; confident; rejected; on guard; bored; overwhelmed; inadequate.	Rossberg, Hoffart and Friis (2003) report development of this measure from an earlier version, and report satisfactory internal consistency and a factor analysis of the measure.
IAI: Implicit Attitudes Inventory (Bodner et al, 2015)	Bodner et al (2015)	Judgements of suitability regarding care of a patient who has been hospitalised, and overall quality of treatment. Items: justified/unjustified; correct/wrong; reasonable/unreasonable; professional/unprofessional; effective/ineffective. Also included ratings of 13 character traits of a patient: cooperative/uncooperative; selfish/unselfish; manipulative/non-manipulative; good/bad etc.	Bodner et al (2015) report very good internal consistency of the parts of the measure relating to assessment of treatment decisions and quality, but not the character trait ratings.
MICA-4: Mental Illness Clinicians' Attitudes Scale 4 (Gabbidon et al, 2013)	Lanfredi et al (2019)	Measure taps attitudes relating to mental illness in general. Identified factors: views of health/social care field and mental illness; knowledge of mental illness; disclosure; distinguishing mental and physical health; patient care for people with mental illness	Lanfredi et al (2019) report acceptable internal consistency in their sample. Gabbidon et al (2013) report detailed validation concerning internal consistency, acceptability and validity.

PD-APS: Attitudes towards patients with Personality Disorders scale (Eren and Sahin, 2016)	Eren and Sahin (2016)	Items relate to various potential attitudes towards PD, e.g.: "I hold back from the patient. I am fearful and insecure in the presence of the patient and this is reflected in my behaviour".	Eren (2014) conducted a detailed validation study of this measure and report good psychometric properties.
PD-DWS: Difficulties of working with Personality Disorders Scale (Eren and Sahin, 2016)	Eren and Sahin (2016)	Items relate to various potential difficulties in working with PD, e.g.: "they act as if they do not learn from their experiences and they cause you to feel like you are not achieving progress".	As above for PD-DWS.
PIQ: Personal Information Questionnaire (Eren and Sahin, 2016)	Eren and Sahin (2016)	Items relate to demographic information, experience of working with PD, attitudes and affective reactions to PD, willingness to voluntarily work with people with PD, and presence of personal psychotherapy experience.	Eren and Sahin (2016) report piloting of the measure during its construction to aid acceptability and clarity.
PRQ: Psychotherapy Relationship Questionnaire (Westen, 2000)	Thylstrup and Hesse (2008); Bourke and Grenyer (2013)	Items relate to clinician report of transference reactions expressed by the patient. Factors of measure: hostile; narcissistic; compliant/anxious; positive working alliance; avoidant/dismissing; sexualised.	Bourke and Grenyer (2013) cite Bradley et al (2005) who report factor structure of this measure, and good reliability.
Social Distance Scale (Ingamells et al, 1996; Trute and Loewen, 1978).	Markham (2003)	Items relate to endorsements of statements concerning desired social distance from specified mental disorders, i.e. "If you had children you would strongly discourage them from marrying a man or woman who had been diagnosed with borderline personality disorder". Identified factors in Trute and Loewen (1978): rejection in social relations; rejection in social responsibility	Markham (2003) report differences in factor loadings between their study and Trute and Loewen (1978). They do not report psychometric validation of the measure as adapted in this study.
Staff Optimism Scale (Dagnan et al, 1998; Sharrock et al, 1990)	Markham (2003); Markham and Trower (2003)	Items relate to statements of pessimism or optimism regarding change, i.e. " a man or woman with this disorder will always have problems once they have developed"	Psychometric validation of this measure is not reported in either study.
Unnamed measure: Mental Illness Management/Clinical and Personality Disorder Management/Clinical scales (Mason, Dulson and King, 2009)	Mason et al (2010a); Mason et al (2010b)	Items relate to perceptions of PD as "management" (relating to security and prevention of risk) vs "clinical" (meaning treatment of symptoms) issues. These seem to be an analogue of "mad" vs "bad" narratives.	Development of the questionnaire is described in Mason, Dulson and King (2009). They describe piloting with large sample of forensic psychiatric nurses, with reliability of the measure established. Other areas of validation are not reported.

Unnamed measure: attitudes toward borderline personality disorder questionnaire (Cleary, Siegfried and Walter, 2002)	Cleary, Siegfried and Walter (2002); James and Cowman (2007); Giannouli et al (2009).	Items are a series of questions relating to the BPD diagnosis (to test knowledge), confidence of staff, and attitudes towards BPD i.e. how difficult they may be to work with.	No validation reported in any study.
Unnamed measure: attitudes toward borderline personality disorder questionnaire (Deans and Meocevic, 2006)	Deans and Meocevic (2006)	Sections of the questionnaire relate to clinical description; emotional reactions; concerns; management. Example item: "People with BPD emotionally blackmail people they work with" (emotional reactions section).	Validation of measure not conducted.
Unnamed measure: countertransference reactions questionnaire (Liebman and Burnette, 2013)	Liebman and Burnette (2013)	Factors of questionnaire are based on earlier stigma measures (but are called countertransference reactions in this study). Factors: empathy; chronicity; conduct problems; distrust; interpersonal efficacy and dangerousness.	Liebman and Burnette (2013) describe piloting with a sample of undergraduate students and report internal consistency for each scale. These range from not acceptable (i.e. empathy .59) to good (interpersonal efficacy .82).
Unnamed measure: six semantic differential scales (Servais and Saunders, 2007)	Servais and Saunders (2007)	Semantic differential scales consist of the following items: effective-ineffective; understandable-incomprehensible; safe-dangerous; worthy-unworthy; desirable to be with-undesirable to be with; similar to me-dissimilar to me.	Validation of measure not reported.
Unnamed measure: attitudes towards borderline personality disorder questionnaire (Little et al, 2010)	Little et al (2010)	Sections of the questionnaire relate to clinical description of BPD; emotional reactions; concerns; management. It is unclear whether this is the same measure as used in Deans and Meocevic (2006), this is not reported.	Validation of measure not reported.
Unnamed measure: experiences and attitudes toward borderline personality disorder questionnaire (Tulachan et al, 2018)	Tulachan et al (2018)	Items of the questionnaire relate to emotional reactions, feelings of competence, difficulty of treatment and avoidance.	Validation of measure not conducted.

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Appendix E: Empirical Paper Materials

Participant Information Sheet and Consent Form

Participant Information Sheet

Study Title: Judging complex mental health problems: jury perceptions and decision making in a homicide case.

Thank you for your interest in this project. Before you participate, it is important to take time to look through the information on this sheet, to help you decide whether to take part. If you have any questions or would like further information, I will be happy to speak with you in person before the study begins, via telephone at [telephone number] or via email at j.baker3@uea.ac.uk . You are welcome to contact me either before the study commences, or after it has finished.

What are the aims of the study?
We aim to investigate how people might judge aspects of a fictional case where someone has been killed, and the defendant accused of murder has a complex mental health problem. This is important because different mental health problems might affect a person's behaviour or judgement if they commit a crime, or they may not, and we don't know much about how jury members weigh up this information when they make decisions during a trial. These decisions could relate to whether someone is charged with murder, or with manslaughter, depending on how jurors consider the impact of the mental health problems upon the person's responsibility for their actions. These could be affected by factors like mental health stigma, which has not been studied in research of this type, and this is a key aim of this study.

Choosing whether to participate
You are free to take part if you wish, and you do not have to take part in this research if you don't want to. If you would like to take part, you will be asked to complete a consent form before participating to indicate this. You may withdraw from the study at any time. If you wish to withdraw your consent to participate, and to the use of your data, you are free to do so without giving any reason, up until one week after your participation in the study tasks. This deadline is in place because after this point, all study data is anonymised for the purposes of confidentiality.

What will I be asked to do?
After reading the Information Sheet and completing the Consent Form, you and the other participants will be shown to the study area at Earlham Hall. There will be another 7-11 participants taking part in the study to form a mock-jury. You will then be shown a series of video clips which outline a trial. You'll be asked to complete questionnaires at various points.

First, you will be shown a clip of a psychologist describing the person in the case, who will describe their mental health problems. After this, you will be asked to fill in two questionnaires which will ask questions about what you think about the defendant and their mental health problem. After this, you will be shown a series of clips which outline the crime and the trial, the prosecution and defence arguments about the case and what sentence should be carried out. You will be asked to consider whether the person had "diminished responsibility" for the crime and you will be given information about what this means and how it would affect sentencing of the person.

After filling in a short questionnaire about your individual views on the case, you will be asked to discuss this as a group and come to a group jury decision about whether they had "diminished responsibility" or not, affecting whether the defendant is charged with murder or manslaughter.

After this is finished, you will be given time for a debrief on the study purposes and discussion, and paid £5 for your time and participation.

Altogether, the study session should take an 60-80 minutes to complete.

Are there risks in taking part?

The study materials will describe a case where someone has been killed, as well as psychological information about the defendant's mental health problems including early traumatic events including sexual abuse. Only necessary information will be given, and potentially upsetting details will not be described in detail. It is important that you think about whether you would be affected by the content of the study, and weigh this up in deciding whether to take part.

The defendant who you will think about has been created with reference to parts of information from other cases, but the defendant and case itself is entirely fictional. The people you will see in the video clips are actors reading from a script. However, if you experience distress you will be able to contact myself at any point for discussion and signposting to means of support. You may also contact my research supervisor, Dr Peter Beazley (p.beazley@uea.ac.uk). If you wish to speak to an independent contact, separate from the study, you may also contact Dr Niall Broomfield, Programme Lead for the Doctoral Programme in Clinical Psychology (n.broomfield@uea.ac.uk).

What will happen if I want to withdraw from the study?

You may withdraw yourself and your information from the study at any time. If you do, you do not have to give any reason. You may withdraw your information from the study after it has finished by contacting myself on the above telephone number or email address. Alternatively, you may contact my research supervisor or the independent contact. In this case, your information would be removed from all data concerning the study. This would be possible up until one week after your participation in the study tasks (when study data are anonymised).

Will my information be kept safe?

If you choose to participate in this study, we will collect your name, a contact telephone number and an email address as personal information. We will also ask for your occupation or subject of study if you're a student. This is used to help us to contact you, to organise days that the study will run and to sort people into representative groups. Information about your part in the study will be held securely in accordance with the General Data Protection Regulation (GDPR), and not shared with any other agencies. You have the right to access, withdraw or rectify your data before it is anonymised. Your data will then be anonymised one week after your participation in the study.

What will happen once the data is analysed?

As the study is part of my Doctorate in Clinical Psychology, it will be submitted to the University of East Anglia for marking. The results will also be submitted to a relevant journal for publication and presented at a conference at the UEA. If you would like to receive the results of the study, you will be able to indicate this and a brief report of the results of the study will be sent to you.

Who is overseeing and funding this research?

This research forms part of my Doctorate in Clinical Psychology with the University of East Anglia. It is organised by myself, but is overseen by my Research Supervisor and subject to internal review processes within the Doctorate in Clinical Psychology Programme department. The research is funded by the University of East Anglia.

Who has approved this study?

This research has been reviewed and approved by the Faculty Research Ethics Panel of the University of East Anglia (study ref: 201819 – 048)

For further information or discussion, please feel free to contact myself (James Baker, Trainee Clinical Psychologist):

j.baker3@uea.ac.uk

Participant Consent Form

Study Title: Judging complex mental health problems: jury perceptions and decision making in a homicide case.

Researcher Name: James Baker

Thank you for your interest in this study. Please ensure that you have read the Participant Information Sheet thoroughly and considered whether you would like to take part in this research.

Please also take this time to ask any questions that you may have about the research before you start. You may ask these questions in person before the study commences on the day you are allocated to. You may also contact myself at j.baker3@uea.ac.uk, or via telephone at [telephone number]. If you wish, you may contact my research supervisor at p.beazley@uea.ac.uk, or a person completely independent from the study at n.broomfield@uea.ac.uk .

If you are happy to take part, please tick against each item to show your consent to participate in this research.

	PLEASE INITIAL
I have read the Participant Information Sheet and understand what the study involves and what I will be asked to do.	
If I have any questions or concerns about the study, I have had the chance to ask questions about these.	
I am aware that my personal information and study data will be held securely, and that I have the right to access, withdraw or correct it if I wish, up until the data are anonymised. This is one week after I complete the study tasks.	
I am aware that I can withdraw my consent to participate, as well as my personal information and data gathered, at any point and without giving a reason, up until the data are anonymised one week after I complete the study tasks.	
I would like to take part in this research.	

Print Name …………………………….

Signature …………………………….   **Date** …………………………….

Participant Identification Number (researcher use) :

Circumstances of the case, given to participants to support the filmed section of the study scenario.

Case details summary

Sarah Priest, a 29-year-old female, is accused of the murder of Paul Simons, 37. They were known to each other before the event, as they lived nearby on the same suburban estate in Colchester and shared mutual friends. Although they did not know each other well, Paul would walk past Sarah's house and wave to her occasionally on his walk to work.

Sarah and Paul met each other fully on the 13th August, 2018, when they both attended a barbeque held by one of Sarah's friends on the estate. Sarah had gone to the barbeque with her younger sister, Beth (26), who on later questioning said that she had persuaded Sarah to go, as she had been feeling particularly low and short-tempered recently and that the barbeque might cheer her up. In the course of the party Paul, having had several alcoholic drinks, struck up a conversation with Beth and over the course of the evening, they became increasingly close and flirtatious as they joked together. At one point in the evening, Sarah became angry at Paul and they began to have a heated argument. She had not been drinking alcohol. From questioning of witnesses of the argument, Sarah accused Paul of "crowding" her sister, and called him a "creep". After a couple of minutes of arguing, she threw a drink in his face, after which Beth told her to go home, and that she would see her later at Sarah's house.

Sarah returned home. On later questioning she reported that she was "fucking fuming" and that she tried to calm down at home. Back at the barbeque, in the aftermath of the argument Beth apologised to Paul, and said that her sister had "anger management issues" and "issues with men because of her past". Paul had then said to Beth that he felt bad about arguing with her and that he wanted to apologise and bring her back to the party. While Beth asked him not to, later on unknown to her Paul left the barbeque and went to Sarah's house.

Paul arrived at Sarah's home and knocked first on her door, and then on an adjacent open window in the kitchen of her house, while calling for her. Sarah entered the kitchen area and on seeing Paul, was verbally abusive to him. From a neighbour's report, they heard Sarah shouting at him and calling him

“a fucking creep, first coming for my little sister and now me in my house”. It is not known what Paul said in response, but it appears that while he was apologetic at first, he began to argue back. The neighbour’s report described both shouting for around half a minute. Sarah became increasingly aggressive and distressed in her tone, screaming at Paul and throwing small items out of her kitchen window at him.

Sarah then took a kitchen knife from the side, opened her front door and stabbed Paul in the neck, causing major injuries. A neighbour who had heard the commotion called the police, who found Paul in a critical condition. Sarah had fled the scene, but was later found by police, distressed on a nearby housing estate. Paul was declared deceased shortly after being found by police at the scene.

When questioned by police, Sarah said that she felt frightened when she saw Paul come to her house. She said that Paul reminded her of her stepfather as he wore a similar Colchester football shirt, and she felt “creeped out” by him. Sarah said that she “lost it” when she stabbed Paul in the neck. Sarah expressed that she regretted what happened.

Scripts for the Expert witness testimony (narrative formulation)

1) Experimental "severe personality disorder, borderline pattern" condition

This case concerns a 29-year-old female, Sarah Priest, who has mental health problems consistent with a presentation of severe personality disorder, borderline pattern. She experiences a high degree of anxiety with panic attacks, which she finds very difficult to cope with. Due to her severe personality disorder, she experiences rapid and extreme variations in her mood which can be difficult for her to understand and to regulate, particularly when she is under stress. She finds her anxiety and her moods difficult to predict, which have meant that she has been unable to work for the past several months, after being asked to leave her last job after an altercation with a male member of staff. As part of her severe personality disorder, Sarah can find it difficult to maintain stable relationships with other people, as she can feel a range of intense emotions and go from feeling adoration to jealousy, anger and betrayal. She can also misperceive situations as more threatening than they are, which can make her feel very unsafe and angry. This has often lead to her having a panic attack or becoming impulsively aggressive toward herself or others, which has led to contact with the police on several occasions. Part of this tendency to read situations as threatening, as part of her severe personality disorder presentation, is her difficulty in making sense of the thoughts, intentions and perspectives of other people.

Sarah struggles with coping with her unstable moods and anxiety, and this as well as being unable to work has meant that Sarah has often felt depressed and hopeless, and had suicidal thoughts. Sarah sometimes thinks about ending her life, but hasn't made any plans to do this recently. However, Sarah has made attempts on her life in the past, which had led to her being diagnosed with severe personality disorder at age 20 after taking an overdose. The most recent attempt on her life was a year ago, when she severely cut her wrists. In the past year, she has gone to A+E six times, having cut herself.

Sarah suffered sexual abuse from her stepfather from the age of 6 until she was 14, when she was able to make the abuse stop. She told her mother about the abuse, although her mother did not believe her and thought she was trying to break up their relationship. Due to this, she felt rejected by her mother and could not turn to anyone else for help. Sarah often has anxieties and fears around being rejected by others, which can underlie her difficult feelings and changing moods. Sarah has wondered whether her younger sister, Beth, might have also been abused although Beth does not want to discuss this. Between the ages of 18 and 20, she had a series of difficult relationships with abusive men and suffered several physical and sexual assaults, which led to her overdose and her diagnosis of borderline personality disorder. Since then, she has engaged with mental health services on a few occasions and currently sees a nurse from their personality disorder team.

2) Control condition with "severe personality disorder, borderline pattern" removed

This case concerns a 29-year-old female, Sarah Priest, who has complex mental health problems. She experiences a high degree of anxiety with panic attacks, which she finds very difficult to cope with. Due to her complex trauma disorder, she experiences rapid and extreme variations in her mood which can be difficult for her to understand and to regulate, particularly when she is under stress. She finds her anxiety and her moods difficult to predict, which have meant that she has been unable to work for the past several months, after being asked to leave her last job after an altercation with a male member of staff. As part of her complex mental health problems, Sarah can find it difficult to maintain stable relationships with other people, as she can feel a range of intense emotions and go from feeling adoration to jealousy, anger and betrayal. She can also misperceive situations as more threatening than they are, which can make her feel very unsafe and angry. This has often lead to her having a panic attack or becoming impulsively aggressive toward herself or others, which has led to contact

with the police on several occasions. Part of this tendency to read situations as threatening, as part of her complex mental health problems, is her difficulty in making sense of the thoughts, intentions and perspectives of other people.

Sarah struggles with coping with her unstable moods and anxiety, and this as well as being unable to work has meant that Sarah has often felt depressed and hopeless, and had suicidal thoughts. Sarah sometimes thinks about ending her life, but hasn't made any plans to do this recently. However, Sarah has made attempts on her life in the past, which had led to her being diagnosed with borderline personality disorder at age 20 after taking an overdose. The most recent attempt on her life was a year ago, when she severely cut her wrists. In the past year, she has gone to A+E six times, having cut herself.

Sarah suffered sexual abuse from her stepfather from the age of 6 until she was 14, when she was able to make the abuse stop. She told her mother about the abuse, although her mother did not believe her and thought she was trying to break up their relationship. Due to this, she felt rejected by her mother and could not turn to anyone else for help. Sarah often has anxieties and fears around being rejected by others, which can underlie her difficult feelings and changing moods. Sarah has wondered whether her younger sister, Beth, might have also been abused although Beth does not want to discuss this. Between the ages of 18 and 20, she had a series of difficult relationships with abusive men and suffered several physical and sexual assaults, which led to her first overdose. Since then, she has engaged with mental health services on a few occasions and currently sees a nurse from their adult mental health team.

Scripts for the trial reconstruction

Note: These scripts are provided for the "Severe Personality Disorder" condition. For the control condition, all references to this are replaced with "complex mental health problems" and are otherwise unchanged.

Initial Prosecution statement

Your honour, members of the jury, I represent the Prosecution in this case. The defendant, Ms Sarah Priest, is charged with the common law offence of murder, in that she has been found to have attacked and stabbed the victim, Paul Simons, causing serious bodily harm resulting in his death. The Defence's plea on this matter, however, is guilty to manslaughter on the grounds of diminished responsibility, one that the Prosecution rejects. Let us consider the question of what murder itself entails, and contemplate whether this applies in this case to a point of being beyond reasonable doubt. Murder, in English law, means the unlawful killing of another human being with malice aforethought, meaning that the defendant intended to kill or at the least intended to cause serious harm to the victim, Mr Paul Simons. Now, let us consider the facts of the case, and in particular the question of the intention to cause serious harm. On the 13th August 2018, following an earlier unprovoked and aggressive altercation with the victim at a communal barbeque, of which she was the driver, the victim presented at her home intending to make some form of restitution. He did not enter her home unduly, but knocked at her door and attempted to speak with her. It appears that on encountering him outside of her home, Ms Priest continued to behave in a hostile and overly aggressive manner, to which the victim began to respond, though not in a manner which could have reasonably provoked what was to occur. Ms Priest then took a knife from the side of the kitchen in her home, opened her front door, approached the victim and stabbed him. Consider the nature of intention. To have intention, there must be knowledge of a virtually certain consequence following an action – namely, that serious harm is a virtually certain result of assault with a knife- and it is argued that the defendant knew this well. In addition, in considering the point of malice in her intentions, it is argued that she foresaw the risk that serious harm or killing would occur as the result of her actions, and that she deliberately took this risk. The defendant and victim were heard by neighbours to be shouting for a period of at least 30 seconds, and this was not the product of a sudden, startling or threatening provocation on the part of the victim. The defendant, Ms Priest, was able to consider her actions as she carried them out, knew the consequences and risks, and chose these as part of malicious intention to cause the victim serious harm, or death.

To the jury, as you make your deliberations, should you agree that Ms Priest killed the victim unlawfully with malice aforethought, you must find the defendant guilty of murder.

Defence case

Your honour, members of the jury, I represent the Defence in this case. As we have heard, the defendant's plea in this case guilty to manslaughter, not to murder, on the grounds of Diminished Responsibility. We have heard the Prosecution's argument that the defendant acted purposefully and with intent to cause at least serious harm during the events that led up to the death of Mr Simons. I will present the facts of this case with respect to further consideration of the nature of the defendant's mental health difficulties, and argue that, contrary to the Prosecution's claims, the criteria of Diminished Responsibility do in fact apply in this case. I will suggest that you should find her not guilty of murder, but instead guilty of manslaughter on the grounds of Diminished Responsibility. Given the nature of her *Severe Personality Disorder*, she was not able to understand the nature of her conduct, to form a rational judgement, nor to exercise self-control over her actions. I will suggest to you, members of the jury, that her *Severe Personality Disorder* substantially impaired her ability to do those things. When you have heard our evidence, if you believe that it is more likely than not that the

criteria of Diminished Responsibility does apply in this case, your verdict should be one of manslaughter and not murder. Should doubt exist in your mind, you should find a verdict of manslaughter and not murder.

In support of the view of the Defence, I present as evidence the report of Dr Jane Bellbottom, a psychiatrist instructed to interview the defendant and determine whether the defendant's mental health condition meant that the Diminished Responsibility criteria do in fact apply.

As this report confirms, Dr Bellbottom agrees that the defendant suffers from *Severe Personality Disorder (Borderline Pattern)*, which is a recognised medical condition. When Dr Bellbottom assessed her, Sarah showed pronounced anxiety and a fluctuating emotional state, consistent with earlier observations from the personality disorder community mental health team. Dr Bellbottom notes that that stressful events can trigger extreme emotional variations and impulsive behaviours which are difficult to control. She describes a pronounced fear of abandonment and rejection from others, which leads her to behave in potentially manipulative ways to avoid this. These, together with the defendant's history of severe sexual and physical abuse, are significant explanatory factors in the defendant's actions during the crime, which means you can properly find her not guilty of murder and guilty of manslaughter on the grounds of Diminished Responsibility.

We now consider Dr Bellbottom's views regarding the Diminished Responsibility impairment criteria, one or more of which must apply.

First, the defendant's ability to understand her conduct. Dr Bellbottom expresses the view that the defendant understood her conduct during the evening, and during the incident itself, but that her conduct itself was affected by the other two factors.

Second, the defendant's ability to form a rational judgement, which it is argued was substantially impaired at the time of the crime. Dr Bellbottom argues that, as part of her *Severe Personality Disorder*, Sarah was less able to make a rational judgement about the situation compared to a person without this condition. She saw the situation as more dangerous and threatening than it actually was, and this was affected by her history of abuse and the victim's appearance, which in resembling her historical abuser, triggered memories and emotions associated with this abuse and substantial fear. This informed a belief that she would be attacked by the victim, and that she needed to defend herself.

Third, the defendant's ability to exercise self-control in this situation. Dr Bellbottom argues that given that the defendant could not rationally judge the danger of the situation, the ensuing extreme fear and stress meant that she could not control her impulsive and aggressive behaviours and could not exercise self-control as she stabbed the victim.

In summary of Dr Bellbottom's report, the impairments relate to the factors of the ability to form a rational judgement, and to exercise self-control during the incident. Both are judged by Dr Bellbottom to be substantially impaired, due to the defendant's *Severe Personality Disorder,* and so the level of responsibility and culpability in this case is lowered. Dr Bellbottom recommends that the defence of Diminished Responsibility does apply in this case. May I remind you that this need only exist on the balance of probabilities – if you feel that these criteria have been made out and apply to the defendant, the defence applies and the charge is one of manslaughter.

Members of the jury, I would invite you to consider everything that has been presented here as you make your deliberations, and find the defendant not guilty of murder, but guilty of manslaughter on the grounds of diminished responsibility. Thank you.

3. The Prosecution Response to the Defence Evidence on Diminished Responsibility

Having heard the defence case for diminished responsibility, the prosecution will present its evidence on the issue.

Prosecution vignette script

Your honour, members of the jury, the Prosecution rejects the Defence's case and we present our own evidence on the issue. Now, there is no dispute as to whether the incident of the killing of the victim, Paul Simons, by the defendant has occurred. However, the Defence suggests that the legal defence of Diminished Responsibility applies in this case. The argument behind this is that her mental health state at the time meant she was less responsible for her actions, by reason that her *Severe Personality Disorder* meant that she was unable to form a rational judgement of the situation and exercise self-control during the incident. Today, I urge you to reject that view; I put it to you that the defendant was in fact able to form a rational judgement, and exercise self-control over her actions. It is the Crown's view that the criteria of Diminished Responsibility do not apply in this case. If you believe that the defendant did not have Diminished Responsibility in this case the verdict must be guilty to the charge of murder. I suggest to you that this was a straightforward case of Ms Priest acting deliberately, in a calm and considered manner; she stabbed Mr Simons intending to cause him serious harm.

In support of the view of the Crown, I present as evidence the report of Dr Michael Albert, a psychiatrist commissioned to interview the defendant and provide a clinical opinion on whether the defendant's mental health problems at the time of the crime qualify for the criteria of Diminished Responsibility.

As the summary report explains, Dr Albert's view is that the defendant's mental health problems are consistent with *Severe Personality Disorder (Borderline Pattern)* a recognised condition. As part of this condition, unstable emotions, interpersonal difficulties and impulsive behaviours are present, and these fluctuate markedly over time in a way which can be difficult to predict. He notes that Ms Priest has manipulative traits as well, in that she could appear helpless or feign other symptoms of mental illness to affect the behaviour of others. While these may be contributing factors in this situation, it is Dr Albert's view that the defendant bears a high degree of responsibility for the crime, and that her mental health problems do not explain her actions. They did not impair her ability to understand what she was doing, to form a rational judgment about how to behave, or to exercise self-control.

It is Dr Albert's view that the defendant was jealous of the victim at the party, as he took attention away from her sister, who had taken her there. She became angry towards him. As such, she orchestrated many of the earlier events of the evening, such as getting into an argument, throwing a drink in the victim's face and leaving. When the victim arrived at the defendant's home, the defendant, still angry and jealous toward the victim, became aggressive stabbed him without restraint.

Summarising this report, we consider Dr Albert's views of the potential impairments under the Diminished Responsibility criteria:

First, the defendant's ability to understand her conduct at the time of the crime. On this matter I put it you that the Ms Priest fully understood what she was doing during the events of the day, including at the time of the fatal stabbing. She was jealous and angry towards the victim, acted in a way to manipulate the situation at the party, and then acted out her anger and jealousy towards the victim purposefully. Her *Severe Personality Disorder* did not by itself account for her actions.

Second, the defendant's ability to form a rational judgement. While it can be said that the defendant's judgements and thought processes might differ from that of a person without these problems, I suggest to you that her *Severe Personality Disorder* does not rule out a capacity to form a rational judgement about her actions.

Third, the ability of the defendant to exercise self-control over her actions during the incident. Dr Albert notes that while impulsive behaviours can be in part due to *Severe Personality Disorder*, he believes that the extreme actions taken by the defendant were a reflection of something more sinister- an intention to cause severe harm to the victim, due to her anger and jealousy. Ms Priest did not lose self-control, rather that she acted deliberately, with purpose, and intentionally killed Mr Simons.

In summary, Dr Albert's report states that in considering the defendant's *Severe Personality Disorder* and its weight upon the defendant's responsibility over her actions, the mental health problems in this case do not explain the defendant's actions to any substantial degree. Ms Priest was fully responsible for her actions in this case. Dr Albert has stated clearly that the Diminished Responsibility criteria do not apply.

Members of the jury, it is your duty to consider the facts of this case. Recognise this brutal killing for what it was: a deliberate, considered series of actions by a woman fully in control of her actions and wholly responsible for them. The proper verdict in this case must be that she is guilty of murder. Thank you.

Trial Judge's directions to the Jury:

Members of the jury, my role is to explain to you what the law is and then your task is to apply the law to the facts of the case before you.

You, in the course of your duty, have a collective responsibility for the verdict in this case. You have taken an oath to try the case based upon the evidence given in this court, and you must base your verdict upon this alone. It is very important that you do not undertake any research of your own on the internet; you must judge the case solely on the evidence you have seen and heard here in court.

The defendant is charged with murder. In English law, murder is the unlawful killing of another person with malice aforethought. You may ask, what does that mean? In English law today, malice aforethought means either that the defendant intended to kill another person or intended to cause another person serious harm. It does not mean that she planned the killing ahead of time, not that she acted with malice in a loose moral sense. The question for you to decide is whether, at the moment she stabbed the victim, she intended to cause at least serious harm to him.

The prosecution's case is that she did intend to cause at least serious harm. Whether she did is for you to decide.

If you are not sure that she did intend to cause serious harm to him, then your verdict must be one of not guilty on the charge of murder, but guilty instead of manslaughter.

The defence case is that Ms Priest was suffering from diminished responsibility at the time of the killing.

Both versions of the film are stored on the memory stick submitted together with the copies of this portfolio.

Juror Information Sheet – explainer of Diminished Responsibility provided to participants

<u>Juror Information Sheet: Diminished Responsibility</u>

You have now heard about the defendant, Sarah, and her mental health problems, as well as the events of the crime committed.

The clips you are about to see explain that while there is no doubt that Sarah committed the act of killing Paul, her plea is that she is guilty to manslaughter, not murder, on the grounds of **Diminished Responsibility** due to her mental health problems.

The Prosecution and Defence arguments will debate whether **Diminished Responsibility** applies when considering Sarah's actions.

Diminished Responsibility is a legal defence in cases of homicide. It means that a defendant is judged as less responsible for their actions because of their mental health problem. It affects the sentence handed to the defendant by the judge. Depending on the situation, it could mean that a person is treated for their mental health problems in a secure psychiatric hospital rather than a prison, or there can be time in hospital before going to prison once these mental health problems are treated. It can also mean that a person's sentence (their punishment for the crime) is reduced by years.

As a jury, you are asked to consider whether you think Sarah had **Diminished Responsibility** for the crime, and to come to a unanimous verdict together.

For **Diminished Responsibility** to apply, the following criteria must be met. Please consider these criteria carefully, and whether you think these apply to Sarah.

There must be an **abnormality of mental functioning** which:

A) arose from a recognised medical condition
B) substantially impaired the defendant's ability to do one or more of:
    1. **understand the nature of their conduct** during the situation
    2. to **form a rational judgement** about the situation and their actions
    3. to **exercise self-control** during the situation
C) provides an explanation for the defendant's actions.

So, if you think that Sarah's mental functioning was affected by a medical condition, and that this affected her ability to understand her conduct, make a rational judgement, or exercise self-control over her actions during the crime, and this explains her actions, then **Diminished Responsibility** would apply.

Participant Debrief Sheet, handed to participants at the end of the study

Participant Debrief Sheet
Thank you very much for taking part in this research study. Now that the study is complete, this form contains further information about the study.

What is the study about?
This study is investigating attitudes towards individuals with a psychiatric diagnosis of Personality Disorder, and whether the presence of this term might have affected the judgements made about them and the decisions made about the case. All participants learned about the crime committed and the events leading up to and after this. Some participants saw a narrative about the defendant's history and emotional problems, with these referred to as "complex mental health problems". Some participants saw the same narrative, but these were referred to as part of a "Severe Personality Disorder" instead.

You were then asked to complete two questionnaires. One of these measured your thoughts and attitudes toward the defendant. The second questionnaire aimed to measure "causal attributions"- these mean judgements about where a behaviour has come from, and whether this is due to the person (internal), or another factor separate from them (external).

After this, you were asked as a group to decide if the defendant had "diminished responsibility" over their actions. This meant you had to try and decide whether their mental health problem meant they understood the nature of their conduct, whether they could form a rational judgement, and whether they could exercise self-control. A judgement of "diminished responsibility" due to a mental health problem means that a person could be treated in a forensic psychiatric service for their mental health problems, instead of going directly to prison where they would not receive the same kind of treatment.

This is important research because individuals with a diagnosis of "Personality Disorder" often face stigma from various sections of society, such as professionals in mental health services but also in the general public. There is research to suggest that due to this term, they might be likely to be seen as morally responsible for their mental health problems and their behaviour, compared to people with other mental health problems. Therefore, it's important that we recognise how the presentation of information about mental health problems affects understanding and decision making. This could help understanding of a person, their behaviour and their mental health problems. If people with this diagnosis face stigma within parts of the criminal justice system, it could also help make sure that our juries are well-informed and fair to these people.

If you would like to know more about this study, please contact the chief investigator, James Baker, via the contact details given below. Some time will also be provided at the end of the session should you wish to speak directly.

What to do if you need further support following taking part in this study
If you need further support or are feeling distressed following taking part in this study, please contact the chief investigator, James Baker (j.baker3@uea.ac.uk), who will be able to signpost you to sources of support, such as your GP or the student support service (as applicable). If you have further queries or would like to complain, please contact the chief investigator, James Baker, or the research supervisor for this study, Dr Peter Beazley (p.beazley@uea.ac.uk). If you would like to speak to someone independent from the study itself, you may contact Niall Broomfield, Programme Director of the Doctoral Programme in Clinical Psychology (niall.broomfield@uea.ac.uk).

What to do if you would like to withdraw from this study
If you would like to withdraw yourself and your information from this study, you may do so without having to give any reason. Should you wish to do so, please let the chief investigator or research supervisor know within one week (after this point, all personally identifiable information is removed from your study data). This will not affect the £5 payment made to you for your participation in the study.

Thank you for your participation.

Appendix F: Study Measures

Attribution Questionnaire-27

Name________________________________ Date ____________

Now that you have watched the description of Sarah and her problems, please read each of the following statements about Sarah and circle the answer that represents how you might feel towards them, if you met them or were put in charge of what could happen to them.

1.
I would feel aggravated by Sarah.

1	2	3	4	5	6	7	8	9

not at all very much

2.
I would feel unsafe around Sarah.

1	2	3	4	5	6	7	8	9

not at all very much

3.
Sarah would terrify me.

1	2	3	4	5	6	7	8	9

not at all very much

4.
I would feel angry at Sarah.

1	2	3	4	5	6	7	8	9

not at all very much

5.
If I oversaw Sarah's mental health treatment, I would require her to take her medication and/or attend therapy.

1	2	3	4	5	6	7	8	9

not at all very much

6.
If I were an employer, I would consider interviewing Sarah for a job, after she has served her sentence.

1	2	3	4	5	6	7	8	9

not at all very much

7.
I think Sarah poses a risk to her neighbours unless she is put in prison.

1	2	3	4	5	6	7	8	9

not at all very much

8.
I would be willing to talk to Sarah about her problems.

1	2	3	4	5	6	7	8	9

not at all very much

9.
I feel pity for Sarah.

1	2	3	4	5	6	7	8	9

not at all very much

10.
I would think that it was Sarah's own fault that the crime occurred.

1	2	3	4	5	6	7	8	9

not at all very much

11.
How controllable, do you think, is the cause of Sarah's behaviour?

1	2	3	4	5	6	7	8	9

not controllable totally controllable

12.
I would feel irritated by Sarah.

1	2	3	4	5	6	7	8	9

not at all very much

13.
How dangerous would you feel Sarah is?

1	2	3	4	5	6	7	8	9

not at all very much

14.
How much do you agree that Sarah should be forced into treatment for her mental health problems, even if she does not want to?

1	2	3	4	5	6	7	8	9

not at all very much

15.
I think it would be best for Sarah's community if she were put into prison.

1	2	3	4	5	6	7	8	9

not at all very much

16.

I would share a lift by car with Sarah every day.

1	2	3	4	5	6	7	8	9

not likely very likely

17.
How much do you think a prison, where Sarah can be kept away from her neighbours, is the best place for her?

1	2	3	4	5	6	7	8	9

not at all very much

18.
I would feel threatened by Sarah.

1	2	3	4	5	6	7	8	9

not at all very much

19.
How scared of Sarah would you feel?

1	2	3	4	5	6	7	8	9

not at all very much

20.
How likely is it that you would help Sarah?

1	2	3	4	5	6	7	8	9

not likely very likely

21.
How certain would you feel that you would help Sarah?

1	2	3	4	5	6	7	8	9

not certain very certain

22.
How much sympathy would you feel for Sarah?

1	2	3	4	5	6	7	8	9

not at all very much

23.
How responsible, do you think, is Sarah for the crime?

1	2	3	4	5	6	7	8	9

not at all very much

24.

How frightened of Sarah would you feel?

1	2	3	4	5	6	7	8	9

not frightened very frightened

25.
If I were in charge of Sarah's treatment, I would force her to live in a group home or facility.

1	2	3	4	5	6	7	8	9

I would not I would

26.
If I were a landlord, I probably would rent an apartment to Sarah.

1	2	3	4	5	6	7	8	9

I probably would I would not

27. How much concern would you feel for Sarah?

1	2	3	4	5	6	7	8	9

No concern a lot of concern

Causal Attribution Scale Questionnaire

You are now going to presented with questions that relate to the case. You will be asked to think of a main reason for the cause of this crime, and then rate the cause.

What do you think the main cause of this crime is?

The main cause of the event is ………………………………………..

Please make ratings of the following statements:

This cause is something internal to Sarah	1	2	3	4	5	6	7	This cause is something external to Sarah
This cause means the same thing would happen in a similar occurring event	1	2	3	4	5	6	7	This cause means the same thing would not happen in a similar occurring event
This cause will influence how the individual behaves in other events	1	2	3	4	5	6	7	This cause will not influence how the individual behaved in other events
Sarah is in control of this cause	1	2	3	4	5	6	7	Sarah is not in control of this cause
Sarah is in control of this event	1	2	3	4	5	6	7	Sarah is not in control of this event

You will now be presented with some other recent events involving the defendant. Please write what you think the main cause of the event might be.

Sarah did not attend an appointment at the job centre.

What do you think the main cause of this event is?

The main cause of the event is ………………………………………..

Please make ratings of the following statements:

This cause is something internal to Sarah	1	2	3	4	5	6	7	This cause is something external to Sarah
This cause means the same thing would happen in a similar occurring event	1	2	3	4	5	6	7	This cause means the same thing would not happen in a similar occurring event
This cause will influence how the individual behaves in other events	1	2	3	4	5	6	7	This cause will not influence how the individual behaved in other events
Sarah is in control of this cause	1	2	3	4	5	6	7	Sarah is not in control of this cause
Sarah is in control of this event	1	2	3	4	5	6	7	Sarah is not in control of this event

Sarah recently contracted a sexually transmitted infection.

What do you think the main cause of this event is?

The main cause of the event is ………………………………………..

Please make ratings of the following statements:

This cause is something internal to Sarah	1	2	3	4	5	6	7	This cause is something external to Sarah
This cause means the same thing would happen in a similar occurring event	1	2	3	4	5	6	7	This cause means the same thing would not happen in a similar occurring event
This cause will influence how the individual behaves in other events	1	2	3	4	5	6	7	This cause will not influence how the individual behaved in other events
Sarah is in control of this cause	1	2	3	4	5	6	7	Sarah is not in control of this cause
Sarah is in control of this event	1	2	3	4	5	6	7	Sarah is not in control of this event

Sarah arrived late to a GP appointment and was told she would have to book another appointment. Sarah became upset and became verbally abusive towards the receptionist.

What do you think the main cause of this event is?

The main cause of the event is ………………………………………..

Please make ratings of the following statements:

This cause is something internal to Sarah	1	2	3	4	5	6	7	This cause is something external to Sarah
This cause means the same thing would happen in a similar occurring event	1	2	3	4	5	6	7	This cause means the same thing would not happen in a similar occurring event
This cause will influence how the individual behaves in other events	1	2	3	4	5	6	7	This cause will not influence how the individual behaved in other events
Sarah is in control of this cause	1	2	3	4	5	6	7	Sarah is not in control of this cause
Sarah is in control of this event	1	2	3	4	5	6	7	Sarah is not in control of this event

Diminished Responsibility Questionnaire

You are now going to think about the facts of these case, and rate whether the Diminished Responsibility criteria apply to each part of the situation.

1. Paul arrived at Sarah's house, and Sarah was verbally abusive to him, calling him "a F****** creep, first coming for my little sister and now me in my house".

Was this related to a recognised medical condition?

Not related to a recognised medical condition	1	2	3	4	5	6	7	Entirely due to a recognised medical condition

Could she understand her conduct, form a rational judgement, or exercise self-control?

Totally unable to understand the nature of her conduct	1	2	3	4	5	6	7	Fully able to understand the nature of her conduct
Totally unable to form a rational judgement	1	2	3	4	5	6	7	Fully able to form a rational judgement
Totally unable to exercise self-control	1	2	3	4	5	6	7	Fully able to exercise self-control

Do any of these factors explain how she acted?

These do not explain her actions	1	2	3	4	5	6	7	One or more of these factors fully explains her actions

2. Sarah became increasingly aggressive and distressed in her tone, screaming at Paul and throwing small items out of her kitchen window at him.

Was this related to a recognised medical condition?

Not related to a recognised medical condition	1	2	3	4	5	6	7	Entirely due to a recognised medical condition

Could she understand her conduct, form a rational judgement, or exercise self-control?

Totally unable to understand the nature of her conduct	1	2	3	4	5	6	7	Fully able to understand the nature of her conduct
Totally unable to form a rational judgement	1	2	3	4	5	6	7	Fully able to form a rational judgement
Totally unable to exercise self-control	1	2	3	4	5	6	7	Fully able to exercise self-control

Do any of these factors explain how she acted?

These do not explain her actions	1	2	3	4	5	6	7	One or more of these factors fully explains her actions

3. Sarah then took a kitchen knife from the side, opened her front door and stabbed Paul in the neck, causing major injuries.

Was this related to a recognised medical condition?

Not related to a recognised medical condition	1	2	3	4	5	6	7	Entirely due to a recognised medical condition

Could she understand her conduct, form a rational judgement, or exercise self-control?

Totally unable to understand the nature of her conduct	1	2	3	4	5	6	7	Fully able to understand the nature of her conduct
Totally unable to form a rational judgement	1	2	3	4	5	6	7	Fully able to form a rational judgement
Totally unable to exercise self-control	1	2	3	4	5	6	7	Fully able to exercise self-control

Do any of these factors explain how she acted?

These do not explain her actions	1	2	3	4	5	6	7	One or more of these factors fully explains her actions

4. Sarah fled the scene but was later found by police on a nearby housing estate, in a distressed condition.

Was this related to a recognised medical condition?

Not related to a recognised medical condition	1	2	3	4	5	6	7	Entirely due to a recognised medical condition

Could she understand her conduct, form a rational judgement, or exercise self-control?

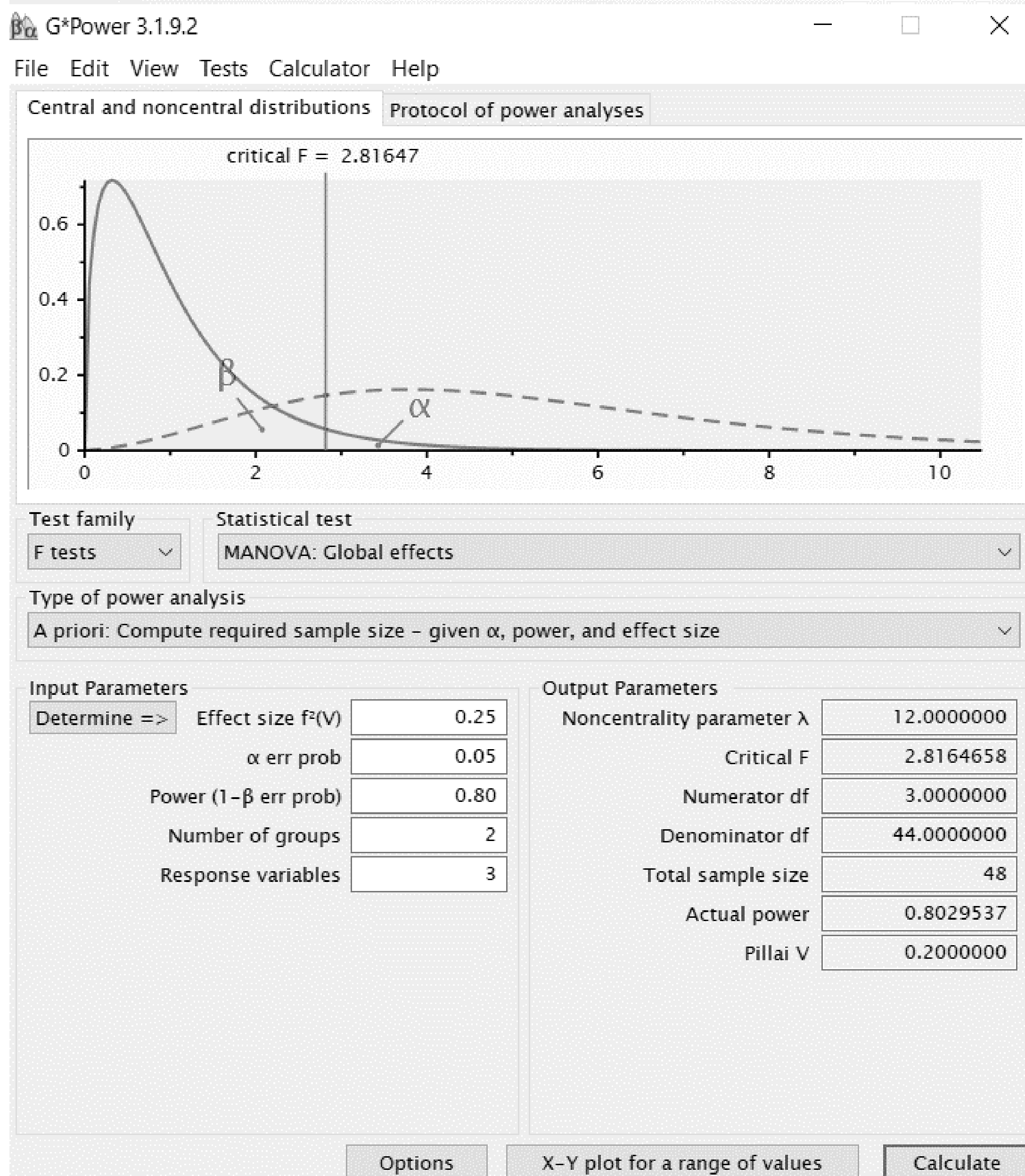
Totally unable to understand the nature of her conduct	1	2	3	4	5	6	7	Fully able to understand the nature of her conduct
Totally unable to form a rational judgement	1	2	3	4	5	6	7	Fully able to form a rational judgement
Totally unable to exercise self-control	1	2	3	4	5	6	7	Fully able to exercise self-control

Do any of these factors explain how she acted?

These do not explain her actions	1	2	3	4	5	6	7	One or more of these factors fully explains her actions

Thank you. You will now be given time as a group to come to your jury verdict.

Appendix G: G*Power screenshot



Appendix H: Study Advert

Participants needed!

Judging Complex Mental Health Problems: Jury Perceptions and Decision Making in a Homicide Case

Participants will form mock juries and watch a trial reconstruction, where the defendant is accused of murder and has a complex mental health problem. You will answer questions about how you feel about the person and reach a jury verdict about their responsibility for the crime.

Participants paid £5

Study duration: 1 hour

FOR FURTHER INFORMATION CONTACT:
J.BAKER3@UEA.AC.UK

Appendix I: Correspondence from Her Majesty's Courts and Tribunals Service regarding early version of study

RE: Psychological research with jury members Data Access Panel Application - Message (HTML)

RE: Psychological research with jury members Data Access Panel Application

Data Access Panel <DataAccessPanel@justice.gov.uk>
To James Baker (MED - Postgraduate Researcher)
Thu 04/10/2018 11:58

You forwarded this message on 07/10/2018 17:00.

Mr Baker

Apologies for the delay but we've been unable to get Business Sponsor Support from HMCTS or Support from MoJ.

MoJ have suggested that you may want to consider the possibility of initially conducting a pilot project, perhaps asking them "If you were asked to remain for a further hour to an hour and a half, for the purposes of participating in a research project, would you agree" to jurors who have just been dismissed at the end of half a dozen trials or so, to gauge the potential for actually achieving the numbers necessary to conduct the mock-trials. This could help to determine whether your research was feasible. There are also concerns around using court premises after a trial and the implications to the court, court users and staff alike.

If you wish to address these concerns and resubmit your application we will follow the DAP process again.

Kind Regards

Justine Cree
DAP Administrator | Analysis & Reporting Team | Finance, Governance & Performance
1st Floor - PP 1.38 | 102 Petty France | London | SW1H 9AJ | DX 152380 Westminster 8

0203 334 4594 / 07798 854816

justine.cree@justice.gov.uk

HM Courts & Tribunals Service

Reduce. Re-use. Re-cycle. Please consider the environment. Help save paper - do you need to print this email?

Appendix J: Ethics panel correspondence, initial feedback and resubmission

Faculty of Medicine and Health Sciences Research Ethics Committee

James Baker

MED

Research & Innovation Services
Floor 1, The Registry
University of East Anglia
Norwich Research Park
Norwich, NR4 7TJ

Email: fmh.ethics@uea.ac.uk

Web: www.uea.ac.uk/researchandenterprise

4 January 2019

Dear James

Title: Judging complex mental health problems: jury perceptions and decision making in a homicide case

Reference: 201819 - 048

The submission of your research proposal was discussed at the Faculty Research Ethics Committee meeting on 13 December 2018.

The Committee were happy to approve your application in principle but have the following concerns which they would like you to address and amend accordingly:

- Recruitment – there is no mention of age in your recruitment criteria and participants also need to be UK nationals.
- Please submit a debrief sheet.
- Will dismissed jury members be compensated for expenses and taking time off work? This needs clarification.
- The trial Judge’s directions to the jury should have more detail and be clearer on the implications of offering each plea. There is little direction on putting a plea of diminished responsibility, other than stating that it is the defence plea.
- Data storage on encrypted memory stick is discouraged, all data should be stored on the UEA servers and password protected.

- Please justify the PIS to the left.

Please write to me once you have resolved/clarified the above issues. I require documentation confirming that you have complied with the Committee's requirements. The Committee have requested that you detail the changes below the relevant point on the text in this letter and also include your amendments as a tracked change within your application/proposal. The revisions to your application can be considered by Chair's action rather than go to a committee meeting, which means that the above documentation can be resubmitted at any time. Please could you send your revisions to me as an attachment in an email as this will speed up the decision making process.

As your project does not have ethics approval until the above issues have been resolved, I want to remind you that you should not be undertaking your research project until you have ethical approval by the Faculty Research Ethics Committee. Planning on the project or literature based elements can still take place but not the research involving the above ethical issues. This is to ensure that you and your research are insured by the University and that your research is undertaken within the University's 'Guidelines on Good Practice in Research' approved by Senate in July 2015.

Yours sincerely

Professor M J Wilkinson

Chair

FMH Research Ethics Committee

Approval following resubmission

Faculty of Medicine and Health Sciences Research Ethics Committee

Research & Innovation Services
Floor 1, The Registry
University of East Anglia
Norwich Research Park
Norwich, NR4 7TJ

Email: fmh.ethics@uea.ac.uk

Web: www.uea.ac.uk/researchandenterprise

James Baker

MED

18 February 2019

Dear James

Title: Judging complex mental health problems: jury perceptions and decision making in a homicide case

Reference: 201819 - 048

Thank you for your response to the recommendations from the FMH Ethics Committee to your proposal. I have considered your amendments and can now confirm that your proposal has been approved.

Please can you ensure that any further amendments to either the protocol or documents submitted are notified to us in advance, and also that any adverse events which occur during your project are reported to the Committee.

Approval by the FMH Research Committee should not be taken as evidence that your study is compliant with GDPR and the Data Protection Act 2018. If you need guidance on how to make your study GDPR compliant, please contact your institution's Data Protection Officer.

Please can you also arrange to send us a report once your project is completed.

Yours sincerely

Professor M J Wilkinson

Chair, FMH Research Ethics Committee