UNIVERSITY OF SOUTHAMPTON

FACULTY OF SOCIAL, HUMAN AND MATHEMATICAL SCIENCES

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BURNOUT IN SECURE FORENSIC MENTAL HEALTH SERVICES FOR YOUNG PEOPLE: A MIXED METHODS APPROACH

by

Matthew James Burdock

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ABSTRACT

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Occupational burnout is highly prevalent in mental health services and has a deleterious effect upon the psychological wellbeing of staff. Few studies have explored burnout in inpatient settings; those that have do not address the possible systemic impact. This study aimed to explore burnout and emotional reactions to behaviour that challenges in a secure forensic mental health service for young people; a specialised environment in which severe and frequent incidences of aggression and violence occur.

Following a systematic review of burnout literature pertaining to inpatient mental health services, an empirical study was conducted using a convergent parallel mixed method design. Forty three staff members were recruited to the quantitative strand and ten were recruited to the qualitative strand. Emotional Reactions to Challenging Behaviour Scale (ERCBS) and Maslach Burnout Inventory (MBI) instruments were used.

A significant moderate positive correlation was found between emotional exhaustion and negative emotional reactions to behaviour that challenges. This relationship was mediated by general self-efficacy, which buffered the effect of emotional exhaustion on negative responses to behaviour that challenges; responses found to be detrimental to the relational environment. 'Young People Blame Themselves' was explored as a relational barrier and maintaining factor in occupational burnout. In 'You Want Someone You Recognise' and 'We Lack That Consistency' a high ratio of agency staff and a lack of operational consistency were identified as occupational stressors.

Emotional exhaustion is associated with negative emotional reaction to challenging behaviour. Interventions should be targeted towards developing staff self-efficacy, through the use of reflective practice and ecological changes that enhance team-working and feelings of safety on the ward. When on the ward, staff should be mindful of young people's predisposition towards attribution bias. Future studies need to give greater consideration to systemic outcomes associated with burnout.

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DECLARATION OF AUTHORSHIP

I, Matthew James Burdock

declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.

BURNOUT IN SECURE FORENSIC MENTAL HEALTH SERVICES FOR YOUNG PEOPLE: A MIXED METHODS APPROACH

I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this University;
2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
3. Where I have consulted the published work of others, this is always clearly attributed;
4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
5. I have acknowledged all main sources of help;
6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
7. None of this work has been published before submission

Signed: .....

Date: .....

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Chapter 1: Occupational Burnout in Acute Mental Health Inpatient Services; a Systematic Review

1.1 Introduction

1.1.1 Inpatient Mental Health Care in the NHS

The NHS in 2016 is under pressure; the government's austerity programme since 2010 has resulted in an estimated £24bn gap between required investment and total NHS spending for the five years from 2010 to 2014 (Appleby, 2015). Mental healthcare services continue to be treated as the "poor relation"; parity of esteem with physical healthcare remains a distant proposition (Appleby, Baird, Thompson & Jabbal, 2015). Within the context of stretched resources, a decommissioning of beds, incongruent with an exponential increase in involuntary admissions over the last two decades (Keown, Mercer & Scott, 2008; Keown, Weich, Bhui & Scott, 2011; Virtanen et al., 2011), has put inpatient mental health services under increased pressure. Mental health professionals working in inpatient settings report feeling overloaded, stressed and burnt-out (Oddie & Ousley, 2007; Morse, Salyers, Rollins, Monroe-DeVita & Pfahler, 2012; Elliott & Daley, 2013).

Recruitment and retention of staff in inpatient mental health services has been, and continues to be, a challenge (Carson, Leary, de Villiers, Fagin & Radmall, 1994; Quirk & Lelliott 2001; Morse et al., 2012). Whilst there is a lack of empirical evidence pointing to burnout as a causal factor in mental health staff attrition, substantial evidence exists to indicate a lack of resources and staffing is positively correlated to high levels of staff burnout (Paris & Hoge, 2010; Morse et al., 2012). Predictably, a lack of resources has implications for the implementation of proposed solutions to reduce burnout in mental health service providers, such as organizational development strategies, staff training and increased levels of transformational leadership behaviours (Ewers, Bradshaw, McGovern & Ewers, 2002; Green, Albanese, Shapiro & Aarons, 2014). However, it is not simply a paucity of funding, resources or manpower that places demands upon staff.

Inpatient mental health units are typically challenging environments where exposure to aggression, violence and deliberate self-harm is to the detriment of staff physical and psychological wellbeing (Nolan, Dallender, Soares, Thomsen & Arnetz, 1999; Stanley & Standen, 2000). The National Institute for Health and Care Excellence (NICE) has published guidance for the short-term management of violence and aggression in mental health settings

(NG10: NICE, 2015). This guidance includes recommendations for staff training and a framework for anticipating and reducing violence and aggression. In the context of high staff attrition and the needs of long-stay clients, who may enact frequent aggressive behaviour, a gap most likely exists between guidance and clinical practice. With the aim of promoting least restrictive practice, NICE recommends alternatives to seclusion where possible, as well as changes to service philosophy, operational policy, the environment and treatment strategies. However, empirical evidence indicates that mental health nurses typically hold the belief that seclusion is a necessary intervention (Happell & Harrow, 2010), despite it having negative consequences for clients and staff and a positive association with increased staff burnout.

1.1.2 The Phenomenon of Burnout

Since burnout was first described in academic literature (Freudenberger, 1974) there has been a lack of consensus with regard to how it may be best operationalised (Elliot & Daley, 2013; Qiao & Schaufeli, 2011). Attempts have been made to define burnout in a number of ways: a reaction to job stress (Cherniss, 1980); physical, emotional and mental exhaustion, occurring as a result of working with people over long periods and in emotionally demanding situations (Pines & Aronson, 1983); a constellation of physical fatigue, emotional exhaustion and cognitive weariness, arising from chronic stress (Melamed, Kushnir & Shirom, 1992). Arguably, the prevailing definition of burnout was developed by Maslach & Jackson (1981), who presented a case for three empirically-derived subscales of burnout: emotional exhaustion, depersonalization and reduced personal accomplishment. In the Maslach Burnout Inventory (MBI) manual, Maslach, Jackson & Leiter (1996) state:

> "Burnout is a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with people in some capacity" (p.4)

According to Maslach et al. (1996), emotional exhaustion relates to feeling psychologically and emotionally over-extended and fatigued. Depersonalization is described as responding impersonally and without feeling towards recipients of care with whom one works. Reduced personal accomplishment relates to feelings of dissatisfaction and inefficacy regarding one's competence and achievements at work.

The original version of the MBI (Maslach & Jackson, 1981) was developed for use in human services and is now referred to as the MBI-HSS, with two additional variants having been added for the assessment of burnout in educators: MBI-ES (Maslach, Jackson & Schwab, 1986) and in workers of other occupations: MBI-GS (Schaufeli, Leiter, Maslach & Jackson, 1996). The MBI-HSS consists of 22 items and was developed to assess three core domains of burnout: emotional exhaustion (EE); depersonalization (DP); and reduced personal accomplishment (PA). The subscale of EE is comprised of nine items, DP of five items and PA of eight items; each item is rated on a 7-point Likert scale, from '0= never' to '6= every day'. Ratings are added to produce a subscale score, with higher EE, higher DP and lower PA scores representing higher levels of burnout. The internal consistency of the MBI-HSS has been demonstrated to be good (EE α= .90, DP α= .79, PA α= .71). Each of the papers in this review has employed the MBI-HSS as an outcome measure. Where the terms "emotional exhaustion", "depersonalization" and "personal accomplishment" are used throughout this review, it should be assumed that they relate directly to MBI subscales.

1.2 Objectives

The objective of the review was to explore the empirical literature relating to burnout in inpatient mental healthcare services and consider possible predictors of burnout, as well as the impact of burnout on the individuals, teams and services under study.

1.2.1 Search Strategy for Identification of Studies

Literature searches for peer-reviewed articles published in English, between 1985 and 2015, were conducted using a range of electronic databases, including: Web of Science, Embase, Medline/PubMed, PsychINFO and ScienceDirect. The search terms used were: 1 “burnout”; 2 “fatigue”; 3 “exhaustion”; 4 “depersonalisation”; 5 “depersonalization”; 6 “stress”; 7 “coping”; 8 “Maslach”; 9 #1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8; 10 “mental”; 11 “psychiatric”; 12 “health”; 13 “illness”; 14 “disorder$”; 15 #10 OR #11 AND #12 OR #13 OR #14; 16 “in-patient$”; 17 “inpatient$”; 18 “in patient$”; 19 “acute”; 20 “secure”; 21 “unit”; 22 “ward”; 23 “forensic”; 24 #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23; 25 #9 AND #15 AND #24.

1.2.2 Inclusion Criteria and Search Results

A total of 7,108 peer-reviewed articles and abstracts were retrieved from search #25. Duplicate records were removed using a combination of automatic and manual search strategies and through the use of a citation manager based upon current recommendations (Kwon, Lemieux, McTavish & Wathen, 2015). The remaining 5,577 records were screened for suitability within defined inclusion criteria, based upon guidance from the Centre for Research and Dissemination (CRD, 2009):

Study design. Empirical studies that collected primary data using a correlational design or a qualitative design of appropriate rigour (Koch, 2006).

Participants. Qualified or unqualified clinical staff working in inpatient mental health care services.

Types of outcome measures. Outcome variables to include a measure of burnout, for example, the Maslach Burnout Inventory (MBI) or qualitative findings implicitly or explicitly linked to burnout.

Study Characteristics. Articles written in English, with data collected from samples of populations with similar cultural identity to that of the UK; broadly individualist, monochromic, democratic cultures (Markus & Kitayama, 1991). Screening according to these criteria aims to provide homogeneity with regard to organisational culture and burnout.

This process is outlined in Figure 1, in the format of a PRISMA flow diagram (Moher, Liberati, Tetzlaff & Altman, 2009) and discussed in greater detail in section 1.3:

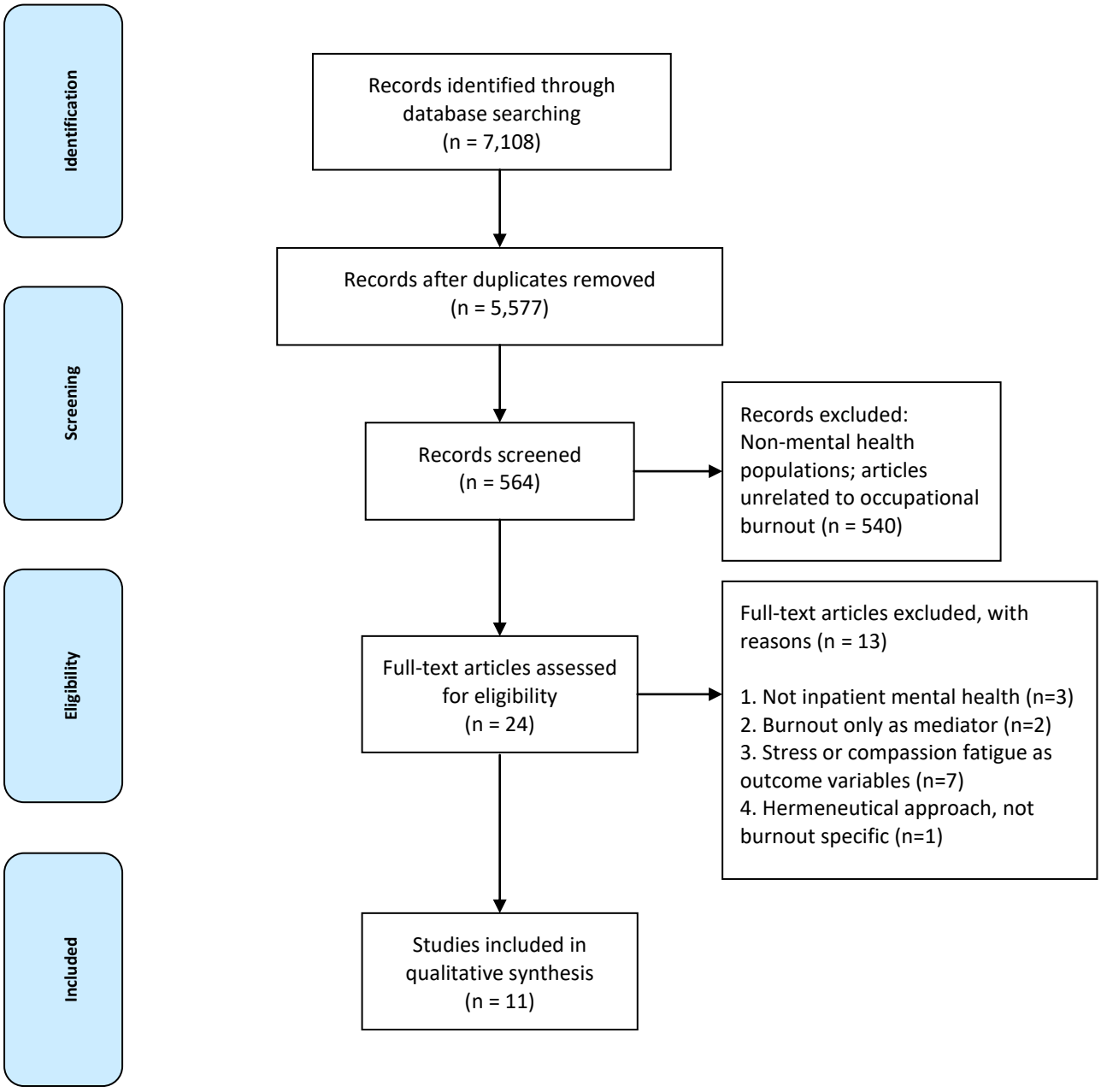

Figure 1. PRISMA flow diagram

1.3 Methods

The use of broad search terms, across a range of databases, resulted in many of the 5,577 records retrieved having relevance to areas other than burnout in inpatient mental healthcare services. A manual search and review of titles and abstracts identified 564 articles relating to burnout, or inpatient mental health services, or both. The 564 articles identified were manually reviewed in greater detail, again according to the criteria defined, to check their suitability for inclusion in the study.

Twenty-four articles were identified from 564 articles retrieved from the comprehensive web-based search and were available either in full-text electronic format or as a hard copy. All the articles were written in English. All quantitative research reviewed was of cross-sectional survey design.

Initial appraisal of the articles revealed the use of a diverse range of predictor and outcome variables; articles were therefore screened to ensure they included at least one outcome measure of burnout. The primary inclusion criterion was the study of burnout in the context of inpatient mental health services. Adhering to this criterion, three studies were disregarded as they reviewed the literature on burnout but not specifically in the context of acute or inpatient mental health. Two studies were excluded as they included only selected subscales of MBI burnout as mediator variables in more complex studies. A further seven studies were excluded as the researchers had sought to explore constructs of occupational stress and compassion fatigue rather than burnout; it is acknowledged that there is shared variance between stress, burnout and compassion fatigue (de Figueiredo et al., 2014).

Three of the articles retrieved adopted a hermeneutical phenomenological approach to data interpretation. Two of these articles discuss burnout either explicitly or implicitly in their exploration of mental health nurses' lived experience and meaning of stress in acute mental health settings; these two articles are included in the review.

In summary, 11 articles relevant to burnout in acute or inpatient mental health were included in this review of the literature. As a review of existing literature, ethical approval was not required.

1.3.1 Description of Studies

Of the 11 studies reviewed in this paper, five explored the relationship between perceived organisational, occupational or relational stressors and burnout (Prosser et al.,

1997; Jenkins & Elliott, 2004; Oddie & Ousley, 2007; Hanrahan, Aiken, McClaine & Hanlon, 2010; Elliott & Daley, 2013) with one study comparing data from a psychiatric nursing sample and a general nursing sample (Hanrahan, Aiken, McClaine & Hanlon, 2010) and another study comparing data from hospital and community mental health staff (Prosser et al., 1997). Two studies explored the relationship between seclusion, measures of satisfaction, therapeutic optimism and burnout (Happell & Koehn, 2011; Happell et al., 2012). One study explored tolerance for aggression amongst mental health nurses and its association with burnout (Whittington, 2002) whilst another explored the relationship between burnout, psychological mindedness, attachment and case formulation skill (Hartley, Jovanoska, Roberts, Burden & Berry, 2015). The final two studies explored occupational stressors, the lived experience and meaning of this experience for mental health nurses working in acute mental health care units (Currid, 2008; Currid, 2009). A verbatim quote from a participant was present in the findings of both studies, indicating at least a partial duplication of data.

Studies were conducted in different geographical locations with local populations, including Australia (Happell & Koehn, 2011; Happell et al., 2012) and the US (Hanrahan et al., 2010), with the remainder of the studies conducted in the UK. Mental health worker sample sizes varied greatly across the studies, ranging from 37 participants (Whittington, 2002) to 353 participants (Hanrahan et al., 2010).

All 11 of the studies measured burnout as an outcome variable using the Maslach Burnout Inventory (MBI: Maslach et al., 1996) although it should be noted that some of the studies' authors reference earlier publications (Maslach & Jackson, 1981; Maslach & Jackson, 1986) and do not make specific reference as to which version of the MBI was used; the original measure, now categorised as MBI-HSS (Human Services Survey) is the appropriate instrument for use with professionals in human services (Maslach et al., 1996).

As reported in Table 1, the research aims of most of the studies included in the review were not limited to exploring the construct of burnout; only findings from these studies relating to burnout in acute or inpatient mental health staff are reported or discussed in this review.

1.3.2 Methodological Quality

The methodological quality of studies included in this review was evaluated according to guidance provided by the Centre for Research and Dissemination (CRD, 2009) and recommendations made by Letts et al. (2007) regarding the critical review of qualitative studies. Overall, the studies were found to be of good methodological quality.

Quantitative Studies. All of the quantitative studies incorporated validated measures and all reported levels of internal consistency, with the exception of Oddie & Ousley (2007) who discussed validity and reliability in the context of existing literature. In one study, a case formulation template was used to gather data based on responses to vignette (Hartley et al., 2015); this template was based on previous research (Dudley, Park, James & Dodgson, 2010). Data was scored by an expert panel of four clinical psychologists and 20% of the templates were randomly sampled and rescored, demonstrating strong inter-rater reliability ($r = .98$, $p < .001$). Another study developed two inventories measuring perceived sources of stress and perceived sources of satisfaction (Prosser et al., 1997). Principle component analysis was carried out on both instruments. The authors commented on the limitations of the study; whilst the results indicated good face-validity, the psychometric properties of the instruments had not been formally assessed. Most studies commented upon limitations, such as social desirability, when using self-report surveys for data collection.

Small sample sizes and power were issues for many of the studies (Whittington, 2002; Jenkins & Elliott, 2004; Oddie & Ousley, 2007; Happell et al., 2012; Hartley et al., 2015) increasing the risk of a type II error and limiting external validity; in some cases (Jenkins & Elliott, 2004; Happell et al., 2012) Bonferroni corrections were made to reduce the risk of type I error, although this further inflates type II errors (Nakagawa, 2004).

Cross-sectional design studies are able to determine neither causality nor direction of an effect and whilst this was largely acknowledged as a limitation, authors of studies had a tendency to report findings in a manner that suggested a directional relationship (Hanrahan et al., 2010; Happell & Koehn, 2011). Moreover, many of the correlations reported were weak (Cohen, 1988); whilst this is not unusual for social psychological research (Anderson, Lindsay & Bushman, 1999), it does bring into question the applied value of the findings.

Qualitative Studies. Both studies (Currid, 2008, 2009) highlighted the interpretivist orientation of their approach, based on the hermeneutic phenomenological tradition of Gadamer (Dowling, 2004). An identifier of quality within this tradition is the capturing of distinct idiomatic expressions, which allow for a greater interpretation of meaning, otherwise impossible to convey in every-day language (Firestone, 1987); this is evident within these two studies. Furthermore, the author presents persuasive accounts and emphasis is given to the collaboration between researcher and participant in the development of themes; also indicators of quality (Langdridge, 2007). However, greater detail regarding each case that confirms or disconfirms themes (to demonstrate analytical rigor) as well as a more comprehensive exploration of rhetorical topography and explicit use of the hermeneutic cycle would have contributed to the credibility and trustworthiness of the findings (Golafshani, 2003; Laverty, 2003).

With regard to the sample used, Currid (2008, 2009) acknowledged the impact of financial events which limited sample size; it is unlikely that the study achieved saturation, based on general recommendations (Charmaz, 2006).

A summary of study characteristics is presented in Table 1 and Table 2.

Table 1. Characteristics of studies included in the literature review

Authors	Setting	Research Aims	Participants	Study Design	Measures	Key Outcomes
Jenkins & Elliott, 2004	UK	Investigate and compare levels of stressors and burnout experienced by qualified and unqualified nursing staff. Examine relationships between stressors and burnout. Assess the impact of social support on burnout (main effect) and stressor-burnout relationships (buffering)	93 nursing staff (57 full-time qualified nurses, 36 nursing assistants) from within 11 acute adult mental health wards at 4 hospitals in London and the South-East. Sixty-two participants (66.7%) were female, 31 participants (33.3%) were male. Mean age was 37.1 years (SD=10.0)	Cross-sectional survey	Mental Health Professionals Stress Scale (MHPSS: Cushway et al., 1996); Maslach Burnout Inventory (MBI: Maslach et al., 1996); House and Wells' Social Support Scale (House & Wells, 1978)	Higher stressor scores associated with higher levels of emotional exhaustion and depersonalization. Significant negative correlation between co-worker support and emotional exhaustion (r= -.32, P=.002). Total MHPSS scores significantly predicted depersonalization in the high support group only (adjusted R^2=.398, F (1, 43)= 30.041, P < .001)
Elliott & Daley, 2013	UK	Investigate stress, coping and psychological well-being among forensic healthcare professionals within inpatient settings	135 participants from within 4 medium-secure units: 72 from forensic MH services (53%), 63 from forensic LD services (47%). The sample included 64 males and 71 females. Mean age was 40 years (SD= 10.31) Ward-based staff constituted 73% of the sample (58 nurses and 41 support workers)	Cross-sectional survey	Maslach Burnout Inventory (MBI: Maslach et al., 1996); The Staff Stressor Questionnaire (SSQ: Hatton et al., 1999); The General Health Questionnaire 12-item (GHQ12: Goldberg & Williams, 1988); The Brief Cope Inventory (BCI: Carver, 1997); The Staff Support and Satisfaction Questionnaire (3SQ: Harris & Rose, 2002)	Females experienced significantly greater satisfaction and support at work, used more positive coping and found challenging behaviour more stressful than males. High 3SQ total scores predicted higher levels of personal accomplishment (b= .229, p< 0.01). High SSQ total scores (b= .182, p= .045) and negative coping factor scores predicted high depersonalization. High GHQ12 score (b=.234, p<.001), SSQ total score (b=.310, p<.000) and BCI negative coping (b=.268, p<.000) predicted higher emotional exhaustion
Hartley et al., 2015	UK	Explore the association of staff experience, psychological mindedness, attachment styles and emotional burnout with case formulation skills	50 participants recruited from 3 NHS acute or long stay MH inpatient units in NW England. Participants had a minimum of 6 months experience working with service users experiencing psychosis and a minimum of 10 hours contact per week	Cross-sectional survey	A case formulation template based upon previous research (Dudley et al., 2010); Psychological Mindedness Scale (PMS: Conte et al., 1990); Psychological Mindedness Speech Sample (PMSS: Berry et al., 2008); Attachment Measure	Self-reported psychological mindedness (PMS) and independently-rated psychological mindedness (PMSS) were significantly positively correlated with case formulation ability (r= .38, p= .008) and (r= .40, p= .005) respectively. Self-reported psychological mindedness (PMS) was significantly negatively correlated with EE (r= -.37, p= .009)

					(Berry et al., 2006); Maslach Burnout Inventory (MBI: Maslach et al., 1996)	
Whittington, 2002	UK	Explore the extent to which tolerance for aggression varies amongst mental health practitioners and the occupational and stress factors associated with a more tolerant attitude	37 mental health workers, 36 of whom were either nurses or healthcare assistants. 16% (n= 6) of participants worked in the community; the remainder worked in adult general psychiatry	Cross-sectional survey	Perception of Aggression Scale (POAS: Jansen et al., 1997); Maslach Burnout Inventory Human Services Survey (MBI-HSS: Maslach et al., 1996)	Tolerance was significantly negatively correlated with EE (r= -.34, p< .05) and with DP (r= -.42, p< .05) and positively correlated with PA (r= .56, p< .01)
Hanrahan et al., 2010	USA	Examines the extent to which organisational factors of the psychiatric nurse work environment affect psychiatric nurse reports of burnout	353 psychiatric registered nurses (PRNs) providing direct patient care on a psychiatric inpatient unit. The study also utilised a sample of 67 general hospital nurses	Cross-sectional survey	Organisational factors of the nurse practice environment measured using the Practice Environment Scale-Nurse Work Index (PES-NWI: Lake, 2002); Maslach Burnout Inventory Human Services Survey (MBI-HSS: Maslach et al., 1996)	All independent measures were statistically correlated with EE. All independent measures with the exception of staffing were statistically correlated with DP. None of the independent measures were correlated with PA
Prosser et al., 1997	UK	Identify major perceived sources of work stress and satisfaction among mental health staff and examine differences in sources of stress between hospital and community staff. Examine extent to which sources of stress and satisfaction explain levels of burnout, job satisfaction and psychological well-being	121 clinical staff working in three mental health sectors in inner London (24% community based, 41% in-patient ward-based, 35% out-patient based). Nursing staff made up 59% of the sample, 19% were psychiatrists and the remainder were multidisciplinary team members	Cross-sectional survey	General Health Questionnaire (GHQ: Goldberg & Williams, 1988); Maslach Burnout Inventory Human Services Survey (MBI-HSS: Maslach et al., 1996)	Stress related to "overload" (overwork and too much administration) was associated with higher EE (B= 4.4, p< .0001). Overall model fit was R^2= .42, p< .0001. Stress from client was associated with higher DP (B= 1.5, p< .003). Overall model fit was R^2= .35, p< .0001. Satisfaction from working with people was associated with higher PA (B= 2.6, p< .0001). Overall model fit was R^2= .15, p< .0001
Happell & Koehn, 2011	Australia	To explore if there is a relationship between burnout, job satisfaction and therapeutic optimism and justification of the use of seclusion	123 (63 female, 60 male) registered and enrolled nurses (mean age= 41.38) employed in acute inpatient units	Cross-sectional survey	Survey of Nurses' Attitudes to Seclusion Survey (SNASS: Heyman, 1987); Elsom Therapeutic Optimism Scale (ETOS: Elsom & McCauley-	Participants supported use of seclusion in response to: patients becoming excited and out of control; inappropriate sexual behaviour; attempting to damage property; attempted self-harm. Five seclusion attitudes were found to

					Elsom, 2008); Minnesota Satisfaction Questionnaire (MSQ: Weiss et al., 1977); Maslach Burnout Inventory Human Services Survey (MBI-HSS: Maslach et al., 1986)	correlate positively with EE, the strongest of which was "The patient showing inappropriate sexual behaviour" (r= .308, p= .002). No correlations between seclusion attitudes and DP were reported. Weak correlations between seclusion attitudes and PA were reported
Happell et al., 2012	Australia	To investigate whether staff attitudes toward seclusion related to levels of burnout, staff satisfaction and therapeutic optimism. To determine the role of staff in decision-making about seclusion	54 participants (43% male, 57% female) from a district health service providing inpatient and community-based care. Mean age was 44 (SD= 9)	Cross-sectional survey	Attitudes to Seclusion questionnaire (Heyman, 1987); Maslach Burnout Inventory Human Services Survey (MBI-HSS: Maslach et al., 1986); Minnesota Satisfaction Questionnaire (MSQ: Weiss et al., 1977); Elsom Therapeutic Optimism Scale (ETOS: Elsom & McCauley-Elsom, 2008)	Small to medium-sized correlations between reasons for seclusion and burnout were identified i.e patients asking to go to seclusion and lower PA (r_s= -.39, p= .002). Correlations between staff feelings about seclusion and burnout were negligible. Staff who perceived secluded patients felt confused reported greater EE (r_s= .37, p= .004) and greater DP (r_s= .34, p= .007). None of the correlations in the study was statistically significant at .000149 level, applied to prevent Type I error inflation
Oddie & Ousley, 2007	UK	To determine occupational stressors and described and measure burn-out among mental health nurses and occupational therapists working in a medium-secure service	71 staff, including qualified and unqualified mental health nurses and occupational therapists. Mean age of 34 years	Cross-sectional survey	Psychiatric Nurses Occupational Stress Scale (PNOSS: Dawkins et al., 1985); Maslach Burnout Inventory Human Services Survey (MBI-HSS: Maslach et al., 1996)	Compared to normative data for 'mental health' occupational subgroup in the MBI manual (Maslach et al., 1996) staff reported high level EE, moderate level DP and low level lack of PA. Organisational/ administrative factors linked to occupational stress were moderately correlated to EE (r_s= .439, p< .01) and DP (r_s= .419, p< .01)

Note: Where the subscales of the Maslach Burnout Inventory are discussed, MBI emotional exhaustion is abbreviated to EE, MBI depersonalization is abbreviated to DP and MBI personal accomplishment is abbreviated to PA

Table 2. Characteristics of qualitative studies included in the literature review

Authors	Setting	Research Aims	Participants	Study Design	Key Themes	Implications of Study
Currid, 2008	UK	To explore stressors, the lived experience and the meaning of the experience of a cohort of eight qualified mental health nurses	8 qualified mental health nurses from a London mental health Trust (two from four acute units selected randomly from a total sample of 22) *	Hermeneutic phenomenological approach	Working conditions of participants revealed four primary themes: dilemma of heavy workloads; violence and aggression; meaning and value of nursing; support	Participants within the study reported dissatisfaction with organisational practices they felt were not supportive of providing quality nursing care, highlighting the prioritisation of administrative tasks over clinical duties. Greater support systems need to be in place and nurses must be given the opportunity to provide clinical-led care based on client need rather than determined by resource availability
Currid, 2009	UK	To explore occupational stressors, the lived experience of stress and the meaning of this experience for staff working in acute mental health care	8 qualified mental health nurses from a London mental health Trust (two from four acute units) *	Hermeneutic phenomenological approach	Three primary themes were identified: pressures (present in the working environment); violence and aggression (incidents of violent, aggressive and unpredictable behaviour directed towards staff); inability to switch off from work (when going home)	The study highlighted the impact of issues such as insufficient staffing levels to manage workload and the impact of administrative work in an already challenging environment. Organisational pressures were seen to compete with demands made by patients and were given priority over patient contact. Aggression placed a limitation on nurse-patient engagement for fear of reprisals or further intimidation. A consequence of ongoing issues is an inability for staff to switch-off from work, ruminating about work issues at home or contacting the ward to ensure tasks have been completed or handed over

*Reviewing the findings of each study, similarities in data suggest it was drawn from the same sample

1.4 Results

All of the quantitative studies included in this review were of cross-sectional design and reported results in the form of either correlation or regression analyses, or both. In order to make evaluative statements about their services, the authors of five of the studies (Whittington, 2002; Jenkins & Elliott, 2004; Oddie & Ousley, 2007; Hanrahan et al., 2010; Elliott & Daley, 2013) compared mean scores for each subscale of burnout against the corresponding subscale means of normative data found in the MBI manual (Maslach et al., 1996) or in previous studies. These findings are not discussed in detail in this review.

This section of the review has been subdivided according to factors associated with burnout and conceptual links between findings from different studies have been highlighted where relevant.

1.4.1 Organisational and Occupational Factors Associated with Burnout

Most of the studies included in this review highlight a relationship between organisational factors, rather than clinical factors, and staff burnout. Oddie and Ousley (2007) reported that 'organisational and administrative stressors' were moderately correlated to emotional exhaustion (r_s= .439, p< .01), as well as to depersonalization (r_s= .419, p< .01) and negatively correlated to personal accomplishment (r_s= -.383, p< .01). Their study also identified 'limited resources' as a factor in occupational burnout. These findings are congruent with those of Prosser et al. (1997) who, using principle component analysis factors as explanatory variables, found that variance in emotional exhaustion (Adjusted R^2= .42, p< .0001) was partially explained by stress from 'overload' (B= 4.4, p< .0001). 'Overload' was defined as being overworked, with too much administration, and within the context of insufficient resources. Stress from 'role' was identified as a possible predictor of burnout, where 'role' was defined as doing a different job from the one for which you were trained or experiencing many changes in the workplace over a short period.

Prosser et al. (1997) also reported that having children at home partially explained variance in depersonalization scores (Adjusted R^2= .35, p< .0001; B= 3.0, p= .003) suggesting a possible protective effect of having family. Whilst family life may serve as a protective factor in relation to work stress, it may also be a contributory factor; Jenkins & Elliott (2004) reported a weak positive correlation between 'home-work conflict' and depersonalization (r_s= .33, p< .01).

In the study by Prosser et al. (1997), relatively low Adjusted R^2 values suggest a high amount of unexplained variance and whilst the study aimed to enhance ecological validity by measuring non-occupational factors, such as having dependants, causal relationships may not be assumed.

Similarly, Elliott and Daley (2013) examined the influence of demographic factors on burnout using a one-way ANOVA and reported that forensic health care professionals with dependents experienced lower rates of emotional exhaustion ($F= 6.14$, $p= .04$) than those with no dependents. Two-step regression analysis found that living with dependent others ($\beta= .225$, $p\leq .008$) and working shifts ($\beta= .204$, $p= .016$) significantly predicted emotional exhaustion, explaining 9% of the variance ($r^2= .086$).

Consistent with the findings of other studies included in this review, Jenkins & Elliott (2004) reported a positive association between emotional exhaustion and 'workload' ($r= .51$, $p< .001$) and highlighted 'relationships/ conflicts with other professionals' ($r= .46$, $p< .001$), 'organizational structure and processes' ($r= .42$, $p< .001$), 'client-related difficulties' ($r= .42$, $p< .001$) and 'professional self-doubt' ($r= .38$, $p< .001$) as other factors associated with emotional exhaustion. They reported similar findings for depersonalization, showing it to be moderately positively correlated with 'professional self-doubt' ($r= .40$, $p< .001$) as well as 'total Mental Health Professionals Stress Scale (MHPSS) score' ($r= .43$, $p< .001$).

A total MHPSS-social support interaction term explained a significant increase in the variance of depersonalization scores (R^2 change = .035, $F (1, 89) = 4.061$, $p= .047$); the 'social support' scores were split around the median to create a dichotomous variable of 'low social support' and 'high social support'. A reverse buffering effect was found; total MHPSS significantly predicted depersonalization in the high support group (adjusted $R^2= .398$, $F (1, 43) = 30.041$, $p< .001$). Jenkins & Elliott (2004) commented upon the unexpected and counter-intuitive nature of this finding, hypothesising that social influence increased the likelihood of negative appraisal. It should be noted that whilst the study by Jenkins & Elliott (2004) was of good methodological quality, the researchers transformed continuous MBI data into discrete categories, subsequently conducting analysis using chi-square tests, as well as making Bonferroni corrections to control for Type I errors in their correlational analysis. Both of these actions reduce the robustness of the findings and bring into question their generalisability.

Experience and length of service may be factors in the development of depersonalization. Elliott and Daley (2013) reported significantly higher depersonalization scores in forensic health care professionals with between 2 and 5 years experience in forensic

inpatient services, than in those with either less than 2 years experience or more than 5 years experience (F= 3.59, p= .04). Two-step regression analysis found that experience in forensic in-patient services did not significantly predict depersonalization (β= .025, p= .78).

Hanrahan et al. (2010) measured organisational factors of the nurse practice environment using an adapted 5-domain Practice Environment Scale – Nurse Work Index (PES-NWI). This study recruited a substantial sample of 353 psychiatric nurses working across 67 American hospitals and adopted a rigorous approach towards matching of demographic characteristics, data screening and analysis. The researchers found subscale means of 'manager skill at leadership' and 'nurse-physician relationship' were weakly negatively correlated with emotional exhaustion (r= -.20, p< .001) and (r= -.21, P< .001) respectively. Using regression analysis, Hanrahan et al. (2010) demonstrated emotional exhaustion was significantly associated with all five domains of organisational factors of the nurse practice environment, although the proportion of variance accounted for by the regression model above and beyond the mean model was not reported. Depersonalization was reported to be significantly associated with 'manager skill at leadership' and 'nurse-physician relationship' as well as composite PES-NWI score.

1.4.2 Attitudes toward Seclusion and Perceptions of the Feelings of Secluded Patients and Burnout

In their study exploring seclusion attitudes and emotional exhaustion, Happell and Koehn (2011) reported a weak positive correlation between emotional exhaustion and 'the patient is showing inappropriate sexual behaviour' (r= .308, p= .002), suggesting that this was a behaviour that staff found particularly difficult to manage, or was occurring with sufficient frequency such that staff found it particularly fatiguing. No seclusion attitudes were found to be associated with depersonalization. All other findings reported by Happell and Koehn (2011), relating to seclusion attitudes and either emotional exhaustion or personal accomplishment, were below the minimum level at which correlation coefficients are commonly reported (r= .3). Despite a sample size of 123 respondents, effect sizes of less than .25 suggest the study is slightly underpowered.

In a follow up study, Happell et al. (2012) found only weak correlations between perceived reasons for seclusion and staff burnout. Patients asking to go to seclusion was positively correlated with emotional exhaustion (r_s= .30, p= .016) and negatively correlated

with personal accomplishment (r_s= -.39, p= .002). Patients wanting to sleep and patients trying to break something like a chair or a window were positively correlated with depersonalization (r_s= .33, p= .008) and (r_s= .30, p= .015) respectively.

In the results section of their paper, Happell et al. (2012) state that to prevent Type I error inflation, a Bonferroni adjustment was made to the level of α, meaning that only effect sizes (r_s) of .55 and above are statistically significant. This is likely to have increased the risk of a Type II error to an unacceptable level and as such, the generalisability of the authors' findings should be treated with caution.

1.4.3 Tolerance for Aggression among Mental Health Nurses and Burnout

Patient aggression is a common occurrence in inpatient mental health settings and according to Whittington (2002), tolerance for patient aggression is strongly associated with two occupational factors: length of experience and level of burnout. Tolerance for patient aggression was found to be negatively correlated with both emotional exhaustion (r= -.34, p< .05) and depersonalization (r= -.42, p< .05). Whittington (2002) also reported finding a moderate positive correlation between tolerance for patient aggression and personal accomplishment (r= .56, p< .01). These findings appear to have good face-validity; one might expect mental health care staff who feel burnt out to be less tolerant of patient aggression, or conversely, staff with greater resilience and tolerance for aggression to be affected less, therefore reporting lower rates of burnout. The study did not comment on the bidirectional relationship in detail but did report that tolerance for aggression was higher amongst more experienced staff. The sample size of the study was limited at 37 respondents and the author acknowledges that this, along with the likelihood of self-selection bias, means the findings cannot be generalised to other settings.

1.4.4 Psychological Mindedness, Attachment and Burnout

In the only study included in this review that explored psychological mindedness, Hartley et al. (2015) reported a significant negative correlation between psychological mindedness scale (PMS) scores and scores of emotional exhaustion (r= -.362, p= .009). No significant correlations between psychological mindedness scale scores and the other two subscales of the MBI were found.

1.4.5 Lived Experience and Meaning of Stress in Relation to Burnout

The final two papers discussed in this review are of hermeneutical phenomenological design, written by the same author, and appear to report findings from the same data set. Currid (2008) highlights mental health nurses' experiences of working conditions and presents superordinate themes of 'busy chaotic environments with constant and competing demands ever present' and 'violence and aggression'. These were linked to themes of 'staffing resources', 'management style' and 'lack of other resources' such as bed availability.

The main stressors identified by participants were 'dilemma of heavy workloads' and 'violence and aggression'. With regard to the former, participants reported insufficient manpower resources to deliver quality nursing care, as well as operational directives from senior staff that participants felt were unethical, such as pressure to discharge patients in order to release beds. At least conceptually, there are similarities between these findings and the findings of some of the quantitative studies reviewed, such as the idea of 'overload' (Prosser et al., 1997), conflict with other professionals (Jenkins & Elliott, 2004) and the need for more skilled leadership (Hanrahan et al., 2010).

The other main stressor, 'violence and aggression', emphasised the way in which participants felt vulnerable due to the frequency of violent incidents. For some participants, this meant management not taking the problem of aggression seriously, and a lack of staffing was linked to both to an increase in aggressive acts, as well as to a decrease in staff ability to meet the needs of clients.

Currid (2008) reported that participants felt the working environment and organisational culture prevented them from using their clinical skills in accordance with their training; a finding that mirrors that of Prosser et al. (1997), as a correlate of occupational stress and burnout. Feeling professionally unsupported led to rumination and anxiety about clinical practice and a tendency for thoughts about work to intrude on home life (Currid, 2008).

In his second paper, Currid (2009) highlighted themes of 'pressures', 'violence and aggression' and the 'inability to switch off from work'. It could be argued that these themes articulate the findings of the research more succinctly than the themes presented in the author's earlier paper but little new data is presented, other than additional quotes from participants, with regard to accounts of hostile and intimidating experiences on the ward, and with regard to somatic effects of feeling over-extended, such as headaches and neck pain.

1.5 Discussion

The objective of the review was to explore the empirical literature relating to burnout in inpatient mental health care services, taking into account possible predictors of burnout and the impact of burnout on the individuals, teams and services under study.

The main finding was a positive relationship between workload or work-related stress and burnout, specifically within the domain of emotional exhaustion (Prosser et al., 1997; Jenkins & Elliott, 2004; Oddie & Ousley, 2007). This finding is congruent with those of studies investigating burnout in mental health professionals across a range of settings and disciplines (Edwards, Burnard, Coyle, Fothergill & Hannigan, 2000; Van Bogaert, Meulemans, Clarke, Vermeyen & Van de Heyning, 2009; Paris & Hoge, 2010), suggesting it is not an effect unique to inpatient settings.

There is evidence to suggest that inpatient staff experience lower levels of burnout and work-related stress than community-based mental health professionals, possibly as a result of fewer administrative demands (Prosser et al., 1997). Elliott and Daley (2013) reported a similar disparity in burnout levels between front-line staff and MDT staff in medium-secure units, although did not offer a supporting hypothesis. They also noted that emotional exhaustion was predicted by shift status, with staff not working shifts (such as psychologists and psychiatrists) reporting higher levels of emotional exhaustion; again no hypothesis was offered as to why this might be the case. Based on the correlates of burnout found in other studies included in this review (Prosser et al., 1997; Jenkins & Elliott, 2004; Oddie & Ousley, 2007) these differences might be explained by differences in workload or by differences in relationships between professionals; MDT members would be expected to have greater administrative and managerial responsibilities and increased multi-agency contact. This is contrasted against the evidence that scoring more highly in psychological mindedness, which might be expected of MDT members by virtue of their training in formulation skills (Hartley et al., 2015), and deriving greater career satisfaction, for which empirical evidence exists (Prosser et al., 1997), is associated with lower levels of emotional exhaustion. Based on the findings of the studies reviewed, explanations for disparities in emotional exhaustion scores by job role are conjecture; a plethora of mediators and moderators are likely to exist, including social support (Jenkins & Elliott, 2004), ward environment characteristics (Konstantinos & Christina, 2008) and individual characteristics (Trudeau & Reich, 1995; Hartley et al., 2015).

Exploring the meanings behind workload and work-related stress has greater relevance, particularly within the context of austerity and lack of investment (Bowers et al., 2005; Csipke et al., 2013; Appleby, 2015). Prosser et al. (1997) differentiated between 'overload' and 'overwork' (as a subset of 'overload') and suggested the correlation with greater emotional exhaustion is explained by the lack of time and resources available to undertake the work, not the demand of the work itself. This is echoed in the findings of Currid (2008; 2009) where participants reported clinical needs that exceeded manpower resources necessary to deliver quality nursing care. Both studies reported the importance of professional role expectations, with qualitative and quantitative findings suggesting that, for mental health nurses, being unable to perform the role for which they originally trained is a significant contributory factor to feeling stressed and burnt-out (Prosser et al., 1997; Currid, 2009).

Inadequate organisational structures, conflicting relationships with other professionals and a lack of leadership were associated with increased emotional exhaustion (Jenkins & Elliott, 2004; Oddie & Ousley, 2007: Hanrahan et al., 2010); these are known organisational-level predictors of burnout in community mental health service provision (Green, Albanese, Shapiro & Aarons, 2014).

Lack of adequate staffing and resources has been linked not only to emotional exhaustion but also to depersonalization (Oddie & Ousley, 2007), which in the context of mental health service provision for typically vulnerable people (Chan, 2010) is of great concern. However, more than one study under review found relatively low levels of depersonalization with concurrently high levels of emotional exhaustion (Prosser et al., 1997; Oddie & Ousley, 2007; Elliott and Daley, 2013) which is a positive finding, as it suggests that even when staff feel burnt-out, a "buffer" exists against an unfeeling and impersonal response to recipients of the care they provide (Maslach & Jackson, 1981) and that they are still able to derive a sense of satisfaction from their work. This "buffer" appears to be an effect common to burnout in mental health professionals, irrespective of whether they work in community or in inpatient settings (Morse et al., 2012) and is thought to relate to the values staff hold regarding working with others. This provides an explanation for why this population also tends to report high scores of personal accomplishment (Edwards et al., 2000; Paris & Hoge, 2010) in the presence of high levels of emotional exhaustion, and in relation to normative personal accomplishment scores for other professions (Maslach et al., 1996).

A cross-sectional study design, which may have ecological validity, is limited in that it does not allow for the controlling of variables. In an attempt to include variables outside of

the working environment that might also explain a percentage of the variance of an effect, some studies included measures of home/work conflict (Jenkins & Elliot, 2004), having children at home (Prosser et al., 1997) and living with dependents (Elliot & Daley, 2013). Home/work conflict was associated with increased depersonalization, whereas having children at home, or living with dependents, was associated with lower depersonalization, and lower emotional exhaustion and higher personal accomplishment. Respective authors do not discuss their findings in detail. However, theories of work-family enrichment (McNall, Nicklin & Masuda, 2010) explain the link between having dependents and greater personal accomplishment and might support greater emotional resilience at work. It is also possible that the relationship between having children or dependents and burnout is mediated by age.

Staff experience, which might be expected to correlate positively with age, was found to be an important factor in relation to burnout. The finding that staff with 2 years to 5 years experience reported significantly higher levels of depersonalization than those with less than 2 years or more than 5 years experience was not explored in detail by Elliot & Daley (2013). It may be assumed that newly recruited staff are less likely to experience depersonalization, particularly as it is described as a domain of burnout typically preceded by emotional exhaustion (Maslach et al., 1996). However, it is more difficult to make an a priori assumption with regard to the reporting of decreased depersonalization scores in staff with 5 years experience or more. This finding could be due to a form of attrition bias, if an association between burnout and staff attrition could be established. However, as discussed in the introduction, this link is tenuous (Paris & Hoge, 2010). An alternative hypothesis is that other variables exist that have a protective effect against burnout, correlated with age, experience or having dependents. A possible variable could be that of perceived self-efficacy, which has been shown to be inversely correlated with burnout in other professional domains such as education (Friedman, 2003).

Self-efficacy is highly correlated with self-esteem and, as related to one's capacity to produce given attainments (Bandura, 1997), may be inversely related to self-doubt, described as metacognition about ability (Zhao & Wichman, 2015), itself negatively correlated with performance outcomes and psychological wellbeing (Oleson, Poehlmann, Yost, Lynch & Arkin, 2000; Zhao & Wichman, 2015).

Professional self-doubt was found to be positively correlated with emotional exhaustion (Jenkins & Elliott, 2004). The term "professional self-doubt" infers a domain-specific metacognition. The construct is not explored in detail by Jenkins and Elliott (2004) but it is suggested that it may be explained by an "aspiration-achievement gap" (Glass &

McKnight, 1996), a relational and situational cognitive process that is a determinant of quality of life (Copestake & Camfield, 2010). This fits with empirical data from non-clinical populations, that primary and secondary appraisals at least partially mediate the relationship between job stress and burnout (Gomes, Faria & Gonçalves, 2013). Jenkins and Elliot (2004) found a reverse buffering effect on burnout characterised by a positive correlation between stressors and depersonalization for staff reporting high levels of social support; they explained this effect in terms of social influence leading to increased negative appraisal of work-related issues; it is conceivable that social influence has an impact on professional self-doubt.

As discussed in the introduction to this paper, staff working in inpatient mental health care settings are often exposed to situational violence and aggression; not only are these situations linked to increased levels of burnout but strategies for managing them such as the use of seclusion is also associated with perceived burnout (Happell & Harrow, 2010). Specific attitudes towards seclusion and perceptions of client behaviours likely to lead to seclusion were positively correlated with emotional exhaustion; these included displays of inappropriate sexual behaviour and yelling and making too much noise (Happell & Koehn, 2011). Again, this suggests appraisal is important in that there is a feature of sexually-orientated behaviour and environmental disturbance that makes greater demands of the psychological capital of staff. Asking to go to seclusion was also positively correlated with emotional exhaustion (Happell & Koehn, 2011) and negatively correlated with personal accomplishment (Happell et al., 2012) which perhaps reflects the frustration of staff as well as a sense of failure at not being able to support the client with positive engagement or a more conservative method of management. As discussed, being able to work in a therapeutic manner in accordance with their training was found to be of significant meaning for mental health nurses (Currid, 2008).

1.6 Conclusion

This review can be summarized in five main points. First, there is strong evidence from a wide range of studies that staff burnout, particularly emotional exhaustion, is highly prevalent in acute mental health inpatient services.

Second, the number of studies evaluating burnout in inpatient mental health care settings is relatively few, in comparison to studies sampling community mental health professional populations. Around half of the studies reviewed were found to be underpowered, limiting the external validity of their findings. Moreover, many of the correlations reported were weak. This suggests the likelihood of relationships between predictors and burnout was low, even if a genuine effect exists. The specialised nature of inpatient mental health care is likely to be a limiting factor in the recruitment of large samples and future research should attempt to sample from multiple matched settings whilst maintaining strict inclusion criteria, professional role for example, to reduce the threat to internal validity.

Third, authors must be cautious in reporting their findings. Even in instances where it was made explicit that a study was under-powered, findings were discussed without further caution as to their generalisability. In the reporting of some correlation and regression statistics, directional effects were inferred, instead of making statements relating to dependence and shared variance.

Fourth, a significant weakness in the literature is the high prevalence of cross-sectional quantitative designs used. The findings from cross-sectional designs are bound to a single moment in time; longitudinal studies would show increases and decreases in burnout which might allow for hypotheses regarding maintaining factors. Mixed method research would be one way to overcome the limits of small sample sizes, allowing for a broader and deeper understanding of burnout, though the process of triangulation.

Fifth, most of the studies look at predictors of burnout and make recommendations based on their findings, which include the need for organizational changes, improvements in communication, an increase in resources or further staff support and training. Little emphasis is given to the impact of burnout on staff wellbeing in acute mental health inpatient services (discussed briefly in the qualitative studies reviewed here) or the impact of staff burnout on the wider social environment and critically, the provision of care.

In summary, there is a growing evidence-base linking the unique challenges of inpatient mental health care work to a high degree of burnout, specifically MBI emotional

exhaustion. In these settings, occupational burnout arises though a complex interplay of political, organisational, social and individual factors. Many of the current studies make clinical and service recommendations but fail to explore, in detail, the impact of staff burnout on care quality and on clients within their respective services. Future research needs to address this gap in the literature. The current body of evidence is dominated by cross-sectional design studies; longitudinal studies or those using mixed method approaches would allow for a broader and deeper understanding of the phenomenon of staff burnout in inpatient mental health services. Further research to support evidence-based interventions to limit and reduce burnout, is critical to the wellbeing of mental health professionals, the services within which they operate and the people for whom they provide care.

Chapter 2: Burnout in Secure Forensic Mental Health Services for Young People; A Mixed Methods Approach

2.1 Introduction

2.1.1 Burnout as a Pervasive Problem in Inpatient Mental Health Care

Staff burnout (discussed in greater detail in the systematic review accompanying this paper) is highly prevalent in acute mental health inpatient services, associated with stress arising from insufficient staffing and resources necessary to meet operational demands (Prosser et al., 1997; Jenkins & Elliott, 2004; Oddie & Ousley, 2007) and conflicting relationships with other professionals (Jenkins & Elliott, 2004; Oddie & Ousley, 2007: Hanrahan et al., 2010). In one acute inpatient setting, limited resources and a lack of agency with regard to decision-making were reported to be barriers to working therapeutically with clients and in accordance with nurse professional training (Currid, 2009). Burnout has also been shown to correlate positively with increased use of seclusion and restraint (Happell & Koehn, 2011; Happell et al., 2012). An examination of the burnout literature revealed a paucity of research pertaining to mental health inpatient services, in comparison to research conducted in other settings (Paris & Hoge, 2010; Morse et al., 2012). A comprehensive review of academic literature published between 1985 and 2015 found no studies relating to burnout in staff working in secure forensic mental health services for young people; highly specialised environments for young people who have both developmental and mental health needs (Hill et al., 2014).

2.1.2 Specific Needs of Young People: Mental Health Difficulties in Adolescence

Psychosocially, adolescence is recognised to be a difficult and often life-course-defining developmental phase; the global prevalence of mental health problems in young people is estimated at one in five (Kieling et al., 2011) and 75 percent of adult mental health problems are thought to originate in childhood and adolescence, prior to the age of 18 years (Davies, 2014).

Childhood-onset externalising behaviours, such as hyperactivity and aggression (Hinshaw, 1987) are common in early childhood and peak around the age of 15 years. In the

majority of cases, externalising behaviours remain adolescence-limited and do not become life-course-persistent (Moffitt, Caspi, Dickson, Silva & Stanton, 1996). Substance abuse, deliberate self-harm (DSH) and suicide rates are thought to be an increasing problem in adolescent populations (Maughan, Iervolino & Collishaw, 2005; Twenge, 2011); the lifetime prevalence of DSH in European adolescents is already estimated to be 18% (Muehlenkamp, Claes, Havertape, & Plener, 2012). Young people admitted to a secure forensic mental health service typically have complex, psychosocially-disadvantaged backgrounds and high chronicity of frequent, severe episodes of violence, aggression and DSH (Hill, White, Lolley, Sigki-Gomez & Williams, 2012).

2.1.3 The Relationship between Behaviour that Challenges and Staff Burnout

A review of incident data in one secure forensic mental health service for young people found that young female clients averaged more than one incident of DSH or aggression per day (Hill et al., 2014). In this service, DSH was described as a setting event for aggressive behaviour; a common antecedent of aggressive behaviour was staff intervention, usually with the aim of safeguarding the young person. These incidents were reported to conclude often in physical restraint.

Behaviour that challenges is ubiquitous in acute mental health inpatient settings and the frequency of restraint and seclusion is positively correlated with fear, arising from working in a high-risk environment, as well as difficulty understanding the cause of client aggression (Foster, Bowers & Nijman, 2007).

High levels of negative emotion in response to behaviour that challenges has been linked to high levels of burnout in care staff (Mitchell & Hastings, 2001; Rose, Horne, Rose & Hastings, 2004). Based upon the cognitive model, negative emotions are likely to arise from negative appraisals of the behaviour, its outcomes or negative predictions about future events and outcomes (Lazarus, 1991; Rose, Mills, Silva & Thompson, 2013). Increased depersonalization, a core domain of burnout according to the MBI, is thought to occur secondary to high levels of emotional exhaustion, having a ‘protective’ effect; responding impersonally towards others reduces one’s emotional vulnerability (Hastings 1995; Maslach et al., 1996). A criticism of the findings of Mitchell and Hastings (2001) and Rose et al. (2004) is that whilst the authors acknowledge the limitations of their respective studies’

cross-sectional designs, they still infer a directional effect between increased negative emotional reaction to behaviour that challenges and burnout.

Staff experience is thought to be a mediator in the relationship between behaviour that challenges and staff burnout (Hastings, Remington and Hopper, 1995) with less experienced staff reporting a greater aversion to behaviour that challenges and a lower likelihood of endorsing behavioural hypotheses with regard to self-injury; it should be acknowledged that this was a finding from a study that explored burnout in staff working in an intellectual disability setting, rather than a mental health setting. In one physical health setting, more senior staff and staff who had experience of higher levels of verbal aggression reported greater self-efficacy in managing aggressive behaviour (Lee, 2001).

2.1.4 Self-Efficacy as a Protective Factor against Burnout

Self-efficacy, related to one's beliefs regarding capacity to produce given attainments (Bandura, 1997), has been shown to be a protective factor against burnout in care staff working with older adults (Duffy, Oyebode & Allen, 2009) and negatively correlated with burnout in educational domains (Friedman, 2003). In educational staff working with children with intellectual disabilities, low self-efficacy was found to increase staff vulnerability to negative emotional reactions to behaviour that challenges (Hastings & Brown, 2002).

2.1.5 Why Negative Emotional Reaction to Behaviour that Challenges and Burnout is a Problem in Secure Forensic Mental Health Services for Young People

Guidance from the NHS Commissioning Board (2013), now NHS England, states that secure forensic mental health services for young people should take an active approach to recognising the importance of the quality of relationships within their setting. Young people should be supported regarding the development and maintenance of better relationships, whilst aiming to reduce problematic, challenging and risk-related behaviours. This mandate emphasises the relational nature of the environment and the role of staff as temporary attachment figures, as a key component of care (Hughes, 2003). For staff to experience consistently high negative emotional reactions to behaviour that challenges may present a risk to care-quality. Few studies have explored the systemic impact of behaviour that challenges, or of staff burnout, on staff-client relationships and care quality; where research has been

conducted it has been done so predominantly in settings other than inpatient mental health services (Arnetz & Arnetz, 2001; Garman, Corrigan & Morris, 2002; Salyers et al., 2015)

One of the ways in which negative emotional reaction to behaviour that challenges is likely to be a problem in a secure forensic mental health service for young people, is through increased likelihood of attribution bias and exaggerated aversive processing (Robinson, Letkiewicz, Overstreet, Ernst & Grillon, 2011), as well as reducing task performance (Eysenck, Derakshan, Santos, & Calvo, 2007). This is likely to limit staff experiences of mastery and create a cycle of negative appraisal, which can undermine and weaken self-efficacy (Bandura, 1997).

A comprehensive review of the literature found no studies relating to burnout in staff working in secure forensic mental health services for young people. These are highly specialised environments, providing care to young people whom, irrespective of individual differences and experiences, are at a life-stage characterised by distinct psychosocial needs (Compas, Hinden & Gerhardt, 1995; Sales & Irwin, 2013). It is predicted that the need for strong therapeutic alliances with young people, acting 'in loco parentis' (Green, 2006) and as temporary attachment figures (Adshead, 1998), tensioned against operational challenges and the need to manage frequent and severe episodes of behaviour that challenges, presents unique demands upon staff and the service.

2.1.6 The Nature of Behaviour That Challenges in the Setting under Study

The research was conducted in a secure forensic service for young people, located in Southern England. High secure forensic services do not exist for adolescents, hence medium secure units are expected to be able to care for high risk individuals who, if adults, would be detained in high secure specialist forensic units (Hill et al., 2012). Young people admitted to the service are of mixed gender and aged between 12 and 18 years; all are detained under the Mental Health Act 1983.

The service experiences frequent and severe episodes of behaviour that challenges and all incidences relating to risk, threat or injury to staff or young people or damage to property, are recorded on a central database.

During the period from 01/07/2015 to 31/12/2015, a total number of 669 incidences were reported which occurred in relation to, or as a consequence of, a young person's

behaviour. Table 3 shows the total number of reported incidences by day over the specified period:

Table 3. Total Reported Incidences by Weekday for the Period 01/07/2015 to 31/12/2015

Day of the Week	Total Number of Reported Incidences
Monday	108
Tuesday	65
Wednesday	93
Thursday	67
Friday	66
Saturday	64
Sunday	103

The accuracy of these figures is difficult to verify; it is highly probable that other incidents occurred over the period but were not recorded. Reporting bias is also to be expected in the gathering of incident data, as different staff interpret behaviour that challenges and the threshold for an incident differently. Plotting these figures (Figure 2.) shows a trend in incident frequency, with incidences occurring more frequently on Sundays, Mondays and Wednesdays:

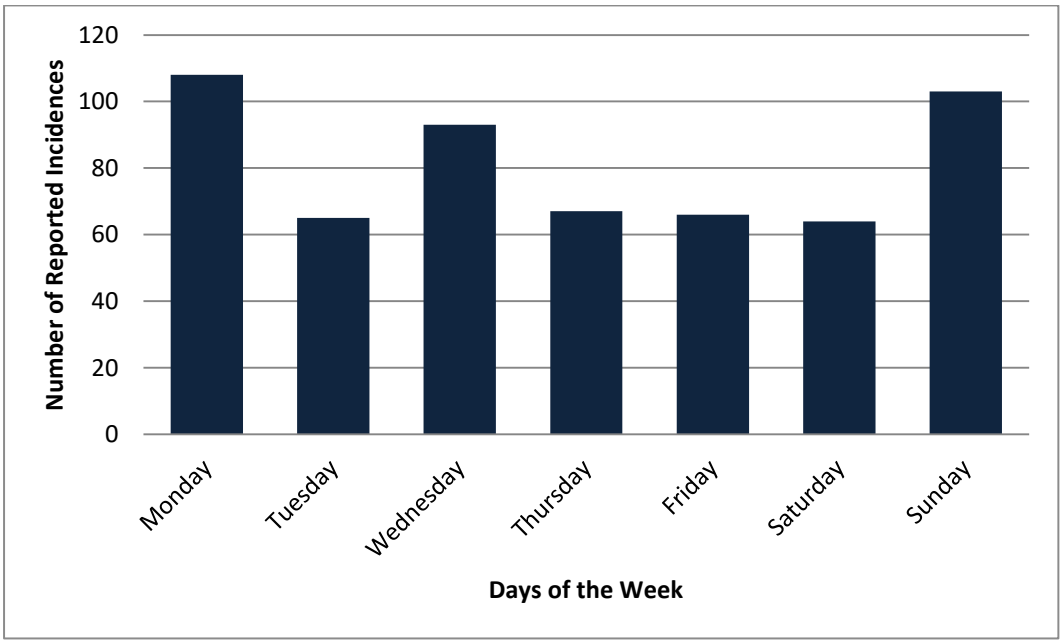

Figure 2. Total Reported Incidences by Weekday for the Period 01/07/2015 to 31/12/2015

According to staff at the unit, it is more common for incidents to occur in the absence of structured activities (such as on a Sunday), as well as upon returning to the hospital from leave (which may explain the high frequency of incidences on a Monday). Wednesday is one of the days when ward round is conducted, during which decisions are made with regard to each young person's leave; this may have an impact upon incident frequency. Formal research conducted in the adolescent forensic secure inpatient service appears to support these assumptions (Hill et al., 2012).

Incidents reported within the unit are grouped into categories. For the period of 01/07/2015 to 31/12/2015, the type of incident represented as a percentage of the total number of reported incidents (566) is shown in Figure 3:

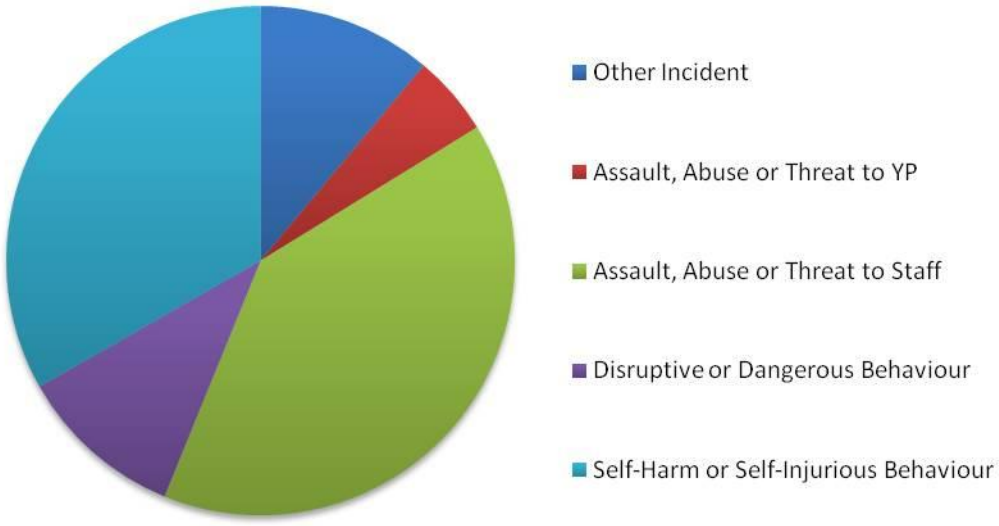

Figure 3. Types of Incident Represented as a Percentage of Total Reported Incidents

Figure 3. shows the three most frequent types of single incident category include: Assault, Abuse or Threat to Staff (40%); Self-Harm or Self-Injurious Behaviour (33%); and Disruptive or Dangerous Behaviour (11%). Assault or abuse of staff may include verbal abuse, spitting, kicking, hitting or less frequently, assault with a weapon (which may include bits of metal, a kitchen knife or a razorblade) or throwing of bodily waste. Self-harm may include cutting and scratching, mutilation, tying of ligatures, swallowing or inserting objects (such as pens, glass, batteries) or overdoses of medication. Disruptive or dangerous behaviour is a category more open to interpretation, as discussed, which highlights issues with regard to the robustness of incident data.

The category labelled as “Other Incident” includes a range of risk-related situations such as general security concerns, accident or injury to either staff or young people, and absconsion or missing person.

2.1.7 Statement of Purpose

This mixed methods study addresses burnout in staff working in a secure forensic mental health service for young people; a highly specialised setting. A convergent parallel mixed methods design is used; this is a type of design where quantitative and qualitative data is collected concurrently, analysed separately and the findings are then merged.

The quantitative strand aimed to explore the relationship between burnout and emotional reaction to behaviour that challenges, building on the findings of Mitchell and Hastings (2001), Rose et al. (2004) and Mills and Rose (2011). Burnout, specifically emotional exhaustion and depersonalization, due to the relational qualities of these domains (Maslach et al., 1996), was predicted to correlate with negative emotional reaction to behaviour that challenges. The direction of the relationship was not predicted, as factors exist which might influence the direction of an effect. For example, depersonalization acting as a ‘buffer’ (having a protective effect) against emotional exhaustion (Hastings 1995), could result in a negative correlation; an otherwise counter-intuitive prediction.

Self-efficacy was predicted to mediate the relationship between burnout and emotional reaction to behaviour that challenges.

The qualitative strand had three main aims:

1. To explore staff experience of occupational stressors and the effect of those stressors in terms of burnout and emotional reaction to behaviour that challenges
2. To explore the impact of staff burnout upon staff individually, their relationships with the young people and in the context of the wider system
3. To explore protective factors against negative emotional reaction to behaviour that challenges and burnout

Collecting both quantitative and qualitative data allows a convergence of findings from differing ontological and epistemological orientations (Sale & Brazil, 2004) to bring

greater insight into the problem than would otherwise be obtained from either data strand separately (Creswell & Plano Clark, 2011).

2.1.8 A Reflection on Terminology

Nomenclature varies according to clinical and research disciplines. This paper uses the term "behaviour that challenges", more commonly found in intellectual disability literature, to cover behaviours including, but not limited to, aggression, violence and deliberate self-harm. It should also be acknowledged that whilst secure forensic mental health services for young people are not intellectual disability services, a high degree of comorbidity exists between developmental, intellectual and mental health difficulties, most likely arising from a common factor of increased exposure to psychosocial disadvantage (Emerson & Hatton, 2007).

2.2 Method

2.2.1 Design

The study used a convergent parallel design to obtain different but complementary data on the same topic (Morse, 1991). The quantitative strand incorporated a cross-sectional survey, in which all participants completed brief self-assessment questionnaires. The qualitative strand adopted a thematic analysis approach, utilising semi-structured interviews to collect data from a subset of the total sample recruited to the quantitative strand. A flow chart of the convergent parallel design is shown below (Figure 4):

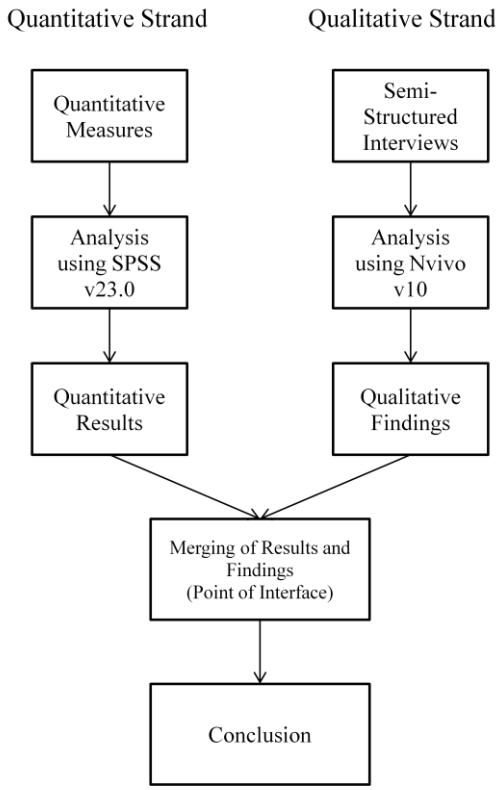

Figure 4. Flow Chart of Mixed Method Design

2.2.2 Participants

82 clinically-facing staff were invited to participate in the quantitative strand of the study, via ward communications and the use of posters in staff areas. Inclusion criteria were a minimum of 20 clinical or educational hours worked per week with exposure to situations

involving behaviour that challenges, such as deliberate self-harm and aggression. Participants were awarded entry into a draw for one of five gift vouchers. 44 participants consented to take part in the study (54%); 43 participants completed all questionnaire items (n=43). Of these 43 participants, 14 were male (33%) and 29 were female (67%), aged between 22 and 60 years (M= 35.14, SD= 11.12). Participants included healthcare support workers, nurses and multidisciplinary team (MDT) members, including occupational therapists and education staff. Of the 43 staff recruited, 31 were healthcare support workers or nurses and 12 were MDT members. Supplemental group comparison data is provided at the end of this paper (appendix P). Based upon information provided by the administrators of the unit at the time of recruitment, the sample of respondents was broadly representative of the permanent staff population, in terms of age, length of service and qualification. Agency workers and non-permanent staff were not recruited into the study; many of these staff members work irregular shift patterns, did not meet the inclusion criteria for the study and, based upon observations made prior to recruitment, have less close relationships generally with the young people in the unit, when compared to permanent staff.

Ten participants were recruited to the qualitative strand through purposive sampling, based on job title and demographic variables, with the aim of enhancing trustworthiness (Shenton, 2004). Participants included 4 qualified nurses, 4 healthcare support workers, an occupational therapist and a teacher, all of whom met the inclusion criteria of a minimum of 20 clinical or educational hours worked per week with exposure to behaviours including deliberate self-harm, violence and aggression.

Each participant recruited to the qualitative strand of the study was awarded a gift voucher to acknowledge the contribution of their time.

2.2.3 Procedure

Following ethical approval and permission from the senior managers of the unit, staff were invited to take part in the study. Information about the study was provided (appendix A), prospective participants were given opportunity to ask questions and from those who participated, written consent was obtained (appendix B). Participants were then asked to complete the questionnaires (appendices C-F) in their own time and without conferring, then seal them in the envelope provided and return them via the hospital's internal mail to the researcher. A debrief form was provided (appendix G).

The ten participants recruited to the qualitative strand were identified from within four key professional groups: healthcare support workers, nurses, occupational therapists and education staff. Each participant was selected partly based upon demographic information (males and females who fell below the 10th, around the 50th or above the 90th percentile for age or experience, or both) to ensure a heterogeneous sample and partly based on availability within the timeframe available for data collection. Participants were contacted either by email or face-to-face and all consented to continue participation in the study.

Data was collected by semi-structured interview lasting between 45 minutes and one hour (a copy of the interview schedule is included in appendix H). Field notes were taken during the interview process; a summary of these notes is provided in appendix I. Interviews were recorded on an encrypted digital voice recorder and subsequently transcribed (a sample copy of a transcript is included in appendix J). Each transcript was open-coded for semantic and latent content (Boyatzis, 1998) using NVivo 10. Codes were written onto flashcards and visually arranged to form a concept map (Wolcott, 1994) to support basic and organising theme development. The organisation of themes, codes and their meanings is provided in appendix K. Draft findings were presented back to a sub-sample of three participants from the qualitative strand one month after data collection, to enhance trustworthiness of findings. A summary of the research and its findings was communicated to staff across the unit in ward supervision and MDT meetings.

Ethics information and an NHS Letter of Access are located in appendices L and M.

2.2.4 Measures

Participants in the quantitative strand of the study completed four brief questionnaires, which included a demographic information questionnaire and three psychometric measures.

Demographic information questionnaire. Participants provided their gender, age, previous experience (in months), experience working at the unit (in months), job title, hours worked per week and relevant qualifications.

The general self efficacy scale (GSE). The GSE (Schwarzer & Jerusalem, 1995) consists of ten items, rated on a 4-point Likert scale that distinguishes varying degrees of truth, ranging from ‘Not at all true’ to ‘Exactly true’. Each item refers to successful coping

and implies an internal-stable attribution of success, reflecting optimistic self-belief across domains (Schwarzer & Born, 1997), for example: “I can solve most problems if I invest the necessary effort”. Item scores are summed to generate a composite total score ranging from 10 to 40. Psychometric properties of the GSE are well-established, suggesting a unidimensional factor structure and internal consistency coefficients ranging from .75 to .91, with the majority of coefficients reported to be above .80 (Scholz, Doña, Sud & Schwarzer, 2002). Cronbach’s coefficient alpha for the GSE in this research indicated good internal consistency (α= .86).

The emotional reactions to challenging behaviour scale (ERCBS). The ERCBS (Mitchell & Hastings, 1998) consists of 15 items (negative emotions), rated on a 4-point Likert scale of frequency, ranging from ‘No, never’ to ‘Yes, very frequently’. Scores on items relating to two factor analysis-derived subscales of fear/ anxiety emotions and depression/ anger emotions are summed, providing two total scores, one for each domain. Normative data is derived from studies of staff working with children and adults with intellectual difficulties (Mitchell and Hastings, 2001; Rose et al., 2004; Mills & Rose, 2011) and the scale has been found to be reliable. However, empirical evidence regarding its use with staff working in other disciplines is lacking. Cronbach’s coefficient alpha for each subscale of the ERCBS in this research indicated good internal consistency (F/A α= .87, D/A α= .86).

The Maslach burnout inventory – human services survey (MBI-HSS). The MBI-HSS (Maslach, Jackson & Leiter, 1996) consists of 22 items, designed to assess three core domains of burnout: emotional exhaustion (EE); depersonalization (DP); and reduced personal accomplishment (PA). The subscales are comprised of nine, five and eight items respectively and each item is rated on a 7-point Likert scale, from ‘0= never’ to ‘6= every day’. Ratings are summed to yield subscale scores; higher levels of burnout are represented by higher EE and DP scores and lower PA scores. The MBI-HSS has been found to have good internal consistency (EE α= .90, DP α= .79, PA α= .71) and test-retest reliability (Maslach et al., 1996). The internal consistency for each subscale of the MBI-HSS in this research was found to be good (EE α= .90, DP α= .79, PA α= .73).

2.2.5 Quantitative Strand: Data Preparation

Descriptive and inferential analysis was conducted using IBM SPSS Statistics for Windows, Version 23.0 (IBM Corp, 2015) on data from 43 participants. MBI depersonalization scores were found to be significantly positively skewed; a Shapiro-Wilk test, appropriate for small sample sizes (Ghasemi & Zahediasl, 2012) indicated non-normal distribution ($W = .885$, $p < .001$). Otherwise, data was found not to differ significantly from normality and met assumptions of linearity, homoscedasticity and an acceptable level of multicollinearity (Field, 2009; Judd & Kenny, 2010).

Relationships between demographic variables, burnout, emotional response to behaviour that challenges and general self-efficacy were examined using Pearson product-moment correlation. Based upon theoretical assumptions from the empirical literature, supported by the correlational findings, mediation analysis was conducted in SPSS using PROCESS (Hayes, 2013).

The initial aim to recruit 60 participants to the quantitative strand was not achieved; this would have allowed for an acceptable level of power ($1-\beta = .80$) with a weak correlation coefficient (.35). Hence, some of the findings of the study are slightly underpowered, depending upon the magnitude of the effect for any given test.

Whilst low statistical power negatively affects the probability that a statistically significant finding is genuinely representative of a true effect (that a Type I error does not occur), no attempt was made to adjust p values (by Bonferroni correction) as this would have increased the risk of a Type II error (Button et al., 2013) and further reduced the external validity of the findings. Furthermore, Jennions and Møller (2003) and Nakagawa (2004) caution against the use of Bonferroni corrections in order to inflate the "significance" of findings whilst increasing Type II error to unacceptable levels, recommending instead the routine presentation of observed (standardised) effect size. Effect sizes are reported in the correlation and mediation analyses present in this study.

2.2.6 Qualitative Strand: Analytic Approach

Thematic analysis was selected as it is a flexible approach to qualitative research with a degree of compatibility to both essentialist and constructionist orientations (Braun & Clarke, 2006). It allows for the interpretation of commonality within data, at the same time as enabling the researcher to draw themes from salient data present in the narrative of any one

individual; this is particularly relevant when exploring data from a small sample of participants (Braun & Clarke, 2006). This study aims to draw together positivist and interpretivist paradigms in its exploration of burnout and its impact upon individuals and the wider system.

2.3 Quantitative Strand: Results

2.3.1 Demographic Characteristics of Participants

Descriptive statistics (Table 4) show that just over two-thirds of the sample population was female (broadly representative of the wider staff population) with a mean experience of less than 3 years (34 months); the modal value of experience was 6 months. High standard deviations for both age and experience indicates dispersed distributions and demographic heterogeneity.

Table 4. Demographic Characteristics of Participants

Demographic Characteristics (n= 43)	Total n (%) or Mean (SD)
Sex	
Males	14 (33)
Females	29 (67)
Age (years)	35.14 (SD 11.14)
Role	
Ward staff	31 (72)
MDT staff	12 (28)
Experience working in unit (months)	33.95 (SD 29.64)

Note: It was necessary to report experience in months. The distribution has a moderate positive skew, with a median value of 21 and a mode of 6.

2.3.2 MBI Burnout and ERCBS

Comparing MBI subscale means with normative mean ranges for mental health workers (Maslach et al., 1996) participants were found to score in the 'high burnout' category of emotional exhaustion, the 'average burnout' category of depersonalization and the 'low' burnout category of personal accomplishment (Table 5). Scores of emotional exhaustion were more widely dispersed than scores on the other two subscales, indicating emotional exhaustion varies more greatly across the sample.

ERCBS scores were not compared to scores from other studies as no normative data exists for staff working in an inpatient mental health setting.

Table 5. Descriptive Statistics for Maslach Burnout Inventory (MBI) Scores

	Study Findings		Normative means for mental health workers (Maslach et al., 1996)		
MBI subscale	Mean*	SD	Low	Average	High
EE	22	11.64	≤ 13	14 – 20	≥ 21
DP	7	6.11	≤ 4	5 – 7	≥ 8
PA	37	6.05	≥ 34	33 – 29	≤ 28

Note: *to zero decimal places.

2.3.3 The Impact of Demographic Variables on MBI Burnout and ERCBS

Exploring the impact of demographic variables on MBI and ERCBS scores, a weak negative correlation found to exist between the demographic variable of age and the MBI domain of depersonalization (Table 6).

Table 6. Pearson Product-Moment Correlation Statistics

	Depersonalization	Sig. (2-tailed)
Age	-.347	.022

Fear/Anxiety and Depression/Anger reactions to behaviour that challenges were not found to vary significantly according to participant age or experience. Female staff reported higher fear/anxiety scores than male staff in response to behaviour that challenges (Table 7).

Table 7. Mean Fear/Anxiety Scores and Between Subjects (Gender) Results

Gender	n	Mean Score	S.D	t	Sig. (2-tailed)	95% CI
Male	14	3.50	2.68			
				-2.08	.044	-3.71 – -.054
Female	29	5.38	2.82			

2.3.4 The Relationship between MBI Burnout, ERCBS and GSE

Exploring the relationships between burnout, emotional reaction to behaviour that challenges and general self efficacy (Table 8), emotional exhaustion was found to be moderately positively correlated with both fear/anxiety (r= .442, p= .003) and depression/anger (r= .676, p< .001). Depersonalization was found to be moderately positively correlated with depression/ anger only (r= .510, p< .001). Personal accomplishment was found to be moderately negatively correlated with depression/anger (r= -.423, p= .005).

General self-efficacy was found to be weakly negatively correlated with emotional exhaustion (r= -.306, p= .046) and moderately negatively correlated with fear/ anxiety (r= -.610, p< .001) and depression/ anger (r= -.486, p< .001).

Table 8. Pearson Product-Moment Correlation Statistics

	Emotional Exhaustion	Depersonalization	Personal Accomplishment	Fear/ Anxiety	Depression/ Anger	General Self-Efficacy
Emotional Exhaustion	-	.527**	-.411**	.442**	.676**	-.306*
Depersonalization	-	-	-.423**	.142	.510**	-.019
Personal Accomplishment	-	-	-	-.258	-.423**	.286
Fear/ Anxiety	-	-	-	-	.658**	-.610**
Depression/ Anger	-	-	-	-	-	-.486**
General Self-Efficacy	-	-	-	-	-	-

Note: **Correlation is significant at the .01 level (two-tailed). *Correlation is significant at the .05 level (two-tailed).

2.3.5 The Mediating Effect of GSE

PROCESS (Hayes, 2013) was used to determine whether general self-efficacy mediated the effect of burnout, specifically emotional exhaustion and depersonalization, on fear/anxiety and depression/ anger reactions to behaviour that challenges. An a priori assumption was made that higher general self-efficacy would have a buffering effect on negative reaction to behaviour that challenges, even in the presence of burnout.

Figure 5 shows that emotional exhaustion significantly indirectly effects a fear/anxiety reaction to behaviour that challenges through general self-efficacy (standardised *B* = .16, unstandardised *b* = .040, bootstrapped SE = .023, 95% BCa CI [.003 - .094]. A medium – large effect size was found (k^2 = .173, 95% BCa CI [.022 - .362]). The standardised regression coefficients for the relationships represented by paths a, b and c were all statistically significant (p< .05).

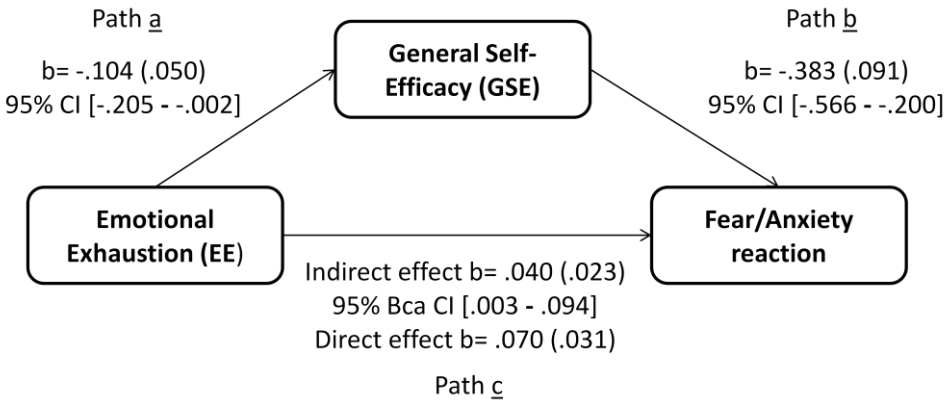

Figure 5. Mediation Analysis of Fear/ Anxiety Reaction to Behaviour that Challenges

Figure 6 shows that emotional exhaustion significantly indirectly effects a depression/ anger reaction to behaviour that challenges through general self-efficacy (standardised *B* = .09, unstandardised *b* = .041, bootstrapped SE = .029, 95% BCa CI [.002 - .113]. This is a medium – large effect size (k^2 = .125, 95% BCa CI [.008 - .278]). The standardised regression coefficients for the relationships represented by paths a, b and c were all statistically significant (p< .05).

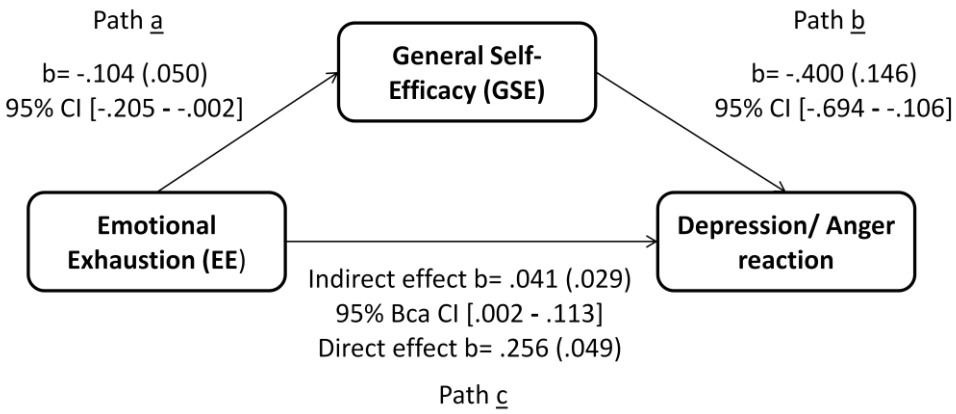

Figure 6. Mediation Analysis of Depression/ Anger Reaction to Behaviour that Challenges

General self-efficacy was not found to mediate the effect of fear/ anxiety or depression/ anger reactions on emotional exhaustion, supporting the prediction made regarding the direction of the effect. General self-efficacy was not found to mediate the effect of depersonalization or personal accomplishment on fear/ anxiety or depression/ anger reactions.

2.4 Qualitative Strand: Findings

Thematic analysis yielded seven basic themes, which were clustered into three organising themes: 'Occupational Stressors', 'The Systemic Impact of Burnout' and 'Protective Factors'. Organising themes are acknowledged to be predominantly deductive, driven by research aims of exploring possible predictors and consequences of burnout in a secure forensic mental health service for young people.

Organising themes, basic themes and their interactions are displayed in Figure 7. Red arrows indicate the link between organising themes and basic themes. Each theme was labelled based upon one or more quotes provided by participants in the qualitative strand of the study (see the coding manual in appendix K for more information). Organising themes are arranged in Figure 7. in a framework that suggests "Protective Factors" buffer the effect or impact of "Occupational Stressors", and as such, may reduce "The Systemic Impact of Burnout". The interaction between themes is discussed in greater detail in the discussion section (2.5).

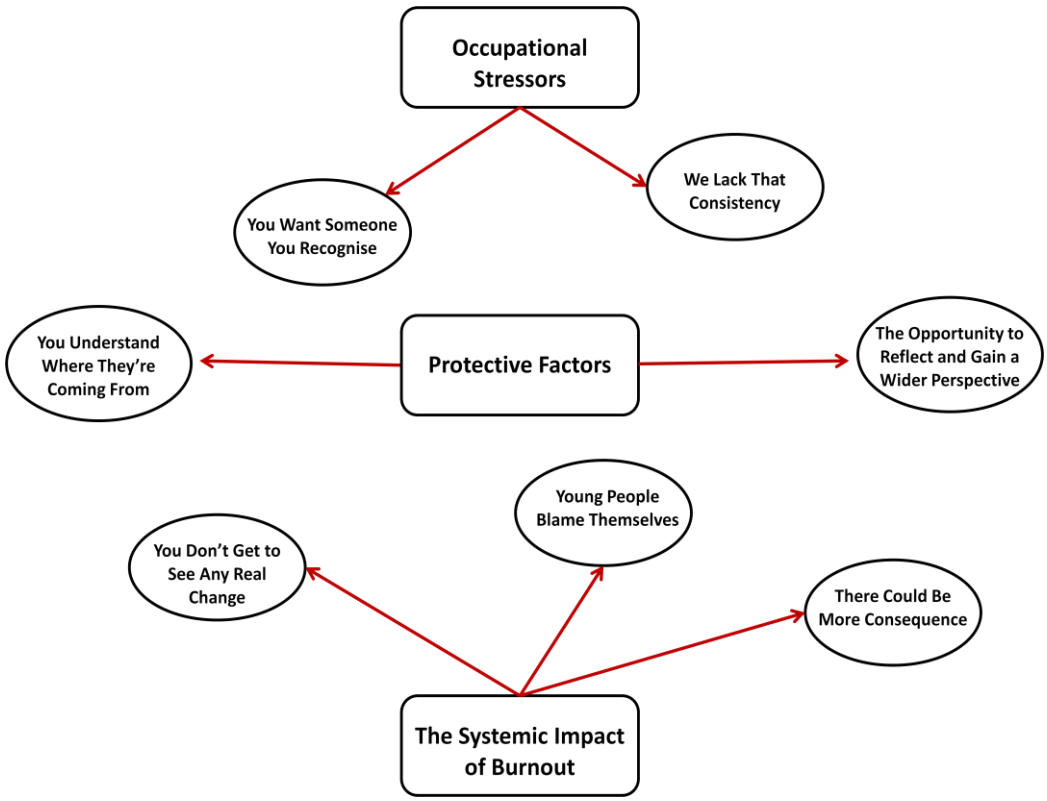

Figure 7. Thematic Map Showing Clustering and Interaction of Basic Themes

Participants recruited to the qualitative strand of the study were from a range of professional backgrounds and had varying lengths of experience working in the unit, ranging from 5 months to 6 years. Considerable homogeneity was observed in their responses. In the following section, basic themes drawn from the data are explored and contextualised with the use of direct participant quotes.

2.4.1 Occupational Stressors

You Want Someone You Recognise. Whilst having insufficient resources to meet demands places pressure on the system, participants reported an over-reliance on agency staffing, as a short-term solution to staffing insufficiency, as a key contributor to burnout. A high ratio of agency staff was reported to have a negative impact on care:

> *"What experienced staff are good at is knowing instinctively the unforeseen, having a knack of being able to tell when a patient is not right. Which agency staff don't... I hope I'm not damning all agency staff because they're a necessary part of the service, I just wish we didn't have to use so many"* (10)

There was also the concern that a high ratio of agency staff resulted in the ward being less safe; partly due to less-good relationships with the young people and partly due to lack of familiarity with the working environment.

> *"I think the main one is, unsafe, so people feel unsafe or unsupported. So, as a whole unit... For instance, if the alarm goes and only minimum people can respond because of the staffing levels or because the agency members of staff aren't PRIS trained or they don't know the patients"* (2)

Critically, there was concern that agency staff inadvertently increase distress in young people, particularly during crisis:

> *"[...] the young person feels unsafe, even though they're being physically held and physically made safe, they don't know who's on their legs for instance, 'cos they might be, kind of prone position, so they can't see who's on their legs, they're not recognising voices, I guess. When they're in that heightened emotional state, you want someone you recognise around, to bring you back down a little bit, to be able to manage that situation"* (2)

We Lack That Consistency. The core of this basic theme is one of inconsistency, driven by what participants describe as poor communication and the team not 'being in sync'. This is thought to come about through staff working different shift patterns, constant demands that result in 'fire-fighting' (managing situations as they arise on the ward) and the influence of frequently changing agency staff:

> ***"****So the chance of that nurse being the same nurse that comes into MDT next time is slim and the chances of that nurse being able to effectively communicate that message out to everyone else when you only work with 5 people for instance on one shift"* (8)

The changing rota and communication issues affect the consistency of clinical practice on the ward, which increases the frustrations of staff and has an impact on care provided to the young people:

> ***"****I feel like they're inconsistent. You see it and you hear it a lot. You see people looking at the rota, 'Who am I working with today? Which team is it today? Oh it's a good team on today'... that means there's a bad team! You think, if it was a different team or if I was working with so-and-so, would it be managed differently. Or tomorrow the decision is made, tomorrow it's reversed, tomorrow... it sends conflicting messages to the young people and that doesn't help them at all"* (6)

2.4.2 The Systemic Impact of Burnout

Within the organising theme of 'The Systemic Impact of Burnout', three basic themes are arranged: 'There Could Be More Consequence', 'You Don't Get to See Any Real Change' and 'Young People Blame Themselves'.

There Could Be More Consequence. Participants talked about a desire to use seclusion pre-emptively and strategically but acknowledged that this contravened the least restrictive practice operational policy. Desire to make greater use of seclusion was perceived to sit within the sub-theme of 'Focus on Retribution over Rehabilitation':

> *"There could be more consequence, I mean, I don't want them to lose possessions, I don't want them to lose any more than they've already lost, but, surely there must be something that they're going to take more seriously"* (1)

These views were justified by taking an 'in loco parentis' stance:

> *"[...] when I first started, if they weren't up at 08:30, the power would be switched off, so they wouldn't be sat in their rooms watching TV all day rather than going to education... you can't do that anymore as it's seen as being restrictive, and, but in, like, the real world, if they weren't getting up and going to school, whoever was parenting them would get into a lot of trouble"* (3)

Signs of increased arousal, such as changes in facial expression, posture and prosody, were observed in some of the participants discussing this topic at interview.

You Don't Get to See Any Real Change. Participants described the frustration and sense of hopelessness regarding the slow pace of change in young peoples' presentations; a paradigm contextually defined by emotional exhaustion and negative appraisal:

> *"[...] it can be quite difficult, especially if, sometimes it feels you're investing a lot of time and things aren't really changing"* (8)

The risk of increased depersonalization was also highlighted within this theme:

> *"[...] you just become desensitised to what's happening around you and you're almost dismissive of what's happening to the kids, either they tie a ligature and 'it's another ligature', you know, and you stop exploring what's behind that ligature or what's behind that behaviour"* (6)

Much of the data emphasised the importance of perception; it is not that the young people do not progress, it is that the signs of progress are subtle and easily overlooked when staff feel burnt-out:

> *"[...] when young people aren't moving on, there's not like, progression, people get hopeless almost, they can't see the light at the end of the tunnel, they're just here, they're just stagnant and it's not on, they're doing all the small steps, they just can't see that"* (7)

> *"[...] it's a mind set, it's not easy to do, I think it comes with experience of working with young people and learning to appreciate those small things... you learn, or you teach yourself to look at [situations]"* (2)

Participants also presented solutions to the problem of not seeing change occur and the importance of being able to prioritise:

> *"[...] she was having loads of incidents and stuff but that didn't bother me so much because she was starting to build relationships with people and, that was more of a positive than the incidents were a negative. And hopefully, as she builds those skills, the incidents will decrease"* (9)

Young People Blame Themselves. The emotional sensitivity of young people in the unit was highlighted and the tendency for them to attribute blame to themselves if they perceive staff to be frustrated or angry:

> *"[...] they will say, is it me? Have I annoyed you? And stuff like that, which in turn really doesn't help in that situation"* (1)

Young people are described as having a tendency to make direct attributions to themselves as responsible for staff burnout, absence and attrition:

> *"[...] young people blame themselves quite a lot of the time, which I find quite unfortunate. They'll go, "It's because of me, that they've gone off sick. I hurt them this one time, so it's because of me" where as it might not be"* (7)

The importance of self-monitoring and emotional self-regulation was emphasised. This highlights the pressure staff are under to maintain a professional persona in the context of anxiety associated with working in a challenging environment:

> *"[...] working in a forensic setting, staff are anxious, quite rightly sometimes, or most of the time, about young people. But some people haven't got that emotional intelligence or awareness to think, I'm anxious, how is that coming across to the young people"* (2)

2.4.3 Protective Factors

The organising theme of 'Protective Factors' encompasses two basic themes that represent attitudes and behaviours present in the environment that have the potential to mitigate burnout: 'The Opportunity to Reflect and Gain a Wider Perspective' and 'You Understand Where They're Coming From'.

The Opportunity to Reflect and Gain a Wider Perspective. This basic theme refers to the potential for reflective practice and supervision as a catalyst for change through collaborative working and sharing of paradigms.

> *"[...] they tell me, and I'm 'not reflective practice' but I'm one of those people, once I'm in there, I'm like 'Oh my gosh, I did have so much I needed to reflect on and to work on' and I come out of there always looking at something or someone from a totally different angle"* (6)

Providing a forum for normalisation and validation of participants' thoughts and feelings was defined as a key role of reflective practice and supervision.

> *"[...] basically everyone just sat there crying but it was good to have that chance to kind of, sit there and get it off your chest... at least it's kind of left in that room and you can go home and it's kind of, as well, you know other people are feeling the same as you"* (9)

Within this forum, there also exists the potential for reinforcement of unhelpful and negative attributions:

> *"Sometimes, it becomes a bit of a bitch fest... then before you know it, everyone's in a mood because that person was annoyed with something..."* (2)

You Understand Where They're Coming From. This basic theme was strongly represented in the data of all participants as something that allows staff to work in a psychologically informed way:

> *"I didn't really want to look at their history and all their incident forms, risk assessments, all the things that they'd done necessarily, why they're in forensic services but I think it's really important to have a look at the formulation, understand their sort of background and earlier life. I don't know if that's part of what makes it easier to deal with, the violence and aggression as well..."* (8)

Knowing the young person's personal and family history allows staff to formulate based on attachment theory, which gives them insight into the relational needs of the young people, allows them to make predictions about their social interactions and critically, provides data that can be used to challenge negative attributions:

"[...] someone like [name], who is not skilled at having attachments and there have been a lot of broken attachments in their past, and they're expecting everyone to let them down here as well, it's a lot harder because they've got very few attachments with the staff team" (9)

2.5 Discussion

Using a convergent parallel mixed method design, this study explored the relationship between burnout and emotional reaction to behaviour that challenges, and the role of self-efficacy as a mediator in this relationship. The study also explored: staff experience of occupational stressors and the effect of those stressors; the impact of staff burnout upon individual staff, their relationships with the young people and in the context of the wider system; protective factors against negative emotional reaction to behaviour that challenges and burnout. The qualitative findings of the study provide the context for the quantitative mediation model presented and reveal distinct occupational stressors linked to burnout, the impact of burnout and negative emotional reaction to behaviour that challenges on the young people and protective factors in the environment that may be related to self-efficacy.

The main findings from the study show that high levels of emotional exhaustion are prevalent in staff working in the service, factors arising as a consequence of occupational stressors and burnout have an impact on the perceptions of both staff and young people in their care, and that perceived general self-efficacy has a protective effect against negative emotional reaction to behaviour that challenges, even in the presence of a high level of emotional exhaustion.

2.5.1 Prevalence and Characteristics of Burnout and Emotional Reaction to Behaviour that Challenges

In comparison with normative means for mental health workers (Maslach et al., 1996) it was found that staff working in a secure forensic mental health service for young people experienced a high level of emotional exhaustion (M= 22, SD= 11.64), an average level of depersonalization (M= 7, SD= 6.11) and a high level of personal accomplishment (M= 37, SD= 6.05). These findings should be interpreted cautiously. This research was conducted in a highly specialised environment, hence the sample characteristics may be significantly different those used to calculate normative means; furthermore, empirical validation of the cut-off points for discrete variables of burnout on each subscale is lacking (Morse et al., 2012).

Emotional exhaustion scores are widely spread (SD= 11.64); it is unclear as to the reason for this as analysis revealed no significant differences between emotional exhaustion according to sex, and no significant correlation between emotional exhaustion and age or experience. However, mean emotional exhaustion scores were significantly higher than mean depersonalization scores and this finding is comparable to other studies of burnout in both inpatient and community mental health settings (Jenkins & Elliott, 2004; Oddie & Ousley, 2007; Paris & Hoge, 2010). In these studies, it was hypothesised that even when feeling emotionally overwhelmed and fatigued, staff continued to feel connected with the people for whom they cared. An alternative hypothesis might be that increased depersonalization is correlated with increased staff attrition. An adult forensic inpatient service found depersonalization scores to be significantly lower in staff with more than 5 years experience than in staff with between 2 and 5 years experience (Elliott and Daley, 2013); this could indicate that staff with high levels of depersonalization left the service around the 5-year mark.

In the secure forensic mental health service for young people, no significant correlation between experience and depersonalization was found. Staff experience ranged from 1 to 99 months, with a mean of 33.95 (SD= 29.64); 51.2% of staff were found to have 21 months experience or less. Staff experience data was bi-modally distributed (Mode= 6, 15), each mode accounted for 7% of the total sample. These figures indicate a relatively inexperienced staff team. If this is a normal staffing pattern for the unit, it suggests that staff attrition increases around 2 years of service.

Staff experience was not found to correlate with any MBI subscale. A significant negative correlation between age and depersonalization ($r= -.347$, $p= .022$) was found. No other results from this study explained this correlation but this could be a clinically-relevant finding to explore in future research.

The high levels of personal accomplishment reported by participants may relate to non-clinical aspects of the role (Maslach et al., 1996) such as the status of working in a demanding environment that makes full use of a professional's skills (Jenkins & Elliott, 2004).

With regard to perceived emotional reaction to behaviour that challenges, participants' scores were not found to vary according to age or experience, only according to sex, with female staff reporting significantly higher levels of Fear/Anxiety. It is unclear as to whether a genuine effect exists within the staff population as the broad confidence interval in the analysis of sample means implies a wide range of plausible values for the

true population mean. This finding might also be explained by social desirability bias; sociocultural influences and gender role socialisation increases the likelihood of males under-reporting feelings of fear and anxiety (McLean & Anderson, 2009).

Findings from the qualitative strand of the study highlight two key occupational stressors that participants attributed to increased staff anxiety and burnout on the ward and an impact upon the young people in their care.

2.5.2 Occupational Stressors

The theme 'You Want Someone You Recognise' describes how permanent staff and young people feel less safe with a high ratio of agency staff on the ward. Feeling unsafe suggests increased fear and anxiety (staff anxiety is explicitly mentioned within the theme of 'Young People Blame Themselves') which is understood to be associated with more frequent use of restraint and seclusion (Foster, Bowers & Nijman, 2007). Restraint in the presence of agency staff is reported to be significantly more traumatic for a young person as they may not know, or recognise voices of, staff placing them in restraint. This has the impact of prolonging distress for the young person, placing further demands upon the staff team and increasing factors that may onset emotional exhaustion.

The theme of 'You Want Someone You Recognise' links to the theme of 'We Lack That Consistency' in that the high agency staff ratio contributes to a team that is struggling to be consistent. Participants explained this lack of consistency in terms of shift patterns (which mean two staff members might not work together from month to month), different modus operandi of charge nurses and team members, not supporting each other's clinical decisions or the reversal of clinical decisions. Leadership may play a significant role in this reported lack of consistency; the need for increased transformational leadership behaviours has been identified in other inpatient mental health settings (Green et al., 2014) and positive leadership is a contributor to the maintenance and development of perceived self-efficacy (White & Locke, 2000).

Two of the qualitative participants who described themselves as burnt-out (verifiable from their emotional exhaustion scores) explicitly blamed colleagues for issues such as poor communication or lack of support. Other participants couched their responses in terms of a collective, for example, suggesting that, "*[...] now we lack that consistency.*" (6). Different attitudes to the problem may be reflective of an individual's perceived self-

efficacy. Participants who take ownership of perceived problems on the ward, implying an internal attribution, whilst maintaining optimism would be expected to have a higher perceived self-efficacy (Schwarzer & Hallum, 2008). Had the qualitative sample been larger, findings could have been quantised and compared against quantitative general self-efficacy scores; this is discussed in the limitations section of this study.

2.5.3 Burnout, Negative Emotional Reaction to Behaviour that Challenges and Self-Efficacy

A key finding of the study was that emotional exhaustion was positively correlated with both fear/anxiety and depression/anger reactions to behaviour that challenges; depersonalization was positively correlated with depression/anger. These findings are congruent with those of previous studies (Mitchell & Hastings, 2001; Rose et al., 2004) which sampled staff from intellectual disability settings, albeit with different methodologies. That depersonalization correlated only with depression/anger and not fear/anxiety, may reflect what has been described as a 'numbing' of emotions (Hastings & Remington, 1995) and a protective effect against continued emotional exhaustion (Leiter & Maslach, 1988).

The mediation model of emotional exhaustion as a predictor of negative emotional reaction to behaviour that challenges is presented here in reverse of the model proposed by Mitchell and Hastings (2001). However, it should be emphasised that the relationship is bi-directional, although general self-efficacy was not found to mediate the effect in the other direction. In applied terms, it is more helpful to think of the stability of the constructs. If, as suggested by Leiter & Maslach (1988), depersonalization occurs as a consequence of chronic emotional exhaustion, burnout may be considered to be a more stable construct than that of emotional reaction to behaviour that challenges. The potential for negative emotional reactions to increase negative appraisal and exaggerated aversive processing (Robinson, Letkiewicz, Overstreet, Ernst & Grillon, 2011), and have a detrimental impact on relationships with young people, suggests a target for intervention and a way to address ongoing high levels of emotional exhaustion.

Themes of 'You Don't Get to See Any Real Change' and 'There Could Be More Consequence' highlight the frustration of not seeing young people progress and the anger that arises from feeling that there are no consequences for young peoples' assaultative

behaviour. This implies a feeling of helplessness for staff and thoughts relating to lack of agency. Some respondents highlighted the role of appraisal in this process, suggesting that it is "*[...] a mind-set*" and that "*[...] it comes with experience of working with young people and learning to appreciate those small things*". Also highlighted were the challenges of working to a model of least restrictive practice without a full complement of staff and with agency staff who do not know the young people, compromising relational security. Whilst these are operational limitations, perceived self-efficacy continues to be important, particularly in relation to least restrictive practice. High self-efficacy individuals are more likely to choose to perform more demanding tasks and engage in positive risk taking (Krueger & Dickson, 1994; Bandura & Locke, 2003) than low self-efficacy individuals.

General self-efficacy was found to mediate the relationship between burnout and emotional reaction to behaviour that challenges, specifically between emotional exhaustion and fear/anxiety, and emotional exhaustion and depression/ anger. General self-efficacy was not found to mediate the relationship between depersonalization and emotional reaction to behaviour that challenges. It may be that staff who reported high levels of emotional exhaustion and high levels of general self-efficacy are able to remain optimistic and committed to investing more effort (Bandura & Cervone, 1983) despite behaviour that challenges. Where their outlook is more likely to be prospective (Schwarzer & Hallum, 2008) there may be greater inclination to try to formulate difficulties and less emphasis on rumination and negative appraisal, which one would associate with depression/anger emotions. Understanding behaviour as an expression of the young person's feelings is integral to the theme of 'You Understand Where They're Coming From'. It is possible that on reaching high levels of depersonalization, an individual is so detached and cynical about their work (Maslach et al., 1996) little or no intrinsic motivation remains to achieve a given outcome, hence their belief about whether or not they can achieve that outcome is no longer relevant.

The qualitative strand of the research identified two basic themes grouped under the organising theme of 'Protective Factors'. 'You Understand Where They're Coming From' metaphorically and literally describes how participants make sense of young persons' difficulties and behaviours based on a young person's personal and family history. Formulating in this way enables behaviour that challenges to be viewed as communication to be understood, a paradigm adopted by intellectual disability services for some time (Thurman, 1997). There appears to be less emphasis on the formulation of behaviour that challenges in mental health literature; much of the literature focuses on DSH and

experiential avoidance, predictors and co-morbidities (Crawford, Geraghty, Street & Simonoff, 2003; Evans, Hawton & Rodham, 2005; Chawla & Ostafin, 2007). Perhaps surprisingly, DSH was not reported by any of the participants in the qualitative strand of the study to be an occupational stressor or a factor in individual anxiety or burnout.

The theme of 'The Opportunity to Reflect and Gain a Wider Perspective' highlights the potential value of reflective practice and supervision, as well as challenges inherent in engaging staff in reflective practice, specifically in relation to the theme of 'We Lack That Consistency'. Reflective practice and supervision are important to the development of self-efficacy. They provide a forum for vicarious learning, persuasive communication regarding staff ability to attain outcomes, training to increase mastery and supporting staff to notice positive outcomes and make positive internal attributions (Bandura, 1997; White & Locke, 2000). Returning to the mediation model, higher perceived self-efficacy means less negative emotional reaction to behaviour that challenges, even in the presence of emotional exhaustion. Lower negative arousal reduces the risk of subsequent negative appraisal (Robinson et al., 2011), protecting against increased depersonalization (Jenkins & Elliott, 2004).

The final key finding from the study is in reference to the impact of staff burnout upon the young people in their care. The accompanying systematic review to this paper (Chapter 1) found a lack of emphasis in the literature on the effects of staff burnout on client wellbeing, therapeutic relationships and care quality. In the theme of 'Young People Blame Themselves', the emotional sensitivity of the young people is highlighted with regard to what they perceive as negative staff affect.

Studies conducted with younger children indicate those who have been victims of abuse show increased sensitivity to anger cues and increased negativity bias (Ayoub et al., 2006), resulting in the attribution of anger or sadness to neutral expressions (Pollak, Cicchetti, Hornung & Reed, 2000). This is described as an adaptive response in order to predict threat (Cicchetti, 2016) and informs attachments. Adults who have experienced abuse as children report less secure peer relationships and increased prevalence of depression (Styron & Janoff-Bulman, 1997) which increases negative internal attributions.

Within the unit, young people blaming themselves for what they perceive as negative staff affect and staff burnout may increase the risk of incidents such as deliberate self-harm, arising from a need for experiential avoidance (Chawla & Ostafin, 2007). This is likely to have a range of impacts, acting as a barrier to the young person's progress, increasing the likelihood of negative appraisal by staff and increasing demands associated

with clinical-activity on the ward within the ongoing context of limited resources. The theme of 'Young People Blame Themselves' highlights why burnout is an important phenomenon to consider in secure forensic mental health services for young people with regard to the overall aims of the service; to provide care, support and treatment to young people. The theme also suggests a mechanism for staff burnout in this setting and, by understanding "*[...] where they're coming from*", suggests areas to target towards intervention to reduce burnout and enhance outcomes for the young people.

2.5.4 Methodological Limitations of the Research

A number of methodological limitations to this study were identified. The convergent parallel mixed method design of the study was chosen as it makes intuitive sense when exploring existing theory, such as the relationship between burnout and emotional reaction to behaviour that challenges, in a new environment. Delays in research approval and a high frequency of staff attrition and absence were factors that influenced the decision-making process, as a parallel design is efficient in expediting the data collection process. However, two problems arose subsequently. Firstly, there was less overlap of constructs explored by each strand of the study than had been initially expected and there was little qualitative data that could be explicitly linked to general self-efficacy. A pilot study exploring predictors and protective factors of burnout would have been beneficial and informed the development of the semi-structured interview schedule. Secondly, a lack of time and participant availability had a detrimental impact on recruitment to the qualitative strand, resulting in significantly different sample sizes between that and the quantitative strand. This limited the opportunity for more formal analysis such as data transformation or typology development. Both of these limitations could be mitigated in future research through the use of a sequential mixed methods design, provided sufficient time was available to implement each phase (Creswell & Plano Clark, 2011).

The chaotic nature of staff shift patterns, high levels of clinical activity and low staffing resources presented a significant barrier to data collection. In the three months from obtaining a staff list for the unit and commencing data collection, over 25% of staff on the list were either no longer in post, on sick leave or on maternity leave. Staff who participated in the study reported limited availability to complete questionnaires and

interviews. Hence, the total quantitative sample of 43 participants resulted in the study being slightly underpowered, limiting external validity.

Limitations are also acknowledged with regard to measures used. Whilst the construct validity of the MBI holds up well against critical review (Koeske & Koeske, 1989; Taris, Schreurs & Schaufeli, 1999; Schaufeli, Bakker, Hoogduin, Schaap, & Kladler, 2001) the predictive power of emotional exhaustion is emphasised over the other two subscales, with some researchers recommending the use of only emotional exhaustion and depersonalization subscales when considering burnout in a clinical setting. The point at which emotional exhaustion or depersonalization affects psychological wellbeing or performance outcomes is highly subjective and presents a problem in terms of what an acceptable level of burnout in human services might be.

Whilst MBI subscales show some multicollinearity, concerns have been raised regarding the cross-loading of factors on the ERCBS, questioning the construct validity of the measure (Oh, Seo & Kozub, 2010). However, further exploration of the construct validity is required as Oh et al. (2010) translated questionnaire items into Korean which threatens the validity and reliability of measurement. In the interim, ERCBS findings may be more appropriately represented as 'negative emotional reactions', as other studies have done (Rose et al., 2004), rather than as separate subscales. It should also be noted that the measure was developed for use with staff working with intellectual disability and whilst the test appears to have face validity in inpatient mental health services, further research exploring the psychometric properties of this measure is warranted.

A limitation with regard to how the ERCBS was used in the study is also acknowledged. Previous studies have used vignettes as examples of behaviour that challenges (Mitchell & Hastings, 2001; Rose et al., 2004) whereas participants in this study were asked to think about their response to behaviour that challenges on the ward in general. This increases the risk of response bias. For example, involvement in a recent clinical incident might encourage extreme responding.

The GSE scale was selected for this study as it has good internal consistency (Scholz, Doña, Sud & Schwarzer, 2002) and has been shown to correlate with personality measures (Luszczynska, Gutiérrez-Doña & Schwarzer, 2005), suggesting that as a situation-independent competence belief (Scherbaum, Cohen-Charash & Kern, 2006), it assesses a trait-like quality. However, GSE has been criticised for having limited explanatory and predictive value as items may not be relevant to the domain of functioning (Bandura, 1997). Bandura recommends developing a scale of perceived self-efficacy

tailored to the relevant domain of functioning, checked appropriately (for example using confirmatory factor analysis) for internal consistency. One of the study aims was to explore the impact of burnout at a team or systemic level; constructing a measure for the assessment of perceived collective efficacy (Guzzo, Yost, Campbell & Shea, 1993) may have supported the merging of qualitative findings with regard to reflective practice and supervision and given greater insight into possible collective efficacy enhancing interventions.

2.5.5 Clinical Implications

There are a number of clinical implications that may be concluded from the findings of this research.

Firstly, that supporting staff to develop general self-efficacy may improve their ability to manage behaviour that challenges more positively, even if they are experiencing emotional exhaustion. Based on the data collected, staff experience a high level of personal accomplishment despite high levels of emotional exhaustion and this should be acknowledged as evidence of staff commitment and robustness, upon which the development of greater self-efficacy may be established. Giving staff training and support to manage behaviour that challenges more effectively and positively is likely to reduce emotional exhaustion.

Secondly, data from the qualitative strand of the study suggests that staff emotional reaction to behaviour that challenges (and general affect on the ward) has a significant impact on young people in the unit, in terms of the attributions they make with regard to how staff feel, how staff behave and the "causes" of staff feelings and behaviours. This represents a possible mechanism for burnout, whereby a young person falsely attributes a staff member's "bad mood" to something they (the young person) has done or not done, resulting in increased feelings of shame which, in this population, is likely to be a predictor of increased social withdrawal or deliberate self-harm. For staff, the majority of whom (according to the data collected) do not experience burnout with depersonalization, seeing a young person withdraw or engage in deliberate self-harm may invoke feelings of helplessness, hopelessness or incompetence (see appendix O); hence, increasing the risk of staff burnout.

Finally, an implicit finding from this study, relevant to clinical operations and future research planning, is the extent to which burnout affects staff and young people in this setting and the difficulties inherent in defining and measuring it, as well as measuring emotional reactions to behaviour that challenges. Data from this study cannot confirm the extent to which burnout contributes to staff attrition in this setting; a recognised problem in many, if not all, inpatient mental health settings (Paris & Hoge, 2010; Morse et al., 2012). However, a heavy reliance on agency staff and the associated challenges, as highlighted in the qualitative findings, emphasises the need for pro-active monitoring of staff wellbeing (to help identify burnout), increased staff support and training as well as investment in longer term leadership and teambuilding initiatives to create the consistency and cohesion that participants described as lacking. The supplemental data in appendix O emphasises the need for ongoing discussions with staff regarding emotions they experience as a consequence of working with behaviour that challenges as well as the need for routine monitoring of staff well-being in relation to burnout. Nothing currently exists within the setting to support this initiative.

2.6 Conclusion and Recommendations for Future Research

According to the current literature, this is the first study to explore staff burnout in a secure forensic mental health service for young people. It is also the first attempt to utilise the ERCBS in an inpatient mental health setting and explore the mediating role of self-efficacy. Further research to support the development of the measure in this setting would be clinically beneficial, allowing for the measure of interventions to reduce the impact of staff emotional reaction to behaviour that challenges on staff-young person relationships and staff appraisals of clinical activity.

This study found evidence that being able to formulate the behaviour of young people based upon their personal and family history, as well the effective utilisation of reflective practice (as a vehicle that promotes self-efficacy) have the potential to shape staff attributions and meaning-making, to reduce negative emotional reaction to behaviour that challenges and have a possible protective impact against burnout. Based upon the findings of this study, interventions and resources in this setting should be targeted towards enhancing staff self-efficacy and increasing staff awareness of young peoples' attributions towards staff affect and behaviour.

Staff burnout, specifically emotional exhaustion, as in other inpatient mental health services, was found to be prevalent in this setting. However, the sensitivity of the young people to the emotions and expressions of staff in the presence of burnout suggests a mechanism with which the progress of young people is impeded and demands upon staff are increased, furthering the likelihood of burnout. Much of the mental health literature pertaining to burnout gives little or no consideration to the impact or effects of burnout on clients and care quality. Future studies need to be mindful of this and redress the balance; otherwise the risk of depersonalization is carried forward from the workplace into the literature.

Appendix A

UNIVERSITY OF Southampton

Participant Information Sheet (**v1.1 30/11/2015**)

Study title: How do frontline staff in Secure Forensic Mental Health Services for Young People (SFMHSYP) make sense of their relationship to an emerging Psychologically Informed Environment (PIE)?

Researcher name: Matthew Burdock
Study reference: Research Thesis
Ethics reference: ID 17443

Please read this information carefully before deciding to take part in this research. If you are happy to participate you will be asked to sign a consent form.

What is the research about?
The research aims to explore the experiences of frontline staff working in secure forensic mental health services for young people, specifically in relation to being psychologically-informed and working within an environment that demands psychologically-informed approaches.

Why have I been chosen?
I am asking any permanent member of the team who attends reflective practice or is engaged in psychological skills training to take part, if they so wish. Overall, I am hoping to recruit approximately 60 people to complete questionnaires and a further 6-10 people to attend a follow-up interview.

What will happen to me if I take part?
You will be asked to complete three brief questionnaires. Depending upon your scores and if you are happy to, you may be asked to attend an interview lasting between 45 minutes and one hour. The interview is designed to ask you questions about your experience of working on the ward, what you think it means to be psychologically-informed and how your experience relates to the wider environment.

Is the interview likely to be stressful?
During the interview, you will be asked about your experience of working at XXXX and you will be asked for your opinion on a range of work-related topics. You will not be asked to provide personal information unrelated to your work. It is understood that the working environment can be stressful and should you experience discomfort or distress during or after an interview, further support will be available from me, Matt Burdock or Dr XXXX, Consultant Clinical Psychologist. You may also wish to contact your line-manager with regard to any work-related difficulties.

Are there any benefits in my taking part?
For your participation in the completion of questionnaires, you will be entered into a draw to win one of five £10 Amazon vouchers. Should you be asked to attend the follow-up interview, in recognition of the time you are being asked to set aside, you will be awarded an Amazon voucher to the value of £30.
Participating in this study will give you the opportunity to, albeit with a high-degree of anonymity, share your personal experience of work in a secure forensic mental health service for young people and should the research be published, make a contribution to the literature in a way that has not previously been done.

Will my participation be confidential?
All information obtained from you will remain strictly confidential and will be kept in accordance with the Data Protection Act (1998) as well as Southampton University ethics policy. The interviews will be recorded and transcribed, the original recordings will then be deleted and you will be represented anonymously in the transcript (using a numeric identifier) as well as in the final write-up of the project. A summary of the findings will be made available to you after the study, should you wish to read them, and nothing you say will be written in such as way as to identify you or any of your colleagues in these findings.

What happens if I change my mind?
You have the right to withdraw at any time, with no penalty of any kind and no impact on your legal rights.

Where can I get more information?
Should you have further questions before, during or after the study please feel free to approach me to discuss, or contact me on: m.burdock@soton.ac.uk

If you have questions about your rights as a participant in this research, or if you feel that you have been placed at risk, you may contact the Chair of the Ethics Committee,
Address: Psychology, University of Southampton, SO17 1BJ.
Phone: (023) 8059 3856
Email: fshs-rso@soton.ac.uk

Appendix B

UNIVERSITY OF Southampton

CONSENT FORM (v1.1 30/11/2015)

Study title: How do frontline staff in Secure Forensic Mental Health Services for Young People (SFMHSYP) make sense of their relationship to an emerging Psychologically Informed Environment (PIE)?

Researcher name: Matthew Burdock
Study reference: Research Thesis
Ethics reference: ID 17443

Please initial the box(es) if you agree with the statement(s):

I have read and understood the information sheet (v1.1 30/11/2015) and have had the opportunity to ask questions about the study.	☐
I agree to take part in this research project and agree for my data to be used for the purpose of this study.	☐
I understand my participation is voluntary and I may withdraw at any time without my legal rights being affected.	☐

Data Protection
I understand that information collected about me during my participation in this study will be stored on a password protected computer and that this information will only be used for the purpose of this study. All files containing any personal data will be made anonymous.

Name of participant (print name)……

Signature of participant……..

Date……

If you have questions about your rights as a participant in this research, or if you feel that you have been placed at risk, you may contact the Chair of the Ethics Committee,
Address: Psychology, University of Southampton, SO17 1BJ.
Phone: (023) 8059 3856
Email: fshs-rso@soton.ac.uk

Appendix C

BACKGROUND INFORMATION **PARTICIPANT # .....**

Please complete the following questions:

1. Are you:
   (tick the appropriate answer)

   Male [ ] Female [ ]

2. How old are you? [ ] years

3. How many years and/ or months experience do you have working with young people with mental health difficulties?
   [ ] years [ ] months

4. How long have you worked at [redacted]?
   [ ] years [ ] months

5. Do you typically work extra / bank shifts? If so, how many hours a week?.....

6. In total, how many hours do you normally work per week: .....

7. What is your current job title: .....

8. Do you hold professional qualifications related to your current role? .....

   If so, please state briefly what they are:
   .....
   .....
   .....
   .....
   .....

9. Do you have a psychology degree? [ ] yes [ ] no

Appendix D

MBI-Human Services Survey

Christina Maslach & Susan E. Jackson

The purpose of this survey is to discover how various persons In the human services, or helping professionals view their job and the people with whom they work closely.

Because persons in a wide variety of occupations will answer this survey, it uses the term *recipients* to refer to the people for whom you provide your service, care, treatment, or instruction. When answering this survey please think of these people as recipients of the service you provide, even though you may use another term in your work.

Instructions: On the following pages are 22 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way about *your* job. If you have *never* had this feeling, write the number "0" (zero) in the space before the statement. If you have had this feeling, indicate *how often* you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way. An example is shown below.

Example:

How often:	**0**	**1**	**2**	**3**	**4**	**5**	**6**
	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

How Often 0-6	**Statement:**
1. _____	I feel depressed at work.

If you never feel depressed at work, you would write the number "0" (zero) under the heading "How Often." If you rarely feel depressed at work (a few times a year or less), you would write the number "1." If your feelings of depression are fairly frequent (a few times a week but not daily), you would write the number "5."

Appendix D (cont.)

MBI-Human Services Survey

How often:	0	1	2	3	4	5	6
	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

How Often 0-6	Statements:
1. _____	I feel emotionally drained from my work.
2. _____	I feel used up at the end of the workday.
3. _____	I feel fatigued when I get up in the morning and have to face another day on the job.
4. _____	I can easily understand how my recipients feel about things.
5. _____	I feel I treat some recipients as if they were impersonal objects.
6. _____	Working with people all day is really a strain for me.
7. _____	I deal very effectively with the problems of my recipients.
8. _____	I feel burned out from my work.
9. _____	I feel I'm positively influencing other people's lives through my work.
10. _____	I've become more callous toward people since I took this job.
11. _____	I worry that this job is hardening me emotionally.
12. _____	I feel very energetic.
13. _____	I feel frustrated by my job.
14. _____	I feel I'm working too hard on my job.
15. _____	I don't really care what happens to some recipients.
16. _____	Working with people directly puts too much stress on me.
17. _____	I can easily create a relaxed atmosphere with my recipients.
18. _____	I feel exhilarated after working closely with my recipients.
19. _____	I have accomplished many worthwhile things in this job.
20. _____	I feel like I'm at the end of my rope.
21. _____	In my work, I deal with emotional problems very calmly.
22. _____	I feel recipients blame me for some of their problems.

(Administrative use only)

EE: _____ cat:_____ **DP:** _____ cat:_____ **PA:** _____ cat:_____

Appendix E

Below is a list of emotions that caregivers have said that they experience when they have to work with people who display challenging behaviours. We want to know how *you* typically feel in this situation. Think about your own recent experience of challenging behaviours displayed by the people that you work with. Consider each of the emotional reactions, and select the response next to each item that best describes how you feel when working with people who display challenging behaviours

	No, never	Yes, but infrequently	Yes, frequently	Yes, very frequently
SHOCKED	0	1	2	3
CONFIDENT	0	1	2	3
GUILTY	0	1	2	3
HOPELESS	0	1	2	3
COMFORTABLE	0	1	2	3
AFRAID	0	1	2	3
ANGRY	0	1	2	3
INVIGORATED	0	1	2	3
INCOMPETENT	0	1	2	3
HAPPY	0	1	2	3
FRUSTRATED	0	1	2	3
HELPLESS	0	1	2	3
SELF-ASSURED	0	1	2	3
DISGUSTED	0	1	2	3
RELAXED	0	1	2	3
RESIGNED	0	1	2	3
FRIGHTENED	0	1	2	3
CHEERFUL	0	1	2	3
HUMILIATED	0	1	2	3
BETRAYED	0	1	2	3
SAD	0	1	2	3
EXCITED	0	1	2	3
NERVOUS	0	1	2	3

Appendix F

Using the following scale:

1 = Not at all true **2** = Hardly true **3** = Moderately true **4** = Exactly true

Please circle what you feel to be the most appropriate response to the questions below:

1. I can always manage to solve difficult problems if I try hard enough.	1 2 3 4
2. If someone opposes me, I can find the means and ways to get what I want.	1 2 3 4
3. It is easy for me to stick to my aims and accomplish my goals.	1 2 3 4
4. I am confident that I could deal efficiently with unexpected events.	1 2 3 4
5. Thanks to my resourcefulness, I know how to handle unforeseen situations.	1 2 3 4
6. I can solve most problems if I invest the necessary effort.	1 2 3 4
7. I can remain calm when facing difficulties because I can rely on my coping abilities.	1 2 3 4
8. When I am confronted with a problem, I can usually find several solutions.	1 2 3 4
9. If I am in trouble, I can usually think of a solution.	1 2 3 4
10. I can usually handle whatever comes my way.	1 2 3 4

Appendix G

UNIVERSITY OF Southampton

How do frontline staff in Secure Forensic Mental Health Services for Young People (SFMHSYP) make sense of their relationship to an emerging Psychologically Informed Environment (PIE)?

Debriefing Statement (v1.1 30/11/2015)

The aim of this research was to explore how frontline staff in Secure Forensic Mental Health Services for Young People (SFMHSYP) make sense of their relationship to an emerging Psychologically Informed Environment (PIE).

Your data will help our understanding of what it is like to work in secure forensic mental health services for young people, in the context of working in a psychologically-informed way and within an environment that is becoming increasingly psychologically-informed. The findings and write-up of this study will not include your name and will be carefully reviewed to ensure that a high-degree of anonymity is maintained. You will be provided with a summary of the findings from the study on completion, should you wish.

If you have found anything in relation to this study distressing, please do not hesitate to contact either me, Matt Burdock or Dr XXXX, Consultant Clinical Psychologist for further support. You may also wish to contact your line-manager with regard to any work-related difficulties.

If you have any further questions, please contact me at: m.burdock@soton.ac.uk

Thank you for your participation in this research.

Signature …… Date ……

Name ……..…

If you have questions about your rights as a participant in this research, or if you feel that you have been placed at risk, you may contact the Chair of the Ethics Committee,
Address: Psychology, University of Southampton, SO17 1BJ.
Phone: (023) 8059 3856
Email: fshs-rso@soton.ac.uk

Appendix H

Qualitative Strand: Interview Schedule

General Questions

What is your role at XXXX?

Tell me about your experience.

What do you find to be the most rewarding aspects of your work?

What do you find to be the most stressful or challenging aspects of your work?

Psychological Frameworks

What helps you cope with the challenging aspects of your work?

Tell me about knowledge or experience you draw upon when young people present with challenging behaviour?

How do you make sense of young people's behaviour?

Agency

Do you feel you are able/ allowed to make decisions in your role? Give examples.

Burnout

Describe your definition of burnout.

How do you think burnout affects both the staff and the young people?

Managing Relationships

What is your experience of reflective practice and ward supervision?

What do you aim to achieve in your relationships with the young people?

Do we support young people sufficiently in pursuit of their goals?

Evaluating Outcomes

How do we measure the progress of young people?

What is your opinion of this process?

Appendix I: Field Notes Summary

Participant #	Date of Interview	Time of Interview	Location of Interview	Descriptive Content	Reflective Content
1	02/03/16	10:50	Ward Office	This interview was conducted in the ward office, which meant that there were no interruptions, despite alarms going off. The participant was a male healthcare support worker (HCSW) who talked rapidly throughout the interview and demonstrated considerable knowledge and experience in his response to questions. Throughout the interview, he was observed to bring the topic back to themes of consequences for young people and a lack of overall support with regard to mediation and debriefs following assaults on staff. He described himself as burnt-out but also identified skills and support that he can bring to the team and to new staff	I felt this interview captured the thoughts and feelings of an experienced member of staff who was burnt-out. He appeared very eager to get his 'voice' heard and we acknowledged that as a member of the MDT, one of my goals was to use the findings of the research to support service developments. I noticed that I had to be mindful of my role and stay focused on the interview process at times, as his anger and distress regarding assault and young people's interest in his personal circumstances pulled me towards my role as a member of the psychology team with a responsibility to facilitate ward supervision. Time was allowed at debrief for him to ask further questions and for me to ask if he wanted me to raise anything, confidentially, with management
2	05/03/16	08:05	Ward Quiet Room	Due to staffing rotas and high levels of clinical activity, the only time I could arrange to meet this member of staff was on a Saturday morning. Consequently, the ward area was very quiet. This interview was conducted with an experienced female member of the nursing team, who communicated clear, strong values with regard to the care of young people. The interview was interrupted by a young person who had just got up, who knocked on the door of the quiet room, and recommenced after 10 minutes. In addition to her experience, she was able to provide a clear list of strategies she actively uses in order to manage psychological and emotional wellbeing at work	I noticed how impressed I was with this member of staff as she was able to explain her thoughts and feelings about the work articulately and seemed to have very strong values with regard to her work. Whilst the voice recorder was switched off as soon as the young person knocked on the door, I was able to observe her interaction with him. There was authenticity in her communication style and genuine concern for his wellbeing but communicated in a manner that was firm and boundaried. I was aware of feeling comfortable throughout the interview and I could image the young people in our care feeling much the same way when engaging with her
3	05/03/16	08:58	Ward Quiet Room	This participant was also a female nurse but newly qualified and with a non-mental health nursing background. Like participant #1, this person identified with being burnt-out and voiced a range of frustrations with regard to what she saw as limitations to the role.	I felt a sense of resignation when talking to this participant, the feeling that the frustrations she experienced in the role were insurmountable. She still spoke in a very committed way regarding the young people and this led me to wonder how this might have influenced her MBI scores; there was a sense of depersonalization towards the team but far less so towards the young people. She also talked about working *in*

					loco parentis and made reference to not being a parent but behaving as a parent within this setting. I noticed my prejudice as a parent, listening to someone talking about parenting. The multi-faceted role of staff in this setting is quite unique and future research should explore this further
4	08/03/16	14:40	Education Block	This interview focused on the education of young people, conducted as it was with a female member of the education team. An attempt was made, in sampling participants, to obtain a broadly heterogeneous sample in order to capture data from a range of paradigms defined by participants' individual differences and in particular, their professions. It was reported that educational staff experience the same frustrations as ward staff in relation to working to a model of least restrictive practice but with staffing shortages and a lack of clear boundaries concerning specific restrictions or consequences that may be imposed	This interview felt like a calm, methodical process and I wondered if that reflected the slightly more quiet environment of the education block or the fact that the participant, whilst having to deal with frequent behaviour that challenges, was not involved in restraining or secluding young people in the way that ward staff often are
5	08/03/16	16:15	Ward Quiet Room	It was a busy period during the afternoon when this interview was conducted, which meant that there was a lot of noise outside the room on the ward. The participant was a female HCSW who was new to the team and had fairly recently been assaulted by a young person. Themes of anxiety, consequences for young people and mediation dominated the interview. Like a number of the HCSWs on the ward, she had previously completed an undergraduate degree in psychology and expressed an interest in clinical training	There were a lot of things to reflect upon in this interview. Firstly, it drew my attention to the research process and how difficult recent events for staff colour and shape their responses to questions. This was a good example of why more longitudinal studies are needed in burnout research and qualitative studies with more of an ecological focus, so that change may be observed over time. Secondly, I reflected upon the participant's use of language throughout the interview, as it was very 'fear orientated'. On reflection, there were a number of lines of questions that could have been taken to explore this in greater detail, which may have had relevance to the quantitative strand of the research. Thirdly, I was aware of her interest in psychology throughout the interview and my role as a trainee. Some of the questions she asked me, in my opinion, seemed to be slightly loaded, either testing my knowledge or making a statement about hers. As a trainee, I am always mindful of the privileged position that I am in and how difficult it can be to access clinical training. We had a discussion prior to the interview about training and I hope that this helped to build rapport and to allow for some of the 'on the course versus want to be on the course' discourse to inform the interview less. I was aware of how this might shape her

					responses to questions, as well as what I brought to the interview, perhaps over-compensating in trying to be considerate towards her, as someone who is going through the painful process of applying and getting rejected
6	09/03/16	15:50	Ward Meeting Room	This interview was conducted at a busy time on the ward and was interrupted by young people banging on the door and perspex windows of the meeting room, waving and shouting. Unfortunately, due to low staff numbers it was not possible for ward staff to leave the ward completely to attend the interviews and whilst the rooms were well soundproofed, people were still able to see in. The participant in this interview was a female student nurse, who had worked on the unit for approximately 5 years as a HCSW and then decided to do nursing training	Personal experience of CAMHS and of working with excluded populations are two of many factors that influence my decision to want to work in this field. Hence, I always try to be aware of what I 'bring' to interactions in this setting. During this interview, I had to be really mindful with regard to my use of language and phrasing in order not to use leading questions or allow my enthusiasm to influence the participant's responses (although this is a circular effect and to some degree will have been the case). This participant demonstrated such strong values around caring for, educating, mentoring and advocating for the young people in the things that she said and the way in which she said them. It was simply inspiring. I made a mental note to share my thoughts and feelings with her in the debrief, which helped me to focus on the interview. What was interesting, and frustrating, was that she was not able to articulate cognitions or strategies she utilised in order to cope with the demands of the environment and mitigate the risk of burnout, simply saying, "I've never really thought about it". She acknowledged that whilst she might feel like quitting after a challenging day, it is only a fleeting thought because she has never come across a hopeless case and everybody has a purpose. This seemed to me, to be a deterministic perspective and I wondered about religious or existential beliefs that shaped her paradigm. I felt that exploring this was outside the scope of the interviews and more akin to taking an IPA approach; further qualitative research in this setting is planned
7	12/03/16	14:02	Education Block	The participant in this interview was a female occupational therapist (OT). Much of the discussion throughout the interview was orientated around the role of OTs and their relationship to other staff teams. The concern that occupational therapy becomes homogenised with other roles was raised and discussed in the context of limited the effectiveness of occupational therapy in the unit. The	Whilst OTs in the unit spend almost all of their time on the wards and are involved in de-escalation and restraint, I noticed during this interview a much broader range of topics in conversation and a 'helicopter view' perhaps reflective of the OTs role as MDT members and also what was reported as their commitment to interdependence and team building. Again, I was aware of my current role as a

				participant also discussed a number of issues relating to the wider organisation and young people's care pathways	facilitator of ward supervision, having a vested interest in supporting staff and helping to reduce staff burnout. In a way, it made this interview 'easier' as my objectives and the structure of my work is closer to that of the OTs than it is to that of the ward staff. I found it particularly interesting that the OTs were reported to have individual WRAP plans as well as a team WRAP plan and thought that simply the process of creating a team WRAP helped to shape the team identity. This highlighted one of a number of possible interventions with regard to managing anxiety on the ward and protecting against staff burnout
8	12/03/16	15:12	Ward Meeting Room	This interview was conducted with a female nurse who was recently qualified but had considerable experience as a support worker prior to completing nursing training. The ward was noisy during this interview and there were interruptions from young people banging on the perspex windows and waving. The participant appeared to be very reflective with regard to her responses, pausing for time prior to answering questions and asking for clarification at times	My perception was that this participant demonstrated a great deal of reflexivity and was skilled at reflective practice. This was evident in some of her responses; she appeared to reflect upon them and modify them as she gave them. She also drew on attachment theory during the interview and highlighted the importance of temporary attachment figures, with a phrase that has been one of the defining points of the research for me, summarising a key aim of our work with young people: "helping someone to feel empowered to... that the relationship is worth moving on from"
9	15/03/16	18:17	Visitors Meeting Room	The only time it was possible to arrange to meet this participant was prior to her starting a night shift at 19:00; she explained that she was at the end of her night shift rotation and as a consequence, was really tired and might not be able to answer questions clearly. She explained that she was a newly qualified nurse with a non-mental health background and thought that this added value to the team as she looked at some situations differently. Much of the discussion focused on developmental needs of the young people and age-appropriate behaviours. Due to the time of day and the location, the interview was conducted in a quiet setting and without interruption	One reflection from this interview related to the abstract concept of being 'psychologically informed'. I thought that this participant articulated fewer metacognitions than participant 8, yet still linked her responses to attachment theory and talked about her work in a manner that suggested an intuitive approach to working with young people. This led me to wonder how one might evaluate psychological informedness (an original aim of the research) as it is possible to draw upon psychological theory and formulate cases without being aware of working in a psychologically informed way or explicitly exploring metacognitive experiences. My perception was that the nurse's approach to work was as she described in the interview; less emphasis on mental health problems and more emphasis on 'being a kid', introducing the young people to new experiences, helping them to have fun. Not doing this, or not having the resources to do this, increases

					the likelihood of behaviour that challenges, as she said: “the fact that you might give a young person much more attention for the challenging behaviour than you would give them just in the day to day”.
10	17/03/16	09:20	MDT Meeting Room	This interview was conducted with a male nurse, with considerable experience in this and other settings. He described himself as ‘older’ and discussed how he thought his age defined his relationship with the young people on the ward. The interview took place off the ward in an MDT meeting room. Many of his comments made reference to organisational challenges and leadership throughout the unit, whether at team, ward or management level.	Initially, I was aware of the age and experience difference between the two of us and what I felt was a need for me to portray myself as competent through my line of questioning. I have learnt that this is not a helpful thought and can become a barrier to building rapport with people who might come across as assertive or dominant. As the interview progressed I felt that other statements made by the participant helped me to view things from his perspective. A number of times, he asked me to repeat a question or checked whether or not I thought his response had been sufficiently comprehensive and I got the sense it was important for him to be understood.

Appendix J: Sample Transcript (8)

Researcher: Can you tell me what your role is at XXXX?

Participant: I think the official title is nurse mental health practitioner, but mental health nurse.

R: Ok, and how long have you worked here roughly?

P: Um, about 5.5 months...

R: So not...

P: Not too long, no, I'm newly qualified, at the start of September, so...

R: Ok, and your experience prior to this?

P: I worked at XXXX which is an acute mental health unit, for a couple of years, and they set up a new hospital at home community team, so I was a support worker there, for, I think about 2 years, then 6 months in the community team. Then I went up to XXXX and studied in XXXX and moved back here to work.

R: You must have liked it?

P: Yeah I did...

R: To be a support worker and then decide, 'I'm going to qualify'

P: Yeah, Yeah (laughs)

R: Can you give me a brief description of what you do on a day to day basis, what your role includes?

P: Um, yeah, so I guess, it's, a lot of it's working with the young people to plan their care and working on plans to manage their day and also working towards their future. A lot of the day is that and having, sort of, 1:1 sessions with, quite ad hoc impromptu sessions when people need it, just sort of to support them ongoing throughout the day, um, and I suppose a big chunk of the job is managing crisis, crisis management, managing things that sort of get thrown up in the moment. Um, then there's, sort of, I've just started a new part

of the role which is 'Therapeutic Skills Practitioner' which is just on top of, the other role really, but it's um, it's a role, you do extra training in the hopes that you sort of initiate change in the culture and ward environment, um, so...

R: So taking a more therapeutic approach?

P: Yeah, um, because I, I'm relatively new, the programme started in November and there was, when we were 3 wards, there was a nurse and a support worker from each ward that went to do it. Then it changed around a bit and XXX ward didn't have a qualified nurse on the scheme so I interviewed and did that, and now it's obviously changed around a bit again because there's a few of us now on this ward and not so many on the other, but I still think it's going to continue because obviously this move and things is quite temporary.

R: Yeah, ok. Um, so what about the rewarding aspects of the job? What are the bits you really enjoy?

P: Um, I really enjoy, to be honest, I, most days, not all days, most days, I leave thinking this has been a good day. I love it when you can see the kids are happy and that they, they've worked through something, they've managed an emotion or an experience and they've come through the other end. Um, I think one of the best things is sometimes, because, a lot of, obviously they're all young, one of the best things is having a new experience with someone. Like if you go out on leave with someone and it's their first time, I know somebody said the other day they took somebody to the park for the first time. I just think that's really sweet. Someone else took someone else for their first ever fish and chips; things like that, I think that's lovely. But also, when you've been working really really hard with someone and it's been difficult and they make a bit of a breakthrough or they have, um, this is quite difficult for me at the moment because I've been working quite closely with a lot of the kids on XXX ward and now I've come over here, so I'm just, I'm trying to build therapeutic relationships with new young people really

but a lot of the work I had been doing, I was associate nurse for one of the young people who's now on XXX and, doing a lot of work around ways of managing quite serious self-harm and I think there was a period of 3 or 4 weeks where there was no self-harm at all. And whilst that was really nice to see, I think the best thing to see was that she was really proud and that, the positive emotions in her. That was lovely. And I guess, also just the process of the therapeutic relationship I find quite rewarding. Like, if somebody's struggling and being able to sit down with them and talk them through or help them to reflect on the situation, being able to have that relationship so that it's therapeutic and positive, I think that's probably the most rewarding things really.

R: What about, um, because it sounds like when you have a situation where a young person does make some change and like you said, maybe doesn't self-harm for 3 or 4 weeks and that is a huge achievement for the young person and the people who've worked with them. Um, how do you manage, how do you cope when there's weeks and weeks where there doesn't seem to be any change?

P: Um, it can be quite difficult, especially if, sometimes it feels you're investing a lot of time and things aren't really changing. But, I don't know, I think, there are times when it, it depends. Sometimes, and it's probably, the two situations aren't very different at all really but, if somebody's really struggling and you can see that and you've put in a lot of work with them and they're, and it, you know, things aren't changing. I think, I maybe experience some feelings of, 'I wish things would be better' but I think about it and I think, 'Well if that's how it feels for me, it must be 100 times worse for them, because they're putting in a lot more time and effort than I am, they're living it'. And then I suppose, there's other times, sometimes, when it feels a bit more difficult is when it seems like it's been more of a calculated decision, which it probably isn't but that's how, I don't know if that's how I was feeling on certain days or what but... As an example, one young person,

I'd spent an awful lot of time with them over a number of weeks. Um, discussing about how they felt really guilty for hurting other people in their past, a lot of guilt and remorse, things like that, and we were working through them sort of feeling and ways of managing them thoughts to hurt other people. And then, one day, they just said, 'I don't want to take my medication anymore'. We sat and had a bit of a conversation about how that was up to them but they had highlighted that as something that stops them from hurting people. And they said, something along the lines of, 'Yeah, I know if don't take my medication I'm probably going to hurt someone', then later that day assaulted a couple of members of staff. And I think I found that a lot more difficult, because even though it's probably exactly the same situation as the other things because it felt like it was premeditated. It may have been, that was, a particularly horrible day on the ward for everyone, patients and staff, so it was probably not premeditated and just quite... but I think that's when it becomes a bit more frustrating...

R: So that's one of the things that makes the job, perhaps harder, or seem harder at times? Maybe the idea that if the young people can't help what they're doing at all, therefore it's just kinda spontaneous behaviour, that's easier to deal with and has less of an impact maybe, than if it seems like they're making a choice?

P: Yeah, I think that's true. It's difficult because I think there's times where it seems like somebody's making a choice but it's quite easy to put yourself in their shoes and think, actually, it's not surprising that they've made that choice and I can see myself or someone else in their position would probably make the same choices. But I think it's when you've done a lot of work with someone and you know they've been able to make other choices and, you know that, they could have come to you and asked for more support and things. I don't know, to be honest, reflecting on it... it's probably more about where I was at that

time and I was less able to take a step back and think it through, rather than what they've actually done.

R: And I guess in a situation where it can get very challenging and there can be aggression and violence, it's probably quite hard to take a step back all the time!

P: Yeah, it is. Especially, one of the things I find quite difficult, is when you're nurse in charge and other young people or staff get hurt, 'cos you kinda feel like it's your job to keep everyone on the shift safe. Then when staff or young people get hurt, I find that, I don't know if other people do but I find that difficult, as nurse in charge...

R: I guess, it sounds like you've got that responsibility towards you colleagues...

P: Yeah

R:... As well as the young people. What are the challenging parts of the job, what are the hardest parts of the role?

P: Um, it's, managing the violence and aggression is difficult, especially when it's unpredictable. The, I think, sometimes the environment is a little bit difficult. There's times when I think, the best way to help somebody or the best thing to do is something you can't do safely in this environment, which is difficult. Um.

R: So that balancing up what we need to do thinking about risk, versus giving the young people more of an enriched experience?

P: Yeah, I think one of the hardest things is when, um, I think it was, I don't know if it was because I was a support worker, when you spend, try to spend, you can tell that somebody needs your time but you also know that you've got like 100 other things that you've got to do but you prioritise and say, 'But that person really does need my time, that's got to come first' but then something happens acutely in that moment that has to be prioritised, someone's hurt themselves or someone's potentially going to hurt someone else, or an alarm is pulled or something like that, and sometimes I think that's really hard.

There's times when I've thought, at the end of a shift like, actually the person that was quite quiet on the shift, the young person that was quite quiet that probably needed me quite a lot today probably didn't get that, because there was, sort of, risk management things happening and I think that's quite difficult.

R: For me, that's interesting because it sounds like, from what you're saying, the hardest stuff for you is not being able to be there for the young people in the way you would like to be?

P: Yeah, yeah

R: Do you think, I guess I've had a range of responses in the other interviews I've done; do you think other staff find that the hardest thing?

P: I think so. I think, the, obviously we've had a massive issue with staffing recently and being short-staffed... I don't know what responses you've had but one of the main things I've heard when I've been talking to people is that's very challenging at the moment, is being short-staffed and I think that, that's probably because of that, because people know they're not able to give the young people what they need really because we're short-staffed, so it becomes harder. I don't know. It does differ, I think, I don't know if it's my experience, I think some people find managing the violence and aggression a lot more difficult, but...

R: What helps you manage that?

P: I'm not sure. I think it's, I've, one of the things I've noticed, I don't take things as personally as some other people do. So if somebody got shouted at, or punched or kicked (I don't want to be punched or kicked or shouted at) but, I, I've seen some people take that really personally. I don't know why I don't but I think it's, I think maybe it's reflection to be able to think, actually understand why someone might be feeling like that and

understand that's an expression of how they're feeling rather than an expression about me. But, that, I don't know why some people find that easier to do than others.

R: Is there a different experience from being a support work and being a nurse?

P: Yeah, it is different. It's very different; it's difficult to say because the environment's quite different as well. But, I think it's helped me massively, having that in the background. But also, we have some staff here that have not had any experience in mental health before. Other staff that, for instance, some of the best nurses to be honest, but some brilliant nurses that are, paediatric nurses or learning disability nurses that, it could be the first time, it probably isn't their first time of dealing with violence and aggression but it could be their first time of dealing with acute mental health problems and I think if you've come from having quite an in-depth understanding of... because, when I was a support worker it was in acute mental health so I saw a lot of different mental health conditions or experiences, and then when I went through university, because it was specifically mental health training. Universities do it differently but my university right from day 1 was, we did do other placements that were specific to mental health nursing. I think, maybe, it's easier to understand maybe some of the background of where the violence and aggression comes from, than it is if this is your first experience of mental health, maybe it's easier to take it a lot more personally.

R: That would make a lot of sense to me. Is there a kind of... I guess, moving on to the next section of these questions, is there a kind of, er, specific theories or frameworks that you base your work on?

P: Well, I've done the attachment and trauma training. I was really lucky, I think I did it in my first or second week here, which was good. But, I'd done a CAMHS placement at university and written quite a lot of essays around Bowlby's attachment and all of that before, so I already, I already was coming into it with that, that in my mind. I think, I think

it probably, I think probably because I know that it's the overarching model, I probably focus mostly on attachment and trauma now. But I try and, I try and keep a lot in my mind about things I learnt at university. For instance, when I first came to XXX which is only last week, I mean, this week, um, one of the things, I'd already met, because I had worked in the unit I had already met the young people, but I really wanted to look at their, I didn't really want to look at their history and all their incident forms, risk assessments, all the things that they'd done necessarily, why they're in forensic services but I think it's really important to have a look at the formulation, understand their sort of background and earlier life. I don't know if that's part of what makes it easier to deal with, the violence and aggression as well...

R: What, having that...

P: Yeah, having that mindset sort of, the more, psychological theory based mindset. I guess it gives you, maybe, explanations as to why someone might be feeling that way or acting that way, which is easier to make sense of.

R: Which is kinda what we hope to do I guess? Certainly as a psychology team, that's how we would see our role. Do you think, it seems to me that some members of staff find that way of working or that way of thinking easier than others?

P: Yeah

R: And as you say, I think having mental health training and mental health experience is a part of that. Why, or where, do you think other staff find it more difficult?

P: I'm not sure because, I do think, I don't know if it's about personal life experience or what because, when I think back to when I was a support worker, before I had the mental health experience, I think I was less academically informed about it, theories and things like that, but I think I was still quite thoughtful about that side of things. I don't know if

it's something that's personal experience of people that have, I guess everyone brings their own personal experience into the job. I'm not sure what it is...

R: So it could be, almost a, kind of, personality trait or...

P: Yeah, maybe or... yeah, 'cos I do think there are some people that if you try to explain, maybe try and put an explanation to why somebody might have been acting that way, there are some people that don't want to hear it almost. I sometimes think that that's maybe because they're upset or hurting from something that that person's done and by explaining it in that way, people feel like you're giving an excuse for it. Which I suppose you kinda are in a way, but not an excuse, an explanation. I think some people maybe feel like that explanation...

R: Is not validating?

P: Trying to get, yeah, it's invalidating. Yeah.

R: I mean, one of the things I'm interested in, as we said at the start, is this idea of burnout. Um, what would be your definition of it?

P: Of burnout?

R: Yeah

P: I guess it's that feeling of, being exhausted and tired and worn out. But we all feel like that sometimes and aren't burnout. So I guess it's maybe about feeling undervalued and unmotivated and probably invalidated. I think there's probably quite a lot of, there's an awful lot of emotion in feeling burnt out. It's not just about feeling exhausted. I think maybe it's when people start to feel that they've got to the point where they aren't able to take that step back and look at it from a different point of view or from the young person's point of view. It's difficult to put into words really.

R: And, so, it also sounded like from what you said there, that feeling appreciated, being acknowledged was something that, maybe means you're less likely to get burnt out.

P: Yeah, absolutely. I'm a massive believer in that. Because I think you can go home at the end of a shift feeling, physically hurt, drained, exhausted, you could have worked 13 or 14 hours without a break, things like that. But if your manager, or the nurse in charge or whoever it is, says, "I think you did really well", or "That was awful but you managed it", or "Thank you for how hard you worked", I think that can completely change your experience of the day.

R: Ok. So, um, changing direction a tiny bit, in your relationships with young people, what is it that you aim to achieve or you hope to achieve?

P: I guess, I hope to achieve, first of all... I think probably there's different stages. First of all, I hope to achieve a relationship where you can have open and honest conversation, where someone... One of the young people once said to me, "I feel I can say anything and you won't be shocked" and I quite liked that because I felt like it was, it could get to the point where, the young person felt like they didn't have to say what they thought you should hear or wanted to hear...

R: I guess they felt safe?

P: Yeah, or where somebody, rather than when you say, "Have you got any thoughts to hurt yourself or other people", when they go out on leave, rather than say "No" because they know that's a question you have to ask and they have to answer to go out on leave, that can be much more of an open and honest conversation and if they say, "Yeah, I have got thoughts" that doesn't necessarily mean, well you're not going on leave then. Work to having that therapeutic relationship where you can have open and honest conversations and know each other, well, and know each other to the point where they know you and how you're going to work and you know them. 'Cos one of the young people I worked with on XXX ward would say something, but the fact that I'd spent a lot of time working with her, she knew that by saying that, I would know that she meant something else really. So, I

guess the first thing is having that open, transparent conversation. But then, the next aim I think, is helping someone to feel empowered to... that the relationship is worth moving on from. 'Cos especially with working with young people, I think that's one of the things that can be difficult, especially with working from like an attachment theory. That you form attachments, that these young people for attachments with you but it's really important that you don't want to form them attachments so that they really, really don't want to leave. But, form the attachments but them relationships sort of empower them to think, of wanting to go forward and looking forward to the future.

R: So giving them that kind of ability to build more relationships?

P: Yeah

R: Not to be dependent on the ones they have?

P: Yeah

R: It sounds, it sounds pretty ideal!

P: Yeah, well that is obviously the ideal situation, but...

R: Um, so thinking about, I guess thinking about that, this idea of being able to be open and transparent in that relationship with the young person.

R: How do you think we evaluate progress for the young people and do we do that ok? What's your view?

P: I'm not sure to be honest. I think we're better at doing it informally than we are formally. Like I think in conversation and MDT, MDT discussions not the right thing to say because that makes it sound like we've sat down to have a meeting, but discussions within the teams about where somebody was and where they've progressed, I think happens quite a lot. But, I don't think we're very good at having conversations with the young people and I don't think, I don't know how they happen formally, I'm not sure. I think, I think, it's important to have those conversations with the young people and I think

they do happen, just, I think there should be a more, maybe there is (?), I think there should be a more, I don't know if it's structured or more signposted, or whatever it is, or way of making sure them conversations happen with young people?

R: In terms of, what they want?

P: Yeah, I suppose a little bit like what I was saying about burnout. If somebody tells you, you're doing really good or that was really difficult but you managed it really well, or, you know, you've been working here however long and look how well you're doing or how far you've come; in the same way that that stops burnout for staff, I think it's really important that the young people hear that as well because, I think they can, I suppose burnout's the wrong way of describing it... I think sometimes they can work really, really, really, really, really hard and not see a, any result or any change for a long time and then, can like, just stop trying because, actually they have made change but because it's still difficult for them, day to day, it's difficult to reflect on, "It is still difficult now but look how far you've come".

R: Yeah, yeah. 'Cos I guess, I wondered if the young people's idea of progress, and I realise that can be quite difficult for people who have a lot of self-hatred or self-disgust or whatever, but, I wonder if they see the progress in the way we see it. It seems to me that on a superficial level we might see progress in terms of longer periods of obs or increased leave or reduced incidences...

P: Yeah, yeah. But I think, I think some of our young people struggle. Whilst to us, that clearly points towards them doing well, like with longer gaps between observations and things, some of our young people don't take that as a measure of progress. Especially, thinking of, feeling let down and abandoned and things... If somebody's been on 5 minute observations and now they're on 30 minute observations (obviously that's not going to happen straight away, there's going to be steps in between) staff might feel like that's

really good progress, they might feel like, “I’m being left for half an hour now”. So, I think, it is really difficult because, you’re right, the young person’s measure of progress and staff’s is probably very different. And, what I think would be great to do, or have, is a young person’s layout of what progress looks like to them.

R: Mmm

P: But I suppose that’s in an ideal world, I suspect if you were to sit down with some of them, they wouldn’t be able to tell you what that looked like.

R: Yeah

P: But...

R: And do you think, is there a difficulty with... is there a kinda disconnect with what the MDT do and think about with the young person and what the ward staff do? Um, or is there...

P: Um, I think there is probably, there is cross-over but I don’t think, it’s probably not good enough. There is disconnect, I’m sure there probably is. But having seen it, it’s difficult for ward staff because, you come into the MDT and then you feel part of the MDT and then you make, you have discussion with the young person and make decisions, and in that time and in that moment that all seems brilliant and realistic and ideal. And then you get out, you’re on a long day next day for instance, and the young, that young person, say you’ve been doing work on... for instance, something that happened here earlier in the week, we had reflective practice on one of the young people here who is showing anxiety, probably anxiety based OCD type symptoms about coming in here and making sure all the chairs are straight and things. And you can come up with a fantastic MDT plan but then actually making sure that happens day in, day out on the ward is a whole different story. I think the problem is, well, I don’t know what the problem is, but a couple of the things I think might be barriers are: You have one nurse that comes in to the MDT, sometimes

you'll have the ward manager as well, that's better. So one nurse that comes into the MDT and then that nurse works a long day 3 days a week. So the chance of that nurse being the same nurse that comes into MDT next time is slim and the chances of that nurse being able to effectively communicate that message out to everyone else when you only work with 5 people for instance on one shift. That's one of the things I've been thinking about with the TSP stuff. Because, I think some of the really good ideas that happen (not necessarily in the MDT, sometimes in the MDT sometimes out of the MDT) get completely lost when you try and take them back to the ward and it takes a really long time to, for everyone to pick it up and things to start happening. That is discouraging but also, if it takes a long time it probably hasn't happened by the next week at MDT and because it's week by week, it kinda feels that then something else happens and that never gets rolled out, I don't know...

R: Yeah, yeah

P: It's a difficult one. I think there needs to be, there needs to be a better way of communicating to the team what happens when decisions are made or plans are made.

R: And how, how sort of able do you feel to make decisions within your role? Or how much opportunity do you have to make decisions in your role?

P: I think, I think, it's difficult. It depends what kind of decisions. Day in, day out we have to make a lot of decisions in our role. But, when it comes to the bigger decisions, I think... I personally feel listened to within the MDT and that my view is respected within the MDT. I don't know if that's because, I don't have a problem speaking and letting my opinions be known (laughs). I think some people probably do, because the MDT meetings probably can be, especially for the young person but even for the ward team, can be a bit intimidating. Especially if your view goes against the psychiatrist or the psychologist or something, it's quite difficult... I don't mind being told that I don't agree, so I'm not too worried about saying it, but other people would probably struggle with that.

R: Do you think, I mean, certainly in my view, that should be an important feature of an environment, that everyone's opinion is as relevant and as valid. And hey, the people that are working with the young people all the time, 24 hours, if anything have more expert knowledge of that young person, of their difficulties, than anyone in the MDT. Does the culture at XXXX, is it neutral in that respect, do you think it promotes that freedom of speech and communication or do you think it reduces the opportunity for that... where does it sit on that kind of continuum?

P: It's difficult to say, because, in my mind it's kind of both ends, but I'll explain what I mean. In some ways, the culture and organisation of any sort of MDT meeting is difficult because, it's a bit like, the important people upstairs come down onto the ward once a week (although, individually the people are around far more than once a week, but) come down to the ward once a week and the, and that's where, decisions, bigger decisions or plans are made, and I think, not just in this unit or this organisation but I think that process as a whole, leans itself towards being difficult for the nursing team to feel completely involved in that. I also think, this is a different question altogether but I think the long-day model we have here, there's huge pros and cons to it I think. But, I do see that as being one of the problems, is, it used to be like a fixed contract, a fixed hours contract and it's moved away from that now which helps a bit, but you probably work Tuesday (which is ward round day) a couple of times in 6 weeks or something, so you're not a frequent member of MDT meetings, which doesn't help. However, this MDT and these MDT discussions are far better at doing it than other places I've been. There's been other places I've been where as a support worker, you would *never* step foot inside an MDT meeting , whereas I've seen people here say, "Actually, this support worker has worked with this person the most this week, they should come in" or, "There's no qualified nurse from this young person's core team on but there is a support worker from that person's core team, so they're the best

person to go into that MDT as support" which I think's brilliant. And I've worked places where, a consultant has said a student nurse can't speak in ward round, and I've been that student nurse (laughs). I would never see that here if that student nurse was in the MDT, their point would be respected as well. So I think, I think in comparison to a lot of the places I've experienced, it's far better.

R: So some areas for development and reflection but strengths too.

P: Yeah, some massive strengths really.

Appendix K: Coding Manual

Sub-themes	Codes	Definition	Illustrative Quote	Differentiation
There Could Be More Consequence	It is harder for ward staff	As frontline staff, ward staff have to manage immediate risk behaviours and are more likely to be assaulted than MDT members who tend to lead the decision-making process with regard to young people	I think, just some form of consequence that they know that it's not acceptable because 90% of our young people here who have assaulted ward staff you won't find assaulting a doctor or a teacher (1)	It's harder for ward staff in terms of personal risk. However, this code is different from 'Risk of harm' in that it highlights the split between ward and MDT
	A lack of consequences for young people	Current consequences for aggressive or violent behaviour are not considered to be sufficient. This code acknowledges the frustrations of staff and the shifting culture towards a model of least restrictive practice	There could be more consequence, I mean, I don't want them to lose possessions, I don't want them to lose any more than they've already lost, but, surely there must be something that they're going to take more seriously (1) When I first started, if they weren't up at 08:30, the power would be switched off, so they wouldn't be sat in their rooms watching TV all day rather than going to Education. And, it, you can't do that anymore as it's seen as being restrictive and, but in like the real world, if they weren't getting up and going to school, whoever was parenting them, would get into a lot of trouble (3) ...assaulted you because, because they're having, I don't know, a psychotic episode or they didn't have control or whatever, it's hard to, I don't know what the kind of consequences are but a lot of the time I don't think that there are enough (5)	
	Risk of harm	This is a high risk environment where young people and staff are at risk of harm. This is a factor in all inpatient mental health settings	it's no one's real fault but is very much a feeling throughout the unit right now that staff feel unsafe, and I think that's always gonna be our biggest challenge, is safety, safety for people, and safety for staff (1)	This code represents the continuous risk of harm, differentiating it from 'Assault on staff' which looks at staff experience of specific incidences of assault
	Assault on staff	Staff experiences of being assaulted	I think the most difficult thing is when you've got somebody who is very verbally confrontational and you're getting sworn at a lot, and you know, you kind of, I've had situations where young people won't even let me explain something to him (4)	
The Opportunity to Reflect and Gain a Wider Perspective	Reflective practice as offloading	Reflective practice as a forum to 'offload' thoughts and feelings about difficult issues at work, including how staff perceive young people and behaviour that challenges. Reflective practice as offloading also represents the	So sometimes, it becomes a bit of a bitch fest... then before you know it, everyone's in a mood because that person was annoyed with something... (2) I have felt, even though people do express their views, nothing really does change. It's a good place to kind of vent, and say what you need to say, but it still doesn't feel like things change, and I think that's because there is still just a small amount of people that are able to attend it (3)	Whilst validation occurs in both this code and 'Every voice valued' the idea of offloading can also have negative connotations as it can become a dominant theme of reflective

		opportunity for normalising and validating feelings	basically everyone just sat there crying but it was good to have that chance to kind of, sit there and get it off your chest... at least it's kind of left in that room and you can go home and it's kind of, as well, you know other people are feeling the same as you (9)	practice and supervision and contribute to negative appraisals and attributions
	Need for validation	All staff (and all young people) need validation	Staff want to be listened to, they want their feelings and thoughts validated, they want to feel safe within their working environment. It's exactly the same as the young people (2)	Highlights the basic need for validation from others
	Equal worth	Valuing the opinions of all staff, irrespective of role, grade or experience	I think every single person in here has got something to contribute, it's just about how, and giving others, those people who are quiet, a chance to actually show what they can do (6)	Emphasises the need for process or leadership to ensure all staff opinions are valued equally
	Reflective practice paradigm shift	Reflective practice has the potential to enable staff to view a situation, problem or person from a different perspective, changing their relationship to the problem. This may have a positive effect on staff motivation and engagement	they tell me, and I'm 'not reflective practice' but I'm one of those people, once I'm in there, I'm like 'Oh my gosh, I did have so much I needed to reflect on and to work on' and I come out of there always looking at something or someone from a totally different angle (6) I have gone into reflective practice thinking, 'right this patient is absolutely driving me nuts and it's not going to work' and come out and thinking, 'know what, I'm going to give this one more shot and see if this works'. Um, so, it's been very, very useful, 'cos sometimes, you're blinkered, if you don't talk to other people and actually engage and see things from a different point of view (6)	
	Reflective practice as problem-solving	Reflective practice provides a forum for problem-solving at a team level. The extent to which participants find this helpful and the way in which this process is facilitated is reported to vary	I think it would help more, if at the end of reflective practice, you kind of have some sort of steps forward or goals, or you know, so you don't just feel like you've been talking for a while and nothing's come from it (5) The word 'reflective' to me isn't what we do on the wards, most of the time it's more problem-solving. Um, so, it's OK. I find it helpful in some places but not to reflect (7)	
	Leadership	The intention and action of staff at all levels to inspire and encourage others to move in a valued direction. This code also identifies the impact of leadership, or lack thereof, on staff and young people	if you're not presenting yourself to be like in a happy state of mind, and cheerful, and optimistic, that will rub off on your staff, who you are trying to lead and also on the young people (3)	
	Sharing experience	Social influence. This can have a positive, negative or neutral impact upon appraisals and behavioural attributions	I guess there's not enough understanding and sometimes staff can be cynical and think they're doing it because they want attention or they're not telling the truth about something (5)	Describes generally the role of social influence
	Sharing best practice	Sharing knowledge, skills and attitudes that can enhance individual competence and confidence, team interdependence and have a positive impact upon clinical practice	I think it helps, with staff, if you're a person who doesn't particularly understand the young person, doesn't have a particularly good relationship with them, I think it's an opportunity for you to listen to others and for what works for others in working with them, I think it's useful for that (3) Reflective practice, I do think that it does help because it makes your team	Different from 'Sharing experience' in that it denotes a specific intention to communicate and model best practice

			cohesive and it kind of helps you realise what your objectives are and what you, as a team, are trying to focus on and your opinions of what's going on for particular young people, and helping you to gain a wider perspective (5)	
Young People Blame Themselves	YP blame themselves	This code describes the propensity for young people to attribute staff negative affect, sickness or attrition to something they (the young person) has said or done.	they will say, is it me? Have I annoyed you? And stuff like that, which in turn really doesn't help in that situation (1) some young people are like, 'what's the matter? Why are you moody today? Why are you looking so sad today?' because they're so in tune to, to people's emotions and, so I do think it does affect them (6) young people blame themselves quite a lot of the time, which I find quite unfortunate. They'll go, "It's because of me, that they've gone off sick. I hurt them this one time, so it's because of me" where as it might not be (7) Especially when the whole of your life, you've just been shoved away from people or people have hurt you because of some reasons. Or the fact that loads of them have moved to loads of different hospitals because people couldn't manage their aggression, their violence, and then they're being told that message again (7)	
	Engaging YP	The importance of continually working to build relationships with young people, which enables therapeutic work to take place	building trust between you and the young person enough that they're able to actually, to an extent, tell you what they're feeling and why they did what they did. When you're speaking face to face with them, that helps and it doesn't happen a lot of the time, but when it does, that definitely helps (5)	
	Staff awareness of their role with young people	The degree to which staff are able to reflect upon how young people might perceive them and maintain a balance between their many roles in this setting, as forensic mental health practitioners as well as temporary attachment figures working *in loco parentis*	working in a forensic setting, staff are anxious, quite rightly sometimes, or most of the time, about young people. But some people haven't got that emotional intelligence or awareness to think, I'm anxious, how is that coming across to the young people (2) unintentionally, you do sometimes get into confrontations, and not exactly arguments, when there's disagreements between you and the young person, and sometimes it does make you angry, you have to keep that kind of professional head on and not let that, like come out (3)	
	Unable to emotionally regulate	Difficulties with emotional self-regulation, as a staff member or as a young person, and the impact of these difficulties on the individual and their environment	these young people, they're emotionally unstable themselves and they're looking at you to be sta... to, to help them regulate their emotions and be the stable factor. If you are unable to regulate your own, then that comes across, they're able to read that, which in turn means that they don't feel regulated (2)	
You Understand Where They're Coming From	Behaviour as communication to be understood	Understanding that behaviour has a function that tells us something about the needs of a young person	a lot of it is to do with rapport that I've got with that young person, understanding why that behaviour is happening so you go into what function does that behaviour have, so if I can understand or try to understand that, then it helps me understand that it's not just challenging behaviour a lot of the time, that actually it serves a purpose, that it's got a function (7) I think it helps you to understand where they've come from and why they're	Understanding that behaviour has a function and how that helps us to relate to a young person

			behaving the way that they do (5)	
	Not taking it personally	Behaviour that challenges is defined by the observer or recipient of the behaviour. Some staff reported finding it easier to see behaviour as functional or to empathise with young people and not take the behaviour that challenges personally	I don't take things as personally as some other people do. So if somebody got shouted at, or punched or kicked (I don't want to be punched or kicked or shouted at) but, I, I've seen some people take that really personally. I don't know why I don't but I think it's, I think maybe it's reflection to be able to think, actually understand why someone might be feeling like that and understand that's an expression of how they're feeling rather than an expression about me. But, that, I don't know why some people find that easier to do than others (8)	Different from 'Behaviour as communication to be understood' in that it describes staff emotions and behaviours in response to behaviour that challenges
	Personal and family history	Knowing the personal and family history of a young person allows staff to formulate (explicitly or implicitly) the young person's difficulties and behaviours in the context of earlier attachments, trauma and social GRRAACCESS (Burnham et al., 2008)	having a lot of information about the background really helps, so you understand where they're coming from, and what situations they've been in and that can help you avoid particular trigger areas if you need to (4) I didn't really want to look at their history and all their incident forms, risk assessments, all the things that they'd done necessarily, why they're in forensic services but I think it's really important to have a look at the formulation, understand their sort of background and earlier life. I don't know if that's part of what makes it easier to deal with, the violence and aggression as well... (8) I don't even want to begin to imagine the kinds of backgrounds they come from, some of them. Although it is partly my job to imagine and partly my job, to at least try to empathise. Because if I can't imagine, I can't empathise, I can't even begin to help them (10) someone like [name], who is not skilled at having attachments and there have been a lot of broken attachments in their past, and they're expecting everyone to let them down here as well, it's a lot harder because, they've got very few attachments with the staff team (9)	
You Want Someone You Recognise	Knowing the young people	Considering the professional position of *in loco parentis* this code refers to knowing the young people well enough to be able to read non-verbal communication and make predictions about their needs and future behaviour	What experienced staff are good at is knowing instinctively the unforeseen, having a knack of being able to tell when a patient is not right. Which agency staff don't... I hope I'm not damning all agency staff because they're a necessary part of the service, I just wish we didn't have to use so many (10)	
	Balance of staff experience	The importance of having an appropriately skilled and experienced staff team to manage clinical activity	I think the main one is, unsafe, so people feel unsafe or unsupported. So, as a whole unit... For instance, if the alarm goes and only minimum people can respond because of the staffing levels or because the agency members of staff aren't PRIS trained, or they don't know the patients (2) you can't guarantee that an agency member of staff, they may be very capable of doing it but when it's in an environment that you're not used to, you can't guarantee that they're going to hand over everything that needs	

			handing over (3)	
	Young people feel unsafe	Any situation that arises on the ward or within the unit that contributes to the distress of the young people resulting in them feeling less safe	Well the young person feels unsafe, even though they're being physically held and physically made safe, they don't know who's on their legs for instance, 'cos they might be, kind of prone position, so they can't see who's on their legs, they're not recognising voices, I guess, when they're in that heightened emotional state, you want someone you recognise around, to bring you back down a little bit, to be able to manage that situation (2)	
	Staffing turnover	High staff attrition, for whatever reason, and the impact of that attrition. This might include a high ratio of agency staff or a relatively experienced staff team, who do not have close relationships with the young people	So, the agency staff haven't got that relationship with the young people. You're kind of picking up the slack for that really, 'cos you have got a relationship with them, so, the young people are naturally always going to come to you, to ask you those questions, because you're a constant factor in their life, whereas agency staff aren't (2) when you've got a lot of agency staff on shift with you, you don't feel that support and you feel like you're doing everything yourself, and less able to rely on people to do things. So, it just feels like the workload is massive even though when you've got it on paper it might not be (2)	
	Risk of harm to staff	This code highlights the high-risk nature of working within secure forensic services and the risk of aggression and violence directed towards staff	it's no one's real fault but is very much a feeling throughout the unit right now that staff feel unsafe, and I think that's always gonna be our biggest challenge, is safety safety for people, and safety for staff (1)	
	Divided team	Staff perceptions of the quality and experience of different teams (rotas of ward staff)	You see people looking at the rota, 'Who am I working with today? Which team is it today? Oh it's a good team on today'... that means there's a bad team! (Laughs) Oh yeah, so you see it, you hear it a lot, you see some of the way some of the incidents are managed and you think, if it was a different team or if I was working with so-and-so, would it be managed differently (6)	Different from 'Balance of staff experience' as it relates to the social divisions within the wider staff team rather than explicitly to staff skills and experience
You Don't Get to See Any Real Change	Lack of perceived change leading to burnout	Where staff are unable to see young people improve or develop, this contributes to staff feeling disappointed, hopeless and exhausted. Emphasis is placed upon perception in this code as a number of participants explained it is not that change does not occur, but that it is often subtle and occurs over a longer timeframe than staff sometimes expect	doing the same thing every day, for a month. And whether that's in a, good cycle or a bad cycle, you don't get to see any sort of, real change (1) it's a mind-set, it's not easy to do, I think it comes with experience of working with young people and learning to appreciate those small things, but you definitely have to go through those massive disappointments before you, you learn, or you teach yourself to look at, and it's like those support as well, so when you're really down on something and it's like, this has happened, that other person looking at it from a different perspective and saying, yeah, but look at what we've achieved before then (2) would have liked to say that you see people move forward, but since I've been here, I don't really feel like I've seen people, or young people, improved to a point where, you think like, done, like done a good job for them, to be ready to not be here anymore (3)	

			like you're not making any progress or headway with young people, and, feeling physically and emotionally exhausted, being anxious about coming to work, and you know, where you get to the point where you don't want to come to work (4) it can be quite difficult, especially if, sometimes it feels you're investing a lot of time and things aren't really changing (8) when young people aren't moving on, there's not like, progression, people get hopeless almost, they can't see the light at the end of the tunnel, they're just here, they're just stagnant and it's not on, they're doing all the small steps, they just can't see that (7)	
	Becoming numb to other people	A code that shares a similar quality to the MBI construct of depersonalization. When staff appear to emotionally disengage from their work and lose empathy for, and interest in, either the young people, their colleagues or both	nobody wants to work with a member of staff who's complaining constantly who's saying, 'I can't do that, I won't do that'. Nobody wants to work with a member of staff who is consistently late, um, who is, or who appears completely disinterested in their work. Who is, so scared of being on the ward, being with these, sometimes, violent children, that they won't even leave the office or that they'll find some excuse to get off the ward somehow. People say that's just laziness but no, it runs deeper than that (10) you just become desensitised to what's happening around you and you're almost dismissive of what's happening to the kids, either they tie a ligature and 'it's another ligature', you know, and you stop exploring what's behind that ligature or what's behind that behaviour (6)	
	They don't see the hope	Staff perception that young people are stuck in the 'Threat System' (Gilbert, 2009) and are therefore unable to have compassion for themselves or hope and ambition for the future	The most challenging bits are, when, carrying the hope for them, when they don't see the hope. And, 'cos you do wonder at some point, just think, come on, can you not see, this is what I'm seeing of you, and they're not seeing it at that time, and that's, for me that's the most challenging, when they don't see it, or, they're scared of seeing it. Sometimes it's not about them not wanting to see it, it's they really can't see it, and when you carry that hope for them for so long sometimes, it can be mentally exhausting. Um, yeah. I think for me that's it, when they don't have any hope for themselves, when they're hating themselves so much, or they've been through so much, they can't see a future, you're carrying it and carrying it and carrying it, because you have to hand it over at some point (6)	
	Individualised care	Providing care that is tailored to meeting the needs of each young person and evaluating their progress accordingly	she was having loads of incidents and stuff but that didn't bother me so much because she was starting to build relationships with people and, that was more of a positive than the incidents were a negative. And hopefully, as she builds those skills, the incidents will decrease... (9)	
We Lack That Consistency	Lack of communication	A lack of communication (poor) communication results in decreased team interdependence and performance, which	what I'm saying is that there is not enough chance for us to sit down as a group, and all discuss it (1) We get, like, weekly newsletters, um, I think it's weekly, sent through to	

		has negative implications upon care quality. Poor communication occurs due to a range of factors.	your email, although I don't think that anybody reads them to be honest. A lot of things do get sent via email, like, important changes and like, things about visits and outcomes and stuff. They do get filtered round by email but just how much people read of them, I don't know... (3) We've got a lot of people with a lot of talent, that can support the young people in a lot of different ways but we've not learned to work in sync with each other. So, I think the consistency we had then helped, whereas now we lack that consistency, so, putting some of the positive risk or whatever now, sometimes it's literally, it's like an experiment (6) So the chance of that nurse being the same nurse that comes into MDT next time is slim and the chances of that nurse being able to effectively communicate that message out to everyone else when you only work with 5 people for instance on one shift (8) most people, when they're out with the young people, on the shop floor, they, I guess, pretend everything's fine, they put on that professional front and you're just sat there thinking, 'Am I the only one that's feeling like this?' But then at other times, when you know that everyone's burnt out and you know, with, band 6's that are burnt out and your support workers are burnt out, and you're just sitting there going, 'I'm really burnt out too and I don't know who to talk to...' (9)	
	Clarity around decisions made	Participants raised concerns regarding decision-making on the ward. These related to decisions made by management and the MDT where ward staff felt the outcome had not been communicated as well as decisions made on the ward that had not been backed up	It's very easy, and I know there is historically, a sort of, worker-slash-management divide, um, you know you see it all the time, it's portrayed in modern culture all the time, films, tv, us versus them – it's the unions the versus the management. I try not to see it like that, we are all on the same side. But if nothing is going to be done, I'd like a reason why (10) a lot of the time where I've made decisions, it's not been backed up by someone else, or someone's done something, um, different and then the young people will see that kind of inconsistency and call you up on it later, or whatever (5)	

Appendix L

ETHICS COMMITTEE CHECKLIST

Please use the tick boxes provided to indicate when the following items have been completed:

If appropriate, have you discussed this application with your Supervisor/Grant-holder	☒
Attached copies of your consent documents	☒
Attached copies of any letters to participants	☒
Attached a copy of your debriefing statement	☒
If applicable, have you attached a copy of the questionnaire/s you intend to use?	☒
Attached a copy of your risk assessment	☒
If applicable, attached a copy of your PsychoBook advert and other forms of recruitment	☒

1

Appendix L (cont.)

SCHOOL OF PSYCHOLOGY

OUTLINE OF PROPOSED RESEARCH TO BE SUBMITTED FOR ETHICAL COMMITTEE APPROVAL

PLEASE NOTE: You will need to discuss this form with your Supervisor or Grant-holder. In particular, you should ask him/her for any School guidelines relating to this area of research which you must read and understand. You should also read and understand the Ethical Principles for Conducting Research with Human Participants published by the British Psychological Society.

You must not begin your study until School of Psychology ethical and Research Governance Office approval have been obtained. Failure to comply with this policy could constitute a disciplinary breach.

1. Name(s): Matthew Burdock

2. Start date: 20/11/2015 **End date:** 22/01/2016

3. Supervisor: Dr Nick Maguire, Dr Jackie Preston

4. How may you be contacted (e-mail and/or phone number)?
mb2g13@Soton.ac.uk

5. Into which category does your research fall?
(select from pull-down list)

Clinical Psychology

6. Title of Project:

"How do frontline staff in Secure Forensic Mental Health Services for Young People (SFMHSYP) make sense of their relationship to an emerging Psychologically Informed Environment (PIE)?"

7. Briefly describe the rationale for carrying out this project and its specific aims and hypotheses

Psychologically informed environments are discussed in the literature in relation to homeless shelters and prisons (planned environments) but there are no studies to date exploring the development of, and barriers to, a psychologically informed environment in a forensic CAMHS setting. This is a uniquely interesting area as the environment is controlled, to an extent, as expected of a forensic setting, yet the staff are supporting vulnerable young people at different stages of psychosocial development, many of whom display behaviour that challenges, including deliberate self-harm. Hypotheses are:

1. How do frontline staff in Secure Forensic Mental Health Services for Young People (SFMHSYP) make sense of their relationship to an emerging Psychologically Informed Environment (PIE)?
2. How does staff experience of reflective practice and shared action learning contribute to the emergence of a PIE, as suggested by Johnson and Haigh (2010)?
3. What do staff perceive to be barriers to the development of a PIE?
4. How do staff think factors such as behaviour that challenges and burnout feature in PIE development?

8. What intervention/procedure will be used? (Briefly describe the design. Explain what participants will experience, including duration of any task/test).

A mixed/multiple method design will be used, incorporating quantitative and qualitative arms of the study. A maximum of 60 participants will complete three brief quantitative questionnaires. These will be handed out to participants as hard copies, with envelopes attached for them to be returned to the researcher, care of psychology at XXXX. Questionnaires will be marked with ID numbers, not participant names and will carry a tick-box to indicate whether or not the participant is interested in contributing to the qualitative arm of the study. Where consent is obtained, participants will provide their XXXX email addresses, which the researcher will retain along with the questionnaire ID numbers until the end of the data collection period.

Based on the scores of the questionnaires (significantly high or low scores in any of the measures) and where participants have expressed an interest, between 6 and 10 participants will be contacted by email, asking them if they would be interested in completing a qualitative interview lasting 45-60 minutes.
Data from the interviews will be analysed using IPA, to explore the "lived-experience" of staff in relation to their own psychological-informedness and their relationship to the wider environment.

Qualitative interviews will be conducted during working hours, including weekends, to suit participants and their shift patterns. XXXX is manned 24 hours, 7 days a week so lone working will not be a factor for consideration.

9. What measurement procedures will be used? Please attach copies of any questionnaires to be used.

Maslach Burnout Inventory (to be purchased):

Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). Maslach burnout inventory manual. Palo Alto: Consulting Psychologists Press.

See measures attached:

The General Self-Efficacy Scale (GSE)

Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston, Measures in health psychology: A user's portfolio. Causal and control beliefs (pp. 35-37). Windsor, UK: NFER-NELSON.

The Emotional Reactions to Challenging Behaviours scales

Jones, C., & Hastings, R. P. (2003). Staff reactions to self-injurious behaviour in learning disability services: Attributions, emotional responses, and helping. British Journal of Clinical Psychology, 42, 189-203.

10. Who are the participants?

Clinical and non-clinical staff at XXXX

11. How many participants will you recruit?

Maximum of 60 for quantitative arm and 6-10 for qualitative arm

12. How will they be identified, approached and recruited?

The study is open to all staff. Staff will be advised of the study in team meetings, through word of mouth and the use of posters. Participants may then contact the researcher if they wish to participate, or express their interest during a meeting, without coercion, and subsequently given the opportunity to discuss participation in private.

13. How will you obtain the consent of participants?
(Please attach a copy of the consent form)

See consent form attached.

14. Is there any reason to believe participants may not be able to give full informed consent? If yes, what steps do you propose to take to safeguard their interests?

No. The demands of the study are clearly laid out in the consent information and participants will be given the opportunity to discuss what the study involves, any commitment they might be required to make and how the study may affect them, should they wish.

15. If participants are under the responsibility of others (such as parents/carers, teachers or medical staff) have you obtained permission to approach the participants to take part in the study?

Yes ☐ **No** ☐

16. Detail any possible discomfort, inconvenience or other adverse effects the participants may experience, including after the study, and how this will be dealt with.

Possible risk of emotional distress associated with recounting difficult or challenging scenarios in the workplace would be managed through the provision of support from lead psychologist at XXXX, who is overseeing the research or through liaison with and support from the participant's line-manager. Senior staff have been made aware of the proposed research and have expressed an interest in it.

17. How will it be made clear to participants that they may withdraw consent to participate at any time without penalty?

This is made explicit in the consent form and will be explained verbally at the time of asking for written consent.

18. Will the procedure involve deception of any sort?

Yes ☐ **No** ☒

If yes, what is your justification?

19. How do you propose to debrief participants and/or provide them with information about the findings of the study?
(Please attach a copy of your debriefing statement)

Participants will be provided with a debriefing statement and given the opportunity to discuss the study and their experience of participation on completion/ at drop-out. The completed write up will be made available to XXXX, should participants wish to have information regarding findings.

20. How will information obtained from or about participants be protected?

ID numbers will be used on questionnaires and qualitative transcripts. Interviews will be conducted in a private room and all appropriate measures taken to ensure that conversations cannot be overheard. Interview recordings will be stored on a password protected recording device and the recordings deleted following transcription. Questionnaires will be retained in a locked filing cabinet and any electronic information stored on the researcher's laptop, which is password protected.

21. Experimental apparatus employed must be approved for safety by a member of the School of Psychology technical team . Has this approval been given?

Yes ☐ **No** ☐

22. Do you intend to make a submission through the NRES?

(certain projects may need NRES approval, please check with your Supervisor)

Yes ☐ **No** ☒

23. Does this research involve work with children? Yes ☐ **No** ☒

If yes, has a CRB check been carried out? Yes ☐ **No** ☐

24. Outline any other information you feel may be relevant to this submission.

Appendix M

[redacted] NHS

Research and Development Department

[redacted]

11 February 2016

Matthew Burdock
Trainee Clinical Psychologist
Building 44a , University of Southampton
Highfield Campus
SOUTHAMPTON
SO17 1BJ

www.[redacted]

Dear Matthew

Study Title	How do frontline staff in a secure forensic MH services for young people make sense of their relationship to an emerging Psychologically Informed Environment?		
REC Reference	ERGO 17443	Trust Project N°	SHT204

This letter provides the formal [redacted] NHS approval required for your project to commence. Your project is now registered on the R&D database with identification number **SHT204.** It would be helpful if you could use this number on all correspondence with the R & D Office.

Please note that this Trust approval (and your ethics approval) only applies to the current protocol. Any changes to the protocol can only be initiated following further approval from the REC via a protocol amendment; the R&D office should be informed of these changes.

This approval is conditional on members of the research team being substantively employed by the Trust or having appropriate Honorary Research contracts in place before they start data collection. Please contact the R&D office to confirm requirements for any new members of the research team.

You may be aware of the 70-day benchmark Target set by the Department of Health from the validation of the SSI form to the first patient consented into the study. The local governance 15 day review target was 6 January 2016. The target for the first participant to be consented is 16 March 2016. It would be very helpful to us if you could confirm by e-mail the date that the first participant is consented into your study.

If this study has been adopted to the UKCRN Clinical Research Portfolio, may we take this opportunity to remind you of your responsibility for uploading accrual data for the research site. If you have any difficulty with this process please let us know.

We would like to remind you that as Principal Investigator you are responsible to ensure that the study is conducted within the Research Governance Framework (RGF) and we encourage you to become fully conversant with the RGF Health and Social Care document. Any breaches of the RGF constitute non-compliance with the RGF and as a result Trust approval may be withdrawn and the project suspended until such issues are resolved.

Please do not hesitate to contact us should you require any additional information or support. May I also take this opportunity to wish you every success with your research.

Yours sincerely

[redacted]

Appendix N

Welcome to the Integrated Research Application System

IRAS Project Filter

The integrated dataset required for your project will be created from the answers you give to the following questions. The system will generate only those questions and sections which (a) apply to your study type and (b) are required by the bodies reviewing your study. Please ensure you answer all the questions before proceeding with your applications.

Please complete the questions in order. If you change the response to a question, please select 'Save' and review all the questions as your change may have affected subsequent questions.

Please enter a short title for this project (maximum 70 characters)
MBurdock DClin Psych Thesis

1. Is your project research?

◉ Yes ○ No

2. Select one category from the list below:

○ Clinical trial of an investigational medicinal product
○ Clinical investigation or other study of a medical device
○ Combined trial of an investigational medicinal product and an investigational medical device
○ Other clinical trial to study a novel intervention or randomised clinical trial to compare interventions in clinical practice
○ Basic science study involving procedures with human participants
◉ Study administering questionnaires/interviews for quantitative analysis, or using mixed quantitative/qualitative methodology
○ Study involving qualitative methods only
○ Study limited to working with human tissue samples (or other human biological samples) and data (specific project only)
○ Study limited to working with data (specific project only)
○ Research tissue bank
○ Research database

If your work does not fit any of these categories, select the option below:

○ Other study

2a. Please answer the following question(s):

a) Does the study involve the use of any ionising radiation?	○ Yes	◉ No
b) Will you be taking new human tissue samples (or other human biological samples)?	○ Yes	◉ No
c) Will you be using existing human tissue samples (or other human biological samples)?	○ Yes	◉ No

3. In which countries of the UK will the research sites be located? *(Tick all that apply)*

☑ England
☐ Scotland

☐ Wales
☐ Northern Ireland

3a. In which country of the UK will the lead NHS R&D office be located:

◉ England
◯ Scotland
◯ Wales
◯ Northern Ireland
◯ This study does not involve the NHS

4. Which review bodies are you applying to?

☐ HRA Approval
☑ NHS/HSC Research and Development offices
☐ Social Care Research Ethics Committee
☐ Research Ethics Committee
☐ Confidentiality Advisory Group (CAG)
☐ National Offender Management Service (NOMS) (Prisons & Probation)

For NHS/HSC R&D offices, the CI must create Site-Specific Information Forms for each site, in addition to the study-wide forms, and transfer them to the PIs or local collaborators.

It looks like your project is research requiring NHS R&D approval but does not require review by a REC within the UK Health Departments Research Ethics Service – is that right?

◉ Yes ◯ No

4b. Please confirm the reason(s) why the project does not require review by a REC within the UK Health Departments Research Ethics Service:

☐ Projects limited to the use of samples/data samples provided by a Research Tissue Bank (RTB) with generic ethical approval from a REC, in accordance with the conditions of approval.
☐ Projects limited to the use of data provided by a Research Database with generic ethical approval from a REC, in accordance with the conditions of approval.
☐ Research limited to use of previously collected, non-identifiable information
☐ Research limited to use of previously collected, non-identifiable tissue samples within terms of donor consent
☐ Research limited to use of acellular material
☐ Research limited to use of the premises or facilities of care organisations (no involvement of patients/service users as participants)
☑ Research limited to involvement of staff as participants (no involvement of patients/service users as participants)

5. Will any research sites in this study be NHS organisations?

◉ Yes ◯ No

5a. Are all the research costs and infrastructure costs for this study provided by an NIHR Biomedical Research Centre, NIHR Biomedical Research Unit, NIHR Collaboration for Leadership in Health Research and Care (CLAHRC) or NIHR Research Centre for Patient Safety & Service Quality in all study sites?

○ Yes ◉ No

If yes and you have selected HRA Approval in question 4 above, your study will be processed through HRA Approval.

If yes, and you have not selected HRA Approval in question 4 above, NHS permission for your study will be processed through the NIHR Coordinated System for gaining NHS Permission (NIHR CSP).

5b. Do you wish to make an application for the study to be considered for NIHR Clinical Research Network (CRN) support and inclusion in the NIHR Clinical Research Network (CRN) Portfolio? Please see information button for further details.

○ Yes ◉ No

If yes, you must complete a NIHR Clinical Research Network (CRN) Portfolio Application Form immediately after completing this project filter and before submitting other applications. If you have selected HRA Approval in question 4 above your study will be processed through HRA Approval. If not, NHS permission for your study will be processed through the NIHR Coordinated System for gaining NHS Permission (NIHR CSP).

6. Do you plan to include any participants who are children?

○ Yes ◉ No

7. Do you plan at any stage of the project to undertake intrusive research involving adults lacking capacity to consent for themselves?

○ Yes ◉ No

Answer Yes if you plan to recruit living participants aged 16 or over who lack capacity, or to retain them in the study following loss of capacity. Intrusive research means any research with the living requiring consent in law. This includes use of identifiable tissue samples or personal information, except where application is being made to the Confidentiality Advisory Group to set aside the common law duty of confidentiality in England and Wales. Please consult the guidance notes for further information on the legal frameworks for research involving adults lacking capacity in the UK.

8. Do you plan to include any participants who are prisoners or young offenders in the custody of HM Prison Service or who are offenders supervised by the probation service in England or Wales?

○ Yes ◉ No

9. Is the study or any part of it being undertaken as an educational project?

◉ Yes ○ No

Please describe briefly the involvement of the student(s):
The study forms part of a doctoral thesis, all research will be undertaken by Matt Burdock, Trainee Clinical Psychologist

9a. Is the project being undertaken in part fulfilment of a PhD or other doctorate?

◉ Yes ○ No

10. Will this research be financially supported by the United States Department of Health and Human Services or any of its divisions, agencies or programs?

○ Yes ◉ No

11. Will identifiable patient data be accessed outside the care team without prior consent at any stage of the project (including identification of potential participants)?

○ Yes ◉ No

Integrated Research Application System
Application Form for Research administering questionnaires/interviews for quantitative analysis or mixed methodology study

NHS/HSC R&D Form (project information)

Please refer to the Submission and Checklist tabs for instructions on submitting R&D applications.

The Chief Investigator should complete this form. Guidance on the questions is available wherever you see this symbol displayed. We recommend reading the guidance first. The complete guidance and a glossary are available by selecting Help.

Please define any terms or acronyms that might not be familar to lay reviewers of the application.

Short title and version number: (maximum 70 characters - this will be inserted as header on all forms)
MBurdock DClin Psych Thesis

PART A: Core study information

1. ADMINISTRATIVE DETAILS

A1. Full title of the research:

How do frontline staff in Secure Forensic Mental Health Services for Young People (SFMHSYP) make sense of their relationship to an emerging Psychologically Informed Environment (PIE)?

A2-1. Educational projects

Name and contact details of student(s):

Student 1

	Title	Forename/Initials	Surname
	Mr	Matthew	Burdock
Address	38 Pentons Close		
	Holybourne		
	Alton		
Post Code	GU344BE		
E-mail	mb2g13@soton.ac.uk		
Telephone	07809129071		
Fax			

Give details of the educational course or degree for which this research is being undertaken:

Name and level of course/ degree:
Doctorate in Clinical Psychology

Name of educational establishment:
Southampton University

Name and contact details of academic supervisor(s):

Academic supervisor 1

	Title	Forename/Initials	Surname
	Dr	Nick	Maguire
Address	Building 44a		
	Programme of Clinical Psychology		
	Southampton University		
Post Code	SO17 1BJ		
E-mail	nick.maguire@soton.ac.uk		
Telephone	02380597760		
Fax			

Please state which academic supervisor(s) has responsibility for which student(s):
Please click "Save now" before completing this table. This will ensure that all of the student and academic supervisor details are shown correctly.

Student(s)	Academic supervisor(s)
Student 1 Mr Matthew Burdock	☑ Dr Nick Maguire

A copy of a current CV for the student and the academic supervisor (maximum 2 pages of A4) must be submitted with the application.

A2-2. Who will act as Chief Investigator for this study?

- ◉ Student
- ○ Academic supervisor
- ○ Other

A3-1. Chief Investigator:

	Title	Forename/Initials	Surname
	Mr	Matthew	Burdock
Post	Trainee Clinical Psychologist		
Qualifications	BSc (Hons), MSc		
Employer	Taunton and Somerset NHS Foundation Trust		
Work Address	Building 44a		
	Doctoral Programme in Clinical Psychology		
	Southampton University		
Post Code	SO17 1BJ		
Work E-mail	mb2g13@soton.ac.uk		
* Personal E-mail	mb2g13@soton.ac.uk		
Work Telephone	07809129071		
* Personal Telephone/Mobile	07809129071		
Fax			

** This information is optional. It will not be placed in the public domain or disclosed to any other third party without prior consent.*
A copy of a current CV (maximum 2 pages of A4) for the Chief Investigator must be submitted with the application.

A4. Who is the contact on behalf of the sponsor for all correspondence relating to applications for this project?

This contact will receive copies of all correspondence from REC and HRA/R&D reviewers that is sent to the CI.

	Title	Forename/Initials	Surname
		Trudi	Bartlett
Address		Research Integrity and Governance Team	
		Research and Innovation Services, Building 37, Room 4079	
		University of Southampton	
Post Code		SO17 1BJ	
E-mail		rgoinfo@soton.ac.uk	
Telephone		02380595058	
Fax			

A5-1. Research reference numbers. *Please give any relevant references for your study:*

Applicant's/organisation's own reference number, e.g. R & D (if available):	17443
Sponsor's/protocol number:	
Protocol Version:	
Protocol Date:	
Funder's reference number:	
Project website:	

Additional reference number(s):

Ref.Number Description	Reference Number

Registration of research studies is encouraged wherever possible. You may be able to register your study through your NHS organisation or a register run by a medical research charity, or publish your protocol through an open access publisher. If you have registered your study please give details in the "Additional reference number(s)" section.

A5-2. Is this application linked to a previous study or another current application?

○ Yes ◉ No

Please give brief details and reference numbers.

2. OVERVIEW OF THE RESEARCH

To provide all the information required by review bodies and research information systems, we ask a number of specific questions. This section invites you to give an overview using language comprehensible to lay reviewers and members of the public. Please read the guidance notes for advice on this section.

A6-1. Summary of the study. *Please provide a brief summary of the research (maximum 300 words) using language easily understood by lay reviewers and members of the public. Where the research is reviewed by a REC within the UK Health Departments' Research Ethics Service, this summary will be published on the Health Research Authority (HRA) website following the ethical review. Please refer to the question specific guidance for this question.*

This study aims to explore how frontline staff in Secure Forensic Mental Health Services for Young People (SFMHSYP) make sense of their relationship to what may be understood to be an emerging Psychologically Informed Environment (PIE). A PIE is developed through the use of reflective practice and shared action learning, where meta-cognition and emotional self-regulation is demonstrated by stakeholders of the environment.

In a SFMHSYP, clients experience frequent or prolonged periods of distress and the risk of deliberate self harm, self-neglect and harm to others is often high. For the environment to become (and to continue to be) psychologically informed, stakeholders need to have some knowledge of psychological theory and formulation as well as the ability to view associated behaviour as communication to be understood.

Through the use of brief questionnaires and more detailed qualitative analysis (Interpretive Phenomenological Analysis) the 'psychological informedness' of staff and their relationship to the PIE will be explored, considering behaviour that challenges as one of the primary barriers to the development of a PIE in a SFMHSYP setting.

A6-2. Summary of main issues. *Please summarise the main ethical, legal, or management issues arising from your study and say how you have addressed them.*

Not all studies raise significant issues. Some studies may have straightforward ethical or other issues that can be identified and managed routinely. Others may present significant issues requiring further consideration by a REC, R&D office or other review body (as appropriate to the issue). Studies that present a minimal risk to participants may raise complex organisational or legal issues. You should try to consider all the types of issues that the different reviewers may need to consider.

Considerations with regard to this study include:

1. Risk of emotional distress associated with recounting difficult or challenging scenarios in the workplace

2. Issues of confidentiality and privacy regarding data collection and storage

Any and all arising issues will be managed accordingly:

1. Support will be available from the psychology team at Bluebird House (Dr Jackie Preston, Consultant Clinical Psychologist is providing supervision of the study onsite) and support may be accessed from a participant's line-manager/ supervisor where necessary and appropriate.

2. ID numbers will be used on qualitative questionnaires and transcripts. Completed questionnaires will be returned to the researcher using blank envelopes. All interviews will be conducted in a private interview room to ensure that conversations will not be overheard.

Interview recordings will be stored on a password protected recording device and the recordings deleted following transcription. Questionnaires will be retained in a locked filing cabinet and any electronic information will be stored on a password protected laptop owned by, and for the exclusive use of, the researcher.

3. PURPOSE AND DESIGN OF THE RESEARCH

A7. Select the appropriate methodology description for this research. *Please tick all that apply:*

- ☐ Case series/ case note review
- ☐ Case control
- ☐ Cohort observation
- ☐ Controlled trial without randomisation
- ☐ Cross-sectional study
- ☐ Database analysis
- ☐ Epidemiology
- ☐ Feasibility/ pilot study
- ☐ Laboratory study
- ☐ Metanalysis
- ☑ Qualitative research
- ☑ Questionnaire, interview or observation study
- ☐ Randomised controlled trial

☐ Other (please specify)

A10. What is the principal research question/objective? *Please put this in language comprehensible to a lay person.*

How do frontline staff in Secure Forensic Mental Health Services for Young People (SFMHSYP) make sense of their relationship to an emerging Psychologically Informed Environment (PIE)?

A11. What are the secondary research questions/objectives if applicable? *Please put this in language comprehensible to a lay person.*

1. What does it mean to be psychologically informed as a frontline member of staff in Secure Forensic Mental Health Services for Young People (SFMHSYP)?

2. What do staff perceive to be the barriers to the development of a PIE and how do they think factors such as behaviour that challenges and burnout feature in PIE development?

3. How does staff experience of reflective practice and shared action learning contribute to the emergence of a PIE, as suggested by Johnson and Haigh (2010)?

A12. What is the scientific justification for the research? *Please put this in language comprehensible to a lay person.*

There is little research into psychologically informed environments in the context of Secure Forensic Mental Health Services for Young People. Much of the guidance is developed from the 'Good Lives' model commonly used in forensic services and there is little clarity as to how, why and when adaptations need to be made for a CAMHS setting.

Furthermore, part of the challenge of research on this topic is due to ontological differences and this study, in addition to contributing to the literature in this area, aims to draw together terms and definitions from a range of concepts such as the 'Good Lives' model and constructs found within therapeutic communities to get a more coherent picture of what a psychologically informed environment might be.

A13. Please summarise your design and methodology. *It should be clear exactly what will happen to the research participant, how many times and in what order. Please complete this section in language comprehensible to the lay person. Do not simply reproduce or refer to the protocol. Further guidance is available in the guidance notes.*

Participants will be recruited from the staff team from within the SFMHSYP setting. The study will have both a quantitative and a qualitative arm. The quantitative arm will require the recruitment of up to 60 participants, for the completion of 3 short questionnaires. Between 6 and 8 participants will be recruited into the qualitative arm of the study.

In an interpretive phenomenological analysis (IPA) approach, it is the quality and depth of the data that is important, rather than, as in other qualitative approaches, the comparison and contrasting of data across a sample that achieves saturation. For this reason, the study will recruit participants with homogeneity of experience in the SFMHSYP setting and participants will be actively participating in reflective practice sessions and shared action learning initiatives.

The study will adopt a multiple methods design, using brief quantitative questionnaires to explore self-efficacy, burnout and emotional response to challenging behaviour and qualitative interviews, to be interpreted using IPA. 2.4

Participants will attend semi-structured interviews as well as complete brief regular diary entries, to provide means for data triangulation, enhancing quality. Interviews will be conducted in January 2016. The data will be analysed in February 2016, with write-up to be achieved during March and April 2016.

A14-1. In which aspects of the research process have you actively involved, or will you involve, patients, service users, and/or their carers, or members of the public?

☐ Design of the research
☐ Management of the research
☐ Undertaking the research
☐ Analysis of results

☐ Dissemination of findings
☑ None of the above

Give details of involvement, or if none please justify the absence of involvement.

4. RISKS AND ETHICAL ISSUES

RESEARCH PARTICIPANTS

A15. What is the sample group or cohort to be studied in this research?

Select all that apply:

☐ Blood
☐ Cancer
☐ Cardiovascular
☐ Congenital Disorders
☐ Dementias and Neurodegenerative Diseases
☐ Diabetes
☐ Ear
☐ Eye
☐ Generic Health Relevance
☐ Infection
☐ Inflammatory and Immune System
☐ Injuries and Accidents
☐ Mental Health
☐ Metabolic and Endocrine
☐ Musculoskeletal
☐ Neurological
☐ Oral and Gastrointestinal
☐ Paediatrics
☐ Renal and Urogenital
☐ Reproductive Health and Childbirth
☐ Respiratory
☐ Skin
☐ Stroke

Gender:	Male and female participants
Lower age limit: 18	Years
Upper age limit: 70	Years

A17-1. Please list the principal inclusion criteria (list the most important, max 5000 characters).

Staff working in any capacity (paid or unpaid, full or part-time) as Bluebird House, Secure Forensic Mental Health Service for Young People.

A17-2. Please list the principal exclusion criteria (list the most important, max 5000 characters).

Any person or persons at Bluebird House who is not a member of staff.

RESEARCH PROCEDURES, RISKS AND BENEFITS

A18. Give details of all non-clinical intervention(s) or procedure(s) that will be received by participants as part of the research protocol. *These include seeking consent, interviews, non-clinical observations and use of questionnaires.*

Please complete the columns for each intervention/procedure as follows:

1. Total number of interventions/procedures to be received by each participant as part of the research protocol.
2. If this intervention/procedure would be routinely given to participants as part of their care outside the research, how many of the total would be routine?
3. Average time taken per intervention/procedure (minutes, hours or days)
4. Details of who will conduct the intervention/procedure, and where it will take place.

Intervention or procedure	1	2	3	4
Seeking Consent	1	1	10 minutes	Matt Burdock. Participants will be provided with information regarding the study (verbally and in written format) and will be permitted to complete a consent form at their discretion or following further discussion, if they should so wish, in an interview room at Bluebird House.
Administration of questionnaires	3	N/A	10 minutes	Matt Burdock. Questionnaires will be distributed to each ward and made available to all staff who have consented to take part in the study. Blank envelopes will be included to allow participants to return questionnaires with anonymity.
Qualitative Interviews (6-8 participants)	1	N/A	45 minutes	Matt Burdock. Interviews will take place in an interview room at Bluebird House.

A21. How long do you expect each participant to be in the study in total?

Quantitative participants, between 5 and 10 minutes to complete questionnaires.

Qualitative participants, approximately 45 minutes in a semi-structured interview.

A22. What are the potential risks and burdens for research participants and how will you minimise them?

For all studies, describe any potential adverse effects, pain, discomfort, distress, intrusion, inconvenience or changes to lifestyle. Only describe risks or burdens that could occur as a result of participation in the research. Say what steps would be taken to minimise risks and burdens as far as possible.

Risk of emotional distress when recounting difficult or challenging scenarios in the workplace and possible risk that a participant might have concerns that the research was aimed at evaluating the quality of their work or personal competence.

These risks will be managed through discussion of research aims, provision of information at the time of consent and ongoing support available, if required, from Dr Jackie Preston, Consultant Clinical Psychologist or the participant's line-manager or clinical supervisor.

A23. Will interviews/ questionnaires or group discussions include topics that might be sensitive, embarrassing or upsetting, or is it possible that criminal or other disclosures requiring action could occur during the study?

○ Yes ◉ No

A24. What is the potential for benefit to research participants?

Potential benefits to research participants include the opportunity to (with a high degree of anonymity) share their experience of work in a forensic CAMHS setting and, should the research be published, make a unique contribution to the literature.

Findings from the study may prove beneficial for the CAMHS setting, in reinforcing existing positive aspects of clinical and operational practice as well as shaping recommendations for future service development and the increase of personal and social capital.

A26. What are the potential risks for the researchers themselves? *(if any)*

Data collection will occur at the participants' usual workplace during working hours. No additional risk in this context exists above the normal level of risk in the working environment.

RECRUITMENT AND INFORMED CONSENT

In this section we ask you to describe the recruitment procedures for the study. Please give separate details for different study groups where appropriate.

A27-1. How will potential participants, records or samples be identified? Who will carry this out and what resources will be used?*For example, identification may involve a disease register, computerised search of GP records, or review of medical records. Indicate whether this will be done by the direct healthcare team or by researchers acting under arrangements with the responsible care organisation(s).*

All information obtained from participants will remain strictly confidential and will be kept in accordance with the Data Protection Act (1998) as well as Southampton University ethics policy.

Questionnaires will have an ID number printed on the top and participant demographic information will be kept separately by the researcher. All hard-copy documents will be kept in a lockable filing cabinet and shredded following the final completion of the research.

Interviews will be recorded and transcribed, the original recordings will then be deleted and participants will be represented with a high degree of anonymity in the transcript (using a numeric identifier) as well as in the final write-up of the project.

A summary of the findings will be made available to participants after the study and nothing will be written in such a way as to identify a participant or their collegues in the findings.

A27-2. Will the identification of potential participants involve reviewing or screening the identifiable personal information of patients, service users or any other person?

○ Yes ◉ No

Please give details below:

A28. Will any participants be recruited by publicity through posters, leaflets, adverts or websites?

◉ Yes ○ No

If Yes, please give details of how and where publicity will be conducted, and enclose copy of all advertising material (with version numbers and dates).

A simple advertising poster will be used on internal noticeboards at Bluebird House

A29. How and by whom will potential participants first be approached?

Potential participants will be made aware of the study through staff meetings, the use of posters and informal 1:1 discussion. Should they express an interest in joining the study, they will be asked to contact Matt Burdock for further information and to arrange a suitable time to complete the consent process.

A30-1. Will you obtain informed consent from or on behalf of research participants?

(•) Yes ( ) No

If you will be obtaining consent from adult participants, please give details of who will take consent and how it will be done, with details of any steps to provide information (a written information sheet, videos, or interactive material). Arrangements for adults unable to consent for themselves should be described separately in Part B Section 6, and for children in Part B Section 7.

If you plan to seek informed consent from vulnerable groups, say how you will ensure that consent is voluntary and fully informed.

If you are not obtaining consent, please explain why not.

Please enclose a copy of the information sheet(s) and consent form(s).

A30-2. Will you record informed consent (or advice from consultees) in writing?

(•) Yes ( ) No

A31. How long will you allow potential participants to decide whether or not to take part?

Participants will be able to take part in the study up until 22 April 2016 and may volunteer for the study or withdraw at any time up until that date.

A33-1. What arrangements have been made for persons who might not adequately understand verbal explanations or written information given in English, or who have special communication needs?*(e.g. translation, use of interpreters)*

It is unlikely that staff at Bluebird House will be unable to understand either verbal or written information in English. Should this be the case and they wish to participate in the study, a translator from within the Trust will be obtained.

A35. What steps would you take if a participant, who has given informed consent, loses capacity to consent during the study? *Tick one option only.*

(•) The participant and all identifiable data or tissue collected would be withdrawn from the study. Data or tissue which is not identifiable to the research team may be retained.

( ) The participant would be withdrawn from the study. Identifiable data or tissue already collected with consent would be retained and used in the study. No further data or tissue would be collected or any other research procedures carried out on or in relation to the participant.

( ) The participant would continue to be included in the study.

( ) Not applicable – informed consent will not be sought from any participants in this research.

( ) Not applicable – it is not practicable for the research team to monitor capacity and continued capacity will be assumed.

Further details:

CONFIDENTIALITY

In this section, personal data means any data relating to a participant who could potentially be identified. It includes pseudonymised data capable of being linked to a participant through a unique code number.

Storage and use of personal data during the study

A36. Will you be undertaking any of the following activities at any stage (including in the identification of potential participants)?*(Tick as appropriate)*

- ☐ Access to medical records by those outside the direct healthcare team
- ☐ Access to social care records by those outside the direct social care team
- ☐ Electronic transfer by magnetic or optical media, email or computer networks
- ☐ Sharing of personal data with other organisations
- ☐ Export of personal data outside the EEA
- ☐ Use of personal addresses, postcodes, faxes, emails or telephone numbers
- ☑ Publication of direct quotations from respondents
- ☐ Publication of data that might allow identification of individuals
- ☑ Use of audio/visual recording devices
- ☑ Storage of personal data on any of the following:
  - ☑ Manual files (includes paper or film)
  - ☐ NHS computers
  - ☐ Social Care Service computers
  - ☐ Home or other personal computers
  - ☐ University computers
  - ☐ Private company computers
  - ☑ Laptop computers

Further details:
In writing up the study direct quotes by participants may be used. However, all efforts will be made to maintain anonymity of participants and quotes will 'stand alone' without reference to information what might be used to identify one or more individuals.

Opinions and reflections shared by participants (as to be expected from qualitative data collection) will be recorded electronically, then transcribed. Storage of electronic and written data will conform to the Data Protection Act (1998).

A37. Please describe the physical security arrangements for storage of personal data during the study?

Interview recordings will be stored on a password protected recording device and the recordings deleted following transcription. Questionnaires will be retained in a locked filing cabinet and any electronic information stored on the researcher's laptop, which is password protected.

A38. How will you ensure the confidentiality of personal data?*Please provide a general statement of the policy and procedures for ensuring confidentiality, e.g. anonymisation or pseudonymisation of data.*

ID numbers to be used on questionnaires and qualitative transcripts. Interviews will be conducted in a private room and all appropriate measures taken to ensure that conversations cannot be overheard. Interview recordings will be stored on a password protected recording device and deleted following transcription.

Only the researcher will have access to a demographic information sheet, which will list the names of participants and their ID numbers. This list will be stored in a lockable filing cabinet.

A40. Who will have access to participants' personal data during the study? *Where access is by individuals outside the direct care team, please justify and say whether consent will be sought.*

Only the lead researcher, Matt Burdock.

Storage and use of data after the end of the study

A41. Where will the data generated by the study be analysed and by whom?

At Southampton University by the lead researcher, Matt Burdock.

A42. Who will have control of and act as the custodian for the data generated by the study?

	Title	Forename/Initials	Surname
	Dr	Jackie	Preston
Post	Consultant Clinical Psychologist Bluebird House		
Qualifications	Doctor of Clinical Psychology		
Work Address	Bluebird House		
	Tatchbury Mount		
	Southampton		
Post Code	SO40 2RZ		
Work Email	jackie.preston@southernhealth.nhs.uk		
Work Telephone	02380874600		
Fax			

A43. How long will personal data be stored or accessed after the study has ended?

- (●) Less than 3 months
- ( ) 3 – 6 months
- ( ) 6 – 12 months
- ( ) 12 months – 3 years
- ( ) Over 3 years

A44. For how long will you store research data generated by the study?

Years: 5
Months:

A45. Please give details of the long term arrangements for storage of research data after the study has ended. *Say where data will be stored, who will have access and the arrangements to ensure security.*

Research (non-personal) data will be stored in a locked, fireproof filing cabinet at the lead researcher's home address.

INCENTIVES AND PAYMENTS

A46. Will research participants receive any payments, reimbursement of expenses or any other benefits or incentives for taking part in this research?

(●) Yes ( ) No

If Yes, please give details. For monetary payments, indicate how much and on what basis this has been determined.
Participants completing questionnaires in the quantitative arm of the study will be entered into a prize draw to win one

of five £10 Amazon vouchers.

Participants completing questionnaires in the qualitative arm of the study will be awarded an Amazon voucher to the value of £30.

A47. Will individual researchers receive any personal payment over and above normal salary, or any other benefits or incentives, for taking part in this research?

○ Yes ◉ No

A48. Does the Chief Investigator or any other investigator/collaborator have any direct personal involvement (e.g. financial, share holding, personal relationship etc.) in the organisations sponsoring or funding the research that may give rise to a possible conflict of interest?

○ Yes ◉ No

NOTIFICATION OF OTHER PROFESSIONALS

A49-1. Will you inform the participants' General Practitioners (and/or any other health or care professional responsible for their care) that they are taking part in the study?

○ Yes ◉ No

If Yes, please enclose a copy of the information sheet/letter for the GP/health professional with a version number and date.

PUBLICATION AND DISSEMINATION

A50. Will the research be registered on a public database?

○ Yes ◉ No

Please give details, or justify if not registering the research.

Registration of research studies is encouraged wherever possible.
You may be able to register your study through your NHS organisation or a register run by a medical research charity, or publish your protocol through an open access publisher. If you are aware of a suitable register or other method of publication, please give details. If not, you may indicate that no suitable register exists. Please ensure that you have entered registry reference number(s) in question A5-1.

A51. How do you intend to report and disseminate the results of the study? *Tick as appropriate:*

- ☑ Peer reviewed scientific journals
- ☐ Internal report
- ☑ Conference presentation
- ☐ Publication on website
- ☐ Other publication
- ☐ Submission to regulatory authorities
- ☐ Access to raw data and right to publish freely by all investigators in study or by Independent Steering Committee on behalf of all investigators
- ☐ No plans to report or disseminate the results

☐ Other (please specify)

A52. If you will be using identifiable personal data, how will you ensure that anonymity will be maintained when publishing the results?

The names of any individuals, teams, institutions, Trusts or specific regions will be substituted or omitted in the write up to try to ensure anonymity.

Quotes from participants will not be kept anonymous and any specific information that might allow a participant to be identified will be changed or omitted.

A53. Will you inform participants of the results?

◉ Yes ○ No

Please give details of how you will inform participants or justify if not doing so.
The results of the study will be made available to participants at Bluebird House by way of a summary report, communicated during team meetings.

5. Scientific and Statistical Review

A54. How has the scientific quality of the research been assessed? *Tick as appropriate:*

☐ Independent external review
☐ Review within a company
☐ Review within a multi−centre research group
☑ Review within the Chief Investigator's institution or host organisation
☐ Review within the research team
☑ Review by educational supervisor
☐ Other

Justify and describe the review process and outcome. If the review has been undertaken but not seen by the researcher, give details of the body which has undertaken the review:
A research proposal has been submitted to Dr Nick Maguire (Research Supervisor) of Southampton University.

The research project has also been approved by Dr Matt Garner (Direct of Research, Psychology) and ethics permissions granted by the university ethics committee (ID 17443).

For all studies except non-doctoral student research, please enclose a copy of any available scientific critique reports, together with any related correspondence.

For non-doctoral student research, please enclose a copy of the assessment from your educational supervisor/ institution.

A56. How have the statistical aspects of the research been reviewed? *Tick as appropriate:*

☐ Review by independent statistician commissioned by funder or sponsor
☐ Other review by independent statistician
☐ Review by company statistician
☐ Review by a statistician within the Chief Investigator's institution
☐ Review by a statistician within the research team or multi−centre group
☑ Review by educational supervisor
☐ Other review by individual with relevant statistical expertise
☐ No review necessary as only frequencies and associations will be assessed – details of statistical input not

required

In all cases please give details below of the individual responsible for reviewing the statistical aspects. If advice has been provided in confidence, give details of the department and institution concerned.

	Title	Forename/Initials	Surname
	Dr	Nick	Maguire
Department	School of Psychology		
Institution	Southampton University		
Work Address	Building 44a		
	Programme of Clinical Psychology		
	Southampton University		
Post Code	SO17 1BJ		
Telephone	02380597760		
Fax			
Mobile			
E-mail	nick.maguire@soton.ac.uk		

Please enclose a copy of any available comments or reports from a statistician.

A57. What is the primary outcome measure for the study?

Qualitative findings analysed using Interpretive Phenomenological Analysis (IPA)

A58. What are the secondary outcome measures?*(if any)*

Correlational data from three short quantitative questionnaires.

A59. What is the sample size for the research? *How many participants/samples/data records do you plan to study in total? If there is more than one group, please give further details below.*

Total UK sample size: 60
Total international sample size (including UK):
Total in European Economic Area:

Further details:
Maximum 60 Quantitative participants

6-8 Qualitative participants

A60. How was the sample size decided upon? *If a formal sample size calculation was used, indicate how this was done, giving sufficient information to justify and reproduce the calculation.*

Quantitative sample reflects number of likely participants available in defined population

Qualitative sample size is based upon BPS recommendations regarding IPA studies

A61. Will participants be allocated to groups at random?

○ Yes ◉ No

A62. Please describe the methods of analysis (statistical or other appropriate methods, e.g. for qualitative research) by which the data will be evaluated to meet the study objectives.

Data will be arranged into themes using NVivo. IPA focuses on the individual participants 'lived experience' and this data will be considered in the context of psychological theory and other comparable settings (forensic and non-forensic).

Correlational analysis will be used on the data obtained from three quantitative measures and these findings will be linked to the qualitative findings and psychological theory.

6. MANAGEMENT OF THE RESEARCH

A63. Other key investigators/collaborators. *Please include all grant co−applicants, protocol co−authors and other key members of the Chief Investigator's team, including non-doctoral student researchers.*

Title Forename/Initials Surname

Post
Qualifications
Employer
Work Address

Post Code
Telephone
Fax
Mobile
Work Email

A64. Details of research sponsor(s)

A64-1. Sponsor

Lead Sponsor

Status:
- ○ NHS or HSC care organisation
- ◉ Academic
- ○ Pharmaceutical industry
- ○ Medical device industry
- ○ Local Authority
- ○ Other social care provider (including voluntary sector or private organisation)
- ○ Other

Commercial status: Non-Commercial

If Other, please specify:

Contact person

Name of organisation University of Southampton

Given name	Diana
Family name	Galpin
Address	Head of IP Contracts and Policy
Town/city	Southampton
Post code	SO17 1BJ
Country	UNITED KINGDOM
Telephone	02380595058
Fax	
E-mail	rgoinfo@soton.ac.uk

Is the sponsor based outside the UK?

◯ Yes ◉ No

Under the Research Governance Framework for Health and Social Care, a sponsor outside the UK must appoint a legal representative established in the UK. Please consult the guidance notes.

A65. Has external funding for the research been secured?

☑ Funding secured from one or more funders

☐ External funding application to one or more funders in progress

☐ No application for external funding will be made

What type of research project is this?

◯ Standalone project

◯ Project that is part of a programme grant

◯ Project that is part of a Centre grant

◯ Project that is part of a fellowship/ personal award/ research training award

◉ Other

Other – please state:
Research for doctoral thesis (Clinical Psychology)

Please give details of funding applications.

Organisation	Southampton University
Address	Building 44a Programme of Clinical Psychology Southampton University
Post Code	SO17 1BJ
Telephone	02380597760
Fax	
Mobile	
Email	nick.maguire@soton.ac.uk

Funding Application Status: ◯ Secured ◯ In progress

Amount: £1200

Duration
Years:
Months: 9

If applicable, please specify the programme/ funding stream:

What is the funding stream/ programme for this research project?

A66. Has responsibility for any specific research activities or procedures been delegated to a subcontractor (other than a co-sponsor listed in A64-1) ? *Please give details of subcontractors if applicable.*

○ Yes ◉ No

A67. Has this or a similar application been previously rejected by a Research Ethics Committee in the UK or another country?

○ Yes ◉ No

Please provide a copy of the unfavourable opinion letter(s). You should explain in your answer to question A6-2 how the reasons for the unfavourable opinion have been addressed in this application.

A68-1. Give details of the lead NHS R&D contact for this research:

	Title Forename/Initials	Surname
	Penny	Bartlett
Organisation	Southern Health NHS Foundation Trust	
Address	R&D Clinical Trials Facility	
	Tom Rudd Unit, Moorgreen Hospital	
	Southampton	
Post Code	SO30 3JB	
Work Email	research@southernhealth.nhs.uk	
Telephone	02380475373	
Fax		
Mobile		

Details can be obtained from the NHS R&D Forum website: http://www.rdforum.nhs.uk

A69-1. How long do you expect the study to last in the UK?

Planned start date: 24/11/2015
Planned end date: 22/04/2016
Total duration:
Years: 0 Months: 4 Days: 29

A71-1. Is this study?

◉ Single centre
○ Multicentre

A71-2. Where will the research take place? *(Tick as appropriate)*

- [x] England
- [ ] Scotland
- [ ] Wales
- [ ] Northern Ireland
- [ ] Other countries in European Economic Area

Total UK sites in study 1

Does this trial involve countries outside the EU?

( ) Yes (•) No

A72. Which organisations in the UK will host the research?*Please indicate the type of organisation by ticking the box and give approximate numbers if known:*

[x] NHS organisations in England	1
[ ] NHS organisations in Wales	
[ ] NHS organisations in Scotland	
[ ] HSC organisations in Northern Ireland	
[ ] GP practices in England	
[ ] GP practices in Wales	
[ ] GP practices in Scotland	
[ ] GP practices in Northern Ireland	
[ ] Joint health and social care agencies (eg community mental health teams)	
[ ] Local authorities	
[ ] Phase 1 trial units	
[ ] Prison establishments	
[ ] Probation areas	
[ ] Independent (private or voluntary sector) organisations	
[ ] Educational establishments	
[ ] Independent research units	
[ ] Other (give details)	
Total UK sites in study:	1

A73-1. Will potential participants be identified through any organisations other than the research sites listed above?

( ) Yes (•) No

A74. What arrangements are in place for monitoring and auditing the conduct of the research?

Supervision is provided by Dr Nick Maguire (Southampton University) and by Dr Jackie Preston, Consultant Clinical Psychologist at Bluebird House.

A76. Insurance/ indemnity to meet potential legal liabilities

***Note:** in this question to NHS indemnity schemes include equivalent schemes provided by Health and Social Care (HSC) in Northern Ireland*

A76-1. What arrangements will be made for insurance and/or indemnity to meet the potential legal liability of the sponsor(s) for harm to participants arising from the management of the research? *Please tick box(es) as applicable.*

Note: Where a NHS organisation has agreed to act as sponsor or co-sponsor, indemnity is provided through NHS schemes. Indicate if this applies (there is no need to provide documentary evidence). For all other sponsors, please describe the arrangements and provide evidence.

☐ NHS indemnity scheme will apply (NHS sponsors only)

☑ Other insurance or indemnity arrangements will apply (give details below)

Southampton University covers insurance/ indemnity arrangements by way of a Zurich Municipal policy, number: NHE-11CA11-0013

Please enclose a copy of relevant documents.

A76-2. What arrangements will be made for insurance and/ or indemnity to meet the potential legal liability of the sponsor(s) or employer(s) for harm to participants arising from the design of the research? *Please tick box(es) as applicable.*

Note: Where researchers with substantive NHS employment contracts have designed the research, indemnity is provided through NHS schemes. Indicate if this applies (there is no need to provide documentary evidence). For other protocol authors (e.g. company employees, university members), please describe the arrangements and provide evidence.

☐ NHS indemnity scheme will apply (protocol authors with NHS contracts only)

☑ Other insurance or indemnity arrangements will apply (give details below)

Southampton University covers insurance/ indemnity arrangements by way of a Zurich Municipal policy, number: NHE-11CA11-0013

Please enclose a copy of relevant documents.

A76-3. What arrangements will be made for insurance and/ or indemnity to meet the potential legal liability of investigators/collaborators arising from harm to participants in the conduct of the research?

Note: Where the participants are NHS patients, indemnity is provided through the NHS schemes or through professional indemnity. Indicate if this applies to the whole study (there is no need to provide documentary evidence). Where non-NHS sites are to be included in the research, including private practices, please describe the arrangements which will be made at these sites and provide evidence.

☐ NHS indemnity scheme or professional indemnity will apply (participants recruited at NHS sites only)

☑ Research includes non-NHS sites (give details of insurance/ indemnity arrangements for these sites below)

Southampton University covers insurance/ indemnity arrangements by way of a Zurich Municipal policy, number: NHE-11CA11-0013

Please enclose a copy of relevant documents.

A78. Could the research lead to the development of a new product/process or the generation of intellectual property?

○ Yes ◉ No ○ Not sure

PART C: Overview of research sites

Please enter details of the host organisations (Local Authority, NHS or other) in the UK that will be responsible for the research sites. *For NHS sites, the host organisation is the Trust or Health Board. Where the research site is a primary care site, e.g. GP practice, please insert the host organisation (PCT or Health Board) in the Institution row and insert the research site (e.g. GP practice) in the Department row.*

Research site		Investigator/ Collaborator/ Contact	
Institution name	Bluebird House	Title	Mr
Department name	Tier 4 CAMHS	First name/ Initials	Matthew
Street address	Tatchbury Mount	Surname	Burdock
Town/city	Southampton		
Post Code	SO40 2RZ		

PART D: Declarations

D1. Declaration by Chief Investigator

1. The information in this form is accurate to the best of my knowledge and belief and I take full responsibility for it.
2. I undertake to abide by the ethical principles underlying the Declaration of Helsinki and good practice guidelines on the proper conduct of research.
3. If the research is approved I undertake to adhere to the study protocol, the terms of the full application as approved and any conditions set out by review bodies in giving approval.
4. I undertake to notify review bodies of substantial amendments to the protocol or the terms of the approved application, and to seek a favourable opinion from the main REC before implementing the amendment.
5. I undertake to submit annual progress reports setting out the progress of the research, as required by review bodies.
6. I am aware of my responsibility to be up to date and comply with the requirements of the law and relevant guidelines relating to security and confidentiality of patient or other personal data, including the need to register when necessary with the appropriate Data Protection Officer. I understand that I am not permitted to disclose identifiable data to third parties unless the disclosure has the consent of the data subject or, in the case of patient data in England and Wales, the disclosure is covered by the terms of an approval under Section 251 of the NHS Act 2006.
7. I understand that research records/data may be subject to inspection by review bodies for audit purposes if required.
8. I understand that any personal data in this application will be held by review bodies and their operational managers and that this will be managed according to the principles established in the Data Protection Act 1998.
9. I understand that the information contained in this application, any supporting documentation and all correspondence with review bodies or their operational managers relating to the application:
    - Will be held by the REC (where applicable) until at least 3 years after the end of the study; and by NHS R&D offices (where the research requires NHS management permission) in accordance with the NHS Code of Practice on Records Management.
    - May be disclosed to the operational managers of review bodies, or the appointing authority for the REC (where applicable), in order to check that the application has been processed correctly or to investigate any complaint.
    - May be seen by auditors appointed to undertake accreditation of RECs (where applicable).
    - Will be subject to the provisions of the Freedom of Information Acts and may be disclosed in response to requests made under the Acts except where statutory exemptions apply.
    - May be sent by email to REC members.
10. I understand that information relating to this research, including the contact details on this application, may be held on national research information systems, and that this will be managed according to the principles established in the Data Protection Act 1998.
11. Where the research is reviewed by a REC within the UK Health Departments Research Ethics Service, I understand that the summary of this study will be published on the website of the National Research Ethics Service (NRES), together with the contact point for enquiries named below. Publication will take place no earlier than 3 months after issue of the ethics committee's final opinion or the withdrawal of the application.

Contact point for publication*(Not applicable for R&D Forms)*

NRES would like to include a contact point with the published summary of the study for those wishing to seek further information. We would be grateful if you would indicate one of the contact points below.

◯ Chief Investigator

- ◯ Sponsor
- ◯ Study co-ordinator
- ◯ Student
- ◯ Other – please give details
- ◯ None

Access to application for training purposes *(Not applicable for R&D Forms)*
Optional – please tick as appropriate:

☐ I would be content for members of other RECs to have access to the information in the application in confidence for training purposes. All personal identifiers and references to sponsors, funders and research units would be removed.

This section was signed electronically by Mr Matthew Burdock on 05/01/2016 13:05.

Job Title/Post:	Trainee Clinical Psychologist
Organisation:	University of Southampton
Email:	mb2g13@soton.ac.uk

D2. Declaration by the sponsor's representative

If there is more than one sponsor, this declaration should be signed on behalf of the co−sponsors by a representative of the lead sponsor named at A64-1.

I confirm that:

1. This research proposal has been discussed with the Chief Investigator and agreement in principle to sponsor the research is in place.
2. An appropriate process of scientific critique has demonstrated that this research proposal is worthwhile and of high scientific quality.
3. Any necessary indemnity or insurance arrangements, as described in question A76, will be in place before this research starts. Insurance or indemnity policies will be renewed for the duration of the study where necessary.
4. Arrangements will be in place before the study starts for the research team to access resources and support to deliver the research as proposed.
5. Arrangements to allocate responsibilities for the management, monitoring and reporting of the research will be in place before the research starts.
6. The duties of sponsors set out in the Research Governance Framework for Health and Social Care will be undertaken in relation to this research.

   Please note: *The declarations below do not form part of the application for approval above. They will not be considered by the Research Ethics Committee.*
7. Where the research is reviewed by a REC within the UK Health Departments Research Ethics Service, I understand that the summary of this study will be published on the website of the National Research Ethics Service (NRES), together with the contact point for enquiries named in this application. Publication will take place no earlier than 3 months after issue of the ethics committee's final opinion or the withdrawal of the application.
8. Specifically, for submissions to the Research Ethics Committees (RECs) I declare that any and all clinical trials approved by the HRA since 30th September 2013 (as defined on IRAS categories as clinical trials of medicines, devices, combination of medicines and devices or other clinical trials) have been registered on a publically accessible register in compliance with the HRA registration requirements for the UK, or that any deferral granted by the HRA still applies.

This section was signed electronically by Ms Diana Galpin on 05/01/2016 16:37.

Job Title/Post:	Head of IP,Contracts and Policy
Organisation:	University of Southampton
Email:	rgoinfo@soton.ac.uk

D3. Declaration for student projects by academic supervisor(s)

1. I have read and approved both the research proposal and this application. I am satisfied that the scientific content of the research is satisfactory for an educational qualification at this level.

2. I undertake to fulfil the responsibilities of the supervisor for this study as set out in the Research Governance Framework for Health and Social Care.

3. I take responsibility for ensuring that this study is conducted in accordance with the ethical principles underlying the Declaration of Helsinki and good practice guidelines on the proper conduct of research, in conjunction with clinical supervisors as appropriate.

4. I take responsibility for ensuring that the applicant is up to date and complies with the requirements of the law and relevant guidelines relating to security and confidentiality of patient and other personal data, in conjunction with clinical supervisors as appropriate.

Academic supervisor 1

This section was signed electronically by Dr Nick Maguire on 12/01/2016 14:47.

Job Title/Post:	Associate Professor in Clinical Psychology
Organisation:	University of Southampton
Email:	nm10@soton.ac.uk

Appendix O

The Emotional Reaction to Challenging Behaviour Scale (ERCBS: Mitchell & Hastings, 1998) is a 15 item scale. Participants rate each item according to a 4-point Likert scale. An example of the measure is provided in appendix E. Some of the specific items (emotions) on the scale are conceptually close to other constructs explored within this study, such as self-efficacy, depersonalization and emotional exhaustion; this is to be expected, as low to moderate correlations were found between GSE, subscales of the ERCBS and subscales of the MBI.

Experiencing emotions such as "Hopeless", "Incompetent" and "Helpless" might suggest a lower level of GSE, or at least a low level of task-specific self-efficacy with respect to managing behaviour that challenges. Staff who rated experiencing these emotions "frequently" or "very frequently" when working with behaviour that challenges might be suitable candidates for further training in de-escalation, for example, or may need additional supervision or support from their line manager with regard to their well-being at work.

Emotions such as "Disgusted" and "Resigned" are more likely to correlate with feeling burnt out; specifically, within the domain of depersonalization. If depersonalization is a factor in staff attrition (Morse et al., 2012), staff who rated these emotions as occurring "frequently" or "very frequently" may be more likely to leave the unit. Not only does this highlight an urgent need to support these members of staff but from an organisational perspective, working with these staff and exploring their concerns may help to increase staff retention and reduce reputational risk associated with "burnt out" staff leaving the service.

Perhaps of greater interest to future research are the emotions of "Guilty" and "Betrayed", as these emotions are likely to arise from cognitions relating to how staff view the young people, how staff feel they should be responding to behaviour that challenges and cognitions shaped by staff members' own attachment style and experience of relationships.

Descriptive statistics for participants' responses of selected items from the ERCBS are shown in Table A1 below. 44 respondents completed the ERCBS (n=44); data from only 43 respondents was analysed for use in the main findings of the study as one respondent did not complete the other measures.

Table A1. Descriptive Statistics for Selected ERCBS Responses (n=44)

Emotion	Likert Response	Frequency	Frequency as Percentage of Total Respondents
Guilty	No	20	45.5
	Infrequently	21	47.7
	Frequently	3	6.8
	Very Frequently	0	0
Hopeless	No	11	25.0
	Infrequently	23	52.3
	Frequently	8	18.2
	Very Frequently	2	4.5
Incompetent	No	16	36.4
	Infrequently	20	45.5
	Frequently	7	15.9
	Very Frequently	1	2.3
Helpless	No	15	34.1
	Infrequently	17	38.6
	Frequently	8	18.2
	Very Frequently	4	9.1
Disgusted	No	30	68.2
	Infrequently	10	22.7
	Frequently	4	9.1
	Very Frequently	0	0
Resigned	No	14	31.8
	Infrequently	17	38.6
	Frequently	10	22.7
	Very Frequently	3	6.8
Betrayed	No	27	61.4
	Infrequently	14	31.8
	Frequently	3	6.8
	Very Frequently	0	0

Appendix P

Additional between-subjects T-tests were performed to compare mean MBI subscale, ERCBS subscale and GSE scale scores for ward staff and MDT staff. Ward staff have a greater amount of contact with the young people in the unit, compared to MDT staff. This means that ward staff experience a greater frequency of behaviour that challenges and T-tests were used to check that the two groups were broadly homogeneous in their experience of burnout, emotional reaction to challenging behaviour and general self-efficacy to warrant analysis of them as a single sample in the main study. Tables A2 to A7 show no significant differences between groups, except with regard to the MBI subscale of depersonalization:

Table A2. Mean Emotional Exhaustion Scores and Between Subjects (Job Role) Results

Job Role	n	Mean Score	S.D	t	Sig. (2-tailed)	95% CI
Ward Staff	31	22.65	12.00	.73	.47	-5.15 - 10.94
MDT Staff	12	19.75	10.86			

Table A3. Mean Depersonalization Scores and Between Subjects (Job Role) Results

Job Role	n	Mean Score	S.D	t	Sig. (2-tailed)	95% CI
Ward Staff	31	8.39	6.35	2.74	.01	1.40 – 9.21
MDT Staff	12	3.08	3.23			

Table A4. Mean Personal Accomplishment Scores and Between Subjects (Job Role) Results

Job Role	n	Mean Score	S.D	t	Sig. (2-tailed)	95% CI
Ward Staff	31	36.45	6.08	-.42	.67	-5.08 – 3.32
MDT Staff	12	37.33	6.20			

Table A5. Mean Fear/Anxiety Scores and Between Subjects (Job Role) Results

Job Role	n	Mean Score	S.D	t	Sig. (2-tailed)	95% CI
Ward Staff	31	4.77	3.28	.02	.98	-1.98 – 2.03
MDT Staff	12	4.75	1.55			

Table A6. Mean Depression/Anger Scores and Between Subjects (Job Role) Results

Job Role	n	Mean Score	S.D	t	Sig. (2-tailed)	95% CI
Ward Staff	31	9.45	5.50	1.63	.11	-.66 – 6.23
MDT Staff	12	6.67	3.37			

Table A7. Mean General Self-Efficacy Scores and Between Subjects (Job Role) Results

Job Role	n	Mean Score	S.D	t	Sig. (2-tailed)	95% CI
Ward Staff	31	31.23	3.85	-.33	.75	-3.18 – 2.30
MDT Staff	12	31.67	4.33			

With regard to the differences in mean depersonalization scores, a decision was made not to report or explore this within the main findings of the study, for two reasons. Firstly, it is difficult to know whether or not a genuine effect exists as the associated confidence interval (1.40 – 9.21) is extremely wide. Secondly, general self-efficacy was not found to mediate the effect of depersonalization on fear/ anxiety or depression/ anger reactions to behaviour that challenges; hence quantitative findings emphasised the mediation effect that was found to occur with emotional exhaustion.

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