Adult attachment dimensions in people high in ‘borderline’ personality traits and the professionals who work alongside them

By

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List of Abbreviations

AAI	Adult Attachment Interview
AAS	Adult Attachment Scale
aMBI	abbreviated Maslach Burnout Inventory
ASQ	Attachment Styles Questionnaire
BPD	Borderline Personality Disorder
BPQ	Borderline Personality Questionnaire
CAT	Cognitive Analytic Therapy
CBT	Cognitive Behavioural Therapy
CIC	Children in the Community study
D	Depersonalisation
DSM	Diagnostic and Statistical Manual of Mental Disorders
ECR	Experiences in Close Relationships
EE	Emotional Exhaustion
EUPD	Emotionally Unstable Personality Disorder
ICD	International Classification of Diseases
IPDE	International Personality Disorder Examination
IPV	Intimate Partner Violence
MBT	Mentalization Based Therapy

MCMI-III	Millon Clinical Multiaxial Inventory, third edition
MSI-BPD	McClean Screening Instrument for BPD
NCCMH	National Collaborating Centre for Mental Health
NHS	National Health Service
NICE	National Institute for Health and Clinical Excellence
PA	Personal Accomplishment
PAM	Psychosis Attachment Measure
PDQ	Personality Diagnostic Questionnaire
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
PRP	Personal and Relationships Profile
PSQ	Personality Self-Portrait Questionnaire
RQ	Relationships Questionnaire
RSQ	Relationships Styles Questionnaire
SCID-II	Structured Clinical Interview for DSM IV - Personality
SIDP-IV	Structured Interview for DSM-IV Personality Disorders

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I feel it would be remiss to not acknowledge the wider sets of individuals and structures which have enabled me to write this piece of work. This includes the supporters of my supporters. However, I also understand the great privilege which has allowed me this position, privilege which has not been earned but bestowed merely on the basis of my socio-demographic situation and provided life experiences (things which many people, often including those clients we work alongside, have not been provided with).

Declaration

This thesis has not been submitted for any other degree at any other university. It has been prepared under the academic supervision of Dr Tom Patterson (Academic Director, Coventry and Warwick Clinical Psychology Doctorate) and Dr Ian Hume (Senior Lecturer in Clinical Psychology, Coventry and Warwick Clinical Psychology Doctorate). Both supervisors provided support in research design and analysis, offering feedback and comments at each stage of the project. Apart from these stated collaborations, all material presented in this thesis is my own work.

The literature review paper has been prepared for submission to Clinical Psychology Review. The empirical paper has been prepared for submission to Clinical Psychology and Psychotherapy. The final chapter, the reflective paper, has been prepared for submission to Reflective Practice: International and Multidisciplinary Perspectives.

Summary

This thesis consists of three chapters: a literature review, an empirical and a reflective paper. The literature review and empirical papers investigate adult social attachment dimensions in specific samples (those with high levels of 'borderline' traits, and professionals who work alongside these individuals).

The literature review paper aimed to investigate the relationship between a specific operationalised definition of attachment (adult attachment dimensions) and 'borderline' traits. A quantitative analysis of the effect sizes between the variables as well as a narrative synthesis which considers inter-related variables were conducted. Both attachment dimensions were significantly related to 'borderline' traits, with 'attachment anxiety' having a stronger relationship. The results are considered alongside other intra- and interpersonal variables presented in the literature. A descriptive model of the literature is provided and the review, as well as the literature, is critiqued, with future research, clinical and policy directions suggested.

The empirical paper investigated the effect of clinician attachment dimensions and their levels of 'burnout' on their endorsed response to a vignette of a client in crisis. The study employed a questionnaire survey design to measure attachment dimensions and 'burnout' constructs. Bivariate, point-biserial and partial correlations were used to test models where 'burnout' constructs mediated the relationship between attachment and endorsed 'response urgency' to the vignette. Greater levels of urgency among staff with high 'attachment anxiety' were suppressed by greater levels of 'depersonalisation'. The findings are discussed in the context of previous healthcare and childcare research and the limitations of the research design. Recommendations for clinicians, policy makers and researchers are suggested.

The reflective paper uses a repertory grid technique to explore the way I construe the role of researcher in clinical psychology. The grid was administered at two time-points and changes through the thesis research process are discussed with reference to my values and epistemological position.

Chapter One

Adult attachment dimensions and ‘borderline’ traits: a systematic review and meta-analysis

Word count (excluding titles, tables, references and footnotes): 7970

Paper prepared for submission to Clinical Psychology Review (see Appendix A for notes to contributors)

1.1. Highlights

- Provides evidence for the relationship between adult attachment dimensions and ‘borderline’ traits.
- Literature highlights a number of mediating and associated intrapersonal variables in the attachment-‘borderline’ relationship.
- Current literature limited by the dearth of research investigating the influence of environmental/material variables in the relationship.

1.2. Abstract

The present review aimed to critically evaluate the relationship between adult attachment dimensions and ‘borderline’ traits. Study findings were synthesised both qualitatively and quantitatively (using meta-analysis). Meta-analytic results identified both attachment dimensions as significantly related to ‘borderline’ traits. ‘Attachment anxiety’ had a stronger relationship. Narrative synthesis identified a number of mediation models including attachment dimensions and ‘borderline’ traits, as well as a role for the two constructs in relational difficulties. The validity and clinical utility of attachment dimensions for differential diagnosis is discussed. While the relationship between attachment constructs and ‘borderline’ traits has been well established, the present review builds on this by identifying the relationship within a strictly operationalised definition of attachment. Limitations of the identified studies and review methodology (particularly pertaining to homogeneity of studies in the meta-analysis) are considered alongside recommendations for future research. Recommendations for

intervention at different levels is discussed, both for clinicians and policy makers.

1.3. Keywords

Borderline; attachment dimensions; meta-analysis

1.4. Introduction

The term ‘borderline’ was coined by psychoanalysts to describe traits which fell on the border between neurosis and psychosis. Kernberg (1968) provided one of the first operational definitions when he described the ‘Borderline Personality Organisation’. This was a personality characterised by primitive defense mechanisms such as splitting and projective identification. Kernberg recognised early abandonment and maltreatment played a causal role in the development of ‘borderline’ traits.

Descriptions of ‘borderline’ traits have been further articulated in the International Classifications of Diseases (ICD) (under the label ‘Emotionally Unstable Personality Disorder’, EUPD) and the Diagnostic and Statistical Manual of Mental Disorders (under the label of ‘Borderline Personality Disorder’, BPD) projects. In the Diagnostic and Statistical Manual of Mental Disorders (5th Edition, DSM5) the American Psychiatric Association (2013) stated that BPD is characterised by “a pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity” (p.663).

The definitions provided in DSM5 and ICD-10 (World Health Organization, 1992) are not uncontroversial. Both provide a categorical explanation, wherein BPD is viewed as a pathological disease state which individuals either have or do not have. This is increasingly inconsistent with psychological personality theories which understand the constructs dimensionally. This criticism has been considered by both project teams. Indeed, the DSM5 includes an appended dimensional model of personality difficulty. It is understood the forthcoming ICD-11 will use a fully dimensional model (Tyrer, Reed & Crawford, 2015).

However, a potentially more unassailable criticism of both projects has been the lack of any explanatory model for BPD (or indeed any of the other proposed 'mental disorders'). While DSM5 does state the increased incidence of childhood maltreatment in people receiving a diagnosis, it does not explain how the two phenomena may be related. In addition, while the DSM5 does cite heritability studies as providing evidence for genetic vulnerability it fails to explain how environmental factors can be controlled for in such studies (including *in utero* experiences).

DSM5 does make clear the centrality of people's attempts to avoid and escape experiences of abandonment. It is on the basis of this experience and the relational element within most of the described phenomena that an Attachment Theory understanding of 'borderline' traits has developed.

Bowlby (1969) proposed that attachments formed in early infancy provide an evolutionary survival strategy through care elicitation. The nature of these attachments go on to serve as a template for future relationships, templates represented as 'Internal Working Models'. Ainsworth, Blehar, Waters and Wall (1978) described a number of categorical attachment patterns in infancy. While Bowlby's original theory was based on mother-infant interaction, it was conceived as a life course model. This focus was more fully developed by Hazan and Shaver (1987), and later elaborated by Bartholomew (1990). These authors identified different adult attachment styles occurring in romantic relationships, which were derived from childhood styles and experiences. Adults were classified as 'secure' ("comfortable with intimacy"), 'dismissing' ("denial of attachment"), 'preoccupied' ("overly dependent"), and 'fearful' ("fear of attachment"), (Bartholomew, 1990, p.163).

A range of other categorical understandings have arisen since, reflecting significant diversity across adult attachment theories (e.g. Crittenden & Claussen, 2003; George, Kaplan & Main, 1985). A number of these theories have been applied to try to understand 'borderline' traits. These models are often based on the concept of people falling into specific categorical attachment styles (Agrawal, Gunderson, Holmes, & Lyons-Ruth, 2004; Fonagy, Target, Gergely, Allen, & Bateman, 2003). Agrawal and colleagues provided a review of the research, but reported that its findings were limited by the diverse manner in which attachment had been operationalised.

In contrast to and supplementing categorical models, a two dimensional model of adult attachment has been proposed by Bartholomew (1990). These two dimensions are referred to as ‘model of self’/‘attachment anxiety’ and ‘model of other’/‘attachment avoidance’. The different terms for each dimension are largely synonymous, for the purpose of the present paper, the terms ‘anxiety’ and ‘avoidance’ will be used. The two constructs are orthogonal to one another. In a large-scale questionnaire-based study of adult attachment dimensions by Brennan, Clark and Shaver (1998), factor analysis revealed a two dimensional model best fit the data: ‘attachment anxiety’ (high levels being associated with high need for care from others) and ‘attachment avoidance’ (high levels being associated with self-reliance and avoidance of care from others). In this sense, high levels of ‘attachment anxiety’ indicate low expectations on self for care and high levels of ‘attachment avoidance’ represent low expectations on others for care.

These dimensions correspond to adult attachment categories. Low scores on both dimensions represent a ‘secure’ style. High scores on ‘attachment anxiety’, but low scores on ‘avoidance’ indicate a ‘preoccupied’ style. The opposite patterns suggests a ‘dismissing’ style, while high scores on both dimensions indicates a ‘fearful’ style. Dimensional and categorical models are not inconsistent. However, Fraley and Waller (1998), using taxometric analysis, identified that adult attachment data better represented latent

dimensions rather than latent types/categories. That is, individual differences in attachment are better understood as continuous rather than nominal.

There is evidence that attachment representations may have an explanatory role in understanding 'borderline' experiences (Agrawal et al., 2004). However, attachment has not been consistently operationalised in the research literature. To better understand the relationship between attachment and 'borderline' experiences a review could consider one specific operational definition of attachment. Of relevance to this, there is evidence that the adult attachment dimensions proposed by Brennan and colleagues (1998) are a more valid form of measurement than traditional categorical models.

When aiming to consider the relationship between attachment dimensions and 'borderline' traits researchers are faced with the further dilemma of 'borderline' operationalisation. It is increasingly understood that, like attachment insecurity, personality difficulties also occur on a dimension. Rather than individuals having 'borderline' traits or not, it is more valid to consider the extent of the traits. For this reason, it would be acceptable and useful to draw on all empirical literature investigating the attachment-'borderline' relationship: literature using both clinical and non-clinical samples. Diagnostic manuals currently provide clinicians and service users with a clear description of difficulties. However, these descriptions do not provide explanation. To further our understanding in this area, the ability of

this research to provide meaningful explanation and to inform intervention needs to be considered.

1.4.1. Aim

The present review aims to critically evaluate existing empirical evidence regarding the relationship between attachment dimensions and 'borderline' traits. In line with this aim, two specific questions will be asked:

1) *What is the relationship between 'borderline' traits and attachment dimensions?*
2) *What is the clinical utility of attachment dimensions for understanding 'borderline' traits?*

1.5. Method

1.5.1. Literature search

1.5.1.1. Search process

A systematic literature search was conducted to find empirical studies investigating the relationship between 'borderline' traits and attachment dimensions, with the final formal database search conducted on 23rd October 2015. Databases hosting journals with a psychology and/or mental health focus were searched: PsychINFO, MedLine, ASSIA and Web of Knowledge. Reference lists and citation reports of papers selected for review were manually searched for further literature.

1.5.1.2. Search terms

Table 1 presents the main concepts and synonyms used to conduct the search. An initial search revealed that the term “attachment dimensions” was too narrow and omitted useful literature. Therefore the broader term, “attachment”, was used. “Model of self” and “model of other*” were also searched as synonyms to “attachment anxiety” and “attachment avoidance”. In addition, the name and abbreviations of the two main measures of attachment dimensions (“Experiences in Close Relationships” and the revised version of the measure) were searched as synonyms.

The second concept search was “borderline”. The two diagnostic labels (“borderline personality disorder” and “emotionally unstable personality disorder”) and their abbreviations were searched. Additionally, the more trait focused “emotionally unstable” was also searched. Article titles and abstracts were searched for the two concepts.

Table 1: *Key search terms*

Main concept	Synonyms	Location
Attachment	"model of self"	Title
	"model of other*"	Abstract
	"Experiences in Close Relationships"	
	ECR	
	ECR-R	
'Borderline'	"borderline personality disorder"	Title
	BPD	Abstract
	"emotionally unstable"	
	"emotionally unstable personality disorder"	
	EUPD*	

1.5.1.3. Search strategy

The search strategy employed Boolean operators. Concept synonyms were separated by the OR operator and the two concepts were separated by AND. The * operator was used with "model of other*" where plural was possible and EUPD* where subtypes are sometimes appended.

1.5.2. Selection criteria

Search results underwent screening according to inclusion and exclusion criteria (Table 2). Initially, duplicates were removed and titles and abstracts were screened to check that articles met the inclusion/exclusion criteria. Only peer-reviewed articles were included to ensure quality of studies included in

the present review. Articles which were published before attachment dimensions were fully operationalised (Griffin & Bartholomew, 1994) were excluded, as were non-English language texts.

Articles where the full-text was accessible were then fully screened. Articles where the relationship between attachment dimensions and 'borderline' traits were discussed were included. Any articles where attachment dimensions were only used to control for difference, and where the relationship was not discussed, were excluded.

Table 2: ***Inclusion/Exclusion criteria***

Criteria	**Inclusion**	**Exclusion**
Attachment variable	Measuring 'attachment avoidance' and 'attachment anxiety' dimensions	Attachment dimensions are only used to control for effect
Relationship between variables	Relationship between attachment dimensions and 'borderline' traits discussed	Where the relationship between the two variables is not discussed
Document type	Peer-reviewed journal article	Any non-peer-reviewed journal article (e.g. book chapter, unpublished thesis, conference proceedings etc.)
Time	Post-1994	Pre-1994
Language	Full-text English language	Non-English language
Accessibility	Copy of article accessible via institutional library/inter-library loan	Not accessible to principal researcher

1.5.3. Quality assessment procedure

Caldwell, Henshaw and Taylor's (2011) quality assessment framework was used to screen the quality of the 21 selected studies. It was chosen because it has been designed to assess all aspects of a paper and provides concrete descriptors to aid inter-rater reliability. Caldwell and colleagues' tool is widely used in health literature reviews (e.g. Hobbs, 2015; Rodolpho, Hoga, Reis-Queiroz & Jamas, 2015). The framework consists of 16 items. Each quality criterion was rated on a three point scale (0 = not met, 1 = partially met, 2 = fully met). Percentage compliance with the criteria was then calculated.

Article ratings can be found in Appendix B. Following quality assessment, one paper, with a criteria compliance of 43.8%, was removed (Ling & Qian, 2010). It did not include an up-to-date review of the literature and failed to comprehensively display or discuss the findings.

All selected studies were assessed. A second reviewer independently assessed two of the papers (Bartz et al., 2011; MacDonald, Berlow, & Thomas, 2013) to test rating reliability. Analysis of inter-rater reliability indicated 'substantial' agreement (kappa=0.68) between raters (Landis & Koch, 1977).

1.5.4. Data extraction

A data extraction form was developed. Appendix C shows a completed form. The form included full references, aims/hypotheses, study design, measures,

pertinent results, clinical, theoretical and research implications, study limitations, quality assessment and space to record information pertinent to the current research questions.

1.5.5. Data synthesis and statistical analysis

1.5.5.1. Quantitative synthesis

To answer question one meta-analyses were conducted examining the effect of the relationship between 'borderline' variables and attachment dimension variables. Full details of the meta-analytic procedure are provided in Appendix T. Firstly effect sizes were extracted (or estimated where not reported in the full-text). For between group difference designs (e.g. using t-tests) Cohen's *d* was calculated. For correlational designs, Pearson's *r* was calculated. As *d* is sensitive to differences of sample size (Rosenthal, 1991), all effect sizes were converted into *r* for analysis. Each *r* was then converted into Fisher's *r* to create a normal distribution. The individual Fisher's *r* scores were summed and converted back to *r* to provide a combined effect size for the studies. The significance of the effect was calculated using the Stouffer method. A standard *Z* score was calculated for each study's effect. The sum of these *Z* scores was divided by the square root of the number of comparisons. This provided a Stouffer *Z* statistic, representing the statistical significance of the combined effect.

There was heterogeneity of sample characteristics used across the thirteen studies. Thus tests of homogeneity were conducted to consider whether,

despite the heterogeneity of samples, the effect remained static. In this way, the universality of effect across populations could be tested. This was conducted by computing a chi-square statistic, analysing variance in the effect sizes.

1.5.5.2. Narrative synthesis

Study results of the 20 records were also qualitatively examined. Pertinent findings and their implications were thematically organised according to concepts which helped to answer the research questions.

1.6. Results

1.6.1. Classification of studies

Study selection followed the 'Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA)' guidelines. The process of study selection is set out in the PRISMA flow diagram (Appendix D). The literature search identified 1534 records. 572 records were identified as duplicates and removed. Initial title and abstract screening excluded 901 records, leaving 61 for full-text screening. Of these, 41 records were excluded due to not meeting the inclusion criteria or failing to be of sufficient quality to ensure reliability and validity of results. The remaining 20 studies were included for narrative synthesis. Citation and reference searches of these papers returned no further literature. 12 of these papers (one paper reporting two studies) reported sufficient statistical analyses to be included for quantitative synthesis. Throughout, the quality of the research was assessed and is

considered across the results and summarised in an appraisal of research limitations.

1.6.2. Characteristics of studies

The characteristics of the included studies are detailed in Table 3.

1.6.2.1. Location

The majority of studies were conducted in North America, with 13 from the USA and two from Canada. Of the remaining studies, two were conducted in Australia, one in the UK and two in other parts of Europe.

1.6.2.2. Design

All but two of the studies used a cross-sectional design, employing a questionnaire-based survey methodology. Bartz and colleagues (2011) was an experimental design. There were two independent variables, each with two levels (received BPD diagnosis versus control, and administered oxytocin versus placebo). The final study (Crawford, Cohen, Chen, Anglin & Ehrensaft, 2009) was a longitudinal study investigating the impact of a range of variables on the course of 'borderline' traits.

1.6.2.3. Sample

Six studies used a sample of people who had received a diagnosis of BPD compared to a control sample (Bartz et al., 2011; Bouchard, Godbout &

Sabourin, 2009a; Bouchard, Sabourin, Lussier & Villeneuve, 2009b; Deborde et al., 2012; Minzenberg, Poole & Vinogradov, 2006; Minzenberg, Poole & Vinogradov, 2008). Four studies used a sample of people from psychiatric settings who had received diverse diagnoses. One of these samples also included participants from the general population (Beeney, et al., 2015), while the other three only included people in contact with psychiatric services (Fossati et al., 2003; MacDonald et al., 2013; Riggs et al., 2007). Three studies used an undergraduate student sample (Boldero et al., 2009; Meyer, Pilkonis & Beevers, 2004; Scott, Levy & Pincus, 2009). Three studies recruited forensic samples. Two of these were men who had committed intimate partner violence (Lawson & Brossart, 2013; Mauricio, Tein & Lopez, 2007), while the other recruited females serving a custodial sentence (McKeown, 2014). Two studies used a sample consisting only of people who had received a diagnosis of BPD (Critchfield, Levy, Clarkin & Kernberg, 2008; Levy, Meehan, Weber, Reynoso & Clarkin, 2005). One study compared people who had received a diagnosis of BPD and people with a diagnosis of 'major depressive disorder' (Hulbert, Jennings, Jackson & Chanen, 2009). The final study recruited children in the general population and collected data longitudinally (Crawford et al. 2009).

Sample sizes across studies were variable. Studies with student samples tended to have larger sample sizes. Bartz and colleagues (2011) had the smallest sample size in the review, with 27 participants. Scott and colleagues (2009) had the largest sample, recruiting 1401 undergraduate students.

1.6.2.4. Measure of attachment

11 of the studies (Bartz et al., 2011; Boldero, et al., 2009; Bouchard et al., 2009a; Bouchard et al., 2009b; Critchfield et al., 2008; Hulbert et al., 2009; Mauricio et al., 2007; Meyer et al., 2004; Minzenberg et al., 2006; Minzenberg et al., 2008; Riggs et al., 2007) measured attachment dimensions using the Experiences in Close Relationships (ECR) questionnaire (Brennan, Clark & Shaver, 1998). The ECR is a 36-item questionnaire. Items are rated on a 7-point scale on the extent to which they described participants' experiences. The ECR has high Cronbach's alpha scores for each of the two scales.

Four of the studies (Beeney et al., 2015; MacDonald et al. 2013; McKeown, 2014; Scott et al., 2009) used the revised version of the ECR (ECR-R) (Fraley, Waller & Brennan, 2000). Again, this scale has 36 items rated the same as the ECR. The ECR-R was developed from the same 300 questions as the ECR. Fraley and colleagues used Item Response Theory in an attempt to improve the validity of the questionnaire. Like the ECR, the ECR-R has high Cronbach's alpha scores.

Of the four remaining studies each used a different measure. Crawford and colleagues (2009) used a measure specifically developed for the research, the Children in the Community (CIC) attachment scales (Crawford et al., 2006). The CIC attachment scales have convergent validity with the ECR.

Deborde and colleagues (2012) used the Relationships Style Questionnaire (RSQ) (Bartholomew & Horowitz, 1991). The RSQ has demonstrated good construct, convergent and discriminant validity (Bartholomew & Horowitz, 1991). Fosatti and colleagues (2003) used the Attachment Styles Questionnaire (ASQ) (Feeney, Noller & Hanrahan, 1994). While traditionally used to measure a categorical attachment model, Fosatti and colleagues subjected the data to canonical correlation, from which two canonical variates representing 'attachment anxiety' and 'attachment avoidance' arose. Finally, Lawson and Brossart (2013) used the Adult Attachment Scale (AAS) (Collins & Read, 1990). The AAS consists of three subscales: comfort with depending on others, comfort with closeness and 'attachment anxiety'. The first two subscales can be combined to form a single 'attachment avoidance' scale.

The final study, Levy and colleagues (2005), uses three attachment measures: the ECR, RSQ and the Relationships Questionnaire (RQ) (Borman & Cole, 1993). The RQ is a brief measure consisting of four vignettes, each representing four categorical attachment styles. Participants are asked to choose which best represents them and rate each on a 7-point scale according to how much they feel they are consistent with themselves. Levy and colleagues used the items from these four measures to conduct a principal components analysis to test the two factor model of attachment dimensions.

1.6.2.5. Measure of 'borderline'

Nine studies measured 'borderline' traits as a nominal variable comparing people receiving a diagnosis of BPD versus those who did not. Six of these studies (Bartz et al., 2011; Bouchard et al., 2009a; Bouchard et al., 2009b; Hulbert et al., 2011; Minzenberg et al., 2006; Minzenberg et al. 2008) classified participants using the Structured Clinical Interview for DSM-IV Personality (SCID-II) (First, Spitzer, Gibbon, Williams & Benjamin, 1994). Two studies, Critchfield and colleagues (2008) and Levy and colleagues (2005), nominally classified participants using the International Personality Disorder Examination (IPDE) (Loranger, 1999).

One other study categorised participants diagnostically. Deborde and colleagues (2012), used the Structured Interview for DSM-IV Personality Disorders (SIDP-IV) (Pfohl, Blum & Zimmerman, 1997). The SCID-II, IPDE and SIDP-IV are all administered by trained raters with their items directly corresponding to DSM-IV diagnostic criteria. All three interviews have good psychometric properties. Deborde and colleagues also measured 'borderline' traits dimensionally. Dimensional scores were calculated by summing SIDP-IV item scores, with each item being rated on a four-point scale.

The other 11 studies measured 'borderline' traits solely using dimensional scales. Beeney and colleagues (2015) constructed a dimensional scale by summing scores from the SIDP-IV. Two studies (Lawson & Brossart, 2013; Riggs et al., 2007) provided dimensional scores using the Millon Clinical

Multiaxial Inventory, third edition (MCMI-III) (Millon, 1994). The MCMI-III has good psychometric properties and its scales correspond to DSM-IV. Two studies used the Personality Diagnostic Questionnaire (PDQ). Crawford and colleagues (2009) adapted items for adolescents from the original PDQ (Hyler, Rieder, Spitzer & Williams, 1982), while Mauricio and colleagues (2007) used the revised version (PDQ-R) (Hyler et al., 1988). The PDQ has good psychometric properties. While it was not designed as a diagnostic tool, the scales do correspond with diagnostic categories in the DSM-IV. Two studies used elements of the SCID-II to record dimensional 'borderline' scores. Fossati and colleagues (2003) created severity scores by summing criteria, while Meyer and colleagues (2004) used the SCID-II screening questionnaire.

The four remaining studies each used different measures. Boldero and colleagues (2009) measured 'borderline' traits using the Borderline Personality Questionnaire (BPQ) (Poreh et al., 2006). The BPQ was developed using diagnostic criteria from the DSM-IV. Scores on the BPQ are highly correlated with the SCID-II screening questionnaire. MacDonald and colleagues (2013) used the Personality Self-Portrait Questionnaire (PSQ) (Oldham & Morris, 1995). PSQ scales correspond to the DSM-IV diagnoses and scores correlate with ratings on the SCID-II and PDQ. McKeown (2014) measured 'borderline' traits using the Personal and Relationships Profile (PRP) (Straus, Hamby, Boney-McCoy & Sugarman, 1999). The PRP was originally designed for use in research on intimate partner violence. The borderline personality subscale measures traits present in DSM-IV.

To measure ‘borderline’ traits, the final study (Scott et al., 2009) used items from the IPDE screening questionnaire and the McClean Screening Instrument for BPD (MSI-BPD) (Zanarini et al., 2003). The items were rated on a four-point scale and summed to provide a dimensional score. The MSI-BPD has good psychometric properties.

Table 3: ***Characteristics of the research studies***

First author (Quality checklist score)	Year	Country	Sample (N)	Percent female	Sample frame	Study design	'Borderline' measure	Attachment measure	Key findings
Bartz (71.9%)	2011	USA	14 (clinical) 13 (control)	71% (BPD) 46% (control)	Clinical: diagnosed with BPD. Control: no lifetime axis I or II diagnoses.	Experimental (between groups)	SCID-II	ECR	Diagnosis interacted with oxytocin administration to impact on trust and cooperation.
Beeney (81.3%)	2015	USA	150	65%	Half recruited from outpatient psychiatric departments, half recruited from non-clinical community population.	Cross-sectional (within group)	SIDP-IV	ECR-R	Social cognition mediated the relationship between 'attachment anxiety' and 'borderline' traits.
Boldero (71.9%)	2009	Australia	101 (study 1) 131 (study 2)	70% (study 1) 71% (study 2)	Student sample	Cross-sectional (within group)	BPQ	ECR	'Rejection sensitivity' and 'negative self-beliefs' mediated relationship between attachment dimensions and 'borderline' traits.
Bouchard (a) (71.9%)	2009	Canada	34 (clinical) 34 (control)	100%	Clinical: diagnosed with BPD. Control: non-clinical group matched on educational attainment.*	Cross-sectional (between groups)	SCID-II - French-Quebec version	ECR - French Canadian version	'Attachment anxiety' mediated the relationship between sexual attitudes and 'borderline' traits.

Bouchard (b) (68.8%)	2009	Canada	35 couples (clinical) 35 couples (control)	50%	Clinical: heterosexual couples where the female partner has a diagnosis of BPD. Control: non-clinical couples matched on age, education and income.*	Cross-sectional (between groups)	SCID-II - French-Quebec version	ECR - French Canadian version	Partners of women with BPD diagnosis had higher scores on attachment dimensions.
Crawford (87.5%)	2009	USA	766	Not stated	Children in the Community (CIC) cohort sample.	Longitudinal	Measure adapted from Personality Diagnostic Questionnaire (PDQ) and items corresponding to DSM-IV criteria.	CIC attachment measures	Impact of childhood abuse on trajectory of 'borderline' traits was partially mediated by attachment dimensions.
Critchfield (81.3%)	2008	USA	92	92%	Diagnosed with BPD	Cross-sectional (within group)	IPDE	ECR	Combination of specific attachment dimensions and 'borderline' traits predicts different forms of aggression.
Deborde (84.4%)	2012	France, Belgium and Switz.	54 (clinical) 51 (control)	100%	Clinical: adolescents meeting at least 5 of the 9 DSM-IV diagnostic criteria for BPD. Control: school and university students socioeconomically matched.	Cross-sectional (within and between groups)	SIDP-IV	RSQ	Relationship between 'attachment anxiety' and 'borderline' traits partially mediated by alexithymia.

Fosatti (78.1%)	2003	Italy	487	62%	Mixed psychiatric sample	Cross-sectional (within group)	SCID-II	ASQ	'Attachment anxiety' related to 'borderline' traits, but also related other personality difficulties.
Hulbert (68.8%)	2011	Australia	30 (BPD) 30 (MDD)	80% (BPD) 73.3% (MDD)	Young adults (15-25), one group with Major Depressive Disorder (MDD) diagnosis and one with BPD diagnosis.	Cross-sectional (between groups)	SCID-II	ECR	Group diagnosed with BPD did not significantly differ from group diagnosed with 'major depressive disorder' on attachment dimensions and a number of 'early maladaptive schemas'
Lawson (87.5%)	2013	USA	132	0%	Males on probation for Intimate Partner Violence offences.	Cross-sectional (within group)	MCMI-III	AAS	Relationship between attachment dimensions and 'intimate partner violence' better mediated by 'hostile dominant interpersonal problems' than 'borderline' and associated personality difficulties.
Levy (78.1%)	2005	USA	91	Not stated	Diagnosed with BPD	Cross-sectional (within group)	IPDE	RQ, RSQ and ECR	Sample with diagnoses of BPD show similar factor structure on attachment measures to normative samples.

MacDonald (81.3%)	2013	USA	357	55%	Mixed psychiatric sample	Cross-sectional (within group)	PSQ	ECR-R	'Borderline' traits related to attachment dimensions, as are other 'personality disorder' traits.
Mauricio (81.3%)	2007	USA	192	0%	Court ordered attendees at a 'community batterer intervention programme'	Cross-sectional (within group)	PDQ-R	ECR	'Borderline' and 'antisocial' traits mediate relationship between attachment dimensions and 'intimate partner violence'.
McKeown (93.8%)	2014	UK	92	100%	Female prisoners, 55% charged with violent and 45% with non-violent offences.	Cross-sectional (within group)	PRP	ECR-R	'Borderline' and 'antisocial' traits mediated the relationship between attachment dimensions and being a victim of 'intimate partner violence'.
Meyer (81.3%)	2004	USA	176	84%	Student sample	Cross-sectional (within group)	SCID-II screening questionnaire	ECR	The relationship between 'borderline' and 'avoidant traits and neutral face appraisal was mediated by 'attachment anxiety'.

Minzenberg (81.3%)	2006	USA	40 (clinical) 25 (control)	88% (clinical) 89% (control)	Clinical: Diagnosed with BPD Control: Non-clinical, matched on age, sex, race, parental education and employment.	Cross-sectional (within group and between groups)	SCID- II	ECR	'Attachment anxiety' and 'attachment avoidance' mediate the relationship between different forms of child maltreatment and 'borderline' traits.
Minzenberg (84.4%)	2008	USA	43 (clinical) 26 (control)	88% (clinical) 89% (control)	Clinical: Diagnosed with BPD Control: Non-clinical, matched on parental education and employment.	Cross-sectional (between groups)	SCID II	ECR	In a group diagnosed with BPD, 'attachment anxiety' was predicted by interaction of childhood abuse and neurocognitive difficulties; 'attachment avoidance' was predicted by independent influence of childhood abuse and neurocognitive difficulties.
Riggs (87.5%)	2007	USA	80	93%	Mixed psychiatric sample	Cross-sectional (within group)	MCMI-III	ECR	Attachment dimensions predicted 'borderline' traits, where adult social attachment styles and adult representations of childhood attachment did not.

Scott (87.5%)	2009	USA	1401	67%	Student sample	Cross-sectional (within group)	MSI-BPD and IPDE screening questionnaire	ECR-R	Relationship between 'attachment anxiety' and 'borderline' traits was fully mediated by 'trait negative affect' and 'impulsivity'.

*Both papers conducted different analyses on the same sample. The papers will be treated as one sample for the purpose of the meta-analysis.

1.6.3. Quantitative synthesis

1.6.3.1. 'Attachment anxiety'

Effect sizes, Fisher's *r* (*Zr*) and Stouffer *Z* for the 13 studies included in the analysis are presented in Table 4. The analysis gave a mean effect size *r* of .52 with a corresponding Stouffer *Z* of 19.13, $p < .001$. However, there was significant heterogeneity of effect sizes: $\chi^2_{(12)} = 191.93$, $p < .001$.

Table 4: '*attachment anxiety' study statistics for meta-analysis*

Study	***r***	***Zr***	***Z***
Bartz	0.78	1.05	4.05
Beeney	0.47	0.51	5.76
Boldero (Study 1)	0.56	0.63	5.63
Boldero (Study 2)	0.57	0.65	6.52
Bouchard (a)	0.62	0.73	5.19
Deborde	0.30	0.31	3.07
Fossati	0.41	0.44	9.05
Lawson	0.31	0.32	3.56
MacDonald	0.43	0.46	8.09
Mauricio	0.57	0.65	7.90
McKeown	0.65	0.78	6.23
Meyer	0.45	0.48	3.92
Scott	0.50	0.54	18.57

1.6.3.2. 'Attachment avoidance'

Test statistics for 'attachment avoidance' are presented in Table 5. Overall, effect size *r* was .30 with a corresponding Stouffer *Z* of 12.96, $p < .001$.

However, a test of heterogeneity revealed that effect sizes across these studies were significantly different: $\chi^2_{(12)} = 58.00$, $p < .001$.

Table 5: '*attachment avoidance' study statistics for meta-analysis*

Study	***r***	***Zr***	***Z***
Bartz	0.65	0.78	3.38
Beeney	0.33	0.34	4.04
Boldero (Study 1)	0.18	0.18	1.81
Boldero (Study 2)	0.17	0.17	1.95
Bouchard (a)	0.52	0.58	4.36
Deborde	0.12	0.12	0.21
Fossati	0.32	0.33	7.06
Lawson	0.41	0.44	4.71
MacDonald	0.20	0.20	3.74
Mauricio	0.28	0.29	3.88
McKeown	0.26	0.27	2.49
Meyer	0.13	0.13	1.13
Scott	0.21	0.22	7.97

With no clear theoretical grounds for removal of studies from these analyses to resolve heterogeneity issues, it would appear that the differing effect sizes across these studies are due to differences in sampling. Inspection of homogeneity statistics indicated that the large sample used in Scott and colleagues (2009) influenced overall homogeneity. Therefore, the results of these research syntheses should be interpreted cautiously.

1.6.4. Narrative synthesis

1.6.4.1. Psychological mediators

The studies proposed a number of other psychological constructs as potential mediators between attachment dimensions and 'borderline' traits. Beeney and colleagues (2015) used confirmatory factor analysis to establish latent social cognitive factors. Their analysis of wide ranging questionnaires produced three latent factors: 'identity diffusion', 'self-other boundaries', and 'mentalization'[1]. Structural equation modelling identified that 'self-other boundaries' and 'mentalization' mediated the relationship between 'attachment anxiety' and 'borderline' traits. The weaker relationship between 'attachment avoidance' and 'borderline' traits was not mediated by social cognition.

In addition to social cognition, personality dimensions were also implicated in the mediation of attachment dimensions and 'borderline' traits. Deborde and colleagues (2012) showed 'alexithymia' (cognitive and affective deficits in emotion processing) to mediate the relationship between 'attachment anxiety' and 'borderline' traits. Scott and colleagues (2009) found that the more established personality dimensions, 'trait negative affect' and 'impulsivity' also mediated the relationship between 'attachment anxiety' and 'borderline' traits. Boldero and colleagues (2009) identified the role of 'rejection sensitivity' and 'negative self-beliefs' in fully mediating the

[1] "Mentalizing is the process by which we make sense of each other and ourselves, implicitly and explicitly, in terms of subjective states and mental processes." (Bateman & Fonagy, 2010).

‘borderline’-‘attachment anxiety’ relationship, and partially mediating the relationship with ‘attachment avoidance’.

The research suggests that the influence of ‘attachment anxiety’ on ‘borderline’ traits may occur through social cognition, emotion processing and personality characteristics. It is likely that early experiences leading to the development of ‘attachment anxiety’, e.g. inconsistency and rejection, may also contribute to personality characteristics such as ‘rejection sensitivity’. However, it is possible the relationship is non-recursive and a complex mix of direct experiences and those evoked due to attachment behaviours may contribute to the personality development. Indeed, Beeney and colleagues (2015) suggest the hyper-dependency on others, observed in high ‘attachment anxiety’, is likely to lead to a lack of experiences of seeing the other as separate to the self. These associated difficulties (e.g. ‘rejection sensitivity’ or problems with social cognition) were then observed in groups with greater ‘borderline’ traits.

The reviewed research failed to provide clear psychological mediators for any possible ‘attachment avoidance’-‘borderline’ relationship. Studies tended to show ‘attachment avoidance’ to have a less significant relationship than ‘attachment anxiety’.

1.6.4.2. Environmental mediators

Two studies considered the impact of early trauma. Crawford and colleagues (2009) showed the relationship between childhood abuse and ongoing 'borderline' traits in adulthood was mediated by 'attachment anxiety' measured in late adolescence. They suggest that their data showed 'attachment anxiety' maintained 'borderline' traits in those who had experienced childhood abuse, where otherwise it may have dissipated.

Additionally, Minzenberg and colleagues (2006) found attachment dimensions in a sample with BPD diagnoses were related to childhood trauma. Minzenberg and colleagues identified separate pathways for the two dimensions. 'Attachment avoidance' was predicted by childhood abuse and neglect generally. Higher levels were associated with greater distancing in interpersonal relationships. In contrast to this, 'attachment anxiety' was predicted by only childhood abuse, and most significantly by childhood sexual abuse. Higher levels were associated with more 'clinging' in relationships.

In summary, the relationship between childhood trauma and 'borderline' traits is mediated by attachment dimensions. More specifically, childhood maltreatment in general is related to a mistrust of others and denial of dependence, leading to distancing in relationships. Child sexual abuse is associated with a negative model of self and a need for support from others,

leading to a ‘clinging’ interpersonal style, often identified in people with ‘borderline’ traits.

1.6.4.3. Neurochemical and neurocognitive factors

Two studies (Bartz et al. 2011; Minzenberg et al., 2008) provided evidence of a neurochemical/neurocognitive effect. Bartz and colleagues showed that oxytocin (often seen as an affiliative neurochemical) increased cooperation and trust in a non-clinical sample, but decreased it in a sample with BPD diagnoses (although this was non-significant). However, their study identified heterogeneity in ‘attachment avoidance’ among the clinical sample. Findings showed that when both dimensions were high, trust and cooperation was impeded, but when only ‘attachment anxiety’ was high trust and cooperation were not impeded. These findings suggest that attachment dimensions vary across those with high levels of ‘borderline’ traits and that variance in how avoidant individuals are of intimacy relates to differential effects of oxytocin on pro-social behaviour.

Minzenberg and colleagues (2008) found evidence of neurocognitive differences between those diagnosed with BPD and a non-clinical sample: significantly weaker short-term recall and executive functioning performance. Within the BPD sample, ‘attachment anxiety’ was predicted by an interaction of short-term recall and childhood abuse, while ‘attachment avoidance’ was predicted independently by childhood abuse and executive functioning. This indicates that among people with ‘borderline’ traits, high ‘attachment

avoidance' is related to cortical pathology (the seat of executive functioning), while high 'attachment anxiety' is associated with subcortical pathology (the seat of memory). This suggests that variation in 'attachment avoidance' in the sample is related to differences in abuse severity and cognitive control.

These studies indicate that attachment dimension scores in those with high levels of 'borderline' traits are associated with neurochemical and neurocognitive differences. In addition, variation in 'attachment avoidance' in the sample is likely to be related to differences in oxytocin effect and neurocognitive abilities. It is possible these differences contribute to heterogeneity of presentation among those with high levels of 'borderline' traits.

1.6.4.4. Interpersonal relationships

A number of studies investigated the impact of attachment dimensions and 'borderline' traits on interpersonal and relational factors. In a student sample, Meyer and colleagues (2004) found greater 'borderline' and 'avoidant' personality traits were associated with more negative attraction appraisals of faces. This effect was fully mediated by 'attachment anxiety'. An interaction between higher levels of 'borderline' and 'avoidant' personality traits and 'attachment anxiety' related to higher levels of disliking neutral faces.

Two studies (Bouchard et al., 2009a; Bouchard et al., 2009b) investigated the impact of attachment dimensions on romantic relationships. In a sample

of women in heterosexual relationships, Bouchard and colleagues (2009a) found that women with a BPD diagnosis reported higher levels of feeling 'pressure to engage in sex'. This relationship remained when having been a victim of childhood sexual abuse was controlled for. The relationship between BPD diagnosis and 'pressure to engage in sex' was mediated by 'attachment anxiety'. Bouchard and colleagues suggested that fear of abandonment in this group may contribute to the sense of pressure. However, it could also, and should also, be understood that women with these difficulties may be more vulnerable to forming couple relationships where this a material, real-life pressure (as opposed to a 'cognitive distortion'). A second study (Bouchard et al., 2009b) using the same sample, found partners of women with a BPD diagnosis had higher scores on both attachment dimensions, than partners of matched control women. This lends support to the assertion that women with a BPD diagnosis are more likely to find themselves in more difficult romantic relationships (as opposed to them making misattributions).

The concept of aggression was investigated by Critchfield and colleagues (2008). In a sample of participants with a BPD diagnosis they found that attachment dimensions were related to aggressive constructs. Higher scores on both dimensions related to higher expectation of aggression from others. 'Attachment avoidance' specifically related to higher levels of self-harm. The authors suggested that a lack of reliance on others may contribute to self-attacking to cope with difficulties. 'Attachment anxiety' was specifically related to experiences of irritability and anger. It was proposed that higher

levels of anxiety about the other's availability may cause subjective experiences of irritability.

Focusing on more extreme manifestations of relational aggression, three studies (Lawson and Brossart, 2013; Mauricio et al., 2007; McKeown, 2014) investigated the relationship between 'borderline' traits, attachment dimensions and 'intimate partner violence' (IPV). In a forensic sample, Mauricio and colleagues showed that attachment dimensions predicted perpetration of physical and psychological violence. However, 'borderline' and 'antisocial' personality traits mediated these relationships; the impact of attachment dimensions occurred through personality traits. Yet, a later study (Lawson and Brossart, 2013) repeated the methodology, but also included an additional mediator: 'Hostile Dominant Interpersonal Problems' (vindictive, domineering and intrusive traits). When entered into the model, neither 'borderline' nor 'antisocial' traits were significant mediators. This suggests that traditional personality disorder traits are not the most useful way of characterising the constructs through which attachment dimensions impact on IPV.

McKeown (2014) found that attachment dimensions and 'borderline' traits also contributed to IPV victimisation. In their female forensic sample, they found that 'borderline' traits can be a partial mechanism through which attachment dimensions lead to IPV victimisation. However, it did not fully

mediate the relationships and ‘attachment avoidance’, in particular, still had a direct effect in the model.

1.6.4.5. Validity of attachment dimensions

Riggs and colleagues (2007) investigated the relationship between adult attachment and personality and dissociative difficulties in a group of trauma survivors. They compared adult social attachment, as measured by the ECR (a more attitudinal measure), and adult representations of parent-child attachment, as measured by the Adult Attachment Interview (AAI) (George, Kaplan & Main, 1985). They found constructs arising from the ECR, including attachment dimensions, provided more significant relationships with personality traits, including ‘borderline’. However, it is possible this difference resulted from a lack of power; there were small cell sizes in AAI classifications. Riggs and colleagues also compared the utility of categorical attachment styles (secure, preoccupied, dismissive and fearful) with attachment dimensions. Styles provided no significant relationship with ‘borderline’ traits, but the dimensional ‘attachment anxiety’ did. While the study has some methodological limitations (e.g. cell size), and the superiority of attachment dimensions cannot be assumed, Riggs and colleagues found there was a clear role for attachment dimensions (particularly over and above adult social attachment styles).

The structure of the factors measured by the ECR was examined in a sample of individuals diagnosed with BPD (Levy et al., 2008). The structure was

broadly consistent with Bartholomew's (1990) conceptualisation of a two dimensional space on which four categories were mapped. Levy and colleagues did suggest there may be subtly different factor loadings within this subgroup. However, the reliability of this finding was challenged by Critchfield and colleagues (2008), (a paper in which Levy was also an author) due to the small sample size in the Levy and colleagues paper. Overall, Levy and colleagues did conclude that a two dimensional conceptualisation of attachment was valid for their sample of participants who had received a BPD diagnosis.

1.6.4.6. Utility of attachment dimensions to differentiate diagnoses

A number of studies investigated the potential for attachment dimensions to differentiate between BPD and other diagnoses. Two studies identified the ability of attachment dimensions to differentiate between a small number of 'personality disorder' diagnoses. Meyer and colleagues (2004) showed that 'borderline' traits were characterised by 'attachment anxiety'. This contrasted to their findings that 'avoidant' traits were associated with both dimensions, and 'schizoid' traits had only a weak correlation with 'attachment avoidance'.

Beeney and colleagues (2015) also found, along with social cognition, attachment dimensions could differentiate between 'borderline', 'avoidant' and 'antisocial' traits. However, they struggled to differentiate between traits presenting at a subclinical level. Indeed, a number of other studies have found limited ability for attachment dimensions to adequately differentiate

between current diagnostically identified categories. Fossati and colleagues (2003) found effect sizes of attachment dimensions on personality traits were only small to medium. They found that dimensions loaded onto clusters of traits (e.g. 'attachment anxiety' being related to 'borderline' and 'dependent' traits), and therefore could not fully differentiate between individual categories. Similarly, Riggs and colleagues (2007) found 'attachment anxiety' failed to differentiate between 'borderline', 'dependent', 'compulsive', 'schizotypal' and 'paranoid' traits.

While MacDonald and colleagues (2013) showed that dimensions did not adequately differentiate between diagnoses, they did suggest attachment dimensions may be used as a screening tool for 'personality disorder' more generally. However, findings from Hulbert and colleagues (2011) suggest that MacDonald's proposal may not be sufficient. In a group of adolescents diagnosed with BPD or 'major depressive disorder' they found no significant differences in attachment dimensions. This research indicates attachment dimensions alone fail to differentiate not only between different 'personality disorder' diagnoses, but also between personality and 'mood disorder' diagnoses.

1.7. Discussion

1.7.1. Significance of main findings

In addition to attachment dimensions, evidence from the studies reviewed also points to a number of inter-related constructs which appear to have

relevance to ‘borderline’ traits. The potential relationships, which has arisen from the reviewed research findings, between attachment dimensions and these other constructs is presented in *Figure 1*.

The literature indicated that early trauma can impact on ‘borderline’ traits through attachment dimensions. In turn, childhood trauma can also be related to other psychological factors, e.g. neurocognitive difficulties (Minzenberg et al., 2008). The impact of attachment dimensions on ‘borderline traits’ has been shown to be both direct and also occur through the mediation of other psychological factors (e.g. personality traits, social cognition, neurocognition, alexithymia, beliefs and schemas). Among people with high levels of ‘borderline’ traits, attachment dimensions have been shown to affect interpersonal relationships (both directly, and through other psychological mediators, e.g. ‘hostile dominant interpersonal styles’). Research has also shown that people high in ‘borderline’ traits may have relationships which put them at more risk of future interpersonal trauma (e.g. through partnering with others high in attachment difficulties, or in terms of the impact of attachment dimensions on the likelihood of being a victim of IPV).

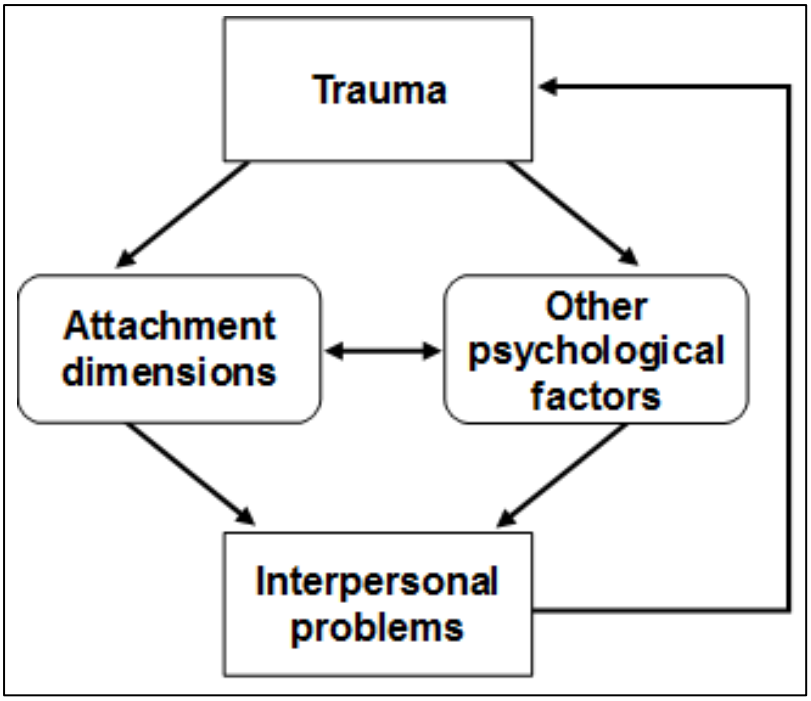

Figure 1: **Summary of review findings**

Higher levels of difficulty in all these identified areas are related to higher levels of 'borderline' traits. This indicates the relationship between 'borderline' traits and attachment dimensions is multifaceted and involves other psychological and environmental factors.

1.7.2. Clinical utility/ practice implications

The identified relationships, regarding attachment dimensions and 'borderline' traits could be used to guide intervention. The model (*Figure 1*) suggests a number of targets for which there is evidence that psychological therapies can influence change. Interventions can specifically target attachment and attachment trauma through the therapeutic relationship (e.g. Transference Focused Psychotherapy; Levy et al., 2006). Given the mediating role for social cognition between attachment dimensions and 'borderline' traits therapies targeting 'mentalization' or reflective functioning

(e.g. Mentalization Based Treatment; Bateman & Fonagy, 2010) may be useful. Cognitive Analytic Therapy may benefit those wishing to consider the current interpersonal difficulties stemming from the attachment difficulties (Clarke, Thomas & James, 2013). Dialectical Behaviour Therapy could support the associated skills deficits (Neacsiu, Rizvi & Linehan, 2010) while other psychological therapies could also target unhelpful beliefs about the self and other (e.g. Cognitive Therapy; Wenzel, Chapman, Newman, Beck & Brown, 2006). The implications and utility of attachment dimensions and associated constructs in understanding 'borderline' traits lies partly in the provision of a model with numerous targets for intervention.

The attachment dimension-'borderline' relationship is characterised by complexity. To make full use of the findings discussed in the present review, they would need to be shared more fully with those involved in supporting people with significant 'borderline' traits. There is some emerging evidence indicating the benefit of psychological consultation (Christofides, Johnstone & Musa, 2012; Kennedy, Smalley & Harris, 2003). In line with this, in the UK guidance stipulates a core competency of practitioner psychologists should be in providing consultation to colleagues (Division of Clinical Psychology, 2011; Onyett, 2007). Given the complexity of the model, one way in which it could be utilised is through psychological consultation to provide better multi-disciplinary services, as seen in other settings (Kennedy et al., 2003).

Finally, the clinical utility of the findings for diagnosis should also be considered. DSM5 states that BPD is characterised by interpersonal difficulties, including fear of abandonment. This characteristic is synonymous with high levels of 'attachment anxiety'. However, studies in the present review show this feature is not unique to 'borderline' traits but also occurs across a number of other personality traits. In turn, current diagnostic manuals, ICD-10 and DSM5, propose a categorical definition, where personality is either 'disordered' or not. With reference to homogeneity inspection in the meta-analysis, among clinical and non-clinical levels of 'borderline' traits, it was clear that many studies had homogeneity of effect size. This suggests the difficulties associated with 'borderline' traits, as well as the traits themselves, are better characterised by dimensional models (i.e. both dimensions of different personality traits and dimensions of the level of difficulty). This finding is consistent with the model set out in the appendices of DSM5 and the proposed model for ICD-11 (Tyrer et al., 2015).

1.7.3. Policy implications

The present review provides clear targets for intrapersonal change in attachment dimensions and associated psychological factors associated with 'borderline' traits. However, studies also suggest that, aetiologically, a significant proportion of the variance in these intrapersonal constructs results from interpersonal trauma (Crawford et al., 2009; Minzenberg et al., 2006). Clinical services do have a role in providing support for people who have suffered abuse and are suffering with associated psychological consequences. However, findings from the present review indicate that, in

order to more comprehensively address the suffering associated with 'borderline' traits, resources should be targeted at the aetiology.

Increasingly, funds in the UK are being directed into 'late' intervention services (e.g. adult mental health), through the protection of NHS funding (HM Treasury, 2015) and parity of esteem funding for mental health services (Health and Social Care Act 2012). Alongside this, Local Authority spending is being cut (HM Treasury, 2015). Consequently, funding for bodies providing vital social care and early intervention services to protect children from early trauma and the ensuing difficulties (including attachment problems, associated psychological difficulties and even 'borderline' traits) is being cut (National Children's Bureau & The Children's Society, 2015). The findings of the present review indicate both a need for increased therapy provision and a need for more early intervention.

1.7.4. Research limitations

There are a number of limitations that are common within the research reviewed herein. Particularly, there is significant diversity in the operationalisation of 'borderline' traits across the studies. Among the 20 studies reported in this review, there were 10 unique methods for measuring 'borderline' traits. While measures presented clear reliability and validity, it is still possible that there were differences in the operationalisation of the construct. It is unlikely this limitation in the research literature will be overcome until there is more clarity on the dimensional vs. categorical

models of ‘borderline’ traits and greater consensus around operational definitions.

A number of the studies reviewed here included adolescents in their sample. Personality structure may be different in adolescence and this could influence findings in those studies. However, proposals for the ICD-11 do include the possibility of providing personality diagnoses before the age of 18 (Tyrer et al., 2015). Indeed, it would be naïve to assume that the issue of personality development could be overcome by only including adult samples. Neuroscientists now believe aspects of brain development are still not complete during adolescence. In particular, parts of the prefrontal cortex associated with factors such as ‘impulsivity’ do not finish developing until the early twenties (Giedd, 2004).

Some of the studies included in the present review did not provide overall models to explain the interaction of the different variables. For example, MacDonald and colleagues (2013) reported individual correlations between three constructs: attachment dimensions, personality traits and affective temperament. The authors did not provide any overall statistical model to show how the three constructs were inter-related. Such analysis may have allowed for an understanding of how more biological (affective temperament) and more environmental (attachment) constructs might interact to influence ‘borderline’ traits. In this sense, the data has not been fully utilised.

A final limitation of the studies reviewed was the preponderance of the cross-sectional research designs. All of the studies included in the present review measured attachment dimensions at one time point only. While attachment is often seen as a more static construct, some authors have suggested that 'attachment avoidance' could fluctuate in people with high levels of 'borderline' traits. Beeney and colleagues (2015) noted individuals who acquire a BPD diagnosis oscillate between high and low levels of self-sufficiency. The current available research, with its single time point measures, is insufficient to detect any dynamic aspect to attachment 'avoidance' in a high 'borderline' trait group.

1.7.5. Review limitations

The present review search did not extend to identifying 'grey literature'. This decision was taken to protect the quality of the studies included in the review. Grey literature would not have been subject to the same peer-review process as included studies. While Masters level dissertation and Doctoral level theses are assessed by academics, there is no clear process for evaluating the rigour of this process across courses and universities. In contrast, peer-review journals provide clear details on their review processes. While this decision was taken to strengthen quality of the present literature review, it is also a limitation. There remains a possibility that the present review may suffer from publication bias. Other, unpublished research, which does not identify the same significant relationships could have existed and been omitted.

A second limitation concerns the diversity of the literature. Across the studies reviewed here, a number of different variables were studied. Due to this, conclusions made regarding relationships often relied on only a small number of studies. This introduces a risk that type I or type II errors may have occurred.

In addition, despite the diversity within the literature, the model developed here fails to adequately account for the relationship between the different factors. The model presented (*Figure 1*), is a model of the current research, rather than a comprehensive model of 'borderline' traits. Other research and theories can be drawn upon to inform future research aiming to test and further develop the model. As an example, Crawford and colleagues (2009) found that attachment mediated the relationship between childhood abuse (trauma) and 'borderline' traits but the scope of their study did not extend to explaining what led to some children developing more problematic 'attachment anxiety' and 'attachment avoidance'. However, longitudinal research by Werner and Smith (1992) indicates that having a protective early relationship may protect against later attachment insecurity. Drawing upon this work, similar longitudinal studies in relation to personality traits would serve to further develop the model presented here.

Ultimately, the model fails to account for all the variance in relational difficulties. This may be due to a lack of research on other pertinent factors.

However, it may also be accounted for by the dearth of research investigating the material world circumstances of people with high levels of 'borderline' traits. Smail (2005) suggested that psychological theory often misses the social and material contexts of individual distress and difficulty. This is one way in which the model produced by the reviewed papers may fail to fully explain the relationship between attachment dimensions and 'borderline' traits in that it does not fully account for the real-life circumstances of people who may be really struggling with material adversity. The present review is limited by the internal psychological focus of the available literature.

1.7.6. Future directions

While there is evidence supporting the validity of attachment dimensions when considering 'borderline' traits (Levy et al. 2008; Riggs et al. 2007), future research should also consider the reliability of single time-point measures. If 'attachment avoidance' does fluctuate in those who score high on 'borderline' traits researchers will have to be creative in how they attempt to capture this. It would be unethical to artificially measure changes under different conditions, however it is possible that this data could be collected as part of normal clinical practice.

Furthermore, research should also more adequately measure the realities of people's lives, rather than simply focussing on internal correlates. Attachment Theory proposes that internal representations develop as a

result of environmental experiences. While the current literature does address this to some extent, environmental experiences do not end at early childhood trauma. Future research could investigate the impact of a wider range of early and later experiences on the attachment-'borderline' relationship.

However, the scale of the challenge for future research may be far greater. If proposed diagnostic changes take place (a move towards dimensional models within the DSM and ICD projects), the vulnerable group currently conceptualised by high 'borderline' traits will be conceptualised using alternate constructs. In this instance research may have to refocus how it captures the experiences of those currently provided with a diagnosis of BPD.

1.8. Conclusion

The present review aimed to consider the relationship between attachment dimensions and 'borderline' traits. While the results of the meta-analysis should be interpreted cautiously, there is convergent evidence from across a number of the studies reviewed to tentatively suggest that 'borderline' traits are associated with higher levels of both attachment dimensions. Across studies, a stronger effect for 'attachment anxiety' was observed. The present review also identified a number of other factors involved in the relationship. This included a predisposing effect of childhood trauma, a mediating effect of

other psychological correlates and an effect of attachment dimensions and ‘borderline’ traits on interpersonal problems.

The empirical literature would benefit from large-scale studies of the role of environmental factors. With regard to the utility of early intervention, it would be particularly pertinent to investigate not only the impact of childhood trauma on attachment and ‘borderline’ traits, but also any potential protective factors. With the right support at the level of national policy, these factors could then be harnessed to protect vulnerable children.

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Chapter Two

The impact of attachment and burnout on mental health professionals' *response urgency*: a vignette-based study

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2.1. Abstract

Objective: The present study aimed to investigate whether there was an interactional relationship between mental health professionals' adult social attachment dimensions and 'burnout' processes on their 'response urgency' to somebody meeting the diagnostic criteria for 'Borderline Personality Disorder'.

Method: Secondary care mental health professionals were administered attachment dimension (Psychosis Attachment Measure) and 'burnout' questionnaires (abbreviated Maslach Burnout Inventory). Scores were interpreted alongside their endorsed response to a vignette task depicting a client in crisis.

Results: 'Burnout' phases were differentially correlated with attachment dimensions. The 'depersonalisation' phase of 'burnout' directly predicted 'response urgency'. It also acted to suppress the effect of 'attachment anxiety' on 'response urgency'. Findings from the present study are considered in the context of findings from previous research into 'burnout' and attachment.

Discussion: 'Depersonalisation' may act as a coping strategy for managing 'attachment anxiety', but also serves to suppress the effect of attachment on professional endorsed responses. Clinical, organisational and policy

implications were considered alongside the need for the use of creative research methodologies, such as mixed-method designs, to explore the area.

2.2. Key practitioner message

- Mental health professional attachment and levels of ‘burnout’ are related.
- Professionals’ ‘attachment anxiety’ and ‘burnout’ ‘depersonalisation’ affected their endorsed response to a client in crisis.
- Clinical Psychologists are well placed, given their expert knowledge of intrapersonal constructs, to advocate for more supportive environments and practices (for professionals and clients) at a clinical, organisational and policy level.

2.3. Keywords

Attachment; Burnout; Mental Health Professional; Crisis; Borderline; Vignette

2.4. Introduction

The National Collaborating Centre for Mental Health (NCCMH, 2009) reported that 'Borderline Personality Disorder'[23] (BPD) is characterised by an "instability in emotions, self-image and relationships" (p.17). The NCCMH reported that, for these clients, distress can often reach unmanageable levels, termed a 'crisis'. Some examples of what constitutes a 'crisis' include: "self-harm, impulsive aggression, and short lived psychotic symptoms… intense anxiety, depression and anger" (NCCMH, 2009, p.298). Reported statistics suggest that between 5.3% and 11% of people accessing Community Mental Health Teams receive a BPD diagnosis (Newton-Howes et al., 2010; Keown, Holloway & Kuipers, 2002). Despite the relatively low incidence, evidence suggests that clients with these difficulties can be particularly prominent in the thoughts of mental health professionals. Markham (2005) found that professionals were less optimistic and held more negative views about working with clients with a diagnosis of BPD, compared to those with 'schizophrenia' or 'depression' diagnoses. Moreover, Woollaston and Hixenbaugh (2008) identified a 'Dangerous Whirlwind' to be the core theme arising from nurse's perceptions of these clients, with study participants expressing the view that these clients had control over their behaviour (including those during crises) and were 'manipulative'.

[2] 'Borderline Personality Disorder' is thought to be largely synonymous with 'Emotionally Unstable Personality Disorder-Borderline Type'. Except where specifically referring to diagnostic criteria for one term, the label BPD is applied in the present study to represent both of these diagnostic labels.

[3] Use of this term does not imply the author's agreement with the category's validity or utility. Instead, every effort has been made to describe individuals as having 'received' this diagnosis (as opposed to it being something which is intrinsically true about their personhood).

The concept of ‘manipulation’ appears throughout literature relating to BPD. As recently as 2000, the American Psychiatric Association stated that a characteristic of those meeting diagnostic criteria was manipulation of relationships in order to obtain nurturance. However, some have argued that this notion of manipulation is pejorative and inaccurate. For example, Linehan (1993) stated that nurturance is a basic human need which is not being fulfilled in people with BPD. In situations where others may feel nurtured, people with these difficulties can instead feel emotional pain. She noted that what is perceived as manipulation is instead an attempt to have one’s emotional needs met.

When trying to understand the difficulties that mental health care providers can face in trying to meet their clients’ emotional needs, Attachment Theory (Bowlby, 1969) may be of utility. This is perhaps the most well researched theory of human care giving and receiving. The central tenet is that relationships developed in infancy (with the primary caregiver) serve an evolutionary need to survive. They allow infants to have their basic needs met, including nurturance. The theory postulates that the way in which we relate to our attachment figures is carried forward as a relationship template into adulthood. Indeed, there is a significant body of research showing the effect of early attachment on later difficulties with care and nurturance in individuals who receive a BPD diagnosis (e.g. Agrawal, Gunderson, Holmes, & Lyons-Ruth, 2004; Fonagy, Target, Gergely, Allen, & Bateman, 2003; Minzenberg, Poole & Vinogradov, 2008).

Attachment is not simply a theory of care reception, but also of care provision. Although now somewhat dated, van IJzendoorn's (1995) meta-analytic review provided a decisive insight into the relationship of attachment and care provision. Investigating parent-child dyads, he found that adult attachment was related to both parental responsiveness and children's attachment styles. That is, attachment representations in adulthood affect care provision.

Adult social attachment can be conceptualised along two dimensions: 'attachment anxiety' and 'attachment avoidance' (Brennan, Clark & Shaver, 1998). 'Attachment anxiety' refers to anxiety about attachment relationships and the availability of the other, while 'attachment avoidance' represents the comfort with which people are able to be intimate and seek help and closeness from others (Fraley, Heffernan, Vicary & Brumbaugh, 2011). Parent-infant research has investigated the specific effect of each dimension on parenting behaviour. 'Attachment avoidance' has had the clearest relationship with responsiveness; as avoidance increases, responsiveness decreases. 'Attachment anxiety' has had less of an impact on responsiveness, but higher levels have been found to co-occur alongside interference with the child's exploration, e.g. over-involvement/protection (Jones, Cassidy & Shaver, 2015).

Similarly, a developing body of literature has sought to explore the impact of mental health professionals' adult social attachment representations on the care they provide. There has been particular interest in the psychotherapeutic relationship. Findings suggest that therapist attachment security is related to a better working alliance, particularly in clients with more symptomatic complexity (Bucci, Seymour-Hyde, Harris & Berry, 2016; Schauenburg et al., 2010). However, many clients in secondary care mental health settings rarely see a psychologist or psychotherapist, more often receiving support from other healthcare professionals (Department of Health, 2011). Beyond psychology and psychotherapy there is a paucity of research investigating the impact of adult attachment on mental healthcare professionals. However, one study (Berry et al., 2008) has investigated the effect of mental health keyworking professional attachment representations when working with people who have experienced psychosis. Berry and colleagues found that higher levels of 'attachment avoidance' was related to poorer professional psychological mindedness and lower levels of 'attachment anxiety' correlated with more positive client-rated therapeutic relationship.

While there is some promising early evidence to suggest a relationship between mental health professional attachment and the relationships they form with clients, more research is needed. Firstly, no research specifically focusing on professionals working with individuals who receive a BPD diagnosis was found in the literature search. This is a group with evidenced attachment needs (Agrawal et al., 2004; Fonagy et al., 2003; Minzenberg et

al., 2008). As such, it would be helpful to better understand any impact of professionals' attachment on these relationships. Secondly, the existing literature is not fully consistent in its findings. For example, while the studies reported did show a relationship, other research has indicated that it may not be a simple direct effect. Petrwoski, Nowacki, Pokorny and Buccheim (2011) showed that the issue was more complex than simply professionals' attachment. The effect on relationship was an interaction between client and clinician attachment.

In their review of parent-child relationships Jones and colleagues (2015) found a particular role for parental stress. They reported that parental stress was significantly related to both attachment dimensions. One study, Mills-Koonce et al. (2011), found that adult attachment only affected care provision when parental stress was present. Psychological stress mediated the relationship between parental attachment and response sensitivity.

In the Occupational Psychology literature stress is often considered alongside 'burnout'. A widely used definition of 'burnout' (Leiter & Maslach, 1988) proposes a three phase model. Leiter and Maslach argue that workplace stress can lead to 'emotional exhaustion'. Emotionally exhausted professionals can be prone to 'depersonalisation' of the individuals they are working with. This ultimately leads to lower levels of 'personal accomplishment'. Similar to the attachment literature findings that attachment dimensions are related to parental stress, Leiter, Day and Price (2015)

showed that healthcare workers' attachment dimensions were related to their levels of 'burnout'. They found that 'attachment avoidance' was correlated with an efficacy dimension (similar to 'personal accomplishment'), while 'attachment anxiety' was related to all three 'burnout' phases: efficacy, exhaustion and cynicism (similar to 'depersonalisation').

In a review of 'burnout' in mental health professionals (Morse, Salyers, Rollins, Monroe-DeVita & Pfahler, 2012), it was reported that 21-67% of mental health professionals could be suffering from high levels of 'burnout' (p.342). Similar to the infant research showing the effect of stress on care provision (Jones et al., 2015), the literature has also indicated a role for 'burnout' in mental health professionals' care provision. Garman, Corrigan and Morris (2002) showed that teams who were more emotionally exhausted had less satisfied clients. In addition, Holmqvist and Jeanneau (2006) found that higher levels of 'emotional exhaustion' and 'depersonalisation' were associated with more distancing and rejecting attitudes towards clients. In contrast, Morse and colleagues' review failed to identify any clear directional influence of differential levels of 'personal accomplishment' on mental health professionals' care provision.

There is emerging evidence for the role of clinician attachment and 'burnout' on care provision. One group which mental health professionals report as difficult to provide care for are those clients who receive a diagnosis of BPD (Markham, 2005; Woollasron & Hixenbaugh, 2008). Individuals with these

types of difficulties often find themselves in ‘crisis’, experiencing high levels of emotional distress. One way of conceptualising these crises is as a result of/or as an attempt to have one’s emotional needs met (Linehan, 1993). Parent-infant literature has shown that both parental attachment and stress can impact on the responsiveness of the caregiver to meet the child’s emotional needs (Jones et al., 2015). Similarly, there is emerging evidence that both professionals’ attachment dimensions and ‘burnout’ are related to mental health professionals’ responsiveness and therapeutic relationships (Berry et al., 2008; Bucci et al., 2016; Morse et al., 2012). However, there has been no research to investigate the specific relationships for professionals when working with people who have difficulties which can result in them receiving a BPD diagnosis.

2.4.1. Aims and hypotheses

The present study aims to consider the utility of attachment theory and ‘burnout’ for understanding differences among professionals in their responsiveness to clients in crisis. Responsiveness in the present study is operationalised as ‘urgency of response’. Due to practical and ethical reasons a single vignette was used to assess professionals’ responses to BPD patients in crisis as opposed to a more naturalistic observation method.

Previous research has indicated clear directional relationships for ‘burnout’ and attachment dimensions on ‘response urgency’ (Holmqvist & Jeanneau, 2006; Jones et al., 2015). As such, it was hypothesised that higher scores on

‘attachment avoidance’, ‘emotional exhaustion’ and ‘depersonalisation’ would be negatively correlated with endorsed ‘response urgency’ (where higher scores on ‘response urgency’ indicated higher urgency). Given findings suggesting the role for caregiver ‘attachment anxiety’ in inhibiting exploration, it was hypothesised that higher scores on ‘attachment anxiety’ would be associated with endorsing a more urgent response to the vignette. In other words, regarding ‘personal accomplishment’ the hypothesis was that there would be no significant relationship with ‘response urgency’.

In line with previous research (Mills-Koonce et al., 2011), the present study considered the interactional effect of attachment and ‘burnout’. Mediation hypotheses were based on the direct effect hypotheses. It was hypothesised that the relationship between ‘attachment avoidance’ and ‘response urgency’ would be mediated by ‘emotional exhaustion’ and ‘depersonalisation’. In addition, it was hypothesised that the effect of ‘attachment anxiety’ on ‘response urgency’ (predicted to be positively correlated) would be suppressed by ‘emotional exhaustion’ and ‘depersonalisation’ (due to their oppositional relationships).

2.5. Method

2.5.1. Design

A questionnaire survey design was employed. Variables were measured to test a mediation analysis. The effect of two predictor variables (‘attachment anxiety’ and ‘attachment avoidance’) on care coordinator ‘response urgency’

was measured. Three subscales of ‘burnout’ were measured as possible mediator variables (‘emotional exhaustion’, ‘depersonalisation’, and ‘personal accomplishment’). All measures were self-report instruments.

2.5.2. Participants

Previous research in this area differs in important ways (participants, design and analysis). As such, a power analysis calculated from the effect sizes and other characteristics of such studies was unlikely to be a valid measure of predicted sample size for the present study. Instead, Jackson’s (2003) method for estimating required sample size for path analysis has been used (20 participants per model parameter). Models in the present study include three parameters. It was estimated that 60 participants would be required to ensure the study was sufficiently powered.

186 care coordination professionals (Community Mental Health Nurses, Occupational Therapists and Social Workers) were approached. These professionals have the role of coordinating clients’ care within secondary care mental health services. Professionals were recruited from working age adult secondary care mental health services, across five NHS Trust in the West Midlands of England. Eligible professionals were identified by team managers. 41 responses were received, representing a 22.04% response rate. Demographic data for the sample is presented in Table 6. While this is a low response rate, the sample age was similar to those reported with comparable populations (Edwards et al., 2006; Gale, Hawley, Butler, Morton

& Singhal, 2016). The present sample had a higher percentage of female participants.

Given the low response rate there was potential for sampling bias. Therefore, the relationships between demographic factors and predictor and mediating factors were examined. No significant relationships were found between gender (independent sample t-tests: 'attachment avoidance' $t_{(39)}$=-.88, p=.39; 'attachment anxiety' $t_{(39)}$=.52, p=.61; 'emotional exhaustion' $t_{(39)}$=1.31, p=.20; 'depersonalisation' $t_{(39)}$=-.70, p=.51; 'personal accomplishment' $t_{(39)}$=.70, p=.49), age (Pearson's correlation: 'attachment avoidance' r=.05, p=.77; 'attachment anxiety' r=.07, p=.66; 'emotional exhaustion' r=-.19, p=.23; 'depersonalisation' r=.01, p=.94; 'personal accomplishment' r=-.02, p=.88) and profession (one way ANOVA: 'attachment avoidance' $F_{(2,38)}$=.16, p=.85; 'attachment anxiety' $F_{(2,38)}$=.09, p=.92; 'emotional exhaustion' $F_{(2,38)}$=.66, p=.52; 'depersonalisation' $F_{(2,38)}$=.61, p=.55; 'personal accomplishment' $F_{(2,38)}$=.96, p=.39) and any of the predictor or mediator variables. This suggested that any measured demographic differences between the sample and the population were unlikely to bias the results of the research.

Table 6: ***Sample demographic data***

	Community Mental Health Nurses	Occupational Therapists	Social Workers	Total
N (%)	28 (68.29%)	10 (24.39%)	3 (7.32%)	41
Mean age (*SD)*	42.57 (9.64)	45.60 (5.83)	46.67 (15.63)	43.61 (9.22)
Female (%)	21 (75.00%)	10 (100.00%)	2 (66.67%)	33 (80.49%)
Male (%)	7 (25.00%)	0 (.00%)	1 (33.33%)	8 (19.51%)
Mean 'attachment anxiety' (*SD*)	.49 (.42)	.50 (.42)	.39 (.38)	.48 (.41)
Mean 'attachment avoidance' (*SD*)	1.25 (.50)	1.16 (.53)	1.12 (.66)	1.21 (.50)
Mean 'emotional exhaustion' (*SD*)	7.36 (4.23)	8.20 (4.42)	5.00 (3.46)	7.39 (4.20)
Mean 'depersonalisation' (*SD*)	1.69 (2.28)	2.30 (2.71)	.67 (.58)	1.76 (2.31)
Mean 'personal accomplishment' (*SD*)	10.04 (1.91)	9.70 (2.21)	8.33 (2.89)	9.83 (2.05)

2.5.3. Measures

To ensure the reliability of the study findings questionnaire constructs were inspected for internal consistency. Consistent with accepted advice, alterations were made to scales where it would improve the internal consistency. It is widely accepted that items which share less than 15% of their variance with the overall construct have an adverse impact on a measure's reliability (DeVellis, 2003; Field, 2013; Kline, 2000; Oppenheim,

1992). For this reason, items with an item-total correlation of r<.30 were removed from each scale.

2.5.3.1. Psychosis Attachment Measure (PAM)

The Psychosis Attachment Measure (Berry, Wearden, Barrowclough, & Liversidge, 2006; Appendix F) is a 16 item self-report measure of 'attachment anxiety' and 'attachment avoidance' which, unlike other questionnaires, is concerned with general relationship rather than a specific romantic relationships. While this measure was originally developed for assessing attachment dimensions with people experiencing psychosis, more recently it has been employed in mental health professional research (Berry et al., 2008). The PAM showed good internal consistency ('attachment anxiety' α=.82; 'attachment avoidance' α=.75) and concurrent validity with other measures (Berry et al., 2006).

Cronbach's α for the present study were acceptable (α=.73 and α=.80). However, two items (item 3 and 5) on the 'attachment anxiety' scale did not meet required standards for item-total correlation (r>.30) (Field, 2013). These items were removed. The resulting reliability scores was α=.76. The internal consistency of both factors was acceptable.

2.5.3.2. Abbreviated Maslach Burnout Inventory (aMBI)

The Maslach Burnout Inventory (Maslach, Jackson, & Leiter, 1996) is the most used measure of 'burnout' (Worley, Vassa, Wheeler & Barnes, 2008).

The questionnaire consists of three scales which all showed acceptable levels of internal consistency in the original validation study: ‘emotional exhaustion’ (EE) (*α*=.89); ‘depersonalisation’ (D) (*α*=.74); and ‘personal accomplishment’ (PA) (*α*=.77) (Maslach & Jackson, 1981). However, a recent meta-analysis found heterogeneity of internal consistency across different populations (Aguayo, Vargas, de la Fuente & Lozano, 2011). For this reason, it is recommended that internal consistency should be measured for individual samples.

For the purpose of the present study an amended and abbreviated version was used (McManus, Winder, & Gordon, 2002; Appendix G). Factor Analysis of the measure has confirmed that its structure matches that of the original measure (McManus, Winder, & Gordon, 2002). Using the abbreviated version of the questionnaire placed less demand on participants.

In the present study, internal consistency for EE was ‘good’ (*α*=.83), and for D was ‘questionable’ (*α*=0.66). While, the D scale fell in the ‘questionable’ range, all items correlated sufficiently with total scale score. It is likely that the low *α* score resulted from the small number of items comprising the scale (Field, 2013). Internal consistency for the PA scale was also ‘questionable’ (*α*=.61). Item 9 was removed, as it did not sufficiently correlate with the total score. After the removal internal consistency was ‘good’ (*α*=.75). This two-item scale was used in the present study.

2.5.3.3. Vignette

To measure 'response urgency' a vignette task was constructed (Appendix H). The vignette provided participants with background information. This emulated information they would hold on clients they were working with. It then provided a description of the current 'crisis' situation. Participants were presented with eight different possible responses. Decisions on content of the initial vignette were guided by the criteria listed in the International Personality Disorder Examination (Loranger, Janca, & Sartorius, 1997) for the World Health Organisation International Classification of Diseases, 10th Edition. This is a structured assessment for personality disorder diagnoses included in the classification system. Criteria for the Emotionally Unstable Personality Disorder, Borderline Type were inspected for inclusion of symptoms in the vignette.

To validate the vignette a number of steps were taken and the vignette was amended in line with feedback at each stage. Firstly, a small group made up of care coordination, psychiatry and psychology colleagues were consulted about the vignette. They were asked about the representativeness of the vignette to real life clinical practice. Information gained was used to amend the vignette where appropriate.

Secondly, the vignette was provided to two Consultant Psychiatrists. They were asked what diagnosis they feel best matches the client's presentation, both responded with 'Borderline Personality Disorder'/'Emotionally Unstable

Personality Disorder-Borderline Type'. They were also asked how accurately they thought the vignette reflects a diagnosis of BPD. Both respondents rated the vignette as 9/10 (where 0='doesn't fit at all', and 10='fits completely'). This feedback was taken to evidence the clinical validity of the vignette.

Finally, the vignette and response options were provided to two Consultant Clinical Psychologists. They rated the response options on sensitivity and appropriateness. However, in the current study, only two of the eight potential responses were selected by participants. The classifying difference between these two response options (to provide reassurance and visit today/provide reassurance and visit later in the week) was the urgency of the response. In the current sample, the vignette can be understood to measure the urgency with which participants would provide support.

2.5.4. Procedure

Ethical approval to conduct the present study was received from Coventry University Ethics (Appendix I) and also Research and Development approval from five local NHS Trusts (Appendices J-N). The procedure was developed in line with the British Psychological Society's Code of Conduct (2010).

Potential participants were provided with information about the study, the Participant Information Sheet (Appendix O), from their team manager or team psychologist. Professionals wishing to participate were provided with

the test booklet, either electronically (via Bristol Online Surveys) or on paper copy with pre-paid self-addressed envelopes. Participants first read the Participant Information Sheet, then provided informed consent (Appendix P) and demographic information (Appendix Q). Participants completed the vignette task, then the PAM followed by the aMBI. Finally, there was a debrief sheet (Appendix R). The full test booklet was estimated to require 20 minutes of participants' time. Brief measures (aMBI and PAM) were selected to reduce the strain on participants. All responses were provided anonymously.

The test booklet was administered in this standardised order to all participants. While it would have been preferable to randomise the questionnaire order, to control for order effects, this was not possible due to the nature of postal surveys. As only 22.04% of those provided with a test booklet decided to participate there would have been no way of ensuring a balance of different ordered booklets.

2.5.5. Statistical analyses

To understand the direct relationships between the test variables, bivariate or point-biserial correlation was computed for each effect. To test a mediation model Baron and Kenny (1986) suggest running a number of multiple regression analyses and comparing their coefficients. However, as the outcome variable in the present study is dichotomous, binary logistic regression would need to be employed for relationships involving the

outcome variable. Coefficients from binary logistic regression and multiple regression cannot be directly compared. Instead, given the simplicity of the models (involving three parameters), partial bi-serial correlation was used to test the effect of the predictor variable on the outcome, controlling for the mediator. Due to the hypothesised directional influence of test variables upon one another, one-tailed tests of significance were used.

Given the low response rate, exploratory analysis was also conducted to consider the similarity of the present sample to a number of previously reported samples (on the predictor and mediator variables). One sample t-tests were employed to compare the present sample with a similar mental health professional sample (Berry et al., 2008), a student sample (Wearden, Peters, Berry, Barrowclough & Liversidge, 2008) and a sample of people experiencing psychosis (Arbuckle, Berry, Taylor & Kennedy, 2012) on their attachment dimension scores. The present sample's 'burnout' characteristics were compared to a large sample of medical doctors (McManus, Jonkvik, Richards & Paice, 2011). For the purpose of these exploratory analyses, the original scale item configurations for 'attachment anxiety' and PA was used. This ensured that identical scales were being compared. Due to a large number of differences between the present sample and each of the reference samples, no clear conclusions on group differences can be drawn (e.g. mental health professional vs. students). Differences could be due to other unaccounted for sample differences (e.g. gender or age). However, if the analyses indicate a significant difference between the present study and

previous study samples this may suggest further investigation into population differences is warranted.

2.6. Results

2.6.1. Correlational analysis

Bivariate correlation results for all variables are reported in Table 7. Both attachment dimensions were significantly correlated with one another (r=.34, p=.02). In addition, attachment dimensions were also related to 'burnout' subscales. 'Attachment avoidance' was significantly correlated with only D (r=.34, p=.01). 'Attachment anxiety' was significantly correlated with all three subscales: EE (r=.30, p=.03), D (r=.47, p=.01), PA (r=-.31, p=.03).

'Burnout' subscales were also significantly correlated with one another. D was significantly correlated with EE (r=.35, p<.01) and PA (r=-.48, p<.01). EE and PA were not significantly related.

Using point-biserial correlation, of the 'burnout'/attachment variables, only D was significantly correlated with 'response urgency' (r_{pb}=-.29, p=.03).

Table 7: ***Test variable correlation matrix***

	Attachment anxiety	Attachment avoidance	EE	D	PA
Attachment avoidance	**.34***				
EE	**.30***	.16			
D	**.47****	**.34***	**.35***		
PA	**-.31***	-.21	-.16	**-.48***	
Response urgency	.09	-.19	<.01	**-.29***	.17

* $p<.05$, ** $p<.01$

2.6.2. Path models

To test path models, considering the interaction of attachment and 'burnout' variables, six partial correlations were calculated (Table 8). These correlations calculated the impact of the attachment variable (predictor) on 'response urgency' (outcome) when the 'burnout' variable (mediator) is held constant. Where controlling for the mediator variable decreases any significant relationship between the predictor and outcome (as reported in the direct correlations above), a mediation can be said to have occurred. However, where controlling for the mediator variable increases the strength of the relationship between the predictor and outcome, the mediator can be said to be suppressing the effect of the predictor on the outcome.

Table 8: ***Partial correlations, attachment dimensions controlling for 'burnout' subscales***

Predictor	Control	*r*	*p*
Attachment anxiety'*	EE	.09	.29
	D	.23	.05
	PA	.15	.18
Attachment avoidance'**	EE	-.19	.12
	D	-.10	.27
	PA	-.16	.16

*direct effect (*r*=.09, *p*=.26), ** direct effect (*r*=-.19, *p*=.12)

As neither 'attachment anxiety' nor 'attachment avoidance' had shown significant correlations with 'response urgency', none of the mediating variables could be measured to test for mediation effects. However, one

partial correlation was significant. When controlling for D, the correlation between ‘attachment anxiety’ and ‘response urgency’ increased and was statistically significant (*r*=.23, *p*=.05).

Figure 2 indicates the path model where D is positively correlated with ‘attachment anxiety’, but where it also acts to suppress the effect of ‘attachment anxiety’ on ‘response urgency’. The product of the two indirect correlation coefficients (‘attachment anxiety’ to D, and ‘attachment anxiety’ to ‘response urgency’ controlling for D) is greater than the direct relationship (*r*=.11), indicating that the indirect path is stronger.

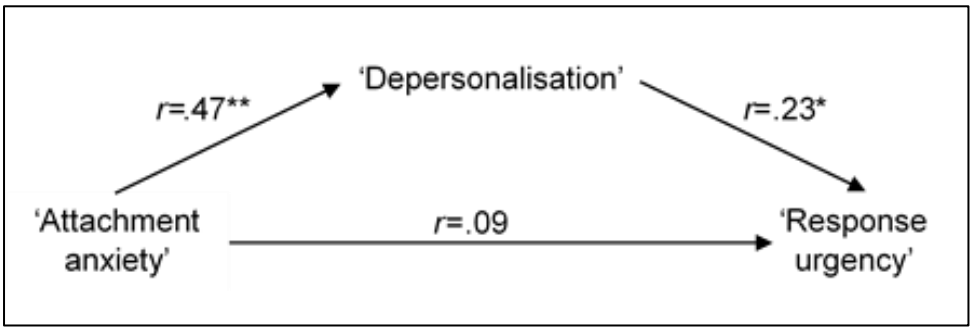

***Figure 2*: ‘Attachment anxiety’-‘depersonalisation’ path model**
*p<.05, **p<.01

2.6.3. Exploratory analysis

2.6.3.1. ‘Attachment anxiety’

Differences between the present sample and reference samples on ‘attachment anxiety’ are reported in Table 9. A one sample t-test indicated no statistically significant difference in mean ‘attachment anxiety’ scores between the current sample and another mental health professional sample

(Berry et al., 2008). However, the current sample 'attachment anxiety' scores were significantly lower than mean scores from a student sample (Wearden et al., 2008; $t_{(40)}$=-13.24, p<.01, d=-2.07) and a sample of participants experiencing psychosis (Arbuckle et al., 2012; $t_{(40)}$=-10.05, p<.01, d=-1.57). Both of these differences constitute a large effect.

Table 9: ***Sample differences in 'attachment anxiety'***

Sample	***T***	***p (2-tailed)***	***M-BM****	***d***
Professional	-.24	.81	-.01	-.04
Student	-13.24	<.01	-.75	-2.07
Psychosis	-10.05	<.01	-.57	-1.57

**M* (current study mean), *BM* (baseline mean, e.g. professional sample)

2.6.3.2. 'Attachment avoidance'

Present study differences to reference samples on 'attachment avoidance' are presented in Table 10. No significant difference was found between the previous and current professional samples on 'attachment avoidance'. The current sample had a higher mean 'attachment avoidance' score than the student sample. This difference was approaching significance, with a small effect size ($t_{(40)}$=-1.92, p-.06, d=-.30). The current sample had a significantly lower score on 'attachment avoidance' than the sample of participants experiencing psychosis ($t_{(40)}$=-2.30, p=.03, d=-.36). This difference in mean scores constitutes a medium effect size.

Table 10: ***Sample differences in 'attachment avoidance'***

Sample	*T*	*p (2-tailed)*	*M-BM*	*d*
Professional	.67	.51	.05	.10
Student	-1.92	.06	-.15	-.30
Psychosis	-2.30	.03	-.18	-.36

2.6.3.3. 'Burnout' subscales

Table 11 shows differences between the current sample and a sample of UK doctors (McManus et al., 2011) on 'burnout' subscales, as measured by the aMBI. Using one sample t-tests, no significant difference was found between the current sample and the reference sample on EE and PA. However, the current sample had significantly lower scores on D than the reference sample ($t_{(40)}$=-14.19, p<.01, d=-2.22). The degree of this difference can be considered a large effect.

Table 11: ***Sample differences in 'burnout' subscales***

Scale	*T*	*p (2-tailed)*	*M-BM*	*d*
EE	-.15	.88	-.10	-.02
D	-14.19	<.01	-5.12	-2.22
PA	-1.13	.27	-.57	-.18

2.7. Discussion

The present study found that attachment dimensions correlated with 'burnout' processes. 'Attachment anxiety' correlated with all three processes, while 'attachment avoidance' specifically related to 'depersonalisation'. These results are similar to those found by Leiter and colleagues (2015) in their study. Similarly, they found that 'attachment anxiety' and all three processes were related. However, their results showed 'attachment avoidance' to be related to 'personal accomplishment'. When comparing the results of the two studies more closely, the effect size for 'personal accomplishment' in the present study is greater. Leiter and colleagues had a significantly larger sample size (*N*=1624) which would have been more able to detect this small effect. In addition, while Leiter and colleagues did not identify 'depersonalisation' as significantly related to 'attachment avoidance', they used a subtly different measure which looks at more global cynicism. The overall findings of the present study do replicate Leiter and colleagues' findings of a relationship between attachment dimensions and 'burnout'. One possible explanation for this finding could be the lower levels of effective help-seeking among those with high attachment dimension scores. This lack of supportive relationships may leave these individuals more vulnerable to exhaustion and its resultant processes.

In contrast to findings from previous attachment (e.g. Berry et al., 2008; Jones et al., 2015) and 'burnout' (e.g. Holmqvist & Jeanneau, 2006) research, only 'depersonalisation' was found to have a significant direct effect on care provision ('response urgency'). One possible explanation for

the differing attachment results could be variation in the measures of caregiving. Much of the previous research has measured more general effects, e.g. therapeutic relationship, rather than specific behaviours (as measured in the present study). Again the operationalisation of care in the present study may also provide insight into the observed lack of relationship between care and 'emotional exhaustion'. Holmqvist and Jeanneau measured care attitudinally, while the present study measured endorsed behaviour. It is possible that 'emotional exhaustion' may exert an effect on the levels of rejecting attitudes professionals hold, but not on any planned behavioural rejection.

When considering the interaction of attachment and 'burnout', a significant relationship was identified with 'attachment anxiety' and 'depersonalisation'. Professionals higher in 'attachment anxiety' were also more likely to engage in 'depersonalisation'. In turn, higher 'depersonalisation' among professionals was related to lower levels of 'response urgency' to the client in crisis. When the effect of 'depersonalisation' was controlled for, higher 'attachment anxiety' was related to higher levels of 'response urgency'. This suggested that 'depersonalisation' suppressed the effect of 'attachment anxiety'. It was possible that professionals used 'depersonalisation' as a coping strategy for managing 'attachment anxiety'. That is, the anxiety about the attachment relationship is alleviated interference with professionals' attunement to the personhood of the client. Thus the tendency to react with greater urgency is suppressed by the effect of the coping strategy. Similar to infant research (Mills-Koonce et al., 2011), the present study shows an interactive effect of

‘attachment’ and stress-related factors on care provision. However, attachment-responsiveness issues are not simply mediated by the stress-related factor. Rather, there is a complex oppositional relationship between ‘attachment anxiety’ and the possible coping strategy of ‘depersonalisation’.

While participants in the current sample may have used ‘depersonalisation’, when contrasted with previous research this coping strategy was used at a significantly lower rate than a sample of doctors working across a range of diverse specialties (McManus et al., 2011). This could indicate a possible difference in the levels to which mental health professionals are able to hold onto clients’ humanity, compared to health professionals working in physical health settings. This group difference, along with differences in attachment dimensions (when compared with a clinical and student sample) suggest the utility of population comparison studies (e.g. mental health professional vs. matched controls; or mental health vs physical health professional).

The findings from the present study have a number of clinical, organisational and policy-level implications. At a clinical level, the finding that professionals’ ‘burnout’ and attachment dimensions can affect care provision to an individual with complex needs suggests a role for reflective practice. Indeed, when setting out potential models for services in helping people who receive ‘personality disorder’ diagnoses, Bateman and Tyrer (2004) point to a specific role for psychological consultancy, arguing that this could facilitate multi-disciplinary team reflection on their role in the interpersonal exchange

with clients. However, for some professionals, this consultation may not be enough. Bateman and Tyrer suggest that working with this client group is simply not suitable for some professionals. If attachment representations, as a relatively enduring intrapersonal construct, do affect professional care provision, it may be one factor which constitutes a suitability criteria for professional working with specific clients. One implication of this is that more thought should be given to the interaction of professional attachment dimensions and client difficulties when considering the most appropriate care provider in the team.

While psychologically informed principles may help professionals provide more responsive care, the significant relationship between care provision and a 'burnout' variable indicates a need for change at an organisational level also. A range of work-related factors have been implicated in 'burnout' among mental health professionals: size of caseload, amount of job control, presence of reward structures, fairness, team cohesion and organisational change (Lasalvia et al., 2009). More supportive work environments could reduce 'burnout' and any related effect to care provision for this vulnerable group. However, this type of organisational change would require significant resourcing and there is some evidence to suggest that this level of change is inconsistent with current government policy. For example, research has continually found that austerity is related with higher levels of mental health difficulties (Psychologists Against Austerity, 2015), leading to greater demand for services. In turn, despite swathes of rhetoric to the contrary, funding for mental health services has been significantly cut over the course

of the last two parliaments (The King's Fund, 2015). In this sense, fundamental changes to distal factors (e.g. national policy and funding) could provide some change to proximal interpersonal factors (professional's ability to provide responsive care).

2.7.1. Limitations

The present study does have a number of limitations. Principally, it is possible that the study may be underpowered which could have led to type II error. A sample size calculation based on a one-tailed test, setting power at 80%, indicated that to identify whether the relationship between 'attachment avoidance' and 'response urgency' was true, a sample of 175 would be required. The correlation coefficient for this relationship was r=-.19. Cohen (1988) indicates that this would constitute a small effect. This suggests that while the study is sufficiently powered to detect medium-large effects, it is underpowered to detect small effect sizes. As such, the effect of some factors, (such as the negative correlation between 'attachment avoidance' and 'response urgency') may have been incorrectly dismissed.

Another factor which could have affected the power and validity of the findings was the use of a vignette measure. The reliability and validity of clinician self-report of planned behaviour has not been fully evidenced (Hrisos et al., 2009). As such, it is unclear whether the vignette reported behaviour is representative of true practice. Additionally, the predictor variables ('burnout' and attachment) were also measured using self-report

instruments. Self-report instruments are often criticised for their sensitivity to social desirability, and it is possible that participant responses may have been affected by this. However, the measured constructs (attachment dimensions and 'burnout') are primarily observed using such measures, thus it is difficult to consider other measurement techniques. Despite this, the issue of social desirability was considered and steps were taken to control for it: anonymity was provided, questionnaires were administered in a non-face-to-face manner and care was taken to use non-judgemental language.

One final limitation of the present study was the focus on professional intrapersonal factors. While conducting the research, the chief investigator, through conversations with gatekeepers, was made aware of the large number of material difficulties (e.g. high caseloads) which also contribute to professional experience. While inferences from previously evidenced relationships (e.g. 'burnout' and work stressors) can be drawn, the present study fails to directly account for the effects of a number of other potentially relevant work-related environmental factors.

2.7.2. Future directions

The findings from the present study indicate an interactive role for 'attachment anxiety' and 'depersonalisation' on professional care provision to a client in crisis. However, the study is limited by its sample size and design. These two problems would need to be considered carefully in any future replication study.

While more naturalistic observation designs would generate more ecologically valid findings, such designs face a number of challenges. Measures are unlikely to be ethical (given client distress) or practical (given the need for a large *N* and the relative uncertainty of when interactions may occur). However, some data on responding could be captured retrospectively using client recorded data, e.g. through an audit of electronic records.

Alternatively, future research could consider employing a pragmatic approach to the design challenges. One viable option would be a mixed-methods study which allowed for the rigorous quantitative measurement of professional attachment and 'burnout', alongside rich qualitative data, capturing the idiosyncrasies of professional responses to clients in crisis. Quantitative analysis could inform sample recruitment and interpretation of data considering participant attachment and 'burnout' scores. Following participant selection, professionals and clients would consent to conversations being recorded. This data would be interpreted using conversation analysis. This would allow professional intrapersonal differences to be reliably measured while considering these differences in light of the more idiosyncratic and specific responses in the interpersonal environment.

2.8. Conclusion

The current study investigates the effect of intrapersonal differences on mental health professional caregiving. Professionals' use of 'depersonalisation' of clients suppressed the effect of higher levels of 'attachment anxiety'. That is, higher levels of 'attachment anxiety' would have occurred alongside greater approach behaviours to clients in crisis had 'depersonalisation' not suppressed this. Further support for these findings is required using more naturalistic measures of professionals' care responses.

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Chapter Three

(Re)searching for a role: a repertory grid investigation

Word count (excluding titles, tables, references and footnotes): 4000

Paper prepared for submission to Reflective Practice: International and Multidisciplinary Perspectives (see Appendix S for notes to contributors)

3.1. Abstract

This reflective chapter documents my journey through the research process. It utilises the repertory grid technique to investigate changes in the ways I construe research, knowledge creation and my role within this. I discuss the link between my core constructs and my preferred researcher roles. I provide a reflective account of how my epistemological position relates to these constructs and the meaning of this for my empirical and literature review papers. A final exploration considers the findings from the repertory grid applied to the meta-processes involved in constructing this reflective paper.

3.2. Keywords

Repertory grid; epistemology; clinical psychology; research roles

3.3. Introduction

In July, 2014 I was staring into the blankness of my research proposal. ‘How am I expected to know what I want to do? What do they mean, “what is your epistemological stance?” I don’t have a clue.’ But then I knew what I had to do – ‘let’s pin down the answer to this, let’s measure it, let’s see how it changes over time.’ Maybe if I’d have taken a step back and observed how I approached this problem, it would have been clear what my epistemological stance was.

At that point, I did not step back. Instead, I concerned myself with answering these questions. Explicitly, the questions were: who am I as a researcher? What do I think about the ways clinical psychologists can approach and engage with research? And, is this going to change as my thesis progresses?

To answer these questions I have employed a constructivist technique. Personal Construct Psychology (Kelly, 1995) is a school and theory of human behaviour. It posits that our behaviour is driven by how we anticipate the future and that how we construe the world determines what we anticipate. That is, we are scientists with models of how the world works and we use these models to predict what is going to happen. These predictions drive our behaviour. We personally, and individually, construct a way of seeing the world. I wanted to understand how I construed research, my place within it and how this may change as I fully engage with the thesis research process.

3.4. The method

The repertory grid technique is a tool for investigating construing systems (Kelly, 1955). A repertory grid consists of a topic (e.g. research roles). Within this topic lie a number of elements (different examples of the topic area). The grid then has a number of constructs which can be applied to understand the elements.

Jankowicz (2004) explicitly set out the method of constructing, using and analysing repertory grids. This method was employed for my reflections. I selected elements falling within the topic of research roles. These were identified by considering the different roles I know clinical psychologists to have taken (Table 12). Triadic elicitation (Kelly, 1955) was employed to uncover my construing system for understanding these elements. Three elements are selected and then you ask 'how are two of these similar and different from the other'. This elicits a construct pole (e.g. sad), and then we ask, 'as opposed to?' This elicits the contrast pole (e.g. empty). The contrast pole helps to more fully describe the construct.

Table 12: ***Elements for the repertory grid***

Element title	Comment
Current	Working as a Trainee Clinical Psychologist, with a thesis to write
Therapist	Providing therapy to clients, with no responsibilities for research, service evaluation or development
Split-post	Working in the NHS as a clinician and also part-time at a university as an academic
PhD	Undertaking a PhD after training
Trial	Working on a clinical trial, e.g randomised control trial for a psychological therapy
Service eval.	In a clinical setting with a mix of responsibilities, including service evaluation and development

Using this method I constructed a grid of six elements (research roles) and 8 constructs. A further construct was provided to summarise the extent to which the roles were consistent with my *self* (*alien to me* as opposed to *coherent to my personhood*). Elements were rated on a five point scale. In my grid, five represents the preferred pole, i.e. how I prefer a role to be. The grid is presented in *Figure 3*.

3.5. Beginning my journey

Before completing the grid and analysing the data I was already aware of the effect my past experiences had on element selection. I came with preconceptions that elements such as PhD or Trial would be superior to Therapist. At the time, I felt that these roles allowed psychologists to help larger numbers of people. These ideas were largely supplied by my contact with other psychologists up to this point. Most of my experience had been in assessment ('scientific' measurement) and working alongside psychologists developing services. Many of the discussions I observed and participated in were on the topics of assessment and service development, considering questions around how psychologists can prove our worth. In these conversations I was predominantly an observer, absorbing others' opinions on what psychologists' roles were in developing and employing theory and using their unique research skills to justify their expense. In this sense, I began to see the worth of psychologists in relation to the extent to which they developed and tested new ideas. These beliefs resulted from my observations of others, but through the research process I had the opportunity to fully engage with the issues as a researcher in my own right.

This is where the repertory grid technique could help me examine changes in my construing of psychologists as researchers, more specifically, of myself as a researcher.

I constructed and completed this original grid in July 2014 (*Figure 3)*. The information drawn from it provides an insight into how I construed research and my place within it at this time. A wide range of techniques can be employed to analyse repertory grids (Jankowicz, 2004) and only a small number are employed here. Eyeballing describes a form of analysis where visual inspection is used to note pertinent factors (colour coding aids this) and cluster analysis describes a statistical technique used to identify constellations of similar elements or constructs.

1	Current	Therapist	Split-post	PhD	Trial	Service eval.	5
Tunnel-visioned	3	1	5	3	3	4	Linking
Artificial	2	4	5	1	1	5	Real-life
Up in the clouds	4	4	4	2	4	5	Helping people
Alone	2	2	5	1	5	3	Part of a team
Powerless	2	2	4	3	5	5	Influential
No sense of achievement	5	1	4	5	5	3	Time limited
Complete independence	4	2	3	2	4	2	Safety
Regiment	4	2	4	5	2	3	Creative
Alien to me	5	1	4	3	3	4	Coherent to my personhood

***Figure 3*: Reflective grid, July 2014**

Using WebGrid (Gaines & Shaw, 2010) cluster analysis was used to understand how potential research roles may be understood similarly. This analysis indicated two particular clusters. Firstly, the service evaluation and split-post roles clustered highly together, and eyeball analysis indicated little difference on construct scores. This was unsurprising. I had felt the roles similar, both involving an even distribution of clinical and research work.

Secondly, my current role as a trainee clustered with doing a PhD. I viewed both of these roles as more *creative* and *time limited*, as opposed to *regiment* and having *no sense of achievement*. However, they were also construed as more *alone* and *artificial* (referring to them not being *real-life*, but being some kind of temporary state). The roles did differ in their *coherence with my personhood*; the trainee role seemed more consistent with who I am. This may reflect the different construing of their sense of *up in the clouds*, as opposed to *helping people*. The trainee role was construed as more *helping people*. While the role of conducting research was important to me, this needed to sit alongside doing something which I felt had an observable positive impact on people's lives.

The therapist and trial roles do not cluster highly with any of the other roles. Eyeball analysis showed that being a researcher on a trial was construed as being *part of a team*, *time limited* and *influential*, but also *artificial* and *regiment*. My consulting of randomised control trials and NICE guidance

showed me that clinical work conducted in trials did not always resemble what actually happened in mental health teams. However, what did happen in these teams, as represented by the therapist role, was not construed positively. It was understood as completely *alien to me* and my values with *no sense of achievement*.

When I began training, not so long prior to July 2014, I came with little therapeutic experience. Therapy was scary, but to me academia was comparatively comfortable. I think that my construing of research and the role I could take at this time was influenced by these experiences. There was a strong desire to prove my usefulness (and *influence*) through academics, *influence* attributed to roles such as working on a clinical trial. While the relative preference for the split-post, service evaluation and current trainee roles suggests that *helping people* in an observable way (e.g. through direct clinical work) was important, this alone was not enough (as evidenced by my construing of the therapist role). My preferred role was being somebody who was academic, but also making an observable difference to people's lives.

3.6. Changes in what I think

To consider changes in my construing of research roles, in February 2016 (toward the end of the thesis research process) I re-elicited my grid. Using the same elements as in July 2014, I used triadic elicitation to re-establish my construing system. To some extent, some of these constructs remained the same. The ratings for the constructs which remained from the original

grid could be compared between time points. Changes are illustrated in the change grid, *Figure 4* (elements are ordered according to level of change).

1	PhD	Current	Split-post	Service eval.	Trial	Therapist	5
Tunnel-visioned	1	1	-2	1	-2	3	Linking
Artificial	1	1	-2	-1	0	1	Real-life
Up in the clouds	0	0	0	0	-1	1	Helping people
Alone	0	1	-2	1	-1	2	Part of a team
No sense of achievement	0	0	0	2	-1	3	Time limited
Complete independence	1	0	0	1	-1	0	Safety
Regiment	0	1	0	2	-1	2	Creative
Alien to me	0	-1	0	1	-2	3	Coherent to my personhood

***Figure 4*: Grid of construct rating change between July 2014 and February 2016**

These numerical changes represent changes in <u>what</u> I think about the particular elements. The overall extent of change can be analysed using WebGrid which provides percentage scores for the extent to which element ratings remain the same. This is illustrated in *Figure 5*.

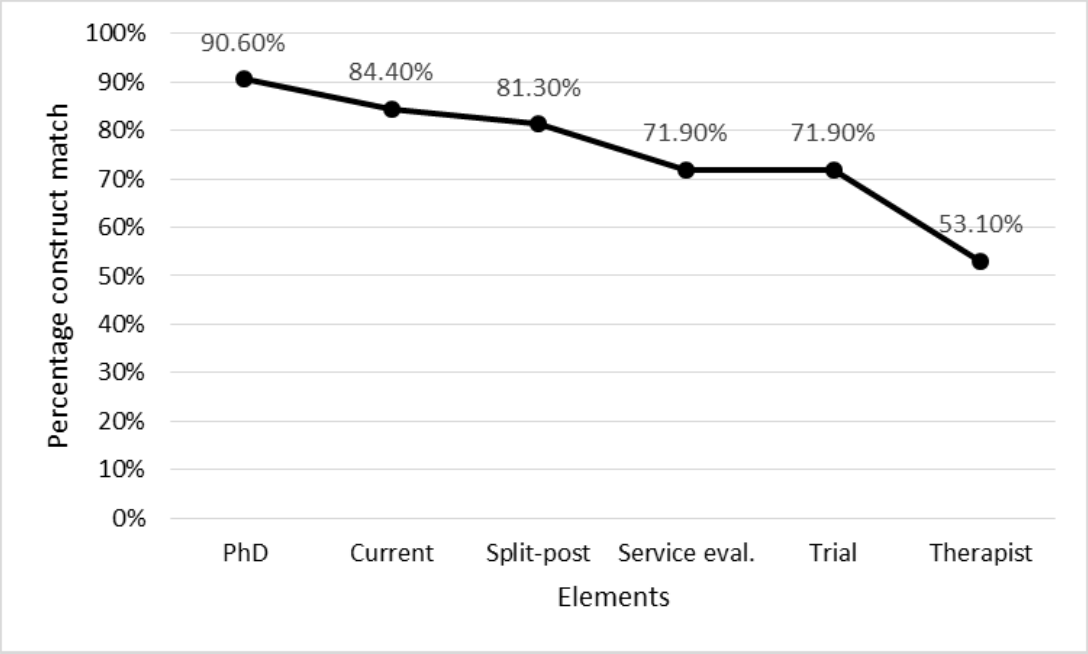

***Figure 5*: Percentage similarity in overall construct ratings between July 2014 and February 2016**

In some of the elements there was significant stability, particularly in PhD and my current role. However, the way which I construed some roles (e.g. trial researcher and therapist) on the constructs showed some change in my appraisals.

I now construed working on a clinical trial as more *tunnel-visioned*, more *alone* and more *regiment*. Throughout the research process, particularly in appraising papers for my literature review, I have become increasingly aware of the inadequacies of many mainstream research designs. This was particularly apparent when reading randomised control trials. I found the descriptions of client's difficulties and the prescribed treatment protocols to be inconsistent with the complexity of human experience observed during my own clinical work. Indeed, most often, psychologists seem to confirm their

initial hypotheses. Those working from a CBT perspective find CBT to be superior; those working from a dynamic perspective find psychodynamic models to be superior etc. It seemed the findings of the research were a foregone conclusion; where researcher bias might have greater effect on outcomes than any true analytic or *linking* process. This was also apparent in my literature review. While the papers were not randomised controlled trials, they often did involve widely accepted sampling techniques. An example would be papers which derived samples of people labelled with 'Borderline Personality Disorder', but excluded 'comorbid mood disorders'. The rationale was to ensure homogeneity of the sample. However, researchers failed to account for other important social sources of heterogeneity (e.g. poverty) with the same rigour. Sampling processes were based on the dominant narrative in mental health, rather than with any consideration to the validity and reliability of categorisation. Sampling followed a *regiment* rather than *creative* methodology. At this later point I was now more aware that dominant research practices (e.g. randomised controlled trials) were not consistent with my personhood, and my clinical experience.

The way I employed my constructs to understand the role of therapist were the most changed. While the role of trial had become less preferential, the role of therapist had become more. I think this is because my work as a therapist had significantly changed over this time. When beginning training I was *regimented*, following CBT protocols. However more recent experience of using Cognitive Analytic Therapy had shown me that I could work in a more *creative* way, *linking* past experiences to present within a *time limit*,

giving a *sense of achievement*. Parallel to this I had experienced difficulties in my empirical research, struggling to recruit. I saw these difficulties as really pertinent to my research topic. I was measuring burnout, but staff were too burntout to complete my questionnaires. These two processes demonstrated to me that hearing people's stories (whether while trying to collect data or during therapy) was a meaningful research process in itself.

3.7. Changes in how I think

While changes in the ratings indicates changes in what I think, changes in the specific constructs elicited indicates changes in how I think. When I re-elicited the grid in February 2016 (*Figure 6*), some of the constructs used to understand the roles remained the same, however there were also some additional constructs and one which was no longer used. This represents a change to my construing system; a change to the structure which I have used to understand research roles.

1	Current	Therapist	Split-post	PhD	Trial	Service eval.	5
Tunnel-visioned	4	4	3	4	1	5	Linking
Artificial	3	5	3	2	1	4	Real-life
Up in the clouds	4	5	4	2	3	5	Helping people
Alone	3	4	3	1	4	4	Part of a team
No sense of achievement	5	4	4	5	4	5	Time limited
Complete independence	4	2	3	3	3	3	Safety
Regiment	5	4	4	5	1	5	Creative
One role	5	2	5	2	3	5	Different activities
Surface	4	5	4	4	2	4	Meaningful
Stable base	5	2	5	3	2	3	In different places
Agent of somebody else	4	4	4	5	1	4	Ownership
Alien to me	4	4	4	3	1	5	Coherent to my personhood

***Figure 6*: Reflective grid, February 2016**

An example of a newly elicited construct was *one role*, as opposed to, *different activities*. At the beginning of the research process I was enthusiastic about my project. Now, I'm enthusiastic, but also fatigued. From the beginning of my final year I have felt a sense of pressure and at times this has felt all encompassing. While struggling with recruitment, I found myself slumped in my supervisor's office, exhausted by the endless effort and rare pay-off. Support and solution-focused discussion helped. What also helped was the sense that the next day I would be on placement, that later in the week we had teaching. In this sense I have become more aware of the

diversity of work that roles can bring, and often this diversity can provide some respite.

A further addition to the construing system was *agent of somebody else*, as opposed to, *ownership*. This construct distinguished between the trial element and the five other roles. Throughout my training I feel I have worked with people where there was a real sense that others (both groups and individuals) had real power over their lives. This disempowerment, observed both in colleagues and clients, seemed to co-occur alongside a sense of hopelessness and burnout. Taking an acceptance and commitment approach (Hayes, Strosahl & Wilson 2012), these people were not living a life, or doing a job according to their own values. Often they were living a life, or doing a job, according to the pressure of other people's values. This could be living their life under populist societal values, where people felt shamed for their struggles, or doing a job with the requirement of adhering to strict organisational protocols inconsistent with their own professional self. As such, it has become clear that some roles may involve strict adherence to other people's values and beliefs (inconsistent with my own); that is, I would be an *agent* of their agenda, as opposed to really *owning* my actions as a researcher.

As well as new constructs being added to my system, one construct fell out of use: *powerlessness*, as opposed to, *influential*. This construct was not re-elicited. It no longer differentiated between roles. I felt that in all roles, due to

the resources afforded to me, I would hold a fair amount of power. It no longer seemed clear which research roles were more powerful and which were less powerful. While clinical trials do have power, in the sense they have power to change national policy, does this power equal more or less than the power to help somebody create change through therapy? In this sense, influence was no longer able to quantitatively differentiate between the different constructs. I found that another new construct, *surface*, as opposed to, *meaningful*, better deals with differentiating constructs according to their qualitatively different forms of influence (e.g. whether the influence I have over people's lives seems really *meaningful* and useful or just a *surface* imposition). That is, I moved away from construing roles according to the amount of power they held, to a position of differentiating them according to the type of power they held.

Another way of measuring changes in <u>how</u> I think about research roles is to consider changes in the hierarchy of the structure. While the previous analysis dealt with additions and losses to the structure, the grid can also be analysed to consider changes to shape and hierarchy of the constructs within the construing system. The supplied construct (*alien to me*, as opposed to, *coherent to my personhood*) expresses a sense of what is important to me. A Match statistic can be calculated, using WebGrid, to consider the extent to which other construct's ratings match the provided construct. This shows the extent to which the individual constructs talk to my sense of *self*. The percentage match of each construct with this supplied construct is illustrated in *Figure 7*.

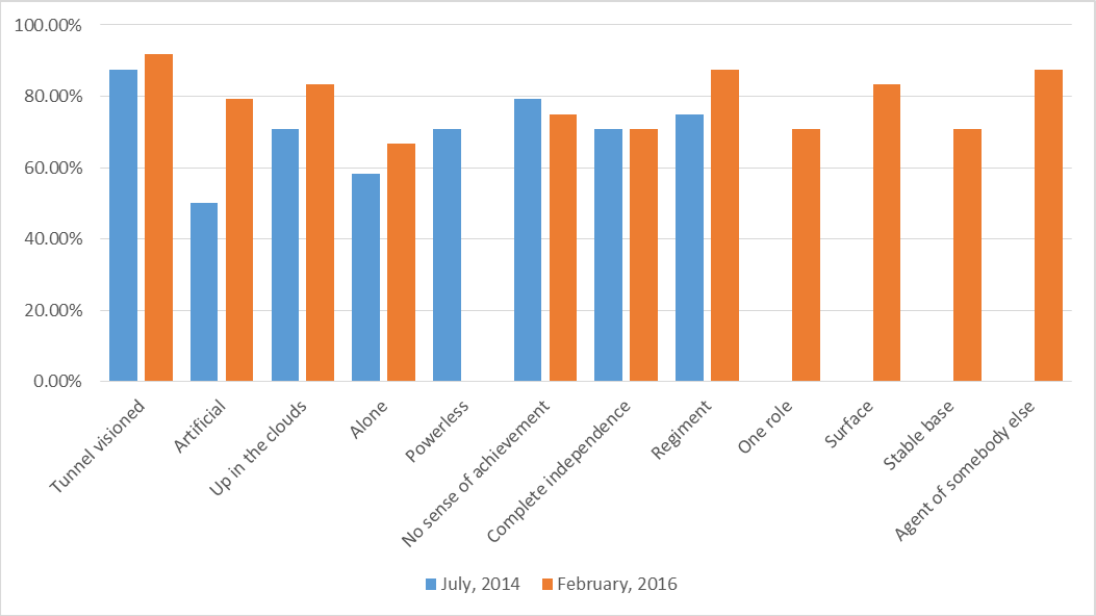

***Figure 7*: Percentage Match of ratings between individual constructs and *alien to me*, as opposed to, *coherent to my personhood*.**

Observing this data, it seems clear that at this current time it is most important to me that my future research role is one in which I am *linking* ideas, being *creative* and having a *sense of ownership*. In addition, now more than before, the extent to which roles are based in the *real-life* experiences of the people we strive to help (as opposed to being *artificial*) will speak to the sense of which role is *coherent to my personhood*. Through meeting the staff I hoped my research would help, by attending their meetings and working alongside them on placement, I have understood how important it is to have a real sense of what their work and life experiences are. I have understood, that to help these individuals, we not only need a quantitative sense that burnout and relationships can be problematic, but I also need to understand the meaning and complexities around this.

3.8. What about me?

When considering this match to my personhood, I was left wondering, 'but what is it that I actually value?' Our constructs have a hierarchy. More concrete and specific constructs relate to higher order, more core constructs. So, what was core to these more specific ways of construing the research process? Kelly (1955) outlined the technique of laddering, where one asks of a preferred construct pole, 'why is this important? And what is the contrast of this?' For instance, *linking* is important to me because it *creates something*, as opposed to, *blindly continuing in the same direction*. In this sense the newly elicited construct is superordinate. One can then ladder upwards and the constructs will become increasingly core to my personhood. I used this procedure for each elicited construct, in both the first and second grid. Two examples are presented in *Figure 8*.

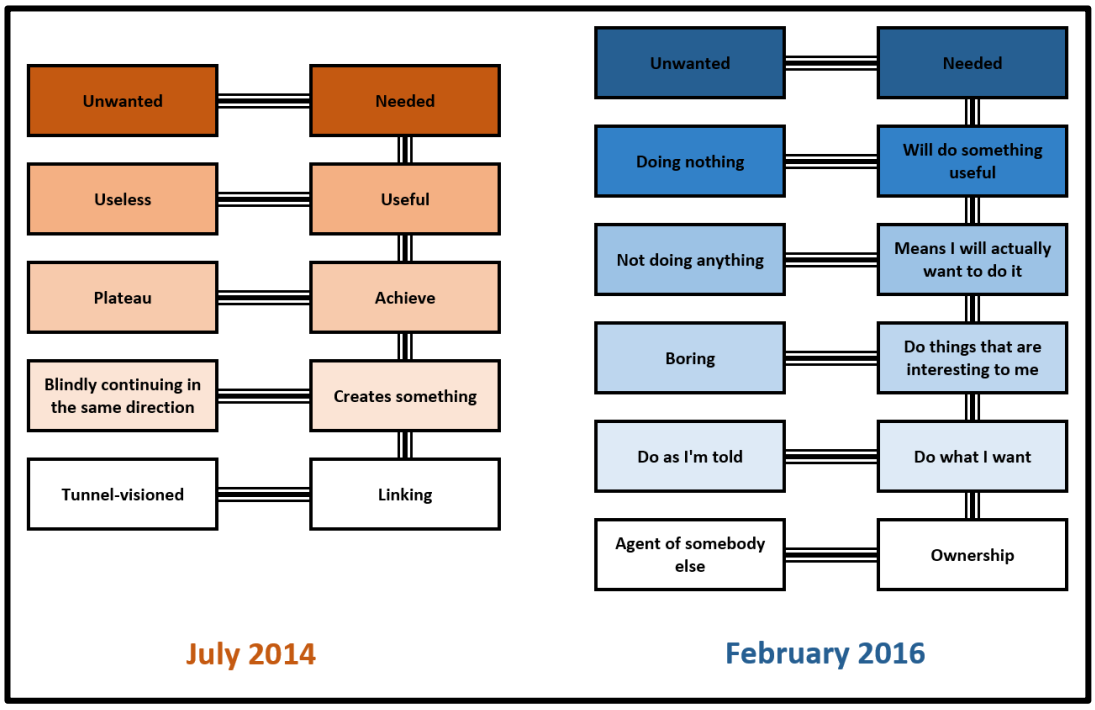

***Figure 8*: Elicited constructs laddered upwards to their core constructs**

Figure 8 shows that there is something about my way of seeing research and the research roles as being understood by the extent to which I am *needed*, as opposed to, *unwanted*. Thus to me, the utility of research and my research role has remained unchanged: to feel *needed*, as opposed to, *unwanted*. However, the specifics and subordinate ways in which the roles are understood as having qualities of one of these poles has changed. For instance, there were changes in the relative importance of subordinate constructs in predicting whether the role will be consistent with my core construct/value. While initially being *needed* involved a sense of being *linking*, *time limited*, *influential* and *creative*, at the end of this research process it no longer required the construing of *influence*, but it did now involve having a *sense of ownership* over what I do, dealing with *real-life* problems in a *meaningful* way.

3.9. Enacting roles, considering core constructs

My empirical and literature review research were based on a logical positivist epistemology. I attempted to reduce human experience to 'valid' and 'reliable' measurable constructs (e.g. measuring the relationship between attachment dimensions, burnout and 'response urgency'). However, as the research has progressed I have come to place more value on the quality of the information provided, the information given in the process (for example, recruitment was hard because staff were so overworked). I have been left with a sense that quantitative positivist approaches to psychological research may not always capture the true meaning of human experience, and in this sense may not always represent the *real-life* events that people endure. This

is the point where I panic: ‘Oh, am I an interpretivist who has chosen to do positivist research?’ I began the process wanting to do research which was ‘tidy’ (as my research supervisor put it), but the process has shown me that people are actually very messy.

I went back to the study of epistemology and reflected on my own beliefs about knowledge and the purpose of research. Drawing on my core construct of being *needed* and on my reading of epistemological stances I realised I had forced a false dilemma on myself. I had set up a place where I felt I had to be positivist and believe that I really had measured something representing physical reality, or I had to be interpretivist and believe all knowledge was an interpretation. However, above all of this is my need to be *useful* and *needed* as a researcher. This does not particularly dictate that I need subscribe directly to either of those two choices I presented myself with. Instead, it suggests that my epistemological stance is one of pragmatism. On pragmatism, Gray (2014) reports that ‘an ideology is true only if it works (particularly in promoting equity, freedom and justice) and generates practical consequences for society’ (p.28). Thus my research and its findings can have truth (i.e. I am not an interpretivist) but this is based in their utility, not in their representation of the material world (i.e. I am not a positivist).

On a personal level, what I hoped and aimed for at the beginning of the project is the same as what I hoped and aimed for at the end of the project:

that the research might influence how staff were supported. My plan was to evaluate the impact of specific intrapersonal variables on staff practice to better understand the changes that might be needed and the impact this could have for staff and service users. I needed to choose a methodology which was appropriate to this end. My methodology does not fully meet this aim but that does not mean it isn't *useful*. It provides data indicating that there may be a need for supporting staff better, placing less pressure on them and generally for organisations to treat staff in a more compassionate manner. Ultimately, the power to make this change lies with organisations and government, and in influencing these structures statistical knowledge can be *useful* (thus true).

In summary, I hope my research is true, not because (as I originally believed) it is measuring something objectively factual in a material sense, but because it has real world consequences. This stance is clear in my preferred future role – one where I can identify real world problems and conduct research which leads to *meaningful* action (a role where I will feel *needed*).

3.10. The meta-process

Interestingly, many of the dilemmas I have faced with my empirical and literature review papers, the split between interpretivism and positivism, have also arisen as I have written this reflective piece.

Originally, I thought that the repertory grid would make my reflections ‘tidy’, a position I maintained well up until I began trying to analyse the grids. At the beginning of this piece I stated that if I had taken a step back from the process and looked at my plan for reflection it might have been clear what epistemological stance I was taking. I was hoping to apply a positivist approach to measuring changes in my internal belief system, a positivist approach to measuring how I construct the world.

When I began to think about analysing the grids I found myself searching endlessly for the ‘right’ way to do it, the perfect statistical test which would provide me with the answer to how I had changed. Alas… Following a discussion with scholars of the repertory grid technique it became painfully clear that to continue down this line was unlikely to provide me with real insight into my experiences, nor was it likely to lead to *meaningful* action. To really take a pragmatic approach I needed to get messy and reflect on the process and the qualitative experiences. I needed to delve into the number of different ways the information could be understood. In this sense, I (and the repertory grid technique) have not provided an objective account of my experiences. Instead, I have provided a pragmatic reflection – not empiricism, but story telling. A very *useful* story, which leads me to a better understanding of who I am, what I want to do and how I can help people and be *needed*.

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Appendices

Appendix A: Clinical Psychology Review instructions to authors

CLINICAL PSYCHOLOGY REVIEW

AUTHOR INFORMATION PACK

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DESCRIPTION

Clinical Psychology Review publishes substantive reviews of topics germane to **clinical psychology**. Papers cover diverse issues including: psychopathology, psychotherapy, behavior therapy, cognition and cognitive therapies, behavioral medicine, community mental health, assessment, and child development. Papers should be cutting edge and advance the science and/or practice of clinical psychology.

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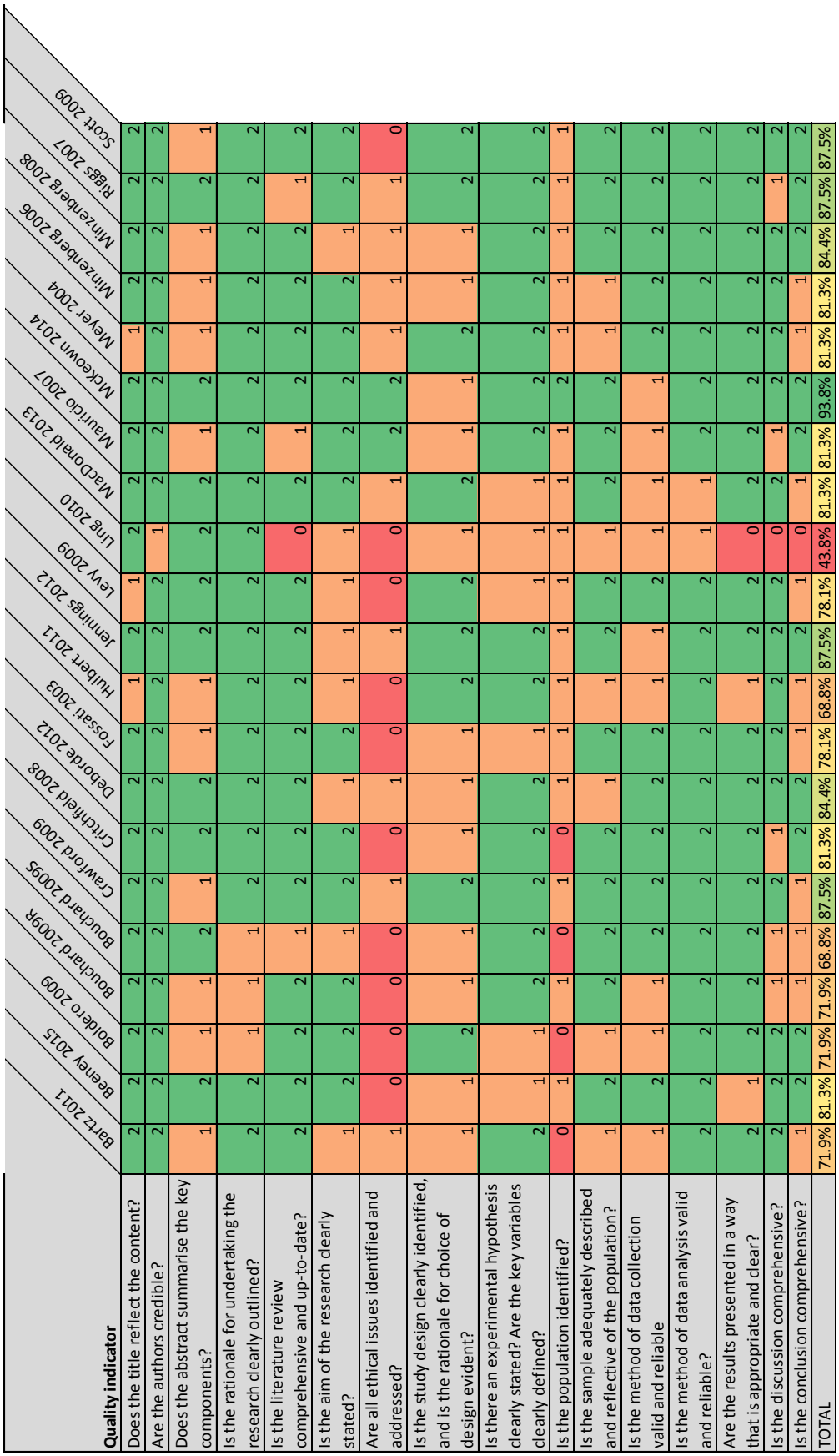

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Does the title reflect the content?	2	2	2	2	2	2	2	2	2	1	2	1	2	2	2	2	1	2	2	2	2
Are the authors credible?	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	2
Does the abstract summarise the key components?	1	2	1	2	1	2	2	1	1	1	2	2	2	2	1	2	1	1	2	2	1
Is the rationale for undertaking the research clearly outlined?	2	2	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Is the literature review comprehensive and up-to-date?	2	2	2	1	2	2	2	2	2	2	2	2	0	2	1	2	2	2	2	1	2
Is the aim of the research clearly stated?	1	2	2	1	2	2	1	2	1	1	1	1	1	2	2	2	2	1	2	2	2
Are all ethical issues identified and addressed?	1	0	0	0	1	0	1	0	0	0	1	0	0	1	2	2	1	1	1	1	0
Is the study design clearly identified, and is the rationale for choice of design evident?	1	1	2	1	1	2	1	1	1	2	2	2	1	2	1	1	2	1	2	2	2
Is there an experimental hypothesis clearly stated? Are the key variables clearly defined?	2	1	1	2	2	2	2	2	1	2	2	1	1	2	2	2	2	2	2	2	2
Is the population identified?	0	1	0	1	0	1	0	1	1	1	1	1	1	1	2	1	1	1	1	1	1
Is the sample adequately described and reflective of the population?	1	2	1	2	2	2	2	1	2	1	2	2	1	2	2	2	1	1	2	2	2
Is the method of data collection valid and reliable	1	2	1	1	2	2	2	2	2	1	1	2	1	1	1	1	2	2	2	2	2
Is the method of data analysis valid and reliable?	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	2
Are the results presented in a way that is appropriate and clear?	2	1	2	2	2	2	2	2	2	1	2	2	0	2	2	2	2	2	2	2	2
Is the discussion comprehensive?	2	2	2	1	1	2	1	2	2	2	2	2	0	2	1	2	2	2	2	1	2
Is the conclusion comprehensive?	1	2	2	1	1	1	2	2	1	1	2	1	0	1	2	2	1	1	2	2	2
TOTAL	71.9%	81.3%	71.9%	71.9%	68.8%	87.5%	81.3%	84.4%	78.1%	68.8%	87.5%	78.1%	43.8%	81.3%	93.8%	81.3%	81.3%	84.4%	87.5%	87.5%	87.5%

Appendix C: Completed data extraction form

Reference

Deborde, A., Miljkovitch, R., Roy, C., Duyré-Le Bigre, C., Pham-Scottez, A., Speranza, M. & Corcos, M. (2012). Alexithymia as a mediator between attachment and the development of Borderline personality disorder in adolescence. Journal of Personality Disorders, 26(5), 676-688.

Aims/questions/hypotheses

- Alexithymia mediates the effect of attachment on BPD development.
  - ↓ BPD associated w/ attachment
  - ↑ BPD associated w/ alexithymia
  - ↑ Alexithymia mediates association between BPD+ attachment

Study design

Cross-sectional, between-groups design

Participant characteristics

Demographics (inc. number)	Clinical profile
- France, Belgium + Switzerland - All female - 54 outpatients - Mainly upper- middle class - 51 controls (nonclinical) matched on socio-economic. - M age C=16.52, M age Com = 16.35 15-18yo.	- At least 5/9 of DSM-IV BPD criteria. - Did not exclude on comorbidities ↑ 87% met criteria for an Axis I disorder inc. ED, mood D, sub use, anx D + disruptive behaviour ↑ Also DI comorbid Axis II inc 39% OCPD and other

Measures

Attachment	Borderline features	Other
Relationship Styles Questionnaire	Structured Interview for DSM-IV Personality (SIDP-IV) - severity scores 0-3 for each symptom criteria - Severity score 0-27 overall.	Kiddie Schedule for Schizophrenia and Affective Disorders (Kiddie-SADS) to assess comorbidity TAS-20 : Alexithymia

Data analysis

- t-tests to consider differences between the two groups.
- Correlations for individual associations between variables
- Regression + using Baron + Kenny's (1986) assumptions to test mediation

Summary of findings

- ↑ Sig higher rates on Alexithymia in BPD group.
- ↑ More neg MoS (att anx) in BPD group.
- ↓ No sig d.f. in MoO,
- ↑ R'ship between MoS + borderline severity partially mediated by alexithymia.

Implications		
Theoretical	Clinical	Research
* Some parts of MoS r'ship w/ BPD direct other parts indirect through Alexithymia.	Need to improve emotional consciousness	* Need to look if relates to males too. * Longitudinal?

Critique

* Using adolescents, HOWEVER more clean data, less confounding when looking at development of BPD.
* Only females, mainly upper middle class
* Use the Relationships Questionnaire. (Model of Self [anx], Model of Other [avo]. Only 4-item measure.
* (+) did not exclude on comorbities.
* Looks @ styles also.

Quality assessment score	84.4%

What is the relationship between borderline features and attachment dimensions?

- Neg MoS (att anx) sig related to BPD severity in adolescents.
- Part of this rel. is explained by Alexithymia.

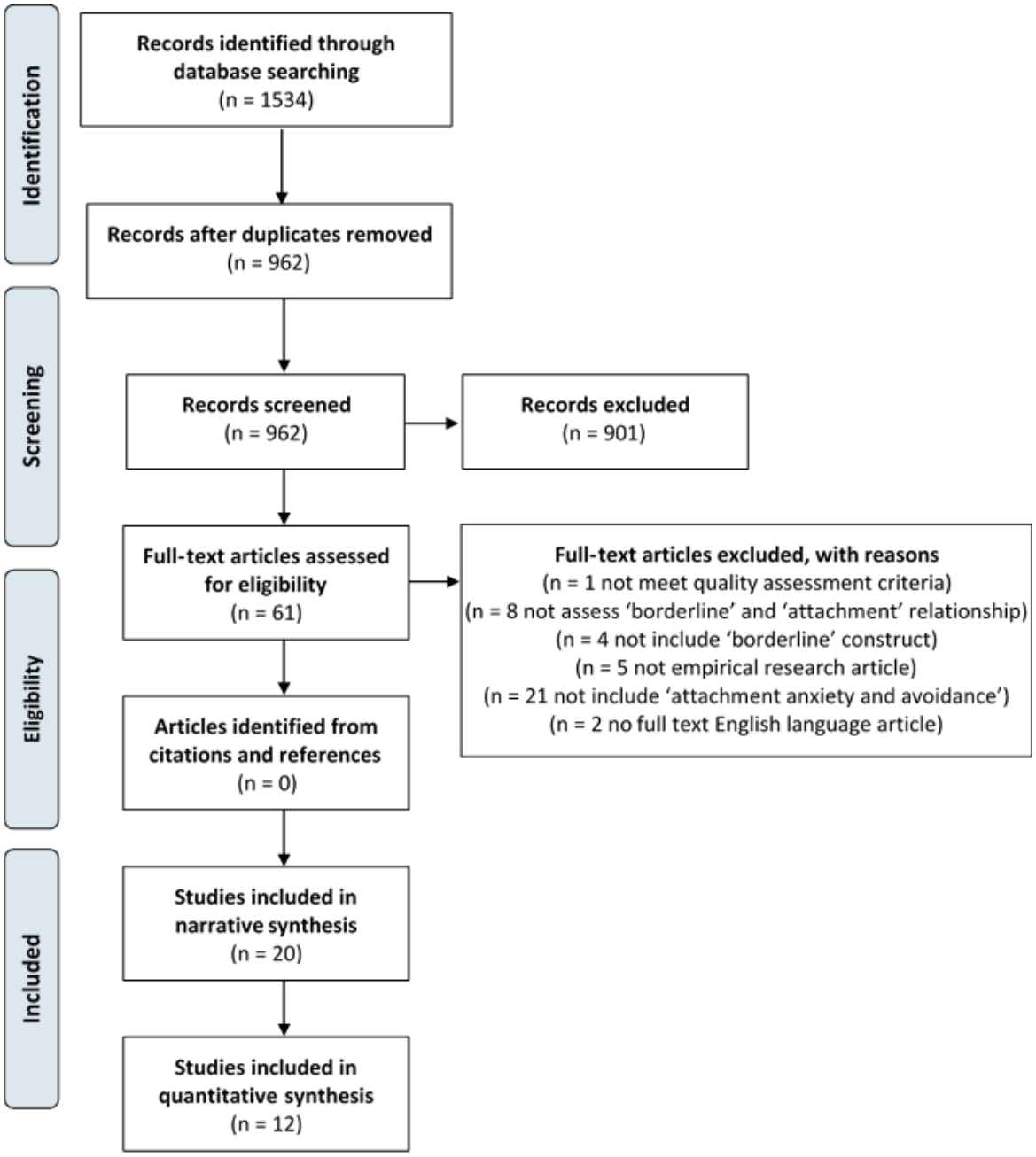
- Neg MoS behave in accordance w/ others'/carigiver's expectations - less opportunity to identify feelings, identification of feelings compromised (Alexithymia), problems w/ reflective functioning leaves vulnerable to manifest symptoms of BPDe through triggered distress in interpersonal situations.
* Because anxious about availability/ abandonment.

What is the clinical utility of attachment dimensions for understanding borderline features?

* "Therapies aimed at increasing emotional consciousness for adults" may also be useful for adolescents, as appear to be lagging behind peers even @ this early stage.
  - MBT
  - TFP
  - DBT

Att dim. Provides explanations + narrative @ this early stage. Suggests use of preventative parenting?
* ~~Conclusion~~
  - Early intervention for children w/ MoS.

Appendix D: PRISMA flowchart



Appendix E: Clinical Psychology and Psychotherapy instructions to authors

Clinical Psychology & Psychotherapy

Edited By: Paul Emmelkamp and Mick Power

Impact Factor: 2.632

ISI Journal Citation Reports © Ranking: 2014: 29/119 (Psychology Clinical)

Online ISSN: 1099-0879

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4. **Specific citations of pages or chapters follow the year** .
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5. **When the reference is to a work by two authors, cite both names each time the reference appears** .
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3. **Book with More than One Author**
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   Hesen, J., Carpenter, K., Moriber, H., & Milsop, A. (1983). *Computers in the business world* . Hartford, CT: Capital Press. and so on.
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4. **Web Document on University Program or Department Web Site**
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5. **Stand-alone Web Document (no date)**
   Nielsen, M. E. (n.d.). *Notable people in psychology of religion* . Retrieved August 3, 2001, from
   http://www.psywww.com/psyrelig/psyrelpr.htm

6. **Journal Article from Database**
   Hien, D., & Honeyman, T. (2000). A closer look at the drug abuse-maternal aggression link.*Journal of Interpersonal Violence, 15* , 503-522. Retrieved May 20, 2000, from ProQuest database.http://www.psywww.com/psyrelig/psyrelpr.htm

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   Garrity, K., & Degelman, D. (1990). Effect of server introduction on restaurant tipping. *Journal of Applied Social Psychology, 20* , 168-172. Abstract retrieved July 23, 2001, from PsycINFO database.http://www.psywww.com/psyrelig/psyrelpr.htm

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   Shea, J. D. (1992). Religion and sexual adjustment. In J. F. Schumaker (Ed.), *Religion and mental health* (pp. 70-84). New York: Oxford University Press.http://www.psywww.com/psyrelig/psyrelpr.htm

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Appendix F: Psychosis Attachment Measure

Coventry University
Priory Street, Coventry CV1 5FB
Telephone 024 7688 8328
Fax 024 7688 8702

Programme Director
Doctorate Course in Clinical Psychology
Dr Eve Knight
BSc Clin.Psy.D. CPsychol

THE UNIVERSITY OF WARWICK

Coventry University

Relationships: Self-Report Measure

We all differ in how we relate to other people. This questionnaire lists different thoughts, feelings and ways of behaving in relationships with others.

Thinking generally about how you relate to other key people in your life, please use a tick to show how much each statement is like you. Key people could include family members, friends, partner or mental health workers.

There are no right or wrong answers.

	Not at all	A little	Quite a bit	Very much
1. I prefer not to let other people know my 'true' thoughts and feelings.				
2. I find it easy to depend on other people for support with problems or difficult situations.				
3. I tend to get upset, anxious or angry if other people are not there when I need them.				
4. I usually discuss my problems and concerns with other people.				
5. I worry that key people in my life won't be around in the future.				
6. I ask other people to reassure me that they care about me.				
7. If other people disapprove of something I do, I get very upset.				
8. I find it difficult to accept help from other people when I have problems or difficulties.				

Dean of Faculty of Health and Life Sciences
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Head of Department of Psychology
Professor James Tresilian BSc PhD University of Warwick Coventry CV4 7AL Tel 024 7657 3009

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	Not at all	A little	Quite a bit	Very much
9. It helps to turn to other people when I'm stressed.				
10. I worry that if other people get to know me better, they won't like me.				
11. When I'm feeling stressed, I prefer being on my own to being in the company of other people.				
12. I worry a lot about my relationships with other people.				
13. I try to cope with stressful situations on my own.				
14. I worry that if I displease other people, they won't want to know me anymore.				
15. I worry about having to cope with problems and difficult situations on my own.				
16. I feel uncomfortable when other people want to get to know me better.				

Appendix G: abbreviated Maslach Burnout Inventory

Coventry University
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Programme Director
Doctorate Course in Clinical Psychology
Dr Eve Knight
BSc Clin.Psy.D. CPsychol

THE UNIVERSITY OF WARWICK

Coventry University

Work: Self-Report Measure

How often do the following describe the way you feel about working as a mental health professional?

	Every day	A few times a week	Once a week	A few times a month	Once a month or less	A few times a year	Never
1. I deal very effectively with the problems of service users.							
2. I feel I treat some service users as if they were impersonal objects.							
3. I feel emotionally drained from my work.							
4. I feel fatigued when I get up in the morning and have to face another day on the job.							
5. I've become more callous towards people since I took this job.							
6. I feel I'm positively influencing other people's lives through my work.							
7. Working with people all day is really a strain for me.							
8. I don't really care what happens to some service users.							
9. I feel exhilarated after working closely with service users.							
10. I think of giving up mental health for another career.							
11. I reflect on the satisfaction I get from being a mental health professional.							
12. I regret my decision to have become a mental health professional.							

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Head of Department of Psychology
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Appendix H: Vignette

Coventry University
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Fax 024 7688 8702

Programme Director
Doctorate Course in Clinical Psychology
Dr Eve Knight
BSc Clin.Psy.D. CPsychol

THE UNIVERSITY OF WARWICK

Coventry University

Vignette

Background

Carly is a 27 year old woman who has received support from the Community Mental Health Team for the last 5 years and whom you are the assigned Care Coordinator for. Carly has received support from the Community Mental Health Team for the last 5 years and you are aware that in her adolescence she had been under the Child and Adolescent Mental Health Service who had provided treatment for disorders of mood and eating. Carly's family also had input from Children's Social Care who had concerns about emotional neglect and abuse within the home. Carly has spoken about caring for her younger siblings when her parents were too drunk and the perceived lack of gratitude for this. She has stated that her parents were clear she was the least preferred child and would tell her that the difficulties they were experiencing with their mental health and substance misuse was due to the strain having her had put on their lives.

At your appointments with her, Carly sometimes describes feeling "empty inside" or "dead inside". Her emotional state is prone to changing dramatically over a number of hours, ranging from high points where she focuses on her future and makes plans for her life to periods where she describes herself as feeling "depressed" and other periods where she presents as agitated and frustrated. She describes a "demon me" and an "angel me". Her emotional state can also be related to some of the behaviour she exhibits. For most of her adult life Carly has misused substances. For a long period of time this was alcohol, and when intoxicated, she regularly exhibited anti-social behaviour or became involved in criminal activity, on one occasion assaulting a barman who refused to serve her a drink. She has since sought help for her alcohol use and succeeded in reducing this but she later replaced alcohol with codeine, and more lately has been using aerosols.

At times where she has felt low and described feeling empty or dead inside she has reported a desire to die. She has had numerous episodes of self-injurious actions and other times where she has threatened serious self-injury but later disclosed that she has not gone ahead with this. Most often this has been cutting behaviour. Usually this has not been life threatening but on a number of instances she has had to attend A&E by ambulance.

Carly has had a number of romantic relationships. She describes hating her past partners. Many of these relationships have involved domestic violence. Carly reports that she uses sex in relationships to keep her partners happy and describes feeling "that is all men want". When she first met her current partner she described being "madly in love" however as the relationship progressed she has become suspicious he is cheating on her. Recently, she has become more agitated, misusing aerosols to a greater degree and also having a one-night-stand with a friend, which she has then informed her partner of. In terms of friendships Carly has not appeared to have longstanding friendships. She previously had friends who she would get drunk with, however when she felt those friendships had become unhelpful, she became closer to friends from church. More recently she has described the church-based friendships as fading and has begun talking about wanting to meet new people and wishing that she had "real" friends.

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Current time

It's a busy day at work, and you have a full diary. You receive a telephone call from Carly, who explains that her partner has said he is going to leave her. She said she has sent a text to her partner telling him that if he leaves her then she doesn't see the point in life anymore. When you ask for clarification she explains that she feels like she is in hell. On asking whether she has any plans to harm herself Carly responds by saying "why do you care?" Carly describes wanting to be free of her "hell" and says that she just needs a "release". On further enquiry, Carly does not provide you with a clear response regarding whether or not she actually intends to harm herself.

Response

In this position, with the information provided, which option best represents how you would respond? (Please ensure you only select one response)

Choices	Selection
Phone the GP for advice.	
Explain that you have a number of other commitments but will call back later.	
Listen to the concerns and provide reassurance.	
Listen to the concerns, provide reassurance and offer to visit her today/now.	
Phone the family to inform them of the current situation.	
Listen to the concerns, provide reassurance and offer to visit her later in the week.	
Request a Mental Health Act Assessment is conducted via appropriate channels.	
Contact the police for immediate assistance to ascertain her safety.	

Appendix I: Certificate of ethical approval

Certificate of Ethical Approval

Applicant:

Greg Stocks

Project Title:

Burnout and mental health staff management of crisis for a patient with a diagnosis of Borderline Personality Disorder: the mediating role of staff attachment.

This is to certify that the above named applicant has completed the Coventry University Ethical Approval process and their project has been confirmed and approved as Medium Risk

Date of approval:

15 July 2015

Project Reference Number:

P28472

Appendix J: Research and Development approval, 2gether NHS Foundation Trust

Gloucestershire Hospitals NHS
NHS Foundation Trust
% Gloucestershire Research Support Service
Leadon House
Gloucestershire Royal Hospital
Great Western Road
Gloucester
GL1 3NN
Telephone: 0300 4225463
Facsimile: 0300 4225469
Email: mark.walker@glos.nhs.uk

Our R&D ref: 15/005/2gt

Monday, 23 March 2015

Dr Greg Stocks
Trainee Clinical Psychologist
Department of Clinical Psychology
James Starley Building
Priory Street
Universities of Coventry and Warwick
Coventry and Warwick NHS Partnership Trust
Coventry
CV1 5FB

Dear Dr Stocks

Study title: **Burnout and Mental Health Staff Management of Crisis for a patient with a diagnosis of Borderline Personality Disorder: The Mediating Role of Staff Attachment**

IRAS Ref: **171334**

Thank you for forwarding information on the above study. I can confirm the approval of 2gether NHS Foundation Trust for the above study to proceed.

Where an NHS Organisation's role in the study involves the recruitment of participants to Clinical Research it is the responsibility of the Sponsor to ensure before the start of the study that site initiation is provided. Potential Research Participants should not be approached until site initiation has been provided and the 'green light' has been given by the Sponsor.

Your project will now be added to the Gloucestershire Health Community Research Register which will identify the following:

- Study Title: **As above**
- Chief Investigator: **As above**
- Sponsoring Organisation: **Coventry University**
- Host Organisation: **2gether NHS Foundation Trust**
- Type of Study: **Qualitative/Quantitative**

It is important that all research conducted with NHS patients and/or staff complies with the Research Governance Framework. We would advise you to notify us at the above address, quoting our reference number for your study with regards to the following information.

- **Protocol Changes/Amendments to the study**
- **Change of Principal Investigator/local Research Team at site**
- **Untimely closure of study**
- **Final study closure date**
- **Final recruitment figure of study**

In relation to this I would like to take the opportunity to remind you of some of your responsibilities under this framework.

1. **Health and safety:** You are reminded of your responsibilities for health and safety at work under the Health and Safety at Work Act 1974. You have a legal responsibility to take care of your own and other people's Health and Safety at work under the Health and Safety at Work ACT 1974 as amended and associated legislation. These include the duty to take reasonable care to avoid injury to yourself and to others by your work activities or omissions, and to co-operate with your employer in the discharge of its statutory duties. You must adhere strictly to the policies and procedures on health and safety.

2. **Codes of confidentiality/Data Protection:** Anybody who records patient information (whether on paper or by electronic means) has a responsibility to take care to ensure that the data recorded is accurate, timely and as complete as possible. It is vital that you conduct your research in accordance with the principles of the Data Protection Act 1998 and codes of confidentiality.

3. **Liability and Indemnity:** Indemnity for your study will be as described in any applicable Clinical Trial Agreement or other Research Contract.
   Where such an agreement is not available, the Trust will indemnify its employees and researchers holding NHS Honorary Contracts for the purposes of Negligent Harm.
   NHS Trusts cannot provide cover for No Fault or Non-Negligent claims. Where this is required, it is expected that the Research Sponsor will provide such indemnity.

4. **Intellectual Property:** Intellectual Property is defined as the tangible output of any intellectual activity that is new or previously undescribed. It can include the following:

   i. Inventions, such as new medical devices, software;
   ii. Literary works, such as software, patient leaflets, journal articles;
   iii. Designs and drawings, such as posters, leaflets;
   iv. Brand names, such as logos and trademarks; and
   v. Trade secrets, such as surgical techniques.

   For projects originating from outside of the NHS Trust with which this agreement is made, Intellectual Property rights will remain with the Lead Site/Investigator unless developed from observations made outside of the scope and influence of the project. The rights to Intellectual Property generated in such a fashion will remain with the Host Trust unless an agreement to the contrary has been signed by both parties. Where a Clinical Trial Agreement or other Contract exists, this will take priority over this clause.

5. **Adverse Events/Incidents:** Any adverse events you witness or suspect to have happened *must* be reported to your supervisor or manager as soon as you know about them and dealt with as described in the research protocol.

6. **Fraud and Misconduct:** Any suspicions of active fraud or misconduct *must* be reported to your supervisor or manager immediately and will be treated in the strictest confidence. The monitoring of research will also seek to reduce incidents of research misconduct and fraud.

7. **Monitoring:** As part of the Research Governance Framework, during the course of your research you may be monitored to ensure that procedures in the protocol approved by the ethics committee are being adhered to. For locally sponsored studies this will be undertaken by the R&D Office. For externally sponsored studies this is likely to be arranged by the appropriate sponsor.

8. **Dissemination:** The Framework also requires the dissemination of research findings to the research subjects, NHS staff and the public. On completion of your research you will be expected to produce a summary of the project and an indication of how the results from the study will be disseminated. For studies where publication of research results is not the responsibility of the local Investigator, requests for such information will be made to the sponsor.

9. **Termination of Agreement:** The Trust also reserve the right to terminate the agreement for your research to proceed if, at any time, you are found to be in breach of the clauses in this Approval Letter or fail to adequately meet the requirements of the Research Governance Framework.

If you need any further support or information, please do not hesitate to contact us at the above address, quoting our reference number for your study.

I wish you every success with your project

Yours sincerely,

Mark Walker
Senior Research Governance Manager
(Gloucestershire R&D Consortium)

Appendix K: Research and Development approval, Black Country Partnership NHS Foundation Trust

Black Country Partnership NHS
NHS Foundation Trust

Maple Room
The Beeches
Penn Hospital Site
Penn Road
Wolverhampton
WV4 5HN

Tel 01902 444323
Fax: 01902 446079

Mr Greg Stocks
Trainee Clinical Psychologist
Universities of Coventry and Warwick

17 August 2015

Dear Greg

Name of project - Clinician attachment, burnout and perceived clinical action

I am writing to inform you that the Black Country Partnership NHS Foundation Trust's Research and Innovation Committee have approved your study and hereby give local R&D approval for your research to begin, on the basis of your research application and proposal approved by Coventry and Warwick University.

May I remind you that if you should deviate from the protocol reviewed by the R&I committee, then local approval for this study will be withdrawn? Permission to conduct research is also conditional on the research being conducted in accordance with the Department of Health's Research Governance Framework for Health and Social Care.

I would like to wish you every success with your research and look forward to receiving a copy of your completed report in the future.

Yours sincerely

Joanne Tomkins, Research & Innovation Manager
On behalf of
Dr Stephen Edwards
Medical Director for BCPFT

Appendix L: Research and Development approval, Coventry and Warwickshire Partnership NHS Trust

Coventry and Warwickshire NHS
Partnership Trust

NIHR Clinical Research Network: West Midlands
Unit 27
Business Innovation Centre
Binley Business Park
Harry Weston Road
Coventry
CV3 2TX

19 October 2015

Greg Stocks
Coventry & Warwickshire Partnership NHS Trust
Psychology Department
St Michael's Hospital
St Michael's Road
Warwick
CV34 5QW

Dear Mr Stocks

Project Title: **Clinician attachment, burnout, and perceived clinical action v1**
R&D Ref: **CWPT130815**

I am pleased to inform you that the R&D review of the above project is complete, and NHS permission has been granted for the study at Coventry and Warwickshire Partnership NHS Trust. The details of your study have now been entered onto the Trust's database.

The permission has been granted on the basis described in the application form, protocol and supporting documentation. The documents reviewed were:

Document	Version	Date
Coventry University Certificate of Ethical Approval	P28472	15 July 2015
R&D Form	171334/859212/14/61	
SSI Form	171334/859538/6/773/291635/333298	
Protocol	1	
Participant Information Sheet	1	
Consent Form	1	15 November 2014
Questionnaires	1	15 November 2015
Informed Consent (Booklet)	1	

All research must be managed in accordance with the requirements of the Department of Health's Research Governance Framework (RGF), to ICH-GCP standards (if applicable) and to NHS Trust policies and procedures. Permission is only granted for the activities agreed by the relevant authorities.

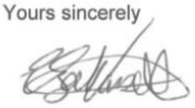
All amendments (including changes to the local research team and status of the project) need to be submitted to the REC and the R&D office in accordance with the guidance in IRAS. Any urgent safety measures required to protect research participants against immediate harm can be implemented immediately. You should notify the R&D Office within the same time frame as any other regulatory bodies.

It is your responsibility to keep the R&D Office and Sponsor informed of all Serious Adverse Events. All SAEs must be reported within the timeframes detailed within ICH-GCP statutory instruments and EU directives.

In order to ensure that research is carried out to the highest governance standards, the Trust employs the services of an external monitoring organisation to provide assurance. Your study may be randomly selected for audit at any time, and you must co-operate with the auditors. Action may be taken to suspend Trust approval if the research is not run in accordance with RGF or ICH-GCP standards, or following recommendations from the auditors.

I wish you well with your project. Please do not hesitate to contact me should you need any guidance or assistance.

Yours sincerely



Elizabeth Vassell
Research Support Facilitator

Copy to: Dr Tom Patterson, University of Worcester
Professor Ian Marshall, Coventry University
Toni Ruck, Head of Community Services SCMH

Appendix M: Research and Development approval, Dudley and Walsall Mental Health Partnership NHS Trust

Dudley and Walsall NHS
Mental Health Partnership NHS Trust

Date of presentation	13/04/2015
Time of presentation	11.45
Title of study	Burnout and mental health staff management of crisis for a patient with a diagnosis of Borderline Personality Disorder: the mediating role of staff attachment.
Presented By	Greg Stocks
Type of study	Own account
Synopsis of study	**Please give enough detail so that the Committee has enough information on which to base a decision to approve the study** **What is the purpose of this research?** The focus of the research is looking at the potential relationship between care coordination staff burnout, their attachment dimensions and the impact these factors have on their response to a clinical decision making task. The decision making task comprises a vignette of a client in crisis (representing a presentation which would fit the diagnostic category of 'Borderline Personality Disorder). Participants are asked to pick from a list of response choices. Burnout is measured with an abbreviated questionnaire and attachment dimensions with a questionnaire. In total, including the consent and debrief process it is expected to take participants 20 minutes and is completed via an online system, allowing participation at a time appropriate for the individual. I have realised some of the variables in this research are sensitive and as such I have taken appropriate precautions both to protect participants and protect the research from any bias. Participants will be CPNs, Social Workers or Occupational Therapists working as care coordinators in secondary care mental health teams (having worked with clients with personality disorder diagnoses at some point). Overall, the proposed research aims to consider the utility of attachment theory and burnout for understanding differences among staff in the caregiving to BPD patients in crisis. Further

	understanding of staff factors in this process may highlight practical implications (e.g. models of staff support and supervision) for the delivery of quality care.
Presented for	Approval x information ☐ feedback ☐ other (specify) ☐
Committee Decision	Approved

Information sheet for research presentations to R&D Committee

Appendix N: Research and Development approval, Northamptonshire Healthcare NHS Foundation Trust

Northamptonshire Healthcare NHS
NHS Foundation Trust

Research and Development
Carey Block
ST Mary's hospital Kettering,
Northamptonshire
NN15 6XR

Direct Dial: (01536) 452303

Medical Director: Dr Alex O'Neill-Kerr
Head of R&D: Sue Palmer-Hill
Interim R&D Manager: Leanne Holman

19th August 2015

Greg Stocks
Universities of Coventry and Warwick

Dear Mr Stocks

I am pleased to confirm that with effect from the date of this letter, the above study now has Trust Research & Development permission. You can now commence your research activities in Northamptonshire Healthcare NHS Foundation Trust in accordance to the agreed protocol and the Research Governance Framework.

Title	Burnout and mental health staff management of crisis for a patient with a diagnosis of Borderline Personality Disorder: the mediating role of staff attachment.	
NHFT Ref:	R253	
Start date	19th August 2015	**End date: 5th September 2016**

As part of our monitoring requirements you are required to submit a six months progress report to the R&D Office and to the Research Ethics Committee from the start date. We ask you for a summary report of your study findings upon completion of your research as we would like to disseminate in within the Trust.

If you have any questions regarding this, or other research you wish to undertake in the Trust, please contact this office. We wish you every success with your research.

Please be aware that any changes after approval may constitute an amendment. The process of approval for amendments should be followed. Failure to do so may invalidate the approval of the study at this trust

Yours sincerely

Leanne Holman

Research and Development Manager

Appendix O: Participant information sheet

Coventry University
Priory Street, Coventry CV1 5FB
Telephone 024 7688 8328
Fax 024 7688 8702

Programme Director
Doctorate Course in Clinical Psychology
Dr Eve Knight
BSc Clin.Psy.D. CPsychol

THE UNIVERSITY OF WARWICK

Coventry University

Mental health staff and their experience of a service user

Information Sheet

Overview

This research focuses on your experiences of working with clients in crisis.

Why have I been chosen?

The research is specifically concerned with staff who spend most time with clients and as such professionals taking a care coordination role with clients with interpersonal difficulties have been selected as potential participants. It was envisaged that this would primarily include CPNs, Social Workers and Occupational Therapists. If this is not your core profession, or you are still unsure about whether this may have been sent in error please do not hesitate to contact me (contact details at bottom of the page).

Do I have to take part?

No. There is no requirement from your employer or anybody else that you take part. Participation is on a completely voluntary basis. You may find that during completing the task you change your mind, and this is completely fine and it is your right to withdraw during completing the task.

What will it involve?

Participation will involve a commitment of around 15 minutes. It involves completing two questionnaires, one about your experiences of work and the other about your experiences of relationships, and reading and responding to a clinical vignette.

Dean of Faculty of Health and Life Sciences
Professor Guy Daly Coventry University Priory Street Coventry CV1 5FB Tel 024 7679 5805

Head of Department of Psychology
Professor James Tresilian BSc PhD University of Warwick Coventry CV4 7AL Tel 024 7657 3009

www.coventry.ac.uk

What are the risks and benefits?

No major risks have been identified. While the information presented in the vignette may appear emotive it is expected that this would be to a level equal with your normal practice. While no direct reimbursement is offered for participation you will receive, if you wish, details of the outcome of the research as a whole which you may find interesting or useful. Furthermore, it is hoped the research will contribute to a body of literature hoping to provide insight into how best care can be provided for clients in acute distress.

What will happen to my data?

The information you provide will be anonymised, as such you will not be identifiable. This information will not be linked to you as an individual and it will be stored securely, electronically on an encrypted drive. Should you wish to withdraw your data at any point during completing the task you can do this by closing your browsing page. However, due to the anonymous nature of the study once you submit your data at the end of completing the task it will not be possible to withdraw it.

Who has reviewed this study?

Ethical approval for the present study has been granted by Coventry University. The study has also received approval from your employing NHS Trust (though they will not have direct access to any data you may provide).

Contact details

Should you have any further questions, prior, during or after completing the task please do not hesitate to contact me, my details are:

Name: Greg Stocks, Email: stocksg@coventry.ac.uk

Should you wish to make a comment or complaint about this research please direct your correspondence to one of my research supervisors, who have oversight of the project.

Name: Dr Tom Patterson, Email: aa5654@coventry.ac.uk

Name: Dr Ian Hume, Email: hsx264@coventry.ac.uk

Appendix P: Informed consent form

Coventry University
Priory Street, Coventry CV1 5FB
Telephone 024 7688 8328
Fax 024 7688 8702

Programme Director
Doctorate Course in Clinical Psychology
Dr Eve Knight
BSc Clin.Psy.D. CPsychol

THE UNIVERSITY OF WARWICK

Coventry University

Informed Consent Form

Research title: Mental health staff and their experiences and reactions to working with challenging clients
Brief summary: This research focuses on your experiences of your workplace and relationships as well as considering your experiences with clients in crisis. It will take around 15 minutes to complete. Please refer to the Information Sheet for further information.

	Please tick
1. I confirm that I have read and understood the participant information sheet for the above study and have been provided with the opportunity to ask questions about the study.	☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time prior to completing the questionnaires without giving a reason	☐
3. I understand that all the information I provide will be treated in confidence	☐
4. I agree to take part in the research project	☐

Date: .....

Name of Researcher: Greg Stocks

Dean of Faculty of Health and Life Sciences
Professor Guy Daly Coventry University Priory Street Coventry CV1 5FB Tel 024 7679 5805

Head of Department of Psychology
Professor James Tresilian BSc PhD University of Warwick Coventry CV4 7AL Tel 024 7657 3009

www.coventry.ac.uk

Appendix Q: Demographic data collection form

Coventry University
Priory Street, Coventry CV1 5FB
Telephone 024 7688 8328
Fax 024 7688 8702

Programme Director
Doctorate Course in Clinical Psychology
Dr Eve Knight
BSc Clin.Psy.D. CPsychol

THE UNIVERSITY OF WARWICK

Coventry University

Demographic information

1. **What is your age?**

   _____ years

2. **What is your sex? (delete as appropriate)**

   Female / Male

3. **What is your core profession?**

Profession	Selection
Community Mental Health Nurse	
Social Worker	
Occupational Therapist	
Other (please specify)	

Dean of Faculty of Health and Life Sciences
Professor Guy Daly Coventry University Priory Street Coventry CV1 5FB Tel 024 7679 5805

Head of Department of Psychology
Professor James Tresilian BSc PhD University of Warwick Coventry CV4 7AL Tel 024 7657 3009

www.coventry.ac.uk

Appendix R: Debrief sheet

Coventry University
Priory Street, Coventry CV1 5FB
Telephone 024 7688 8328
Fax 024 7688 8702

Programme Director
Doctorate Course in Clinical Psychology
Dr Eve Knight
BSc Clin.Psy.D. CPsychol

THE UNIVERSITY OF WARWICK

Coventry University

Debrief

Thank you for taking your time to complete the questionnaires!

This research is investigating the way professionals experience relationships, how burnt out they feel at work and any impact on the way they respond to clients in acute distress. The research intends to investigate whether there is a relationship between these factors and, if so, what this looks like. On reflection of any findings, the impact for professionals and employers will be considered. Suggestions will be made on any appropriate changes to support best practice and staff wellbeing. It is hoped that the findings can be disseminated in an academic journal.

If you wish to be provided with a summary of the outcome of this research please provide your email address as a contact detail by emailing me the address (details below). This email address will not be linked to the data you have provided, that was completely anonymous. Should you have any further questions please do not hesitate to contact me by email:

Name: Greg Stocks, Email: stocksg@coventry.ac.uk

Dean of Faculty of Health and Life Sciences
Professor Guy Daly Coventry University Priory Street Coventry CV1 5FB Tel 024 7679 5805

Head of Department of Psychology
Professor James Tresilian BSc PhD University of Warwick Coventry CV4 7AL Tel 024 7657 3009

www.coventry.ac.uk

Appendix S: Reflective Practice: International and Multidisciplinary Perspectives instructions to authors

Reflective Practice

International and Multidisciplinary Perspectives

ISSN
1462-3943 (Print), 1470-1103 (Online)

Publication Frequency
6 issues per year

Instructions for authors

Thank you for choosing to submit your paper to us. These instructions will ensure we have everything required so your paper can move through peer review, production and publication smoothly. Please take the time to read them and follow the instructions as closely as possible.

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Supporting Taylor & Francis authors

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- the manuscript has been submitted only to *Reflective Practice*; it is not under consideration or peer review or accepted for publication or in press or published elsewhere.
- the manuscript contains nothing that is abusive, defamatory, libellous, obscene, fraudulent, or illegal.

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Contents List

Manuscript preparation

1. General guidelines

- Manuscripts are accepted in English. British English spelling and punctuation are preferred. Please use single quotation marks, except where 'a quotation is "within" a quotation'. Long quotations of 40 words or more should be indented with quotation marks. No Article types required

- A typical manuscript will not exceed 6000 words including tables, references, captions, footnotes and endnotes. Manuscripts that greatly exceed this will be critically reviewed with respect to length. Authors should include a word count with their manuscript.
- Manuscripts should be compiled in the following order: title page (including Acknowledgements as well as Funding and grant-awarding bodies); abstract; keywords; main text; acknowledgements; references; appendices (as appropriate); table(s) with caption(s) (on individual pages); figure caption(s) (as a list).
- Abstracts of words are required for all manuscripts submitted.
- Each manuscript should have 3 to 6 keywords.
- Search engine optimization (SEO) is a means of making your article more visible to anyone who might be looking for it. Please consult our guidance here.
- Section headings should be concise.
- All authors of a manuscript should include their full names, affiliations, postal addresses, telephone numbers and email addresses on the cover page of the manuscript. One author should be identified as the corresponding author. Please give the affiliation where the research was conducted. If any of the named co-authors moves affiliation during the peer review process, the new affiliation can be given as a footnote. Please note that no changes to affiliation can be made after the manuscript is accepted. Please note that the email address of the corresponding author will normally be displayed in the article PDF (depending on the journal style) and the online article.
- All persons who have a reasonable claim to authorship must be named in the manuscript as co-authors; the corresponding author must be authorized by all co-authors to act as an agent on their behalf in all matters pertaining to publication of the manuscript, and the order of names should be agreed by all authors.
- Please supply a short biographical note for each author.
- Please supply all details required by any funding and grant-awarding bodies as an Acknowledgement on the title page of the manuscript, in a separate paragraph, as follows:
    - *For single agency grants:* "This work was supported by the [Funding Agency] under Grant [number xxxx]."
    - *For multiple agency grants:* "This work was supported by the [Funding Agency 1] under Grant [number xxxx]; [Funding Agency 2] under Grant [number xxxx]; and [Funding Agency 3] under Grant [number xxxx]."

- Authors must also incorporate a Disclosure Statement which will acknowledge any financial interest or benefit they have arising from the direct applications of their research.
- For all manuscripts non-discriminatory language is mandatory. Sexist or racist terms must not be used.
- Authors must adhere to SI units. Units are not italicised.
- When using a word which is or is asserted to be a proprietary term or trade mark, authors must use the symbol ® or TM.
- Authors must not embed equations or image files within their manuscript

2. Style guidelines

- Description of the Journal's article style.
- Description of the Journal's reference style.
- An EndNote output style is available for this journal.
- LaTeX template.
- Word templates are available for this journal. If you are not able to use the template via the links or if you have any other template queries, please contact authortemplate@tandf.co.uk.

3. Figures

Please provide the highest quality figure format possible. Please be sure that all imported scanned material is scanned at the appropriate resolution: 1200 dpi for line art, 600 dpi for grayscale and 300 dpi for colour.

- Figures must be saved separate to text. Please do not embed figures in the manuscript file.
- Files should be saved as one of the following formats: TIFF (tagged image file format), PostScript or EPS (encapsulated PostScript), and should contain all the necessary font information and the source file of the application (e.g. CorelDraw/Mac, CorelDraw/PC).
- All figures must be numbered in the order in which they appear in the manuscript (e.g. Figure 1, Figure 2). In multi-part figures, each part should be labelled (e.g. Figure 1(a), Figure 1(b)).
- Figure captions must be saved separately, as part of the file containing the complete text of the manuscript, and numbered correspondingly.
- The filename for a graphic should be descriptive of the graphic, e.g. Figure1, Figure2a.

Graphical Abstracts

Reflective Practice authors now have the option of including a graphical abstract in their paper. The purpose of a graphical abstract is to give the reader a clear idea of the content of the article by means of an appropriate image.

- The graphical abstract should have a maximum width of 525 pixels. If your image is narrower than 525 pixels we recommend placing this on a white background 525 pixels wide to ensure the dimensions are maintained.
- Graphical abstracts must be saved separate to text. Please do not embed graphical abstracts in the manuscript file. Files should be saved as one of the following formats: .jpg, .png, or .gif.
- The file name for a graphical abstract should be descriptive, e.g. GraphicalAbstract1

4. Publication charges

Submission fee

There is no submission fee for *Reflective Practice*.

Page charges

There are no page charges for *Reflective Practice*.

Colour charges

Colour figures will be reproduced in colour in the online edition of the journal free of charge. If it is necessary for the figures to be reproduced in colour in the print version, a charge will apply. Charges for colour figures in print are £250 per figure ($395 US Dollars; $385 Australian Dollars; 315 Euros). For more than 4 colour figures, figures 5 and above will be charged at £50 per figure ($80 US Dollars; $75 Australian Dollars; 63 Euros).

- Authors must ensure that research reported in submitted manuscripts has been conducted in an ethical and responsible manner, in full compliance with all relevant codes of experimentation and legislation. All manuscripts which report in vivo experiments or clinical trials on humans or animals must include a written Statement in the Methods section that such work was conducted with the formal approval of the local human subject or animal care committees, and that clinical trials have been registered as legislation requires.
- Authors must confirm that any patient, service user, or participant (or that person’s parent or legal guardian) in any research, experiment or clinical trial who is described in the manuscript has given written consent to the inclusion of material pertaining to themselves, and that they acknowledge that they cannot be identified via the manuscript; and that authors have anonymised them and do not identify them in any way. Where such a person is deceased, authors must warrant

they have obtained the written consent of the deceased person's family or estate.

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6. Supplemental online material

Authors are encouraged to submit animations, movie files, sound files or any additional information for online publication.

- Information about supplemental online material

Manuscript submission

All submissions should be made online at the *Reflective Practice* Scholar One Manuscripts website. New users should first create an account. Once

logged on to the site, submissions should be made via the Author Centre. Online user guides and access to a helpdesk are available on this website.

Manuscripts may be submitted in any standard editable format, including Word and EndNote. These files will be automatically converted into a PDF file for the review process. LaTeX files should be converted to PDF prior to submission because ScholarOne Manuscripts is not able to convert LaTeX files into PDFs directly. All LaTeX source files should be uploaded alongside the PDF.

Click here for information regarding anonymous peer review.

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Last updated 26/09/2014

Appendix T: Meta-analytic procedures

1. Pearson's *r* effect size collated for each study
2. Where *r* was not reported it was estimated from *t* statistics (using Microsoft Excel software):

$$r = \sqrt{\frac{t^2}{t^2 + df}}$$

3. Each *r* statistic was converted to Fisher's *r* to create a normal distribution (using Microsoft Excel software):

$$Z_r = 1/2 \log_e \left[\frac{1+r}{1-r}\right]$$

4. The mean Fisher's *r* was calculated.
5. The mean Fisher's *r* converted back into *r* by computing the Fisher inversion (using Microsoft Excel software):

$$r = \frac{e^{2Z_r} - 1}{e^{2Z_r} + 1}$$

6. A standard *z* score (Stouffer *z*) was calculated for each effect size (using Microsoft Excel software):

$$z = r\sqrt{N}$$

7. Mean Stouffer z was calculate (using Microsoft Excel software):

$$\text{Stouffer } Z = \frac{\Sigma z}{\sqrt{N}}$$

8. Stouffer *z* was converted to a level of significance (*p*) using an online calculator.
9. Chi-square was computed comparing individual *z* scores with the mean *z* score to test the homogeneity of effect sizes.