

UNIVERSITY OF SOUTHAMPTON

FACULTY OF SOCIAL, HUMAN AND
MATHEMATICAL SCIENCES

School of Psychology

**Burnout in mental health professionals: The role of
individual characteristics**

by

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Thesis for the degree of Doctor of Clinical Psychology

May 2017

Literature review word count (excluding tables): 8027

Empirical paper word count (excluding tables): 9375

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UNIVERSITY OF SOUTHAMPTON

ABSTRACT

FACULTY OF SOCIAL AND HUMAN SCIENCES

Psychology

Thesis for the degree of Doctor of Clinical Psychology

**BURNOUT IN MENTAL HEALTH PROFESSIONALS:
THE ROLE OF INDIVIDUAL CHARACTERISTICS**

A review of the literature investigating the relationship between individual characteristics and burnout in mental health professionals was conducted; a topic which has been under-represented by prior reviews of burnout in mental health professionals. A review of twenty-one empirical studies suggested individual characteristics do predict burnout in mental health professionals. The evidence indicated that personality traits were predictive of burnout, particularly neuroticism. Whilst negative coping strategies and psychological flexibility may also influence burnout, the studies do not allow for a definitive conclusion at this stage. Research remains predominately cross-sectional and further research could be conducted with a longitudinal design to confirm causality. The theoretical and clinical implications will be discussed.

A lack of research on burnout in CAMHS and growing evidence of the value of considering employees' psychological characteristics as a means of preventing burnout resulted in an empirical study exploring the relationship between six areas of worklife, self-efficacy and burnout. CAMHS practitioners across four NHS trusts took part in an online survey. Staff reported high levels of emotional exhaustion, low levels of depersonalisation and high levels of personal accomplishment. Regression analyses revealed that employees who did not appear well matched to their workload and rewards experienced higher emotional exhaustion. Employees who experienced poor workload and reduced control at work were reporting lower levels of personal accomplishment. A mediation analysis confirmed

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individuals' self-efficacy explained this relationship. Therefore, future interventions should consider promoting employees' self-efficacy to improve personal accomplishment as well as addressing workload and control at work in order to reduce emotional exhaustion.

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Academic Thesis: Declaration of Authorship

I, Juanita Claire Merriman, 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.

Title of thesis: Burnout in mental health professionals: The role of individual characteristics

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. Either none of this work has been published before submission, or parts of this work have been published as: [please list references below]:

Signed:.....

Date:

Acknowledgments

Thank you to all the CAMHS teams for being so interested in the research project and supporting the recruitment processes each step of the way, and thank you to all the employees who gave up their precious time to take part in the project.

I would like to thank my thesis supervisors Nick Maguire and George Johnson, your continued support, guidance and all of your knowledge, has enabled me to complete this project. Your calm, positive and approachable attitude has been invaluable and I have learnt so much along the way. Thank you.

I feel blessed every day for my wonderful family and friends. I am eternally grateful for having you all in my life, you have always been there when I have needed you and I have appreciated your support so much. Thank you to my family, who are always interested in how my work is progressing. Your continued support and confidence in my ability to get on to, and complete the doctorate has been invaluable. All of your phone calls over the years have seen me through some stressful times! Thank you to all of my friends, those who live close and afar, you have provided endless support to me and at the same time enabled me to so enjoy my days off. I value your friendship so much.

Thank you to my wonderful cohort, your supportive, helpful, kind and caring approach has really seen me through some stressful times. I feel so lucky to have made friends for life.

Chapter 1: Literature Review

Exploring the Relationship between Individual Characteristics and Burnout in Mental Health Professionals

Introduction

Setting the Context

Burnout is evident in between 21-67% of mental health workers (Morse, Salyers, Rollins, Monroe-DeVita, & Pfahler, 2012). Characterised by cynical client attitudes (Maslach & Jackson, 1981), burnout is particularly concerning for mental health professionals who rely on the interpersonal relationship to facilitate effective therapeutic interventions (Gadecka, Piskorz-Ogórek, Regin, & Kowalski, 2015).

Burnout has severe consequences. It compromises the health of the professional (Stalker & Harvey, 2002), which impacts their organisation as sick leave, job dissatisfaction and staff turnover all increase (Maslach, Schaufeli, & Leiter, 2001; Stalker & Harvey, 2002; Toppinen-Tanner, Ojajärvi, Väänänen, Kalimo, & Jäppinen, 2005). Practitioners are less likely to adhere to evidence-based practices (Rollins, Salyers, Tsai, & Lydick, 2010) and patients experience inconsistent care (Boyer & Bond, 1999). Burnout is associated with poorer treatment outcomes (Gowdy, Carlson, & Rapp, 2003) and reduced service satisfaction (Garman, Corrigan, & Morris, 2002).

The predominant view in the burnout field is that burnout develops from exposure to ongoing organisational stressors (Maslach & Jackson, 1981) and is exacerbated by the individual's lack of personal resources and ability to cope with these stressors (Cooper, 2001; Schaufeli & Buunk, 2003). The focus on larger effect sizes has meant that research has prioritised the relationship between organisational factors and burnout over individual factors (Maslach, 2015; Maslach et al., 2001; Schaufeli & Enzmann, 1998). A lack of clarity remains about which individual factors are most important.

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There is a discrepancy, whereby interventions are primarily focused on the individual, yet, priority is given to organisational and demographic predictors in the literature (Paris & Hoge, 2010). To ensure interventions are empirically grounded, it is paramount to understand which individual characteristics may be associated with burnout. Therefore the literature investigating the association between individual characteristics and burnout in mental health professionals will be reviewed.

Burnout

Burnout was first conceptualised after repeated observations revealed similar patterns in staff, in response to excessive work demands (Freudenberger, 1974). A definition that is most commonly used in research, describes burnout as a syndrome involving three aspects (Maslach & Jackson, 1981). Firstly, professionals experience emotional exhaustion (EE) whereby they feel unable to give themselves at a psychological level, which can create emotional distance with their clients (Maslach et al., 2001). Secondly, and related to this, negative or cynical attitudes about their client develop which is termed depersonalisation (DP) and can be seen as a method of coping with the emotional exhaustion. The third aspect, known as personal accomplishment (PA), refers to an individual's tendency to evaluate their work negatively and feel unhappy with their job related accomplishments. High emotional exhaustion, high depersonalisation and low personal accomplishment are indicators of burnout.

Burnout is specific to the workplace and is therefore separate to depression which pervades all aspects of an individual's life (Maslach et al., 2001) and is distinct from job dissatisfaction (Maslach & Jackson, 1981). Compassion fatigue, vicarious trauma and secondary trauma have been identified as negative consequences of health care work, however, they are distinct constructs with differing presentations (Canfield, 2005; Dunkley & Whelan, 2006; Figley, 1995).

Burnout is commonly assessed using the Maslach Burnout Inventory (MBI: Maslach & Jackson, 1981) which has good validity and reliability (Maslach, Jackson, & Leiter, 1996). The MBI assesses the three constructs,

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whereas other measures, such as the Oldenburg Burnout Inventory (Demerouti, Bakker, Vardakou & Kantas, 2003) only measures one or two of these constructs and the Professional Quality of Life Scale only provides an overall burnout score (ProQOL: Pines, 1984; Stamm, 2010).

Predictors of burnout. Broadly, four domains capture the variables which are thought to influence the development of burnout: demographic factors; occupational factors; organisational factors and individual factors (Maslach, 2015; Maslach et al., 2001). Identifying organisational factors has been a central theme of the literature, resulting in six key factors: workload; control; reward; community (support); fairness and values (Leiter & Maslach, 2003). An individual's unique characteristics are thought to buffer the effects of organisational stressors (Adriaenssens et al, 2015; Alarcon et al, 2009; Boyd et al, 2009; Cooper, 2001; Prins et al, 2007; Schaufeli & Buunk, 2003). However, it remains unclear which characteristics are more important in mental health workers (Paris & Hoge, 2010).

Individual Factors and Burnout: Theoretical Models

Burnout has been conceptualised by a number of theoretical models. Theories initially focused on the role of organisational factors in influencing burnout. This was conceptualised by the Job Demands-Resources model which suggested burnout developed when workers have high levels of job demands and insufficient resources to cope with the demands (Demerouti, Bakker, Nachreiner & Schaufeli, 2001). More recently the Areas of Worklife model (Leiter & Maslach, 2003) has identified six key areas of workplace stressors: workload, control, reward, fairness, community and values. It suggests a mismatch between the person and the job across the six domains, increases burnout. These models focus on organisational factors and therefore do not seek to ascertain which individual factors play an important role in the development of burnout. This limitation of the Area of Worklife model means they cannot be applied to research looking into the role of both organisational and individual factors.

The need to acknowledge both environmental and individual factors has led to the Lazarus and Folkman transactional model of stress (1984)

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being borrowed from the stress literature, to provide a theoretical basis for understanding which individual factors are important in burnout. Lazarus and Folkman (1984) propose that stress occurs as a result of external demands exceeding the individual's perception of or ability to cope. Consequently, an individual's appraisal of the stressor, their resources and coping abilities can buffer the relationship between job demands and burnout. However, the transactional model of stress (Lazarus & Folkman, 1984) does not identify the specific factors associated with burnout which limits its application to burnout. Despite this critique, it provides a useful framework for understanding the theoretical constructs and has been widely used in the burnout literature.

Other models have expanded upon the concepts outlined in the transactional model of stress (Lazarus & Folkman, 1984). Hobfoll (1989) goes further by specifying that the individual's goal for coping is to protect their resources of objects (e.g. home, food), personal characteristics (e.g. self-esteem, mastery), conditions (e.g. being married) or energies (e.g. time, money, knowledge). Resources are valued and promote a positive sense of self and status; the perception of loss, or actual loss of resources causes stress. Following the theoretical framework of the transactional model of stress (Lazarus & Folkman, 1984), Carson and Kuipers' model (1998) explained that although psychological distress including burnout results from environmental or occupational stressors, it is the individual's resources that moderate the development of burnout; these include: high self-esteem, support networks, hardiness, coping skills, mastery, personal control, emotional stability and good physiological release. In summary, it is reductionist to assume burnout results solely from organisational stressors; an individual's dispositional characteristics, such as personality, appraisal and coping abilities play a crucial role (Hobfoll, 1989). However, the theoretical models lack clarity over which individual factors are most important and the models are associated with stress rather than specifically burnout. Therefore, the purpose of this review is to clarify which individual factors are associated with burnout, in a mental health professional population.

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Defining Individual Characteristics

The theoretical models and burnout literature refer to a variety of individual characteristics, using a range of definitions including: ‘moderators’ (Carson & Kuipers, 1998); a ‘coping reservoir’ made up of personality traits, temperament and coping style (Dunn, Iglewicz, & Moutier, 2008); ‘personal resources’ associated with positive self-evaluations (Hobfoll, 1989); ‘coping resources’ (Lazarus & Folkman, 1984) and ‘psychological capital’ involving self-efficacy, optimism, hope and psychological resilience in burnout (Aliyev & Tunc, 2015; Luthans, Youssef & Avolio, 2007). Whilst this demonstrates the breadth of characteristics involved in the development of burnout, a clear definition or concept is currently lacking. Therefore, for the purpose of this review, previous literature reviews have been consulted in an attempt to identify the individual factors associated with burnout. Broadly, these have fallen into three themes: core self-evaluations, personality traits and coping strategies (Alarcon, Eschleman, & Bowling, 2009; Dunn et al., 2008; Judge & Bono, 2001; Martins Pereira et al., 2011).

Personality is defined as a set of psychological systems, residing inside the person, that create patterns of behaviour, thoughts and feelings that are characteristic of that individual (Allport, 1961). Personality traits are thought to be influential in the development of burnout because they influence an individual’s perception of stressors and the coping strategies they employ (Boyd et al., 2009; Cañadas-De la Fuente et al., 2015; Chang, 2012; Code & Langan-Fox, 2001 ;).

Core self-evaluations (CSE) are related to how people perceive the world, they are the conclusions one holds about their self-worth or competence, for example, self-esteem or self-efficacy (Judge, Locke & Durham, 1997) which influences whether they believe they can cope with environmental stressors. Coping is the way in which people respond to a threat, loss or harm in order to reduce it and the associated distress (Carver & Connor-Smith, 2010).

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Although the theoretical models have not explicitly used these terms, these characteristics are evident among the models and previous reviews have utilised Carson and Kuipers' idea of 'moderators' to suggest coping, personality and core self-evaluation as the moderating factors (Coyle, Edwards, Hannigan, Fothergill, & Burnard, 2005; Edwards & Burnard, 2003; Fothergill, Edwards, & Burnard, 2004). Therefore, for the purpose of conducting this review, individual characteristics will be defined as the psychological characteristics which could influence individuals' responses to their organisational context and therefore influence burnout; characteristics such as core self-evaluations, personality and coping skills.

Individual Characteristics and Burnout in Mental Health Professionals

Several reviews have been conducted on burnout in mental health professionals. In a review of burnout in mental health social workers, Coyle (2005) concluded research had focused on the relationship between burnout and occupational stressors or socio-demographic factors but had neglected to consider moderating characteristics like self-esteem or coping skills. Edwards and Burnard (2003) sought to review the coping strategies used by occupational therapists working in mental health settings; here, coping strategies focused on workplace support and supervision with little research exploring other coping strategies. However, in a review of burnout in psychiatry, the role of different coping strategies, 'vulnerable personalities' and other individual characteristics, such as, self-esteem were highlighted as a potential moderators of burnout (Fothergill, Edwards, & Burnard, 2004), although there were inconsistencies and only a limited number of studies. Paris and Hoge's (2010) systematic review of the literature on burnout in mental health workers indicated that research had focused on the relationship between occupational stressors or socio-demographic factors over personality and coping strategies. Furthermore, when coping strategies were represented in the literature the focus was on social support or supervision as a coping strategy, other coping strategies were largely neglected. In conclusion, there has been no literature review of the individual characteristics associated with burnout in mental health professionals. Furthermore, of those reviews that have been conducted,

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whilst the role of individuals' resources have been implicated by some, it has been largely neglected in comparison to other areas of burnout research; a trend which has been seen in the literature on burnout in other healthcare professionals too (Adriaenssens, De Gucht, & Maes, 2015).

In a review of burnout interventions for mental health professionals, Morse (2012) concluded interventions will be most effective when they consider both individual and organisational factors. Therefore, the dearth of information on the role of individual characteristics is concerning. Developing a clear aetiology of the individual characteristics associated with burnout should now be prioritised to facilitate the development of empirically grounded interventions.

Summary of Introduction

It is widely accepted that individual characteristics can influence the development of burnout. Theoretical models are based on the premise that an individual's characteristics mediate the relationship between workplace stressors and burnout. However, reviews of burnout in mental health professionals indicate that literature prioritises organisational factors over individual factors (Coyle et al., 2005; Paris & Hoge, 2010) and a clear understanding of which individual characteristics are associated with burnout is lacking.

Aim and Scope of Literature Review

This review aims to ascertain which individual characteristics are associated with burnout in mental health professionals, it aims to generate an understanding of the individual factors which have been studied and identify gaps or limitations of the current literature. This hopes to broaden our understanding of the aetiology of burnout in mental health professionals and to inform future interventions.

Search Strategy

The heterogeneity of the concept of ‘individual characteristics’ made defining ‘individual characteristics’ in order to review the literature, inherently difficult. Therefore, this search strategy is not claiming to be the only way to search for individual characteristics but is transparent and goes some way towards developing an understanding of this topic which is currently under-represented.

A literature search was conducted using the following electronic databases: PsychINFO, the Cumulative Index of Nursing and Allied Health Literature (CINAHL), MEDLINE and Science Direct. Two methods were used to generate search terms. Firstly, individual characteristics which had been identified from previous reviews of the burnout literature (Adriaenssens et al., 2015; Alarcon et al., 2009; Leiter, 1991; Maslach et al., 2001; McFadden, Campbell, & Taylor, 2015; Prins et al., 2007) were collated. These individual characteristics broadly fell into 3 themes: core self-evaluation, personality traits and coping strategies. Secondly, the search terms used in previous systematic reviews were identified (Alarcon et al., 2009; Dunn et al., 2008; Judge & Bono, 2001; Martins Pereira et al., 2011). These terms were combined to inform the search terms used in this systematic review and are shown in Table 1. All search terms were used in each database.

Table 1

Systematic Review Search Terms

Review Protocol	Search Terms Used
Population	Mental health profession/professional Mental health work*/ personnel Mental health teams/organisation/service Inpatient mental health Mental health nurse/occupation Psychiatric Psychiatrist Psychologist Therapist Counsellor
Outcome variables	Burnout Maslach MBI Occupational Stress Work stress Job Stress
Predictor variables	Core self-evaluation Self esteem Self-efficacy Locus of control Emotional stability Personality/ Personality traits Disposition Five factor model Big five Extraversion

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Conscientiousness
Agreeableness
Neuroticism
Openness
Hardiness
Type A personality
Optimism
Proactive personality
Coping strategy/ strategies/ style
Emotion focused coping
Problem focused coping

Note. MBI = Maslach Burnout Inventory

Articles published between 2001 and 2016 were retrieved. The search yielded a total of 2,384 studies which were uploaded onto a systematic review tool (Covidence) which identified 66 duplicates, leaving 2318 articles to be reviewed.

Inclusion and Exclusion Criteria

Articles were included if they were peer reviewed, empirical papers, written in English. Studies were included when they measured an individual characteristic and had analysed its relationship to burnout in a mental health worker population. Studies which had the correct variables but did not analyse the relationship were excluded.

Articles assessing burnout using different measures were included. Articles measuring work stress using concepts other than burnout were excluded (e.g. compassion fatigue) because they are seen as different constructs (Canfield, 2005; Dunkley & Whelan, 2006; Figley, 1995).

Included articles measured burnout in professionals who work in mental health roles, that involved workers who did psychological work in forensic, (e.g. batterer intervention programs), abuse, trauma and addictions services. Professions were included when mental health work was indicative of the nature of the role (e.g. psychiatrist, psychologist), however, when

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there was ambiguity (e.g. nurse) their workplace setting was confirmed as providing a mental health service (e.g. psychiatric ward). Professionals in education settings or when it was unclear whether they worked psychologically or in mental health settings were excluded (e.g. music therapist). Studies were excluded when their population was mixed between mental health and non-mental health professionals, unless analysis was conducted with only the mental health workers.

Articles measuring an individual characteristic that could be deemed a psychological characteristic such as dispositional or stable traits, personality, temperaments, cognitive or behavioural coping strategies and core self-evaluations were included. Articles exploring mood disorders or attitudes to patients were excluded because these can be more transient states rather than dispositional characteristics, these are also viewed as a consequence of burnout and not necessarily a predictor (Bowers, Nijman, Simpson, & Jones, 2011; Madathil, Heck, & Schuldberg, 2014). Articles that sought to change individual characteristics in order to influence burnout, were excluded. The references of the remaining articles were searched which gave a total of 21 articles to be included in the literature review (see figure 1).

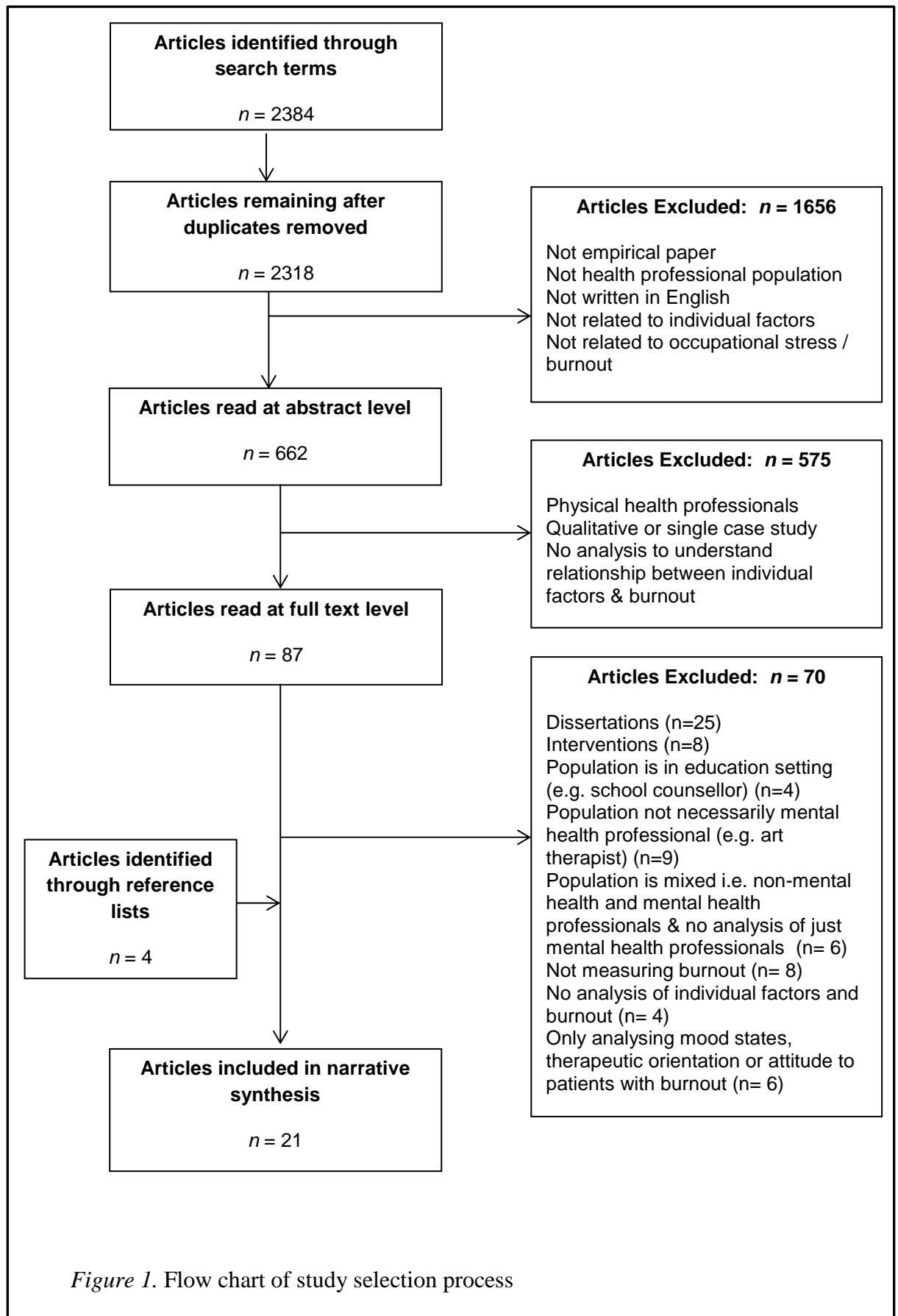


Figure 1. Flow chart of study selection process

Data Extraction & Synthesis

Table 2 provides an outline of the design and results of the included studies. This will be followed by an exploration of their findings. The Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies (National Institute of Health, 2014) was used to assess the quality of the studies. This tool has 14 questions to answer about each study with the aim of raising awareness of possible bias, limitations, and strengths of each study (Appendix A). A point is awarded for each area of possible bias that the study addressed, this creates a final score whereby higher scores indicate a better quality study. However, the authors of this tool advise against using a final score to draw conclusions about a study's quality and instead suggests considering how each question aids understanding about the potential bias of this study. Therefore, the findings from the quality assessment are used in the data synthesis to understand the validity of a study's findings and inform the conclusions which can be drawn about their results.

Table 2

Quantitative Empirical Studies Investigating the Relationship between Individual Factors and Burnout in Mental Health Professionals

Study and Origin	Participants (N)	Individual Characteristic (Measure)	Burnout Measure	Research Design	Analysis	Key Findings
Bahner & Berkel, 2007 USA	Batterers workers – counsellors (n= 115)	1. <u>Personality dimensions:</u> Openness; Extraversion; Agreeableness & Extraversion. (<i>Comprehensive Personality and Affect Scales</i>)	MBI: EE; DP & PA	Cross Sectional Survey	Hierarchical Multiple Regression (x3 dependent variables: EE, DP & PA) Predictor variables entered in order for each model: 1) Demographic & job setting 2) Job Stress 3) Social support 4) Personality	1. Model with EE & personality variables was statistically significant ($R^2 = .45$, $F(12, 102) = 6.87$, $p < .001$). 1b. Higher EE predicted by higher job stress pressure & neuroticism ($\beta = .22$, $t = 2.57$, $p < .05$). 2. Model with DP & personality variables was statistically significant ($R^2 = .41$, $F(12, 102) = 5.85$, $p < .001$). 2b. Higher DP significantly associated with higher job stress threat & lower agreeableness ($\beta = -.41$, $t = 3.77$, $p < .05$). 3. Model with PA and personality variables was statistically

						significant ($R^2 = .33$, $F(12, 102) = 4.13$, $p < .001$).
						3b. Higher PA significantly associated with less job stress threat.
Baker, O'Brien, & Salahuddin, 2007	Crisis Shelter Workers – women ($n = 123$)	1. <u>Self-efficacy at work</u> (<i>Generalised Self-efficacy Scale</i>)	MBI – HSS: EE; DP & PA	Cross Sectional Survey	Hierarchical Stepwise Multiple Regression (x2 dependent variables: EE & PA)	1. EE model accounted for 36.3 % variance ($R^2 = 0.071$, $F(1,117) = 13.04$, $p < 0.001$). 1b. The significant predictors were time pressure work stress and self-efficacy for being productive at work ($\beta = -0.27$, $p < .01$). Self-efficacy contributed an extra 7.1% variance than work stress variables.
USA		2. <u>Self-efficacy in various situations</u> (<i>General Self-efficacy subscale from Self-efficacy Scale</i>)			Predictor variables in order: 1 st Block: Stress 2 nd Block: Social support 3 rd Block: Self-efficacy 4 th Block: Coping strategies	2. PA model accounted for 23% variance ($R^2 = 0.136$, $F(1,117) = 20.81$, $p < 0.001$). 2b. The significant predictors were time pressure work stress and self-efficacy addressing workplace stressors ($\beta = 0.38$, $p < .01$) were significant predictors of PA. Self-efficacy accounted for an extra
		3. <u>Coping strategies:</u> Seeking emotional/instrumental support & Active coping, planning and positive re-framing				

					13.6% variance over work stress variables.	
					(Brief COPE: 2 scales)	
Bakker, Van der Zee, Lewig, & Dollard, 2006	Volunteer counsellors (palliative care) (n = 75)	1. <u>Personality</u> : Extraversion; Agreeableness; Conscientiousness; Neuroticism & Autonomy. (Five Factor Personality Inventory)	MBI: EE; DP & PA	Cross Sectional Survey	Stepwise Regression Analysis (x3 criterion variables: EE; DP & PA) Five personality traits as predictors.	1. EE model accounted for 13% of the variance, neuroticism was the sole predictor ($\beta = .36, p < .001$). 2. DP model accounted for 17% of the variance. Neuroticism ($\beta = .32, p < .01$); extraversion ($\beta = -.23, p < .01$); and autonomy ($\beta = -.22, p < .05$) all demonstrated significant effects on DP. 3. PA model accounted for 19% of the variance. Extraversion ($\beta = .41, p < .001$) and neuroticism ($\beta = -.26, p < .05$) are independent and significant predictors of PA.
Ben-Porat & Itzhaky, 2014	Trauma Social Workers (Shelter therapists / family crisis) (n = 214)	1. <u>Mastery</u> (Pearlin & Schooler, Measure)	Pines Burnout Questionnaire:	Cross Sectional Survey	Hierarchical Regression Analysis 1) Background variables (age & years of experience) 2) Trauma exposure	1. Higher burnout was predicted by lower age, exposure to past trauma, lower self-esteem ($\beta = .16, p < .05$), lower mastery ($\beta = .19, p < .05$) and influence. These personal resources added 34% to explaining variance in burnout above the

		<i>(Rosenburg Measure)</i>	& Mental Exhaustion		3)Personal resources (self-esteem, mastery, role competence) & environmental resources (social support)	background variables and trauma exposure.
Elliott & Daley, 2013 UK	Forensic MH & LD services (n= 135)	1. <u>Range of coping strategies</u> <i>(Brief Cope Inventory)</i>	MBI – HSS: EE; DP & PA	Cross Sectional Survey	2 Step linear regression model: (x3 dependent variables: EE; DP & PA) Step 1) Demographic variables Step 2) Work stressors, psychological distress, staff support and satisfaction & coping strategies.	1. EE model explained 37% of the variance ($r^2 = .365$). Psychological distress, work stressors and negative coping strategies ($\beta = .268, p \leq .000$) were significant predictors of higher EE. 2. DP model explained 17% of the variance ($r^2 = 0.174$). Work stressors and negative coping ($\beta = .271, p \leq .003$) predicted higher DP. 3. Only staff support and satisfaction predicted higher PA. Coping strategies did not predict PA.
Gilibert & Daloz, 2008	Psychiatric Hospital Health care professionals	1. <u>Self-esteem</u> <i>(Self-esteem inventory)</i>	MBI: EE; DP & PA	Cross Sectional Survey	Stepwise Regression (x3 dependent variables: EE; DP & PA)	1.EE predicted by discrepancy between how one would like physical state and job to be and what they are, low self-esteem, sex

France	(n = 49)	2. <u>Locus of control</u> (5items Lumpkins Q)				life, unstable stressors. 2.DP predicted by lower self-esteem, dissatisfaction with intellectual possibilities & physical state. 3.PA predicted by unstable stressors, intellectual possibilities. PA intensity predicted by frequent depersonalisation, professional self-esteem, discrepancy mental life, sleep, lower locus of control.
Gutierrez & Mullen, 2016	Counsellors (Mental health & Marriage & family therapists) USA (n= 539)	1. <u>Trait Emotional Intelligence (EI)</u> (Trait emotional intelligence short form)	Counsellor Burnout Inventory:	Cross Sectional Survey	2 Step Structural Equation Modelling	1. Model accounted for 38% of burnout variance ($\beta = -.62$, $p \leq .001$). Higher global trait emotional intelligence contributes to decreased burnout in counsellors.
Killian, 2008	Trauma therapists (Sexually abused children and Domestic Violence)	1. <u>Affective coping style</u> (Brief COPE) 2. <u>Self-care strategies</u>	MBI: only EE	Mixed Methods: Interviews & Cross Sectional Survey	Multiple Regression Analysis	1. EE model accounted for 74% of variance ($F = 45.92$, $p < .001$). Symptoms of work drain, lack of work morale and neuroticism ($\beta = .20$) predict higher EE.

	adults) (n = 104)	<i>(Brief COPE)</i> <u>3.Emotional self-awareness</u> <i>(Emotional Self-awareness Questionnaire)</i> <u>4.Sense of autonomy & locus of control</u> <i>(5 adapted Qs)</i>				
Lakin, Leon, & Miller, 2008	Child Residential Treatment Centres frontline staff USA (n= 375)	<u>1.Empathic Concerns</u> <i>(Individual Reactivity Index)</i> <u>2.Emotional Contagion</u> <i>(Emotional Empathy Scale)</i> <u>4. Personality: Extraversion & neuroticism</u>	MBI: EE; DP & PA	Cross Sectional Survey	1.Hierarchical Linear Modelling	1. Higher EE was predicted by higher Neuroticism ($\beta = .29$; $t(235) = 3.07$, $p < .01$), lower training, lower job satisfaction, lower extraversion ($\beta = -.21$, $t(235) = -2.20$, $p < .05$) and lower managerial support & Hispanic & native American ethnicity. 2. Higher DP was predicted by younger age, higher neuroticism (β

		(<i>Big Five Inventory</i>)				= .38, $t(237) = 5.03$, $p < .01$) lower empathic concern ($\beta = -.30$, $t(235) = -3.52$, $p < .01$), less perceived management support, Hispanic & Native American ethnicity.
						3. Lower job satisfaction, extraversion, ($\beta = -.24$, $t(237) = 3.34$, $p < .01$) communicative responsiveness, empathic concern ($\beta = .30$, $t(237) = 3.10$, $p < .01$), higher levels of neuroticism and African American ethnicity predicted lower PA.
Langdon, Yaguez, & Kuipers, 2007 UK	Nursing Staff Medium secure hospital for LD ($n=27$)	1. <u>Expressed Emotion</u> <i>(Five Minute Speech Sample)</i>	MBI: EE; DP & PA	Between subjects design (high & low Emotional Expression)	Non-parametric Mann Whitney U test: comparing questionnaire scores of high and low emotional exhaustion groups.	1. EE was not associated with emotional expression. High DP ($z = -2.25$, $p = 0.02$) and low PA ($z = -3.00$, $p = 0.002$) were associated with the high expressed emotion group.
Lent & Schwartz, 2012 USA	Counsellors (CMH, Inpatient, private practice) ($n = 340$)	1. <u>Personality:</u> Extraversion; Agreeableness; Conscientiousness; Neuroticism & Openess.	MBI- HSS: EE; DP & PA	Cross Sectional Survey	Multiple Regression Analysis (x3 dependent variables: EE;DP& PA).	1.5 personality variables significantly predicted EE ($F(5, 336) = 48.05$, $p < .001$) with a large effect size ($R^2 = .41$), DP ($F(5, 336) = 17.15$, $p < .001$) & PA ($F(5, 336) = 20.50$, $p < .001$) with

		<i>(International Personality Item Pool Big Five)</i>			<p>moderate effect sizes ($R^2 = .20$ & $R^2 = .23$, respectively), accounting for 20-41% of variance.</p> <p>2. Higher EE predicted only by higher neuroticism. ($t = 11.36, p < .001$).</p> <p>3. Higher DP predicted by higher neuroticism ($t = 3.83, p < .001$) & lower agreeableness ($t = -5.06, p < .001$).</p> <p>4. Higher PA predicted by lower neuroticism ($t = -5.04, p < .001$) & higher agreeableness ($t = 4.04, p < .001$).</p>	
Leon, Visscher, Sugimura, & Lakin, 2008	Frontline staff in children's residential treatment centres (Psychiatric)	1. <u>Personality</u> : only extraversion & neuroticism <i>(Big Five Inventory)</i>	MBI: EE; DP & PA.	Cross Sectional Survey	Multiple Regression Analysis Block 1: Age, job satisfaction, management support, training. Block 2. Personality variables & client severity ratings.	<p>1. Model predicted 36% of variance of EE when controlling for block 1 variables. Neuroticism predicted EE ($\beta = .26, t = 4.40, p < 0.001$). Neuroticism and PTSD clients predicted high EE ($\beta = .17, t = 2.75, p < .01$).</p> <p>2. Model predicted 21% of variance in DP scores. Older, more satisfied with job & higher</p>
USA	$n=203$					

						<p>neuroticism ($\beta = .31, t = 4.89, p < .001$) predicted higher DP. Higher psychosis client populations & higher neuroticism predicted higher DP ($\beta = .17, t = 2.71, p < .01$).</p> <p>3. Model predicted 21% variance of DP scores. High PTSD clients & neuroticism predicted higher DP ($\beta = .15, t = 2.30, p < .02$).</p>
<p>Malinowski, 2013 USA</p>	<p>Psychotherapists & psychologists ($n = 133$)</p>	<p>1. <u>Humour (coping technique)</u>: self-enhancing humour; affiliative humour; aggressive humour & self-defeating humour. (<i>Humour Styles Questionnaire</i>)</p>	<p>MBI – HSS: EE; DP & PA</p>	<p>Cross Sectional Survey</p>	<p>Stepwise Regression Analysis (x3 dependent variables: EE; DP & PA) Predictor variables: self-enhancing humour; affiliative humour; aggressive humour & self-defeating humour.</p>	<p>1. Model accounted for 10% of variance ($R^2 = .10$) of EE. Self-defeating humour was the sole significant predictor ($F(1, 131) = 14.96, R = .32, p < .001$) in a positive direction.</p> <p>2. Model accounted for 9% of variance of DP ($R^2 = .09$). Self-defeating humour was the sole significant predictor ($F(1, 131) = 12.53, R = .30, p < .01$) in a positive direction.</p> <p>3. Model accounted for 7% of variance of PA ($R^2 = .07$). Self-enhancing humour was the sole significant predictor ($F(1, 131) =$</p>

						10.31, $R = .27$, $p < .01$) in a positive direction.
Oginska-Bulik, 2006	Psychiatrists & nurses in mental health hospital	1. <u>Type D Personality</u> : Negative affectivity & social inhibition.	MBI: EE & PA	Cross Sectional Survey	Linear Regression Analysis (x3 dependent variables: EE; DP & PA)	1. Work overload and negative affect (personality) ($\beta = 0.08$, $t = 3.46$, $p < 0.01$) predicted EE and accounted for 62% of the variance ($R^2 = 0.62$; $F(2;76) = 61.20$; $p < 0.000$).
Poland	($n = 79$)	(<i>DS -14</i>)			Predictor Variables: type D personality, work stressors. Controlled for gender, work experience and profession differences	2. Personality was no predictive of DP. The model was significant, lack of rewards and physical burden were the significant predictors.
						3. Unpleasant work conditions, negative affect (personality) ($\beta = -0.43$, $t = -3.84$, $p < 0.01$) & interaction of profession, gender & work experience predicted PA. The accounted for 26 % of the variance ($R^2 = 0.26$; $F(3;75) = 8.83$; $p < 0.000$).
Pompili et al., 2006	Psychiatric Nurses ($n = 37$)	1. <u>Defence mechanisms</u> : Turning against the object;	MBI: EE; DP & PA.	Cross Sectional Survey	3x2 ANOVA (wards x burnout present or absent) for each defence mechanism	Psychiatric nurses relied on defence mechanisms: Turning Against the Self (TAS: $F = 13.58$, $p < 0.001$) and Reversal (REV: 9.16,

Italy	*part of a mixed sample (n = 120)	Principialisation; Turning against the self; Reversal & Projection. (<i>Defense Mechanixm Inventory</i>)				p <.003) when burnout was present.
Rzeszutek & Schier, 2014	Gestalt & CBT therapists (n = 200)	1.Temperament: <u>Briskness</u> ; Perseveration; sensory sensitivity; emotional reactivity; endurance & activity. (<i>Formal characteristics of behaviour-temperament inventory</i>)	Oldenburg Burnout Inventory: exhaustion & disengagement	Cross Sectional Survey	Hierarchical Regression Analysis (x1 dependent variable: burnout) Predictors: temperament and types of social support	1. Perceived social support (accounted for 33% of variance) and briskness (accounted for 10% of burnout) were both negatively associated with burnout. Perseveration significant positive predictor of burnout which accounted for 5% of variance.
Somoray, Shakespeare-Finch, & Armstrong,	Mental Health Workers providing counselling services	1.Personality: Extraversion; Agreeableness; Conscientiousness; Neuroticism &	ProQOL Burnout	Cross Sectional Survey	Multiple Regression Model 1) Step 1: sex, age, trauma history	1. Final regression model was significant (R ² = 0.55, F(10, 135) = 16.71, p < .001). Age negative predictor of burnout,

2016 Australia	(n = 156)	Autonomy. (<i>NEO Five-Factor Inventory</i>)			2) Step 2: FFM 5 personality traits 3) Step 3: workplace belongingness.	accounting for 18% of variance. Neuroticism positive relationship with burnout ($\beta = 0.34, p < .001$). Extraversion ($\beta = -0.16, p < .05$) & agreeableness had negative relationship. Together they accounted for 28% of the variance. Workplace belongingness added 9.4% of variance accounted for.
Thompson, Amatea, & Thompson, 2014 USA	Mental Health Counsellors (n= 213)	1. <u>Coping Strategies</u> (problem focused, emotion focused, maladaptive strategies) (<i>Brief COPE Inventory</i>) 2. <u>Extent of Mindfulness attitudes</u> (<i>Mindful Attention Awareness Scale</i>)	ProQOL - Burnout	Cross Sectional Survey	Hierarchical regression analysis (x1 dependent variable: burnout) Predictors: 1. Perception of working conditions and gender. 2. Years working as a counsellor 3. Personal resources (mindfulness, compassion satisfaction, emotion focused coping, problem-focused coping and maladaptive coping)	1. Model accounted for 67% of burnout variance explained by work perceptions, gender, length of time in field and personal resources ($R^2 = .656, p < .001$). Gender, time working did not contribute to burnout 2. Greater mindfulness predicted lower burnout ($\beta = -2.698, t = -4.580, p < .001$), as did compassion satisfaction. Higher maladaptive coping predicted higher burnout ($\beta = 4.907, t = 4.004, p < .001$), and lower emotion focused coping predicted higher burnout ($\beta = -2.998, t = -3.176, p < .002$).

Veage et al., 2014	Mental health professionals (psychologists, social workers, nurses etc) (n = 106) 72 female	1. <u>Personal and work values</u> <i>(Survey of guiding principles: card sorting task)</i>	MBI: EE; DP & PA.	Cross Sectional Survey & values card sorting task.	Multiple-Regression (x4 dependent variables: burnout, EE, DP & PA) Predictor variables each type of value.	1 .21% of burnout variance accounted for by values success: this was significantly predicted by successful pursuit of values in work life which accounted for 11% of the variance ($\beta = -.43, p < .01$). 2. Successful pursuit of values in work life significantly predicted EE ($\beta = -.38, p < .05$). 4. Higher value consistency between work and personal life associated with higher ratings on PA.
Vilardaga et al., 2011	Alcohol & drug abuse counsellors (n = 699)	1. <u>Psychological Flexibility</u> 1. Experiential avoidance <i>(Acceptance & Action Questionnaire)</i> 2. Cognitive Fusion <i>(The stigmatizing</i>	MBI: EE; DP & PA	Cross Sectional Survey	Multiple Regression (x3 dependent variables: EE; DP & PA) Predictors: 1 st Step: age, gender, education 2 nd Step: work site factors 3 rd Step: ACT processes	ACT process increased model: 1. Psychological flexibility processes accounted for 12% of the variance of EE, moving overall model from medium to large effect. 1b. Experiential avoidance ($\beta = 0.262, p < .001$) low commitment to values ($\beta = 0.134, p < .001$) and cognitive fusion ($\beta = 0.089, p < .05$) significantly predicted higher EE.

*attitudes
believability Scale)*

3. Successful
completion of work
values

*(Work Values
Questionnaire (1
item))*

2. Psychological flexibility processes accounted for 10 % of the variance of DP, moving the overall model from a small to medium relationship size.

2b. Experiential avoidance ($\beta = 0.229$, $p < .001$), low commitment to values ($\beta = 0.132$, $p < .001$) and cognitive fusion ($\beta = 0.098$, $p < .05$) significantly predicted higher DP.

3. Psychological flexibility processes accounted for 12 % of the variance of PA, moving the overall model from a small to medium relationship size.

3b. Experiential avoidance ($\beta = 0.182$, $p < .001$), low commitment to values ($\beta = 0.182$, $p < .001$) and cognitive fusion ($\beta = 0.164$, $p < .001$) significantly predicted lower PA.

Wallace, Lee, & Lee, 2010	Abuse Counsellors (<i>n</i> = 232)	1. <u>Coping Strategies</u> Range of coping strategies	Counsellor Burnout Inventory (CBI)	Cross Sectional Survey	Multiple Regression Analysis Dependent variable: Burnout Independent variables: Job stress and coping strategies.	1. Of the coping strategies associated with job stress, seven were also predictive of burnout: self-distraction ($\beta = .16$, $p < .05$); denial ($\beta = .12$, $p < .05$); substance use ($\beta = .15$, $p < .05$), behavioural disengagement ($\beta = .33$, $p < .01$); planning ($\beta = .33$, $p < .01$); humour ($\beta = .14$, $p < .05$), and self-blame (β = $.13$, $p < .05$).
Korea		(<i>Brief COPE Inventory</i>)			Mediation & Moderation Model Predictor variable: Job Stress Mediator and moderator variables: Coping strategies Dependant variables: Burnout	2. The mediation model was significant ($t(197) = 2.62$, $p < .05$ and $t(197) = 3.74$, $p < .01$) with workload, role conflict, role ambiguity, greater self-distraction ($\beta = .15$, $p < .05$); and behavioural disengagement ($\beta = .22$, $p < .01$); predicting more counsellor burnout. 2. Complete mediation was observed: job ambiguity not linked to burnout when the mediators self- distraction and behavioural disengagement were present. 4. Relationship between workload and burnout, partially mediated by

self-distraction ($Z = 2.25, p < .05$) & behavioural disengagement ($Z = 3.49, p < .01$). The relationship between role conflict and burnout, partially mediated by behavioural disengagement ($Z = 3.53, p < .01$).

5. Coping moderated the relationship between workload and burnout and significantly increased the variance explained ($\beta = -.17, F = 16.59, \Delta R^2 = .03, p < .01$). Venting coping strategies moderated between role ambiguity and burnout ($\beta = .14, \Delta F = 25.00, \Delta R^2 = .02, p < .05$) and humour coping strategies moderated the relationship between role ambiguity and burnout ($\beta = .13, \Delta F = 20.42, \Delta R^2 = .02, p < .05$).

Note: Acceptance and Commitment Therapy (ACT); Maslach Burnout Inventory (MBI: Maslach & Jackson, 1981); Emotional Exhaustion (EE); Depersonalisation (DP), Personal Accomplishment (PA); Maslach Burnout Inventory – Human Services Survey (MBI-HSS: Maslach & Jackson, 1986); Comprehensive Personality and Affect Scales (Lubin & Van Whitlock, 2002); Generalized Self-efficacy Scale (Shearer, 1982); Brief COPE (Carver, 1997); Five Factor Personality Inventory (Hendriks, 1997; Hendriks, Hofstee, De Raad, & Angleiter, 1999); Mastery measure (Pearlin & Schooler, 1978); Burnout measure (Pines, 1984); Self-esteem measure

(Rosenberg, 1965); Lumpkins Scale (1985); Counselor Burnout Inventory (Lee et al, 2007); Trait Emotional Intelligence Short Form (Petrides & Furnham, 2001, 2003); Emotional Self-Awareness Questionnaire (Killian, 2007); Individual Reactivity Index (Davies, 1982); Emotional Empathy Scale (Mehrabian & Epstein, 1972); Big Five Inventory (John, Donahue & Kentle, 1991); International Personality Item Pool Big Five (Goldberg, 1999); Formal Characteristics of Behaviour-Temperament Inventory (Strelau & Zawadzki, 1995); Oldenburg Burnout Inventory (Demerouti, Bakker, Nachreiner & Schaufeli, 2001); ProQOL (Stamm, 2010); NEO Five Factor Inventory (Costa & McCrae, 1992); Mindful Attention Awareness Scale (Brown & Ryan, 2003); The Acceptance and Action Questionnaire (Hayes, Strosahl, Wilson, Bissett, Pistorello, Toarmino, et al, 2004). Work Values Questionnaire (Blackledge, Spencer & Ciarrochi, 2007).

Data Synthesis

The literature search found 21 studies that sought to investigate the relationship between individual characteristics and burnout, in mental health professionals. These studies predominately employed cross sectional survey designs; they considered a variety of professions, a range of different individual characteristics, various burnout measures and there were differences in their statistical techniques. The included studies will be discussed based on the individual characteristics they investigated; the conclusions drawn about these individual characteristics and burnout will then be considered, taking into account the quality of the literature in each topic area. Suggestions for future research will be made accordingly.

Summary and Critical Appraisal of Personality Traits

Five Factor Model (FFM) personality traits. The FFM is commonly used to investigate the relationship between personality and burnout (see Goldberg, 1993 for a review of the FFM). Seven studies in total analysed the relationship between burnout and at least one of the personality traits from the FFM (Bahner & Berkel, 2007; Bakker, Van der Lewig & Dollard, 2006; Killian, 2008; Lakin, Leon & Miller, 2008; Lent & Schwartz, 2012; Leon, Visscher, Sugimura & Lakin 2008; Somoaray, Shakespeare-Finch & Armstrong, 2016). Similarities exist across these studies as six of them used the MBI to assess burnout and all were cross sectional surveys using a form of regression analysis to draw conclusions. In summary, these studies provide support for the relationship between FFM personality traits and burnout. Personality traits conscientiousness and openness were not predictive of burnout, whereas neuroticism, extraversion and agreeableness were associated with burnout. These will be discussed in turn.

Being a mental health professional with a more neurotic personality type predicted higher overall burnout on the ProQOL (Stamm, 2010) measure (Somoray et al., 2016) and consistently predicted higher emotional exhaustion on the MBI (Bahner & Berkel, 2007; Bakker et al, 2006; Killian, 2008; Lakin et al, 2008; Lent & Schwartz, 2012; Leon et al, 2008) . The

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methodological quality of the studies investigating this relationship was varied. Whilst they all had a reasonable sample size (> 75), they did not all measure and statistically address confounding variables such as demographic or organisational factors (Bakker et al., 2006; Killian, 2008; Lent & Schwartz, 2012) and some were at risk of response bias with response rates below 40% (Bakker et al., 2006; Lakin et al., 2008). Although these limitations could undermine the findings at the level of an individual study, when considered alongside the results of the other studies that did address confounding variables, the same result has been consistently demonstrated across different countries, work settings and professions. Thus the current studies under consideration support the notion that mental health workers with neurotic personality types are more likely to experience emotional exhaustion. Previous reviews have suggested this relationship may be due to both variables being affect-orientated (Alarcon et al., 2009).

The relationship between neuroticism and depersonalisation or personal accomplishment is however, less clear. Whilst higher neuroticism was associated with higher depersonalisation in American children residential treatment centres (Lakin et al., 2008; Leon et al., 2008) and American counsellors (Lent & Schwartz, 2012), it was not found in American batterer intervention counsellors (Bakker et al, 2006) or Dutch counsellors in palliative care (Bahner & Berkel, 2007). However, differences between these studies could help explain the variation in these findings. The latter studies both had low internal consistency on the depersonalisation construct and smaller sample sizes (Bahner & Berkel, 2007, $\alpha = .64$, $n = 115$; Bakker et al, 2006, $\alpha = .64$, $n = 75$), in comparison to the studies which did find neuroticism predicted depersonalisation (Lakin et al, 2008, $n = 375$; Lent & Schwartz, 2012, $n = 340$; Leon et al, 2008, $n = 203$), therefore the quality of these studies could help explain the difference in findings. In addition, there are subtle population differences, as those studies that found support for this relationship tended to focus on staff in mental health settings, whereas the studies without this finding involved staff conducting psychological work but in non-mental health settings. Overall, there is tentative support for the idea that mental health workers

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with higher levels of neuroticism are more likely to experience greater depersonalisation of their clients. However, further research addressing the methodological issues of low internal consistency and small sample sizes are required to confirm this relationship. Future research could investigate whether conducting psychological work in a non-mental health setting (compared to a mental health setting) influences the relationship between neuroticism and depersonalisation.

The literature returned mixed results on the relationship between neuroticism and personal accomplishment. Whilst neuroticism did not significantly contribute to a lack of a sense of personal accomplishment in two studies (Bahner & Berkel, 2007; Leon et al., 2008), three studies found that lower neuroticism did predict higher personal accomplishment (Bakker et al., 2006; Lakin et al., 2008; Lent & Schwartz, 2012). There is therefore some evidence that lower neuroticism contributes towards mental health workers experiencing higher personal accomplishment, however, the inconsistency suggests other factors could also influence this relationship. Further research investigating the relationship between neuroticism, personal accomplishment and the role of other factors is required to better understand this relationship in mental health professionals.

The literature has also indicated the potential role of personality traits extraversion (Bakker et al., 2006; Lakin et al., 2008; Somoray et al., 2016) and agreeableness in burnout of mental health professionals (Bahner & Berkel, 2007; Lent & Schwartz, 2012; Somoray et al., 2016). Mental health professionals with more introverted personality types were associated with higher levels of emotional exhaustion (Lakin et al., 2008), depersonalisation and lower personal accomplishment in their work (Bakker et al., 2006). This finding was replicated on the only study to measure burnout on a different measure to the MBI (Somoray et al., 2016). Whilst this suggests that having an extraverted personality could be protective of burnout in mental health professionals, the remaining studies did not find introversion predictive of burnout (Bahner & Berkel, 2007; Leon et al., 2008). Furthermore, Leon et al (2008) was unable to replicate these findings

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despite the use of the same population and measures as a previous study (Lakin et al, 2008).

Similarly, mental health professionals with lower agreeableness have been found to be predictive of higher levels of depersonalisation and lower personal accomplishment (Bahner & Berkel, 2007; Lent & Schwartz, 2012) and lower overall burnout (Somoray et al., 2016). However, this finding was not consistent across studies (Bakker et al., 2006). Costa & McCrae (2010) suggest that all five of the personality traits have implications for interpersonal interactions, however, extraversion and agreeableness are the most interpersonal in nature. Theoretically it makes sense that being more sociable, warm, altruistic, trusting and sympathetic towards others is protective of burnout, yet this finding was not repeated across studies. Whilst the direction of the relationship is consistent in these studies, the presence of the association between agreeableness, extraversion and burnout is inconsistent. Perhaps extraversion and agreeableness do play a role in preventing the development of burnout but the relationship is more easily influenced by other factors than the relationship between neuroticism and burnout.

Type D personality. Type D personality involves negative emotions (negative affectivity) and social inhibition which means people do not express their emotions (*see* Ogińska-Bulik, 2006). After controlling for demographic variables, individuals with negative affectivity, but not the social inhibition aspects of Type D personality, were predictive of higher emotional exhaustion and lower personal accomplishment (Ogińska-Bulik, 2006). Emotional expression (social inhibition) was not predictive of emotional exhaustion, a finding that was corroborated by Langdon et al (2007) using a practical task to measure emotional expression rather than a self-report measure. This study also discovered higher emotional expression was significantly related to higher depersonalisation and lower personal accomplishment; the use of different designs with more ecological validity, adds weight to these conclusions. Type D personality is well represented by the FFM (Horwood, Anglim, & Tooley, 2015), furthermore negative affectivity is predictive of neuroticism in the FFM (Horwood et al, 2015)

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and consequently, these findings corroborate the above conclusions drawn between neuroticism and burnout.

Summary and Critical Appraisal of Temperaments

Personality and temperaments can be considered two separate but related constructs. Temperament represents a predisposition observed in infants whereas personality traits are patterns developed in accordance with higher level cognition (McCrae et al., 2000). One study considered the relationship between burnout and emotional reactivity, perseveration and briskness (Rzeszutek & Schier, 2014). They found high emotional reactivity and perseveration was associated with increased burnout, interestingly both of which correlate with neuroticism, further supporting the association between neuroticism and burnout (Kandler et al, 2012). The authors suggest high emotional agitation could increase employees' vulnerability to experiencing the negative effects of work stressors (Sobolewski, Strelau, & Zawadzki, 2001) whilst perseveration could result in the repetition of unhelpful behaviours, even when the stressor has gone. Employees with higher briskness predicted lower burnout, with the authors suggesting this allows for more flexible coping behaviours. It is of interest to note, briskness correlates with the FFM personality trait of extraversion which is also considered to be a buffer to burnout (Hornowska, 2011). Although confounding variables were not measured, this study (Rzeszutek & Schier, 2014) had a reduced risk of bias due to their higher response rates and explicit reporting of the validity and reliability of measures. Further empirical study of temperaments and burnout would help to draw conclusions across the literature.

Summary and Critical Appraisal of Core Self-evaluations

CSE is considered a higher-order construct made up of four dispositional characteristics related to an individual's beliefs about their competence (Bono & Judge, 2003; Judge et al, 1997). The characteristic of neuroticism has already been discussed in relation to the FFM, therefore the remaining three characteristics of self-esteem, generalised self-efficacy and locus of control will be addressed. The literature search returned four studies that investigated the relationship between burnout and one of these

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three core self-evaluations (Baker et al., 2007; Ben-Porat & Itzhaky, 2014; Gilibert & Daloz, 2008; Killian, 2008), none of the studies included all of the CSE components. All of these studies employed cross sectional survey designs and regressions to analyse the data.

In summary, higher self-esteem was associated with overall lower burnout (Ben-Porat & Itzhaky, 2014) on the Pines (1984) measure and this finding was replicated on the emotional exhaustion and depersonalisation burnout constructs in another study using the MBI (Gilibert & Daloz, 2008). However, personal accomplishment was not associated with self-esteem, yet higher intensity of personal accomplishment was related to higher self-esteem (Gilibert & Daloz, 2008). Both studies (Ben-Porat & Itzhaky, 2014; Gilibert & Daloz, 2008) controlled for other demographic and organisational factors in the analysis, suggesting that self-esteem influenced burnout over and above the demographic and organisational factors. Additionally, the high response rates (70% and 89% respectively) improve the external validity of these findings. Although the small sample size ($n = 49$) and lack of reported power calculation brings into question the validity of Gilibert & Daloz's (2008) results, the large sample of Ben-Porat & Itzhaky's (2014) study ($n = 214$) helps to strengthen the conclusion. These two studies both provide support for the idea that lower self-esteem is associated with higher burnout, particularly the emotional exhaustion and depersonalisation constructs. Further research could aid clarification of this to ensure these findings are generalised across other settings and countries.

A reduced locus of control was only associated with lower intensity of personal accomplishment, rather than personal accomplishment overall, and was not associated with emotional exhaustion or depersonalisation (Gilibert & Daloz, 2008; Killian, 2008). However, the validity of these findings are questionable. Firstly, one study investigated the emotional exhaustion construct only and did not account for socio-demographic variables, potentially influencing the validity of their findings (Killian, 2008). Therefore, Gilibert & Daloz (2008) was the only study to have investigated the relationship between locus of control and burnout as a whole construct. Although their sample appeared representative of the target

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population and they had controlled for other demographic and organisational variables, the validity and reliability of the measures were not reported, the sample size was small and there was no power calculation to justify this. Consequently, the lack of association could be due to a type II error, the validity and reliability of these findings remain questionable. Further research with larger sample sizes that are explicit about the validity and reliability of measures are required before any conclusions can be drawn about the relationship between locus of control and burnout in mental health professionals.

The one study which investigated self-efficacy explored work related self-efficacy and found it predicted emotional exhaustion and personal accomplishment, depersonalisation was not analysed (Baker et al., 2007). More specifically, those people with greater self-efficacy beliefs about their ability to accomplish tasks at work had lower emotional exhaustion and those with greater levels of self-efficacy associated with coping with work stressors was predictive of higher personal accomplishment. The merits of this study included its representative sample, its seemingly appropriate sample size ($n = 123$) and ensuring confounding variables were accounted for in the analysis. However, it is concerning the authors have not reported the validity or the Cronbach's alpha for their use of the self-efficacy scale, especially given the scale was adapted for this study. These limit the conclusions which can be drawn from this study and more empirical studies exploring the relationship between self-efficacy and burnout in mental health professionals are required.

Summary and Critique of Coping Strategies

Five studies explored the relationship between coping and burnout in mental health professionals (Baker et al, 2007; Elliott & Daley, 2013; Killian, 2008; Thompson et al., 2014; Wallace et al, 2010), all of which employed the Brief COPE Inventory (BCI: Carver, 1997) in a cross sectional survey design. The BCI uses a 4 point Likert scale to rate 28 items which yields 14 subscales: self-distraction, active coping, denial, substance use, humour, instrumental and emotional support, behavioural

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disengagement, venting, positive reframing, acceptance, religion and self-blame.

There is support for the notion that negative coping strategies (denial, substance use, behavioural disengagement, venting and self-blame) and maladaptive coping strategies predict greater emotional exhaustion, depersonalisation and overall burnout (Elliott & Daley, 2013; Thompson et al., 2014). Comparable findings were revealed by Wallace et al (2010) who found self-distraction, denial, substance use, behavioural disengagement, self-blame, planning and humour and were predictive of burnout. Furthermore, this study identified the mediating role of coping strategies between work stressors and burnout: increased burnout could be partly explained by high use of avoidant emotional coping strategies, emotional coping strategies and low use of active coping strategies. In relation to positive coping strategies, Thompson et al (2014) found emotional support, humour and religious beliefs were preventative of burnout. However, these findings have not been corroborated by all studies, Killian (2008), found none of the coping strategies to be predictive of emotional exhaustion and Baker et al (2007) found positive coping strategies (seeking emotional and instrumental support, active coping, planning and positive reframing) were not associated with either emotional exhaustion or depersonalisation. There was no support for the idea that coping strategies predict personal accomplishment (Baker et al., 2007; Elliott & Daley, 2013).

It is reported that the psychometric properties of the BCI remain to be rigorously assessed (Carver, 1997) which could undermine the reliability and validity of these findings. Furthermore, the measure was used differently across the aforementioned studies, as different researchers chose to group the items according to different categories of coping (e.g. problem-focused coping, negative coping), this inconsistency limits the conclusions that can be drawn about the influence of each coping strategy or each group of coping strategies. However, the reasonable sample sizes, consideration of confounding factors and variety of countries used suggests the findings may be valid and the themes that have begun to be highlighted are worthy of

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further research to hone our understanding of coping and burnout in mental health professionals.

Humour. Humour has been implicated as a coping strategy (Carver, 1997) but Malinowski (2013) conducted the only study to investigate how using different types of humour may be related to burnout in mental health professionals. The humour styles questionnaire assessed four aspects of humour, two are adaptive humour (affiliative humour, self-enhancing humour) and two are maladaptive humour (aggressive humour and self-defeating humour). Adaptive humour was not correlated with emotional exhaustion or depersonalisation but was positively correlated with personal accomplishment. Self-defeating humour was positively predictive of emotional exhaustion and depersonalisation, and self-enhancing humour was positively predictive of personal accomplishment. This study had a reasonable sample size ($n= 133$) and good psychometric properties of its measures, however, the validity of results are questionable as potentially confounding variables were not accounted for, also several variables were transformed for analysis which could influence the outcome and finally the low response rate (22%) could create a biased sample. Therefore, further research should be conducted in order to provide support for the idea that self-defeating humour could contribute towards burnout and self-enhancing humour could buffer burnout.

Defence mechanisms. Defence mechanisms are an internal method of coping whereby the individual distorts their feelings or perceptions in order to cope with a conflict between their internal psychological needs and their external reality (Freud, 1937 cited in Pompili et al, 2006). Pompili et al (2006) established psychiatric nurses who were burnt-out relied on two defence mechanisms compared to those who were not burnt-out. These were 'turning against the self' through self-directed aggressive thoughts or behaviours and through a 'reversal defence mechanism' which involves generating neutral or positive responses such as denial. This study has highlighted a relatively under-represented area of defence mechanisms as a form of coping, however, the wider purpose of the study meant there was a small sample of psychiatric nurses ($n = 37$). Furthermore, the reliability and

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validity of the measure was not discussed and therefore further research would need to be conducted before conclusions could be drawn about the role of defence mechanisms and burnout in mental health professionals.

Summary and Critique of Psychological Flexibility

Acceptance and Commitment Therapy (ACT: see Hayes, Levin, Plumb-villardaga, & Villatte, 2013) is a cognitive and behavioural intervention designed to develop an individual's ability to be accepting of their experiences and commit to behaviour change in line with their values. This allows them to respond to their experiences with psychological flexibility which improves their ability to cope with distressing internal and external experiences. There are six processes which prevent psychological flexibility: cognitive fusion; experiential avoidance; loss of flexible contact with the present; attachment to a conceptualised self; values problems; inaction, impulsivity and avoidant persistence (see Hayes, Levin, Plumb-villardaga, & Villatte, 2013). The literature search yielded three articles that had considered the processes involved in psychological flexibility.

There is tentative support for the suggestion that mental health professionals are less likely to develop burnout when they are: more mindful (a skill to contact the present moment: *see* Kabat-Zinn, 1994; Hayes et al, 2013) (Thompson et al., 2014); accepting of the present moment; cognitively defused; and living in accordance with their values (Villardaga et al., 2011). Living in accordance with life and work values predicted emotional exhaustion and personal accomplishment, but not depersonalisation (Veage et al, 2014). All three studies had respectable sample sizes and a representative population, however, none of them reported the response rate and two of the data sets formed part of a larger study, therefore the sample could be biased. Thompson et al (2014) and Villardaga et al (2011) both accounted for confounding variables which strengthened the validity of their findings, however, the validity and reliability of the measure used to assess the ACT variables were not explicitly described which is a potential limitation to the findings. Overall, the idea that psychological flexibility could form a personal resource that could predict or protect mental health professionals from burnout is

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tentatively supported. However, further research including multiple ACT variables and addressing the limitations discussed would be required to provide further support for this idea.

Summary and Critique of Other Individual Characteristics

The literature search yielded a further four individual characteristics which did not sit within the aforementioned categories. These were mastery, empathy, emotional self-awareness and trait emotional intelligence. Mastery is seen as a personality characteristic (Hobfoll, 1989) where individuals feel they can control changes or events in their lives. In a study of good methodological quality this was found to contribute towards lower levels of burnout (Ben-Porat & Itzhaky, 2014) and is therefore worthy of further research in order to confirm this relationship in mental health professionals.

Three of these studies were associated with mental health workers' awareness and use of emotions and each referred to a different concept. Emotional self-awareness, a concept which involved the ability to identify one's emotional states, was not predictive of emotional exhaustion (Killian, 2008). The reasonable sample size and 100% response rate suggests this data is representative of its population, however, they did not control for confounding variables. Guitierrez and Mullen (2016) found counsellors who identified, expressed, regulated and used their emotions more effectively experienced lower levels of burnout. There was evidence that aspects of being empathic was predictive of reduced burnout, suggesting empathy could be a protective factor (Lakin et al., 2008). However, both studies had a large sample size but poor response rate meaning a type 1 error could be possible and the data may not be representative of the population. Whilst understanding mental health workers' awareness and use of emotions has clearly been of interest in the burnout literature, the assessment of different concepts in each study and inconsistent methodological quality of these studies means no definitive conclusions can be drawn. Further research accounting for confounding variables and striving for better response rates, perhaps using broader constructs such as emotional intelligence, are required before conclusions can be drawn.

Methodological Quality of Included Studies

The literature studying the relationship between individual characteristics and burnout in mental health professionals comes with many methodological weaknesses. The reliance on cross sectional designs establishes which individual characteristics are related to burnout, however, it does not provide information on causality. The consistent use of self-report measures could influence findings through social desirability bias or demand characteristics. Additionally, studies generally employed opportunity sampling; it is possible that workers who possess certain characteristics (e.g. agreeableness) may be more likely to take part, consequently increasing the chance of significant results for those characteristics and causing biased results again. Surprisingly, none of the studies reported a power analysis or sample size justification, with some smaller sample sizes present, it is possible results are susceptible to type II error. These limitations echo those outlined from previous literature reviews in the field (Paris & Hoge, 2010).

The broad nature of the area of 'individual characteristics' causes huge variability across the literature, the varying definitions and measurement of individual characteristics limits the comparability of findings and validity of conclusions. It became apparent that those studies that used broader measures and assessed multiple characteristics e.g. all FFM or multiple coping strategies, enabled comparison across these characteristics and therefore conclusions could be more readily drawn about which were associated with burnout and which were not. However, those studies who just assessed one characteristic e.g. self-esteem, all reported a significant result. It is possible that studies that assess only one characteristic which found a non-significant result were not published. This creates a bias in the literature which can be addressed by people using broader constructs to measure multiple characteristics to allow a comparison between those which are significant and those which are not.

The analysis employed by studies, the population sampled and the variety of professions included meant this area of literature also had many strengths. For example, some of the studies ensured confounding

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demographic and organisational variables were accounted for in the analysis, improving the validity of results. Furthermore, all of the studies apart from one, employed regression models to test the relationship between individual characteristics and burnout. This method of analysis is superior to correlational methods because although it does not infer causality (Tabachnick & Fidell, 2007), it provides more support for the notion that intervening at an individual level could reduce burnout. Finally, the breadth of mental health professions included and range of countries currently studied provides ecological validity and generalisability to the findings.

Theoretical Implications

These empirical findings have provided support for the theoretical models which advocate the role of individual characteristics in the aetiology of burnout (Carson & Kuipers, 1998; Hobfoll, 1989; Lazarus & Folkman, 1984). It should be noted this support is tentative, as the results do not allow for conclusions of causation, however, it does demonstrate the value of continuing to research this field.

Patterns among the studies have helped to confirm that personality traits, such as high neuroticism, low agreeableness and low extraversion, high negative coping strategies as well as cognitive processes such as low psychological flexibility are associated with high burnout and potentially contribute towards its development. The findings that a mental health worker's personality, cognitive processes and coping strategies influence burnout, supports the Lazarus and Folkman (1984) model. This review has provided support for the characteristics represented in Carson and Kuipers' (1998) model, such as coping skills, emotional stability and self-esteem, however, it has also highlighted the potential importance of characteristics not already included in their model, such as psychological flexibility. These findings indicate there is a need to update these theoretical models in order to reflect the nuances of the individual characteristics implicated in burnout and to include more recent concepts, such as psychological flexibility. Many individual characteristics had only been covered by one study, perhaps showing the relative under study of individual characteristics and burnout in

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mental health workers, this advocates for further research to explore temperaments, and other characteristics such as self-efficacy and mastery in order to draw conclusions about the influence of these variables and support or refute previous models (Carson & Kuipers, 1998; Hobfoll, 1989).

The aforementioned models propose that individual resources moderate the effect of work stressors, on burnout. Studies employing a cross sectional design are unable to conclude this 'buffering hypothesis' of individual characteristics, as longitudinal studies are required for this (Hutchison, 1999). Therefore, although causality is impossible to infer, the analysis used in this area of the literature has gone beyond correlational; the predictive and mediation analysis strengthens their support for a buffering hypothesis. Of the six studies who used a hierarchical regression analysis to control for demographic and/or occupational factors, all of them found individual characteristics explained a significant amount of variance of burnout, ranging from between 9% - 34%. This demonstrates the importance of individual factors even after other predictors of burnout have been accounted for and therefore provides support for the notion that individual factors combined with organisational and demographic factors, contribute towards burnout. Furthermore, one of the studies employing a mediation analysis demonstrated that the relationship between job stress variables and burnout can partly be accounted for by the coping strategies mental health professionals use (Wallace et al, 2010). This suggests that individual factors do have the potential to buffer or increase the development of burnout and these studies help to understand the mechanisms behind the relationship between the organisational context and burnout.

The literature predominately focuses on mental health professionals in adult services, with far fewer studies exploring the relationship between individual characteristics and burnout in child mental health services and none (to the author's knowledge) were based within the NHS. In order to provide support for the generalisability of these findings, it therefore would be of benefit to explore these relationships in children mental health services.

Clinical Implications

The clinical implications of this review, primarily fall with its support for the idea that interventions aimed at reducing burnout in mental health professionals should be inclusive of individual factors (as well as organisational factors) to increase their effectiveness (Morse, 2012). This review has helped to highlight some of the individual characteristics that may prove useful in the development of interventions.

The importance of considering personality traits as potential predictors of burnout in mental health professionals has been indicated by this review. Personality traits provide a framework to understand how people may present differently and how interventions can be adapted accordingly to accommodate each trait (Miller, 1991). Whilst some have advocated the assessment of personality traits at the recruitment stage of employment to prevent burnout (Piedmont, 1993) an alternative idea may be to use Miller's ideas to develop interventions that account for the personality traits. Furthermore, personality type appears to influence the cognitive processes and coping behaviours people engage in to cope with occupational stressors (Boyd et al., 2009; Cañadas-De la Fuente et al., 2015; Chang, 2012; Code & Langan-Fox, 2001) clarifying the nature of the associated cognitive process and coping strategies in mental health workers aids the development of interventions. It is therefore possible that decreasing workers' use of negative coping strategies and increasing their psychological flexibility as an alternative means of coping with work stress, could reduce burnout in mental health workers. Indeed, ACT has helped to reduce work stress in social workers and it provides tangible cognitive and behavioural strategies for professionals to practice (Brinkborg, Michanek, Hesser, & Berglund, 2011).

Conclusion

Following a review of the individual characteristics associated with burnout in mental health workers, conclusions can be drawn about the relationship between certain characteristics and burnout. In particular, high levels of neuroticism consistently predicted greater burnout, whilst lower

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extraversion and lower agreeableness were less consistent in predicting higher burnout. There was some indication that negative coping strategies predicted greater burnout but definitive answers cannot be drawn from the existing data, partly due to the different approaches to grouping coping strategies. The studies were indicative of an important finding that greater psychological flexibility provided a buffer to burnout, but does not allow for a definitive conclusion at this stage. Other individual characteristics that were associated with burnout in mental health professionals were: low self-esteem; low self-efficacy; low empathy; low mastery; high perseveration; low briskness and low identification of and effective use of emotions . However, apart from self-esteem which had two studies, only one study per characteristic was identified in this review and therefore the existing data is inadequate to draw conclusions.

The studies included were cross sectional and therefore conclusions cannot be drawn about causality. Whilst the use of regression statistics over correlations improved the strength of conclusion, longitudinal or experimental studies are required to determine directional effects. The benefit of cross sectional studies is their ability to identify the variables which are worthy of further research, therefore future research could help determine the directional effects of those variables indicated as being associated with burnout in this review, and further cross sectional studies would clarify those variables whose relationship with burnout remained ambiguous from this review.

Theoretically, this review provides tentative support for those models indicating the importance of individual characteristics in the development of burnout and refutes the notion that burnout should only be considered within the context of work stressors and social support (Karasek, 1979). Furthermore, it has implicated the importance of focusing on both cognitive and behavioural responses, in the development of burnout interventions. Research using experimental and longitudinal designs would aid our understanding of whether neuroticism, negative coping and psychological flexibility would 'buffer' burnout in mental health professionals. This could have clinical implications for future burnout

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interventions involving ACT, behavioural or personality based treatment principles in order to target potential maintaining factors.

Chapter 2: Empirical Paper

Burnout in Child and Adolescent Mental Health Services: Does Self-efficacy mediate the Relationship between Work Life and Burnout?

Introduction

Background to Burnout

Burnout is a common issue for professionals who work with people who have mental health problems (Morse et al., 2012). The process of helping those in need is interpersonally and emotionally demanding; it is the emotional nature of this work which is thought to be at the root of burnout (Schaufeli, 2007). Employees are thought to cope with burnout through holding negative patient attitudes (Holmqvist & Jeanneau, 2006), a process known as depersonalisation (Schaufeli, 2007). Therefore, burnout may be particularly problematic for mental health settings, given that the relationship between the patient and professional is crucial for the effectiveness of therapeutic interventions (Gadecka et al., 2015).

Staff burnout affects the employee, the service and the patients. The employee is more likely to suffer psychological and physical health problems (Stalker & Harvey, 2002) and their organisation experiences an increase in sick leave, job dissatisfaction and staff turnover (Maslach, Schaufeli, & Leiter, 2001; Stalker & Harvey, 2002; Toppinen-Tanner, Ojajarvi, Väänänen, Kalimo, & Jäppinen, 2005). It is not surprising that burnout is then related to inconsistent care provision (Boyer & Bond, 1999) and reduced adherence to evidence-based practices (Rollins et al., 2010). Consequently, patients report poorer outcomes (Gowdy et al., 2003) and reduced satisfaction with services (Garman et al., 2002).

Rationale for Researching Burnout in Child and Adolescent Mental Health Services

The wide reaching implications of burnout could prove detrimental to NHS services. As services aim to respond to legislative requirements, new government initiatives and scientific developments within the context

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of unprecedented funding cuts, it remains challenging to meet patients' needs (Kings Fund, 2014). A concerning 43% of National Health Service (NHS) staff in mental health and learning disability services reported suffering from work related stress (Healthcare commission, 2013). It is therefore crucial to improve our understanding of burnout in NHS mental health services in order to develop empirically supported interventions.

Research on burnout has primarily focused on adult mental health teams (Morse et al, 2012). With a paucity of studies exploring burnout in child mental health services (Lizano & Mor Barak, 2012) and no known studies researching burnout in NHS Child and Adolescent Mental Health Services (CAMHS), this remains a gap in the literature. The introduction of Children and Young Persons Improving Access to Psychological Therapies (CYP IAPT) means CAMHS are undergoing a period of organisational change. Change within a work place has been related to higher rates of burnout (Lasalvia et al, 2009) and therefore could be making CAMHS employees increasingly vulnerable. Therefore, conducting research on burnout in CAMHS would be beneficial in understanding the current burnout rates of this population as well as exploring the factors which may predict burnout in this population.

Burnout Definition

Freudenberger (1974) observed a common process among health care workers whereby their initial enthusiasm, motivation and energy deteriorated. Conceptualised as a social rather than an individual problem it was seen to have three stages (Maslach & Jackson, 1981). Firstly, employees experience chronic emotional demands in the workplace that are greater than their coping resources; this causes emotional exhaustion. Employees create emotional distance from their clients to cope with the emotional exhaustion (Maslach et al., 2001). Ideally, professionals can cope by remaining compassionate but with emotional distance, however, in burnout this detachment is associated with depersonalisation whereby the employee develops negative and cynical attitudes about the patient in order to reduce their emotional burden (Schaufeli, 2007). This is likely to impact the quality of interventions and therefore the number of successful outcomes

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reduce, consequently employees feel insufficient and develop self-doubt which undermines their sense of personal accomplishment in work (Maslach & Jackson, 1981); Schaufeli, 2007.

Burnout is related specifically to the individual's work life, it is theoretically distinct from other concepts of emotional distress (Maslach et al., 2001) and work related distress, such as vicarious trauma, compassion fatigue and job dissatisfaction (Canfield, 2005; Dunkley & Whelan, 2006; Figley, 1995; Maslach & Jackson, 1981).

Predictors of Burnout

The areas which are thought to contribute towards burnout can be divided into four domains: demographic factors; occupational factors; organisational factors and individual factors (Maslach, 2015; Maslach et al., 2001). Findings associated with demographic characteristics remain debateable, however, reviews of previous literature have suggested older age, greater experience, being male and receiving supervision are associated with lower burnout rates (Coyle et al., 2005; Edwards & Burnard, 2003; Leiter & Harvie, 1996; Maslach, 2015). Occupational related characteristics have also affected how employees experience burnout (Maslach et al., 2001). For example, Schaufeli & Enzmann (1998) found similar burnout profiles for occupations existed across two countries (Holland and the United States) teachers had high exhaustion but average depersonalisation and personal accomplishment whereas medics had lower levels of emotional exhaustion and depersonalisation, and higher levels of inefficacy. However, social services and mental health worker's burnout profiles differed between countries whereby mental health workers had higher levels of emotional exhaustion and depersonalisation in Holland, than in the United States. Although, a consistent burnout profile for mental health workers has not been evident as it has with other professions (Morse et al, 2012: Schaufeli & Enzmann, 1998). Mental health workers have frequently shown high levels of emotional exhaustion (Morse et al, 2012) and this has been coupled with low depersonalisation and high personal accomplishment in adult mental health workers in the UK (Onyett et al, 2007). There has been some evidence that mental health workers in outpatient settings have higher

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burnout than those in inpatient settings (Prosser et al, 1997) and others have suggested professionals working with children may be more satisfied at work than those working with adults (Coyle et al, 2005). Alternatively, it has been suggested occupations with more emotional demands are related to higher levels of burnout (Zapf, Seifert, Schmutte, Mertini, & Holz, 2001). Although, there are currently no consistent burnout profiles for mental health workers, there is an agreement that different settings give rise to different burnout profiles. Therefore caution should be exercised in generalising from one profession to another. Organisational and individual factors have provided a theoretical basis to understand what may precipitate and maintain burnout in order to guide interventions for those who may be more vulnerable due to demographic and occupational factors.

Organisational Factors

Exposure to ongoing organisational stressors is central to the development of burnout (Maslach & Jackson, 1981) and the larger effect sizes of these variables have meant it has remained a priority within the field (Maslach, 2015; Maslach et al., 2001; Schaufeli & Enzmann, 1998). As a consequence, there is a plethora of organisational elements found to influence burnout, the Area of Worklife Survey (AWS) model has identified six key themes across the literature: workload, control, reward, community, fairness and values. These are considered problematic when they are not concordant with the employees expectations or needs (Leiter & Maslach, 1999, 2003) and this incongruence between the employee and their workplace increases burnout (Leiter & Maslach, 2003).

The first two domains are captured in the job-demand-control model (Karasek & Theorell, 1990) which identified that a combination of high workplace demands and low control over the workload result in poorer employee health outcomes. An increased awareness of the ‘buffering role’ of support in the workplace resulted in the development of the job-demand-control-support model (Johnson & Hall, 1988). This reflects the community domain which relates to teamwork, social interaction and support in the workplace. The reward domain represents the importance of receiving financial or social rewards for completing work (Leiter & Maslach, 2003).

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The fifth domain of fairness addresses the extent a workplace feels equitable and reciprocal, a lack of this is predictive of burnout (Leiter & Maslach, 2003). Finally, values refers to the incentive for working that goes beyond monetary return, it gives meaning to the job and increases burnout if values are incongruent between the employee and the organisation (Leiter & Harvie, 1997).

A mismatch between the individual and their workplace across these six areas of work life have been found to be associated with burnout in nurses (Burke, Berge Matthiesen, & Pallesen, 2006; Greco, Laschinger, & Wong, 2006; Laschinger & Grau, 2012), physicians in Canada (Leiter, Frank, & Matheson, 2009) and mental health professionals in Italy (Lasalvia et al., 2009) and Canada (Ray, Wong, White, & Heaslip, 2013). Research suggests some patterns among the six areas of work life are consistent across settings, but there is evidence for some situation-specific patterns too (Leiter & Maslach, 2003). Commonly, workload is found to be a key predictor of emotional exhaustion across settings (Leiter & Maslach, 2003) and depersonalisation within health care workers (Lasalvia et al., 2009; Leiter et al., 2009), however, the relationship between the remaining variables and the development of burnout is less consistent. Overall, the six areas of the work life model, provides an empirically supported approach to summarise the organisational factors associated with burnout. It has built upon previous research by demonstrating the organisational factors are not problematic per se but it is the mismatch between these areas of work life and the individual which causes stress (Barnett, Gareis, & Brennan, 1999; Maslach et al., 2001). Clarifying the patterns of the CAMHS organisational environment which are associated with burnout will provide an evidence driven approach to develop theory and implement future interventions.

Individual Factors

Although research on burnout initially exclusively focused on organisational factors, the literature now acknowledges the role of the individual. The inclusion of the person-environment fit in the Area of Worklife Survey model demonstrates this, however, other individual characteristics, such as, personality traits, self-beliefs and coping strategies

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have all been found to influence the development of burnout (Adriaenssens et al., 2015; Alarcon et al., 2009; Maslach et al., 2001; McFadden et al., 2015; Prins et al., 2007). The Lazarus and Folkman transactional model of stress (1984) provides theoretical support for these findings, although borrowed from the stress literature, it proposes that in addition to experiencing excessive demands, it is the individual's appraisal of these demands, their perceived resources and coping abilities that influences the amount of stress experienced. Carson and Kuipers (1998) propose a similar model suggesting the individual's resources moderate the relationship between environmental stressors and burnout, these resources include: high self-esteem, support networks, hardiness, coping skills, mastery, personal control, emotional stability and good physiological release. Therefore, these models propose the interaction between an individual's psychological characteristics and their environment contribute towards the development of burnout.

There is support for the premise that burnout develops from both individual and organisational factors. Psychological characteristics have been found to contribute to burnout, alongside the AWS domains (Laschinger & Grau, 2012). For professionals working with patients who are psychologically distressed, individual factors such as, temperament (Rzeszutek & Schier, 2014), personality traits (Bahner & Berkel, 2007; Bakker et al., 2006; Killian, 2008; Lakin et al., 2008; Lent & Schwartz, 2012; Leon et al., 2008; Oginska-Bulik, 2006; Somoray et al., 2016), self-efficacy (Baker et al., 2007), self-esteem, mastery (Ben-Porat & Itzhaky, 2014; Gilibert & Daloz, 2008), psychological flexibility (Villardaga et al., 2011) and coping strategies (Elliott & Daley, 2013; Thompson et al., 2014; Wallace et al., 2010) have all influenced burnout. Some have found individual factors to be more significant than organisational factors (Ben-Porat & Itzhaky, 2014) and Wallace, Lee and Lee (2010) found the relationship between workplace stressors and burnout could be explained by an individual's coping strategies. Therefore, individual's psychological characteristics are influential in the development of burnout in professionals working in the mental health field.

Self-efficacy as a Protective Factor

Perceived self-efficacy is one psychological characteristic which could protect the individual from burnout. It is defined as a set of beliefs an individual holds about their ability to effectively take action or attain a goal, within a specific domain (Bandura, 1993). Developed from Social Cognitive Theory (SCT: Bandura, 1986) self-efficacy is considered a better predictor of behaviour or outcomes than actual abilities because it determines how individuals use the knowledge and skills they have (Bandura, 1993). When individuals have high self-efficacy, they are more likely to perceive a difficult situation as a challenge, they will be motivated to persevere and choose their actions accordingly. In contrast, an individual with low self-efficacy, may perceive a difficult situation as threatening, increasing their stress and make them less likely to attempt to manage the situation. Therefore, self-efficacy is related to arousal or emotional responses as well as behaviours, effort invested and achievement in a task (Bandura, 1977, 1993; Sebastian, 2013; Zimmerman, 2000).

A recent review of the burnout literature found a medium effect size existed between burnout and self-efficacy across a range of different professionals (Shoji et al., 2015), suggesting its importance in the development of burnout. Self-efficacy is reported to have a protective role in job stress, promoting recovery (Hahn, Binnewies, Sonnentag, & Mojza, 2011) and facilitating employees' adjustment to organisational change (Jimmieson, Terry, & Callan, 2004). Furthermore, perceived self-efficacy relates to a set of beliefs which can be modified (Brown, 2012), enabling the development of interventions to enhance employees' self-efficacy and thus reduce strain (Unsworth & Mascon, 2012, cited in Shoji, 2015). The study of burnout and self-efficacy has brought into question the differences between the concepts of self-efficacy and personal accomplishment (from the MBI). Whilst, self-efficacy refers to a judgement of one's capability and is concerned with prospective actions, potential abilities and the belief that one can be successful in tasks. This is distinct from an outcome such as personal accomplishment which is concerned with retrospective behaviours, outcomes of actions and beliefs about what they have achieved (Bandura,

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2006; Bandura, 1977; Shoji et al., 2015). Therefore, self-efficacy is the perceived chance of success and personal accomplishment is the perceived outcome.

Research in healthcare has consistently found low self-efficacy is associated with higher burnout in learning disability settings (Nota, Ferrari, & Soresi, 2007), where it also explained the relationship between violence and burnout in a secure unit (Howard, Rose, & Levenson, 2009). Higher self-efficacy was associated with lower burnout in medical staff, and found to explain the relationship between stress appraisal and stress outcomes (Cicognani, Pietrantonio, Palestini, & Prati, 2009; Prati, Pietrantonio, & Cicognani, 2011; Emold, Schneider, Meller, & Yagil, 2011). In dementia care givers, self-efficacy was found to be a greater predictor of burnout than organisational factors (Duffy, Oyebode, & Allen, 2009). In line with SCT, higher self-efficacy has been associated with a greater use of active coping strategies as well as lower burnout (Volker et al., 2010), suggesting the individual with higher self-efficacy may be more likely to pursue effective coping strategies which in turn reduces burnout. However, this pattern is not consistently found (Baker et al., 2007) and others have found self-efficacy is not predictive of burnout (Burke et al., 2006). Therefore, there remains some ambiguity around the relationship between self-efficacy and burnout and furthermore no studies to date have explored this relationship for professionals who work in children and adolescent mental health services. This suggests further research on the self-efficacy-burnout relationship is warranted for CAMHS professionals.

Study Rationale and Aims

The burnout literature predominately focuses on adult mental health workers rather than child mental health services, with no published research on burnout in CAMHS, to the author's knowledge. The nuances of professions and services influence burnout rates (Maslach et al., 2001); consequently findings cannot be generalised from one type of service to another. The inherent goal of burnout research is developing efficacious interventions. Combining individual and organisational interventions techniques is recommended (Morse et al., 2012), however, organisational

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aspects of interventions are said to lack focus on the specific stressors (Ruotsalainen, Verbeek, Mariné, & Serra, 2015). The lack of research with CAMHS staff means this study is taking an exploratory approach and as a result, it aims to identify the prevalence of burnout and explore which areas of work life are associated with burnout in CAMHS in order to guide future interventions.

Typically, the literature has been sparse when considering individual factors contributing to burnout in mental health workers (Coyle et al., 2005; Fothergill et al., 2004) and there is a lack of evidence for effective burnout strategies at the individual level (Ruotsalainen et al, 2015) . Therefore, this research seeks to explore whether self-efficacy is associated with burnout in CAMHS and if so, whether it mediates the relationship between organisational factors and burnout, in order to consider its value in future burnout interventions.

Hypotheses:

Burnout

1. a) It is predicted that burnout would be evident within a CAMHS population.
- b) It is predicted that higher emotional exhaustion will be associated with higher depersonalisation and lower personal accomplishment. Higher depersonalisation will also be associated with lower personal accomplishment.

Areas of work life and burnout

2. It is predicted that a discrepancy between the employee and the workplace in the areas of work life will be associated with greater burnout, this study will explore which of the six areas of work life are most predictive of burnout in the CAMHS setting.

Self-efficacy and burnout

3. It is predicted that higher self-efficacy will predict lower burnout and this individual factor will mediate the relationship between organisational factors and burnout.

Methodology

Design

A cross-sectional design, using self-report questionnaires to assess the 6 subscales of the Areas of Work life as the predictor variable, the 3 subscales of burnout as the outcome variable and general self-efficacy as a predictor and mediator variable was used on a sample of CAMHS employees.

Sample

Sampling strategy. An opportunity sample was used to recruit staff from CAMHS services across four NHS trusts. A total of 18 services invited their employees to take part via an email with a link to the online survey.

Justification of sample size. Gpower has been used to find that a sample size of 103 is required. This was based on the study having seven independent variables and using a regression analysis at power .80, significance level .05 in order to obtain a medium effect size (Cohen, 1992).

Inclusion/ exclusion criteria. Staff working in CAMHS in a clinical role were included (e.g. nurse, OT, Social worker). Staff who work in a non-clinical role (secretary, receptionist) were excluded.

Participant Demographics

One hundred and twentysix participants completed some of the online questionnaire. However, only one hundred and nineteen participants completed more than one measure, enabling them to be included in the final sample. Participants were predominately female ($n = 102$), full demographic information is provided in Table 3.

Table 3

*Demographic**Characteristics*

Variable	Category	<i>n</i>	Frequency as a Percentage
Gender	Male	12	10%
	Female	102	86%
	Missing	5	4%
Age (years)	18-24	6	5%
	25-29	21	18%
	30-34	16	13%
	35 - 39	14	12%
	40 – 44	17	14%
	45- 49	15	13%
	50-54	12	10%
	55 - 59	9	8%
	60- 65	2	2%
	Missing	7	5%
Hours Worked	Up to 15	2	2%
Hours Worked	Up to 22.5	8	7%
	Up to 30	22	18%
	Up to 37.5	43	36%
	Over 37.5	40	34%
	Missing	4	3%
Hours with Clients	Under 5	6	5%
	5-10	22	19%
	11-15	22	19%
	16-20	31	26%
	21-25	23	19%
	26-30	6	5%
	31+	5	4%
	Missing	4	3%

Time in Service (years)	Less than 1	34	29%
	1-2	24	20%
	3-4	18	15%
	5-6	11	9%
	7-8	6	5%
	9-10	8	7%
	11-13	6	5%
	14-15	1	1%
	16+	7	6%
	Missing	4	3%
Received Supervision	Yes	110	92%
	No	5	4%
	Missing	4	4%
	Mean	SD	Range
Sick Days (during past year)	5.4	10.8	0 – 90
Years Since Qualifying	10.6	8.1	0-32

Note: not all participants completed all aspects of the demographic information

Measures

All variables were measured using self-report questionnaires. The Maslach Burnout Inventory (MBI: Maslach & Jackson, 1981), made up of 3 subscales, was the dependent variable. The two predictor variables were the Area of Work life Survey (AWS: Leiter & Maslach, 2000, 2011), comprising of six subscales and the General Self-efficacy Scale (NGSE: Chen, Gully & Eden, 2001). For the mediation analysis, the AWS was the predictor variable, MBI was the dependent variable and NGSE was the

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mediator variable. Demographic characteristics were collected and are reported in table 3.

Areas of Worklife Survey. The Areas of Worklife Survey (Leiter & Maslach, 2000, 2011) assesses organisational life (Appendix B). This scale finds a compromise between the myriad of organisational variables and the reductionist approach of only considering one or two elements. The mismatch between the organisation and the employee is central to this scale, instead of assessing the organisation per se, it explores whether each area of work life is congruent with the employees expectations and ability. The scale has 29 items that produce scores for six areas of work life: Workload (6), control (3), reward (4), community (5), fairness (6) and values (5). Respondents rate their degree of agreement with each statement using a five point Likert scale from 1 (strongly disagree) to 5 (strongly agree). High scores indicate the workplace and individual are well matched, low scores (less than 3) indicate incongruence between the workers' preferences and the workplace. The AWS has good construct validity and a consistent factor structure across samples (Leiter & Maslach, 2003) and the alpha values for all scales meet the .70 criteria.

New General Self-efficacy Scale. New General Self-efficacy Scale (Chen, Gully & Eden, 2001) uses 8 items on a 5 point Likert scale to measure general self –efficacy (Appendix C). The scale has high internal consistency reliability (Cronbach's alpha .86) and high content validity (Chen et al, 2001).

Maslach Burnout Inventory. The Maslach Burnout Inventory – Human Services Survey (Maslach & Jackson, 1981) was used to measure burnout (Appendix D). Made up of 22 items with a seven-point Likert scale, it measures three constructs of burnout: emotional exhaustion (EE), depersonalisation (DP), and reduced personal accomplishment (PA). The questions ask how frequently the person experiences certain feelings about their job, those who score highly on emotional exhaustion and depersonalisation, and low on personal accomplishment are thought to have high levels of burnout. This measure has established categories of high, average and low burnout scores and has been used with mental health

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professionals previously (Onyett, Pillinger, & Muijen, 1997). The MBI-HSS enables comparison to other mental health professionals, it has good factor structure, validity and internal reliability (Cronbach's alpha, .90 EE, .79 DP and .71 for PA) and test re-test reliability (Maslach et al, 1996).

Procedure

Recruitment procedure. Managers of CAMHS services in four NHS trusts were notified of the study via email (Appendix E). Services were given the opportunity to meet with the researcher to enable the study to be discussed and any questions answered. Employees within the services were sent an e-mail with information about the study and a link to the online questionnaire (appendix F). Services were also provided with posters to notify staff of the study (appendix G).¹

Participation. Once employees followed the link to the online questionnaire they were provided with an online informed consent and study information form to provide relevant information to allow them to make an informed decision about participating (Appendix H). The participants ticked a box to indicate their consent prior to beginning the questionnaire. The questionnaire took about 15 minutes to complete. Participants were provided with a debriefing statement (Appendix I) and an opportunity to enter into a prize draw for four £50 vouchers by giving their email address, this was kept separate from the rest of the data to keep their data anonymous.

Ethical considerations. Full ethical approval was gained from the University of Southampton Ethics Committee (Appendix J), the NHS Health Research Authority (Appendix K) and the NHS trusts Research and Development teams (Appendix L) using the Integrated Research Application System. Participants were aware of their right to withdraw from the questionnaire at any time and were informed that their data would remain anonymous and confidential. Participants were provided with information of organisations and people to contact should they be

¹ Additional data was collected which was not used in this study and will be used for another study.

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experiencing distress at work, as well as the researcher's contact information.

Analysis

Data preparation. Data was analysed using IBM-SPSS version 22. Prior to analysis, descriptive statistics were run and issues relating to missing data, normal distribution and homogeneity of variance were addressed. The relationship between the demographic variables and the dependent variable was analysed to reduce the impact of confounding variables in the further analysis.

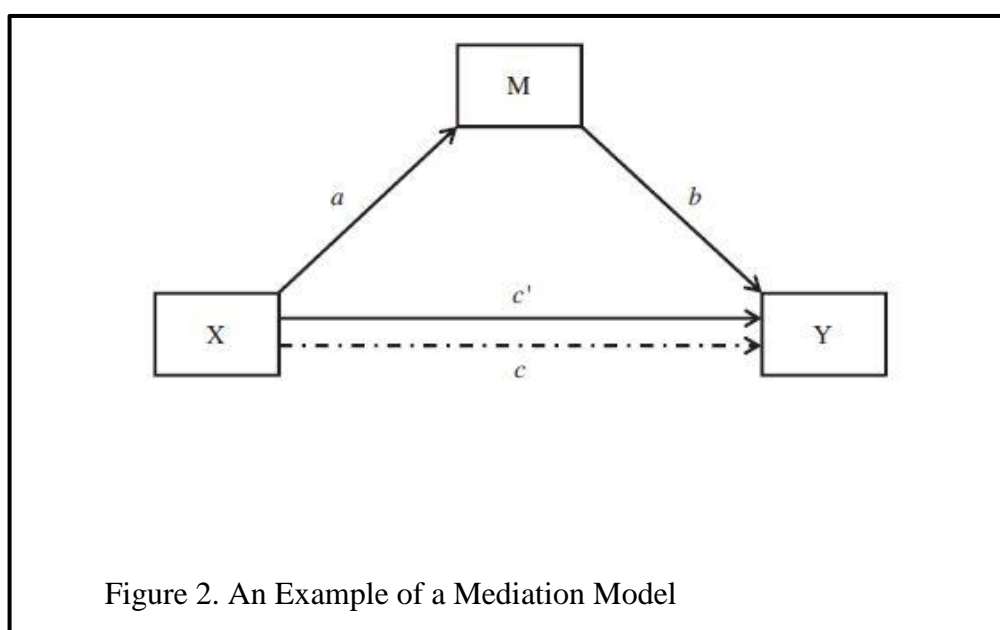
Analysis strategy. Theories have predicted the relationship between organisational factors, individual factors and burnout (Carson & Kuipers, 1998; Lazarus & Folkman, 1984); however, there is no indication of how the six areas of work life or self-efficacy will be associated with burnout in a CAMHS population. Therefore, an exploratory analysis is required to discover the pertinent relationships; the data analysis begins broad and through a process of elimination becomes more nuanced as the key variables emerge. This approach can be seen with other papers in the field (Ben-Porat & Itzhaky, 2014; Malinowski, 2013; Rzeszutek & Schier, 2014; Wallace et al., 2010) and was employed to avoid false positives (Smith & Ebrahim, 2002).

Initial correlations were conducted to assess the degree to which the six areas of work life and self-efficacy were related to each of the three burnout constructs. Following this, multiple regressions were conducted with the variables which correlated with each other to understand which of the predictor variables (AWS and NGSE) could explain changes in burnout (MBI). Once this was established, a bias corrected mediation analysis using the PROCESS add on in IBM-SPSS (Hayes, version 2.16) was used to ascertain whether self-efficacy (NGSE) can explain the relationship between the organisational context (AWS) and burnout (MBI).

Mediation analysis. A mediation analysis was used to test the hypothesis about how the AWS predictor variable (X) is associated with the MBI outcome variable (Y). The predictor variable is already assumed to

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have a causal influence on the outcome variable; the mediation analysis allows a better understanding of how this effect operates by testing whether NGSE as a mediator variable (M) can explain the relationship between AWS and MBI. Figure 2 illustrates a simple mediation model, mediation is assumed when the relationship between the predictor and outcome variable reduces with the inclusion of the mediator (Hayes & Rockwood, 2016). The SPSS tool PROCESS (Hayes, 2013) was used to conduct mediation analyses; it utilises a bootstrapping approach which randomly resamples cases from the data set, with replacement. This is repeated numerous times and builds up a representation of the sampling distribution of the indirect effect as if it were characteristic of the population. Bias corrected and accelerated confidence intervals were used due to the increased accuracy (Efron & Tibshirani, 1993). These were obtained at 2000 bootstrap samples.



Results

Data Preparation

Missing data was addressed prior to analysis. The 5% of participants who had completed only 1 measure or less were deleted from the data set as they could not be included in any data analysis. A further two participants had not completed one of the measures so they were excluded pairwise to allow the measures they did complete to be analysed. The final data set had <1% of random missing data, the sample mean of the item was used to replace the missing data (Tabachnick & Fidell, 2013).

Scatterplots confirmed data was linear but revealed two outliers in the depersonalisation subscale which were removed. The distribution of the data was assessed using histograms, the depersonalisation subscale appeared positively skewed with signs of leptokurtic kurtosis. These measures may be susceptible to a floor effect; this has been found previously with depersonalisation construct (Wood et al, 2011). Bootstrapping was used for further statistical analysis. A linear regression confirmed the variables were not collinear and scatterplots confirmed the assumptions of homoscedasticity. All data was interval data and independent.

Descriptive statistics. Descriptive statistics of all the research variables are shown in Table 4. Chronbach's alpha determined the internal consistency was acceptable for each of the research variables ($\alpha > .70$). The only exception to this was the personal accomplishment subscale, which had a Chronbach's Alpha of .65. Chronbach's alpha greater than .60 is deemed acceptable (Moss et al, 1998).

Table 4
Descriptive Statistics and Chronbach's Alphas for Research Variables

Variable	<i>n</i>	<i>M</i>	<i>SD</i>	<i>α</i>
Subscale				
MBI				
Emotional Exhaustion	119	23.33	11.21	.91
Depersonalisation	117	4.08	3.56	.70
Personal Accomplishment	119	38.48	5.15	.65
General Self-efficacy Scale	119	30.17	3.94	.85
Area of Worklife Scale				
Workload	119	12.52	3.92	.79
Control	119	13.78	2.91	.79
Reward	119	14.13	3.04	.87
Community	119	19.84	3.69	.90
Fairness	119	19.24	4.17	.84
Values	119	14.07	2.62	.72

Demographic characteristics and burnout. Participants' demographic characteristics are shown in Table 3. In order to account for these potentially confounding variables (Coyle et al, 2005; Edwards & Burnard, 2003; Leiter & Harvie, 1996; Maslach, 2015) the relationship between burnout and gender, supervision, age, time in service and years since qualifying were each assessed. An independent samples T-Test for gender and each burnout subscale found males experienced significantly greater personal accomplishment than females and this had a medium effect size ($t(112) = 2.14, p < .05, d = 0.65$). Independent T-Tests for supervision and burnout were not significant suggesting that receiving supervision made no significant difference to burnout.

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Pearson's correlations were conducted to assess the relationship between age, time in service, years since qualifying and burnout. Age, time in service and years since qualifying were significantly positively correlated with emotional exhaustion (Table 6). Therefore, age, years since qualifying, time in service and gender was controlled for by being included in the further analysis.

Burnout Prevalence

To explore the prevalence of burnout in CAMHS staff, the mean of each MBI subscale (Table 4) was compared to the normative ranges for mental health professionals (Table 5) described by Maslach et al (1996). The mean of this studies population was in the high burnout range for emotional exhaustion, with 55% of participants reporting high exhaustion (Table 5), on the cusp of the low range for depersonalisation and within the low burnout range for personal accomplishment. According to Maslach, all three aspects of burnout need to be in the 'high burnout' range for burnout to be present, i.e. experiencing high emotional exhaustion, high depersonalisation and low personal accomplishment. Therefore, contradictory to hypothesis 1a, these findings suggest CAMHS workers are not burnt-out.

Table 5

Normative means for mental health workers and frequency of study participants in each burnout range (Maslach, Jackson & Leiter, 1996)

Normative means for mental health workers in each burnout range			
	Low Burnout	Average Burnout	High Burnout
Emotional Exhaustion	< 13	14-20	>21
Depersonalisation	<4	5-7	>8
Personal Accomplishment	>34	33-29	<28
Percentage of Study Participants in Each Range			
	Low Burnout	Average Burnout	High Burnout
Emotional Exhaustion	22%	23%	55%
Depersonalisation	63%	21%	16%
Personal Accomplishment	80%	16%	4%

Correlations between the Burnout Variables

To assess the relationship between the burnout constructs, three Bivariate Pearson's correlations were conducted to assess the relationship between emotional exhaustion, depersonalisation and personal accomplishment, these are depicted in Figure 3. Emotional exhaustion and depersonalisation were positively significantly correlated, $r = .32, p < .01$, BCa 95% CI [.13-.48]. The effect size was medium and 10% of the variance was accounted for. Emotional exhaustion was also significantly negatively correlated with personal accomplishment, $r = -.29, p < .01$, BCa 95% CI [-.47 - -.11]. The effect size was on the cusp of medium and 8% of the variance was accounted for. However, the relationship between depersonalisation and personal accomplishment was not significant ($r = -.08, p > .05$, BCa 95% CI [-.27-.09]). This suggests CAMHS professionals who

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experience higher levels of emotional exhaustion are significantly more likely to report greater depersonalisation and lower personal accomplishment, providing some support for hypothesis 1b. However, there was no relationship between depersonalisation and personal accomplishment, consequently hypothesis 1b is not totally supported.

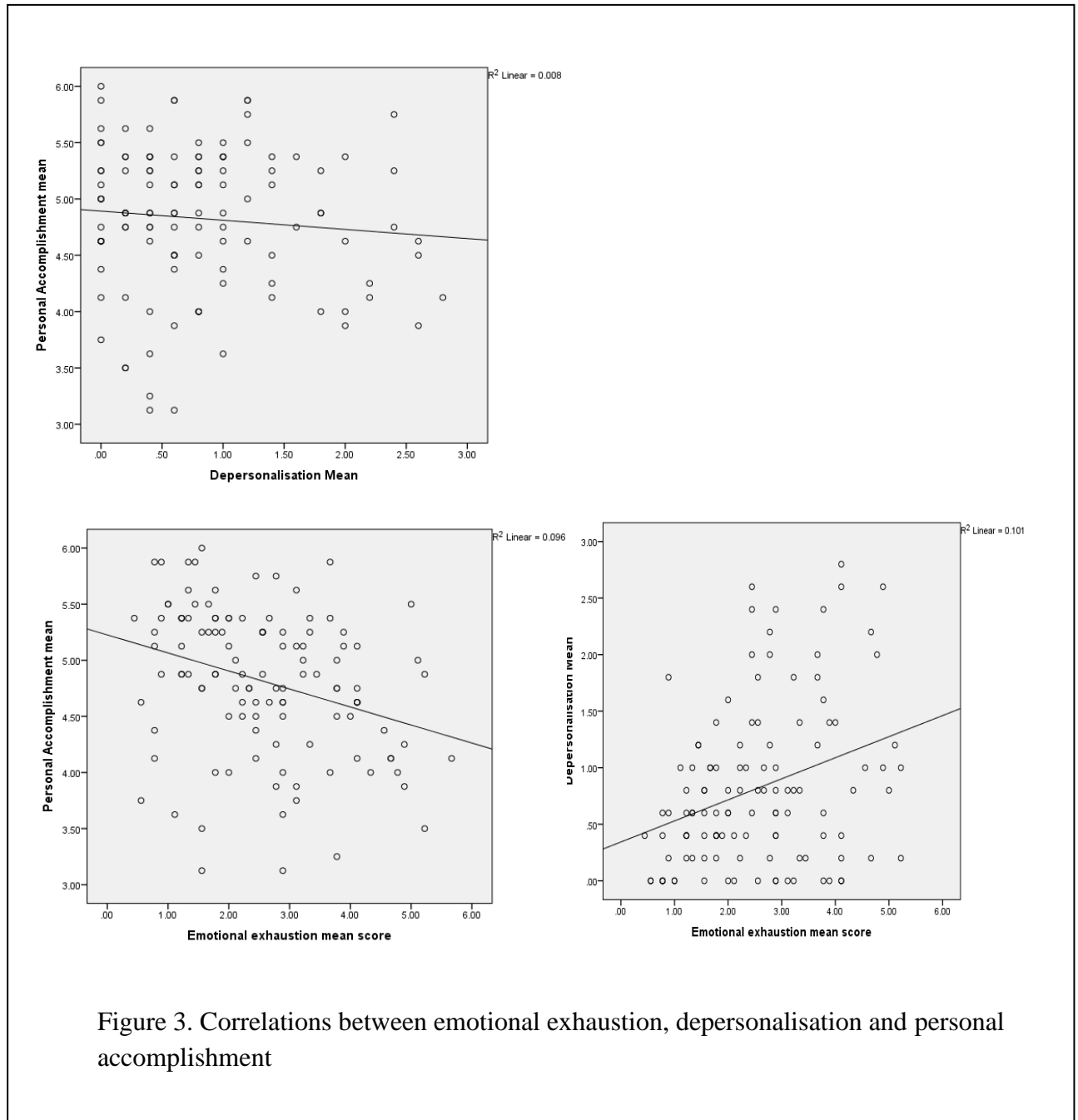


Figure 3. Correlations between emotional exhaustion, depersonalisation and personal accomplishment

Table 6

Pearson's correlations for all variables

	AWS					MBI			NGSE	Demographics			
	Workload	Control	Reward	Community	Fairness	Values	EE	DP	PA	SE	Years Qualified	Age	Time in Service
Workload		.21*	.25**	.20*	.21**	.27**	-.71**	-.21*	.29**	.37**	-.32**	.29**	.37**
Control			.60**	.40**	.53**	.45**	-.47**	-.09	.45**	.52**	-.11	-.25*	-.19*
Reward				.35**	.45**	.43**	-.48**	-.10	.24**	.42**	-.08	-.21*	-.12
Community					.60**	.50**	-.35**	-.07	.26**	.34**	-.13	-.16	-.24*
Fairness						.45**	-.44**	-.03	.17	.36**	-.25*	-.33**	-.35**
Values							-.44**	-.19*	.40**	.55**	-.34**	-.32**	-.34**
EE								.32**	-.30**	-.51**	.29**	.25**	.30**
DP									-.09	-.07	.11	-.12	.06
PA										.53**	-.11	-.07	-.09
Self-efficacy											-.19	-.24*	-.20*
Years Qualified												.66**	.48**
Age													.50**

Note: Areas of Worklife Survey = AWS, Maslach Burnout Inventory = MBI, New General Self-efficacy Scale = NGSE, Emotional exhaustion = EE,

Depersonalisation = DP, Personal accomplishment = PA. $p < .01 = **$ $p < .05 = *$

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Correlations between work life (AWS), self-efficacy (NGSE) and burnout (MBI)

An exploratory approach was necessary to identify which of the areas of work life were associated with burnout and whether self-efficacy could potentially mediate this relationship, in a CAMHS staff population. Therefore, bivariate Pearson's correlations were conducted as a first step to establish whether a relationship exists between all of the variables. The results suggest CAMHS employees who perceive incongruence between their own expectations and their organisational context across all six areas of work life, experience higher emotional exhaustion. As employees experienced a greater incongruence in the organisational areas of workload and values, they also experience greater levels of depersonalisation. The employees who reported a stronger match with all aspects of their work life, apart from fairness, were more likely to feel higher levels of personal accomplishment in their roles (Table 6). Table 6 shows higher self-efficacy was associated with lower emotional exhaustion and higher personal accomplishment, but was not correlated with depersonalisation.

Multiple Regression

To answer hypothesis 2, forced entry multiple linear regressions were conducted to ascertain which six areas of work life (AWS) and whether general self-efficacy (NGSE) could predict an increase or decrease in burnout (MBI). Given correlations existed between AWS and emotional exhaustion, depersonalisation and personal accomplishment, the multiple regression was repeated for each burnout construct. Due to their significant relationship between gender, age, time in service, years since qualifying and burnout, these demographic characteristics were also included in the regression. The findings in table 7 provide support for hypothesis 2, as predicted, employees incongruence with their work life was related to burnout. Higher emotional exhaustion was significantly predicted by a greater incongruence of workload and reward. Higher depersonalisation was significantly predicted by a lower age, a higher workload, a higher number of years qualified and being male. Personal accomplishment was significantly predicted by general self-efficacy, control and workload. There

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was some support for hypothesis 3 as lower self-efficacy was predictive of burnout but only for the personal accomplishment domain. Self-efficacy was not predictive of burnout in the final model for either emotional exhaustion or depersonalisation.

Table 7.

Significant multiple regression models with the burnout subscales as the dependent variable and areas of work life and self-efficacy as predictors

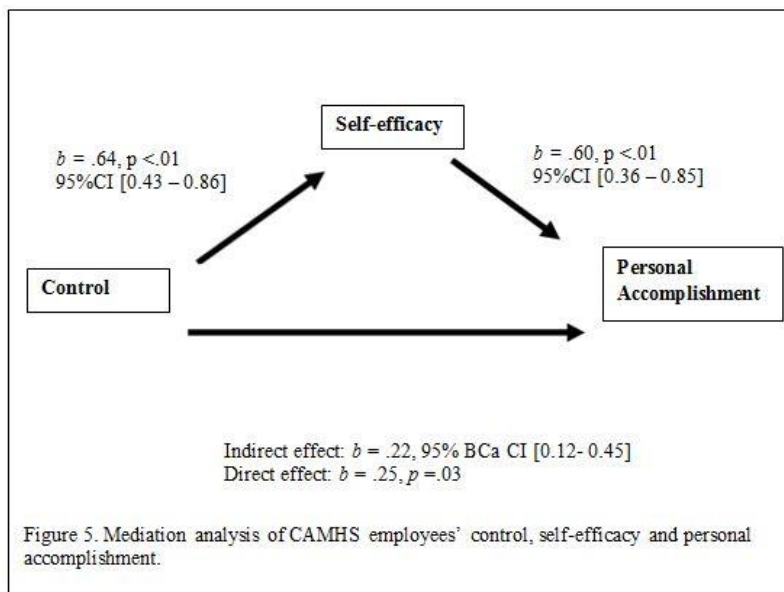
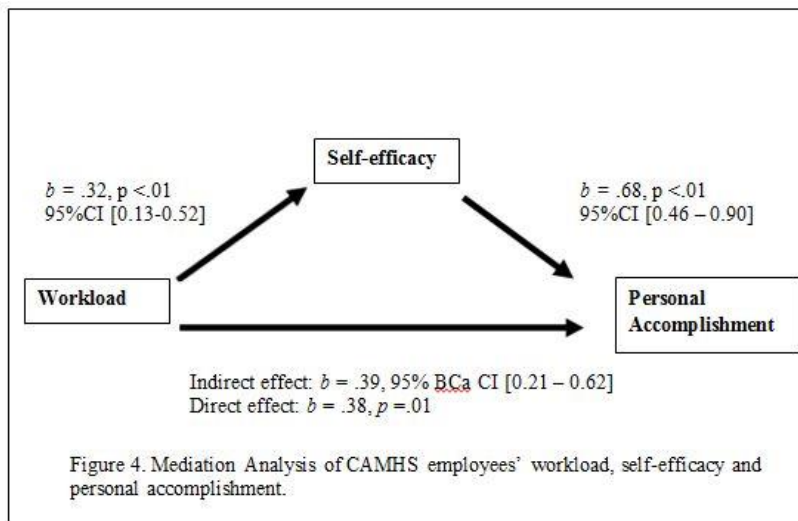
AWS & NGSE	MBI			
predictor variables	dependent variable			
	Emotional Exhaustion			
	b	SE B	B	P
Workload	-1.62	.20	-.57	p=.000
Reward	-.77	.30	-.21	p=.013
	Depersonalisation			
	b	SE B	B	P
Age	-.77	.25	-.44	p=.003
Workload	-.25	.09	-.27	p=.016
Years Qualified	.14	.06	.32	p=.021
Gender	-2.50	1.19	-.22	p=.039
	Personal Accomplishment			
	b	SE B	B	P
Self-efficacy	.47	.13	.36	p=.001
Control	.45	.18	.27	p=.015
Workload	.26	.11	.20	p=.026

The Mediating Role of Self-efficacy

It was hypothesised that self-efficacy would mediate the relationship between the organisational context and burnout. As the multiple regression found control, workload and self-efficacy predicted personal accomplishment, it was then assessed to see if self-efficacy mediated this relationship. The demographic variables, gender, age and number of years

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since qualifying, were entered as covariates to control for their effect. The model with workload as the predictor variable (figure 4) found a significant indirect effect between workload and personal accomplishment, via self-efficacy, this model accounted for 39% of the variance of self-efficacy ($R^2 = .39, p < .01$). The model with control as the predictor variable (figure 5) and self-efficacy as the mediator variable accounted for 40% of the variance of personal accomplishment. In support of hypothesis 3, a significant indirect effect was found whereby the relationship between control and personal accomplishment is mediated by self-efficacy ($R^2 = .40, p < .01$). This suggests CAMHS employees experience reduced personal accomplishment when their actual workload and control at work is incongruent with their expectations for the job, and this relationship can be explained by those individuals also having a lower sense of general self-efficacy.



Discussion

This study found 55% of CAMHS employees reported high levels of emotional exhaustion. An incongruence between the job and the employee in the organisational areas of workload and reward predicted higher emotional exhaustion. This suggests CAMHS employees need to have their workload and rewards at work better tailored to their own expectations and abilities in order to reduce emotional exhaustion. The majority of participants experienced low depersonalisation, suggesting cynicism about clients is experienced less in CAMHS professionals than other mental health workers (Maslach et al, 1996). This study found lower depersonalisation was predicted by an employees' workload and their demographic characteristics of being older, a lower number of years being qualified and being female. A majority of 80% of employees experienced high personal accomplishment in CAMHS (which is indicative of low burnout); the employees' high self-efficacy was the greatest predictor of high personal accomplishment, followed by their levels of control at work and their workload being well tailored to them. Furthermore, the relationship between these organisational factors and their personal accomplishment was mediated by self-efficacy, suggesting appropriate control at work and suitable workloads allow CAMHS employees to develop beliefs around being able to cope with challenging situations and take effective action. These self-efficacy beliefs are likely to influence the action they do then take (Bandura 1977, 1993) and therefore employees achieve and succeed more in the workplace.

Burnout

This sample of NHS CAMHS employees were not burnt-out according to Maslach's definition. On average, high levels of emotional exhaustion were reported, low levels of depersonalisation and high personal accomplishment. This pattern has also been seen in adult mental health teams in the UK (Onyett et al, 1997). Whilst this does not fully support the first hypothesis that burnout would be evident in CAMHS workers, emotional exhaustion is seen as the driving force behind burnout (Leiter & Maslach, 2003) consequently the high levels of emotional exhaustion are

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concerning. The extent of emotional exhaustion is similar to forensic mental health workers in the UK (Oddie & Ousley, 2007) and community mental health workers in America (Webster & Hackett, 1999). According to Maslach, depersonalisation is a strategy to cope with the emotional exhaustion and as a result, the individual then achieves and perceives fewer achievements at work. Therefore, it could be assumed that a longitudinal study would have seen an increase in depersonalisation and a decrease in personal accomplishment, as a result of the high levels of emotional exhaustion. This study found higher emotional exhaustion was significantly associated with higher depersonalisation, although cross sectional, this still provides support for our hypothesis and for Maslach & Jacksons' (1981) understanding of burnout. Taken together, this suggests CAMHS employees who have high emotional exhaustion do experience higher levels of depersonalisation but not to the extent of other populations. Employees who work with children in child protection roles (Anderson, 2000) and in residential treatment units (Lakin et al., 2008) all report greater levels of depersonalisation. This raises questions for future research about how the CAMHS setting enables employees to maintain compassionate relationships with children, despite exhaustion, where in other settings this is problematic. Furthermore, how do CAMHS employees cope with emotional exhaustion if it is not through depersonalisation.

CAMHS professionals who were more emotionally exhausted also experienced lower personal accomplishment in work. However, again, the levels of personal accomplishment were higher than other populations (Maslach et al, 1996). Therefore, despite experiencing high levels of emotional exhaustion, CAMHS employees appear protected from high depersonalisation of clients and low personal accomplishment in work. Coyle et al (2005) identified mental health social workers were more satisfied when working with children instead of adult clients. It is of interest to better understand the factors associated with this process.

Demographic Factors and Burnout

The relationship between demographic factors and burnout has been ambiguous (Maslach, 2015). In support of previous literature, male CAMHS

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practitioners reported greater personal accomplishment than females (Coyle et al., 2005; Maslach, 2015). In contrast to previous literature, the CAMHS staff who had been qualified for a longer time were more emotionally exhausted (Leiter & Harvie, 1996), it is therefore helpful for CAMHS to be aware that in their services, experience is not necessarily protective of exhaustion. Furthermore, those employees who were of an older age and had a longer time in the service were also experiencing higher levels of emotional exhaustion. This suggests CAMHS employees become increasingly emotionally exhausted the longer they remain within the service. However, despite this significant correlation, the length of time employees had spent in the service was not a significant predictor of burnout and other factors explained more variance. One explanation for this could be because people are leaving the service due to higher levels of burnout.

Depersonalisation was found to be predicted by workload and demographic factors. The findings that being female, being younger and being qualified for a longer period of time were all predictive of depersonalisation which suggests CAMHS should be aware these employees may be more vulnerable to depersonalisation. The relationship between burnout and being female and younger has been supported in previous research, however, being qualified for a longer period of time has not (Coyle et al, 2005; Edwards & Burnard, 2003; Leiter & Harvie; Maslach, 2015).

Areas of Worklife and Burnout

The notion that an employee's 'fit' with their work environment is influential in the development of burnout, has been confirmed by these findings and supports the generalisability of the Six Areas of Worklife model (Leiter & Maslach, 2003) to a CAMHS population. The exploratory nature of this study aimed to identify which of the six factors were most influential in this population. Despite all of the six areas of work life correlating with emotional exhaustion, only two were predictive of emotional exhaustion. Specifically, the findings suggest that when workload is incongruent with the employees' abilities or expectations it predicts the

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greatest increase of emotional exhaustion and a lack of appropriate rewards or recognition in the workplace was the second largest predictor of emotional exhaustion. Workload consistently predicts emotional exhaustion (Gupta, Paterson, Lysaght, & Von Zweck, 2012; Lasalvia et al., 2009; Leiter et al., 2009; Leiter & Maslach, 2003). The combination of workload and rewards predicting emotional exhaustion has also been found in adult community mental health staff (Lasalvia et al., 2009). These findings empirically support the effort-reward imbalance model (Siegrist, 1996) which suggests employees become burnt-out when a highly demanding job is combined with few rewards (e.g. job security, promotion, salary) within the workplace or a lack of recognition by employers. Therefore, it is crucial for CAMHS settings to address the balance between workload and reward in order to manage employees' levels of emotional exhaustion. These findings extend on this concept by clarifying it is not just a combination of high demands and low rewards that is problematic; it is the incongruence between the employees' expectations and the reality of the job demands and workplace rewards that predicts exhaustion. This lends itself to interventions with the aim of aligning employees' expectations of workload and rewards with the reality of the service which provides opportunities to intervene by monitoring levels of incongruence in these domains, adjusting employees' expectations and adjusting the workplace.

The relationship between workload and high depersonalisation has been seen in previous research (Lasalvia et al., 2009; Leiter et al., 2009). Given that none of the other areas of work life or self-efficacy were responsible for predicting depersonalisation future research may need to explore other individual or organisational factors to understand which factors predict depersonalisation in a CAMHS setting. Depersonalisation is described as a method of coping with emotional exhaustion (Maslach et al, 2001) and alternative coping strategies can influence depersonalisation. For example, actively solving problems can reduce depersonalisation (Anderson, 2000) and using negative coping strategies can increase it (Elliott & Daley, 2013). When employees work life is in line with their personal values they may be less prone to burnout (Leiter & Harvie, 1996).

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Indeed, poor commitment to personal values during work life has been indicative of high burnout in counsellors (Villardaga et al., 2011). Although the AWS measured employees' congruence with organisational values, the questions may not have been nuanced enough to account for whether CAMHS work is in line with their values. It is possible that working in CAMHS prevents the depersonalisation process because by helping children with mental health issues employees are enacting their personal values through work. As a consequence they may be more able to maintain positive attitudes towards their clients and employ alternative strategies to cope with the exhaustion, instead of depersonalisation. Other possible explanations for the low depersonalisation score could relate to the emotional demands of the job, as different emotional demands can create different burnout profiles (Zapf et al., 2001), alternatively, personality types have been shown to influence emotional exhaustion but not depersonalisation (Oginska-Bulik, 2006). Therefore, further research would benefit from identifying other individual factors, rather than just demographic factors, which do protect CAMHS employees from depersonalisation.

In support of the demand-control theory of job stress (Karasek & Theorell, 1990), control and workload predicted the extent CAMHS workers felt a sense of achievement in their role. When employees experienced incongruence with their workplace in regards to control at work and their workload, it predicted reduced personal accomplishment. Previous research with community mental health workers (Lasalvia et al., 2009) also established the importance of employees' sense of control in order to feel a sense of accomplishment in their role. It is suggested that feeling able to control the work environment allows the individual to shape their role in a way which is congruent with their values; this helps to buffer excessive job demands, preventing emotional exhaustion and promoting a sense of achievement associated with the job (Karasek & Theorell, 1990). These findings do not entirely support this literature as control and workload predicted personal accomplishment but not emotional exhaustion. Nonetheless, it highlights the importance of ensuring that both workload and

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control at work are in line with the employees' values in order to facilitate a sense of achievement within their role as a CAMHS worker.

Self-efficacy and Burnout

Understanding which personal factors could protect employees from burnout has been advocated (Kay-Eccles, 2012) and self-efficacy has been implicated as a protective individual resource (Shoji et al., 2015). It is proposed that employees with beliefs about being able to cope or attain desired goals, are more likely to perceive occupational demands as more of a challenge rather than a threat, their stress levels will therefore be lower, they will take action to cope with the demands and exert more effort on doing so. Therefore self-efficacy can influence stress, the actions taken and the outcomes achieved (Bandura, 1977, 1993; Sebastian, 2013). However, this study found self-efficacy was not predictive of emotional exhaustion or depersonalisation but it was predictive of personal accomplishments i.e. employees with higher self-efficacy was predictive of greater outcomes at work. To an extent these findings corroborate previous meta-analyses who confirmed self-efficacy has the strongest relationship with personal accomplishment (Alarcon et al., 2009; Shoji et al., 2015). This is because as individuals perceive themselves as more able to attain goals, they are more likely to use the knowledge and skills they have to work effectively and succeed in the workplace (Bandura, 1993).

Further exploration of the role of self-efficacy, identified that an individual's self-efficacy mediated the relationship between workload, control and personal accomplishment. This augments the ideas conveyed by the transactional model of stress (Lazarus & Folkman, 1984) and the Carson and Kuipers model (1998), that individual factors will influence the relationship between organisational factors and burnout. However, these models do not home in on the mechanism by which self-efficacy, as an individual factor, may achieve that. This is better understood by a cognitive model, such as Ellis' A-B-C model (1957) which provides a framework to understand how an individual's belief system, will result in associated cognitions being triggered (B) by a situation (A), this then impacts the individual's emotional and behavioural outcomes (C). In line with the

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cognitive model, CAMHS workers who perceived their job to be well matched to them in the areas of control and workload experienced greater personal accomplishment; it is the cognitions relating to self-efficacy which help to explain this relationship. Suitable levels of control and workload in CAMHS may be conducive to CAMHS employees' experiencing self-efficacy beliefs such as "I will be able to achieve the goals I have set for myself" or "I can perform well even when things are tough" (Chen, Gully & Eden, 2001) and in turn they are more successful in their role. For example, they may have the autonomy to shape their work environment or conduct tasks using an approach they feel more able to succeed with, the environment may also be more favourable to learning from other colleagues successes, as well as facilitating their own achievements (Bandura, 1977). This relationship is then reciprocal as the more they achieve, the greater their sense of self-efficacy in that domain (Bandura, 2006).

Summary of Findings

In summary, these findings suggest workload, reward and control are key organisational areas which can be targeted in order to reduce emotional exhaustion and increase personal accomplishment in CAMHS employees. Furthermore, this study has clarified that the mechanism of change or reason why different organisational factors affect personal accomplishment, is employees' self-efficacy. By identifying self-efficacy as a set of cognitive beliefs which influence burnout, it is appropriate to consider cognitive-behavioural informed interventions to modify employees' beliefs (Beck, Rush, Shaw & Emery, 1979) in order to increase their personal accomplishment. These findings allow for the development of specific, theoretically grounded interventions considering both the individual and organisational maintaining factors, to reduce certain aspects of burnout (Edwards & Burnard, 2003).

Clinical Implications

These findings have important implications for CAMHS; practitioners' high levels of emotional exhaustion needs to be addressed as a matter of urgency. The findings of this study suggest it will be crucial to align employees' expectations of their workload and reward with the reality

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of the service. There are different strategies that could help to achieve this. Firstly, levels of incongruence between the employee and their service could be regularly monitored through supervision, staff feedback and staff evaluation surveys. Secondly, services could adjust their services' workload and rewards; for example, services could seek to make tangible, service specific, changes to reduce workload by prioritising what is required. This could involve making changes to how tasks are completed by reducing the length of reports required or introducing group interventions where appropriate to reduce employees' caseloads. Thirdly, as part of supervision or in a dedicated group, services could manage employees' expectations of whether they are completing the required workload. A flexible, employee-centred approach would be required to ascertain employees' expectations and develop collaborative workload agreements, rather than entirely service driven, pre-set goals. Planning their time, prioritising tasks, setting realistic and achievable goals would help to manage expectations. Clinical psychologists' skill in assessment, evaluation and communication makes them well placed for being able to facilitate these sorts of activities. Finally, responsibility lies with the organisation to: support line managers to facilitate this approach effectively; resist the urge to increase employees' workload beyond their capacity and recognise the counter-productive nature of this approach; ensure their workload expectations are realistic and congruent with employees. The hope is this would reduce employees' sense of high workload levels, allowing them to feel less emotionally exhausted and achieve an increased sense of accomplishment from their work. As a consequence, CAMHS practitioners may then become more efficient and productive.

As well as managing workload, services need to address employees' perceptions of feeling rewarded for their work in order to reduce emotional exhaustion. When employees feel appreciated for their work, they are better able to manage high demands (Leiter & Maslach, 2003). Reward can refer to job security, promotions and monetary reward but gaining recognition and feeling appreciated is equally important when the workload is high. Given the clear pay structure of the NHS and financial cuts, promotions and

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monetary rewards may not be as applicable to CAMHS, emphasising the importance of recognising workload and appreciating practitioners' efforts. Receiving recognition for work could be addressed at several levels; it could be incorporated into supervision, into the culture of the team by acknowledging staffs' achievements and challenges, as well as from the organisation, for example, allowing for time to be taken back when overtime has had to be worked.

Given the inherent difficulties with addressing workplace factors such as workload and reward, CAMHS may benefit from managing the high levels of emotional exhaustion at an individual level. A recent review found some evidence for the effectiveness of Cognitive Behavioural Therapy (CBT) and physical relaxation interventions to reduce occupational stress in healthcare workers (Ruotsalainen et al, 2015). In addition, Acceptance and Commitment Therapy (ACT) interventions have reduced burnout in social workers (Brinkborg et al, 2011). Therefore, providing CAMHS workers with access to CBT, ACT or physical relaxation interventions may help to improve the high levels of emotional exhaustion currently evident among staff.

In order to maintain personal accomplishment, CAMHS need to support employees to develop their general self-efficacy. This can be achieved by addressing the level of autonomy and control practitioners have at work, combined with the aforementioned strategies to manage workload: including staff in decisions affecting their work, enabling them to effectively gain appropriate resources to complete their work and allowing them professional autonomy will enable employees to shape their environment accordingly. This improves their self-efficacy which enables practitioners to maintain the high levels of personal accomplishment currently reported by CAMHS staff. The vital role of self-efficacy in improving personal accomplishment, lends itself to the interventions focused on the individual's development of self-efficacious beliefs. From an SCT perspective, staff training, constructive feedback, observation of other colleagues and having opportunities to successfully attain their clinical work goals will aid the development of self-efficacy and consequently, personal

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accomplishment (Bandura, 2006). Furthermore, the nature of general self-efficacy, as a set of cognitive beliefs impacting an individual's behavioural and affective outcomes, allows for a cognitive behavioural approach, of modifying employees' beliefs, to be used (Beck et al, 1979; Ellis, 1957). The efficacy of these approaches has begun to be assessed (Bresó, Schaufeli, & Salanova, 2011). Again, Clinical Psychologists would be well placed to develop and facilitate these aspects of a burnout intervention.

Methodological Limitations

The self-selecting nature of the participants could have biased the data, for example, employees' who were burnt-out may have been on sick leave, left the job or felt unable to give up their time to complete the survey. This could have skewed the data to appear more positive. Although, those participants who were burnt-out may have felt able to relate to the study and thus been more likely to complete it (Bride, 2007). Unfortunately the recruitment approach made it hard to ascertain how many employees the study had been advertised to and therefore the response rate is unclear which exacerbates the difficulties with establishing the likelihood of a response bias. This affects the generalisability of these findings.

The cross-sectional design of this study limits the conclusions drawn. Although regressions identify the variables which predict changes in burnout, causality cannot be identified with a cross-sectional design (Tabachnick & Fidell, 2007) and consequently the findings should be interpreted with caution. In regards to the analysis strategy, Maxwell and Cole (2007) suggest results may be biased, limiting conclusions of causality. The theoretical grounding and empirical support suggesting organisational factors do cause burnout, via cognitive belief systems (e.g. self-efficacy), adds credibility to the conclusions drawn in this study. Although it is common to use mediation analysis in a cross sectional design, it may be of use to address this critique with future longitudinal studies.

The measures used were self-report questionnaires which could be susceptible to common method variance (Podsakoff, Mackenzie, Lee &

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Podsakoff, 2003), due to negative affect influencing participants' responses on multiple questionnaires and inflating the shared variance.

Future Research

This study demonstrated that each of the three burnout constructs is associated with different predictor variables. Given self-efficacy was only predictive of personal accomplishment, future research would benefit from identifying alternative individual factors which may predict or mediate the relationship between the organisational context and emotional exhaustion or depersonalisation, in order to design interventions based on key individual and organisational factors (Edwards & Burnard, 2003; Ruotsalainen et al., 2015).

The findings that CAMHS staff are highly emotionally exhausted yet do not depersonalise clients, raises the question for future research as to how they cope with the exhaustion if not through depersonalisation. This study was unable to generate an understanding of the factors which may underpin depersonalisation in CAMHS employees. Previous research has indicated a relationship between coping strategies and depersonalisation (Anderson, 2000; Elliott & Daley, 2013) and these variables could be of interest for future research in CAMHS. The literature suggests that employees who are able to enact their personal values through their work may be protected from burnout (Leiter & Harvie, 1996; Vilardaga et al., 2011) which could be another explanation as to what protects CAMHS staff and would be worthy of further investigation.

To extend the findings and conclusions drawn from this study, the use of a longitudinal design would help to confirm causality and the explanations inferred from these findings. CAMHS services would benefit from conducting an experimental design testing the efficacy of interventions focusing on ensuring the organisational factors of control, workload and reward are congruent with their employees, and seeking to improve practitioners' self-efficacy. This could pave the way towards being able to reduce emotional exhaustion and promote personal accomplishment for CAMHS employees.

Conclusion

Although the CAMHS practitioners surveyed in this study could not be defined as burnt-out (Maslach et al, 1996; Maslach & Jackson, 1981), they are suffering high emotional exhaustion which is considered the driving force of burnout (Leiter & Maslach, 2003). Despite their emotional exhaustion, it is reassuring CAMHS employees report low depersonalisation of clients and high personal accomplishment in their role. Given the implications of burnout on the employee, organisation, and service-users, it is of paramount importance that CAMHS seek to reduce their high levels of emotional exhaustion and maintain employees' personal accomplishment.

Employing the AWS as a tool to assess the congruence between the employee and the organisation across six areas of work life has proved a useful framework to determine the predictors of burnout in CAMHS. Seeking to align CAMHS employees' workloads with their own expectations is vital to reduce burnout. The findings suggest balancing workload and rewards at work by ensuring employees feel that these organisational areas are in line with their own values and abilities, would reduce emotional exhaustion. Additionally, this study identified the importance of maintaining a work environment which redresses workload and control at work in order to allow employees to shape their environment to facilitate their own self-efficacy and in turn succeed in their role. Self-efficacy is integral in maintaining employees' personal accomplishment and thus self-efficacy increasing strategies should be integrated into interventions aimed at reducing burnout.

Further research should help to identify individual and organisational factors that may be influential in depersonalisation and the individual factors which may influence emotional exhaustion. This will aid the continued need to develop theoretically driven interventions, focusing on both individual and organisational factors (Edwards & Burnard, 2003; Ruotsalainen et al., 2015).

Appendices

Appendix A: Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies

Criteria	Studies		
	Bahner & Berkel (2007)	Baker, O'Brien & Salahuddin (2007)	Bakker, Holland, Van der Zee et al. (2006)
1. Was the research question or objective in this paper clearly stated?	Yes	Yes	Yes
2. Was the study population clearly specified and defined?	Yes	Yes	Yes
3. Was the participation rate of eligible persons at least 50%?	Yes (58%)	Yes (74%)	No (39%)
4. Were all the subjects selected or recruited from the same or similar populations (including the same time period)? Were inclusion and exclusion criteria for being in the study prespecified and applied uniformly to all participants?	No – v. different service set ups	No – homeless shelters and women's crisis centre	Yes
5. Was a sample size justification, power description, or variance and effect estimates provided?	No	No	No
6. For the analyses in this paper, were the exposure(s) of	No	No	No

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interest measured prior to the outcome(s) being measured?			
7. Was the timeframe sufficient so that one could reasonably expect to see an association between exposure and outcome if it existed?	No	No	No
8. For exposures that can vary in amount or level, did the study examine different levels of the exposure as related to the outcome (e.g., categories of exposure, or exposure measured as continuous variable)?	No	No Multiple regression	No Regression Analysis
9. Were the exposure measures (independent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?	Yes	NR for all NR own alphas	Yes
10. Was the exposure(s) assessed more than once over time?	No	No	No
11. Were the outcome measures (dependent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?	No – MBI a= .64 DP a= .77 PA (dropped item 17 to achieve this from .49)	No – MBI A= .52 DP a = .78 PA (Dropped DP)	No – MBI a= .61 DP
12. Were the outcome assessors blinded to the exposure status of participants?	NA	NA	NA

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13. Was loss to follow-up after baseline 20% or less?	NA	NA	NA
14. Were key potential confounding variables measured and adjusted statistically for their impact on the relationship between exposure(s) and outcome(s)?	yes	Yes	No
	5	4	4

Criteria	Studies		
	Ben-Porat & Itzhaky (2014)	Buunk, Ybema & Van der Zee. (2001)	Elliot & Daley. (2013)
1. Was the research question or objective in this paper clearly stated?	Yes	Yes	Yes
2. Was the study population clearly specified and defined?	Yes	Yes	Yes
3. Was the participation rate of eligible persons at least 50%?	Yes (70%)	NR	No (32%)

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4. Were all the subjects selected or recruited from the same or similar populations (including the same time period)? Were inclusion and exclusion criteria for being in the study prespecified and applied uniformly to all participants?	No – different settings (women shelters & social service bureaus)	Yes	No – different services (forensic MH and Forensic LD)
5. Was a sample size justification, power description, or variance and effect estimates provided?	No	No	No
6. For the analyses in this paper, were the exposure(s) of interest measured prior to the outcome(s) being measured?	No	NR	No
7. Was the timeframe sufficient so that one could reasonably expect to see an association between exposure and outcome if it existed?	No	NR	No
8. For exposures that can vary in amount or level, did the study examine different levels of the exposure as related to the outcome (e.g., categories of exposure, or exposure measured as continuous variable)?	No Hierarchical Regressions	No Regression Analysis *pictures show incline*	No Linear Regression
9. Were the exposure measures (independent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?	Yes	No validity, reliability, alphas.	Good reliability No validity
10. Was the exposure(s) assessed more than once over time?	No	No	No

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11. Were the outcome measures (dependent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?	Yes	No – MBI a= .64 PA No diff from norms	Yes
12. Were the outcome assessors blinded to the exposure status of participants?	NA	NA	NA
13. Was loss to follow-up after baseline 20% or less?	NA	NA	NA
14. Were key potential confounding variables measured and adjusted statistically for their impact on the relationship between exposure(s) and outcome(s)?	Yes	No	Yes
	6	3	4

Criteria	Studies		
	Gilibert & Daloz. (2008)	Gutierrez & Mullen. (2016)	Killian. (2008)
1. Was the research question or objective in this paper	Yes	Yes	Yes

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clearly stated?			
2. Was the study population clearly specified and defined?	yes	yes	Yes
3. Was the participation rate of eligible persons at least 50%?	Yes (89%)	No (6%)	Yes (100%)
4. Were all the subjects selected or recruited from the same or similar populations (including the same time period)? Were inclusion and exclusion criteria for being in the study prespecified and applied uniformly to all participants?	Yes	No – different types of services etc. Unkown all professional affiliations	Yes
5. Was a sample size justification, power description, or variance and effect estimates provided?	No	Yes	No
6. For the analyses in this paper, were the exposure(s) of interest measured prior to the outcome(s) being measured?	No	No	No
7. Was the timeframe sufficient so that one could reasonably expect to see an association between exposure and outcome if it existed?	No	No	No
8. For exposures that can vary in amount or level, did the study examine different levels of the exposure as related to the outcome (e.g., categories of exposure, or exposure measured as continuous variable)?	No? Stepwise regression	No?	No? Multiple regression
9. Were the exposure measures (independent variables)	No validity,	Yes	Alpha .80-.91

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clearly defined, valid, reliable, and implemented consistently across all study participants?	reliability reported		
10. Was the exposure(s) assessed more than once over time?	No	No	No
11. Were the outcome measures (dependent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?	No alpha reported	Yes	Alpha .80 - .91
12. Were the outcome assessors blinded to the exposure status of participants?	NA	NA	NA
13. Was loss to follow-up after baseline 20% or less?	NA	NA	NA
14. Were key potential confounding variables measured and adjusted statistically for their impact on the relationship between exposure(s) and outcome(s)?	Yes	No	No
	5	5	6

Criteria	Studies		
	Lakin, Leon & Miller. (2008)	Langdon et al. (2007)	Lent & Schwartz. (2012)
1. Was the research question or objective in this paper clearly stated?	Yes	Yes	Yes
2. Was the study population clearly specified and defined?	Yes	Yes	Yes
3. Was the participation rate of eligible persons at least 50%?	No (31%)	NR	No (45%)
4. Were all the subjects selected or recruited from the same or similar populations (including the same time period)? Were inclusion and exclusion criteria for being in the study prespecified and applied uniformly to all participants?	Yes	Yes	No – different service types. No criteria discussed
5. Was a sample size justification, power description, or variance and effect estimates provided?	No	No	No
6. For the analyses in this paper, were the exposure(s) of interest measured prior to the outcome(s) being measured?	No	Yes	No
7. Was the timeframe sufficient so that one could reasonably expect to see an association between exposure and outcome if it existed?	No	No	NA

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8. For exposures that can vary in amount or level, did the study examine different levels of the exposure as related to the outcome (e.g., categories of exposure, or exposure measured as continuous variable)?	No Hierarchical linear modelling	No (2 levels)	NO Regression
9. Were the exposure measures (independent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?	Yes	No validity of EE	Yes, no alphas
10. Was the exposure(s) assessed more than once over time?	No	No	No
11. Were the outcome measures (dependent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?	Yes	Yes, but no alphas reported	Yes
12. Were the outcome assessors blinded to the exposure status of participants?	NA	NA	NA
13. Was loss to follow-up after baseline 20% or less?	NA	NA	NA
14. Were key potential confounding variables measured and adjusted statistically for their impact on the relationship between exposure(s) and outcome(s)?	Yes?	Demographics measured, no significant differences between	Demographics measured, 3 way interaction, not adjusted for with

		groups but there was no statistical adjustment for their impact	personality factors & burnout
	6	6	4

Criteria	Studies		
	Leon et al. (2008)	Malinowski. (2013)	Ogińska-Bulik (2006)
1. Was the research question or objective in this paper clearly stated?	Yes	Yes	Yes
2. Was the study population clearly specified and defined?	Yes	Yes	Yes
3. Was the participation rate of eligible persons at least 50%?	No	No (22%)	NR
4. Were all the subjects selected or recruited from the same or similar populations (including the same time period)? Were inclusion and exclusion criteria for being in the study prespecified and applied uniformly to all participants?	Yes	No – different setting types	Yes

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5. Was a sample size justification, power description, or variance and effect estimates provided?	No	No	No
6. For the analyses in this paper, were the exposure(s) of interest measured prior to the outcome(s) being measured?	No	No	No
7. Was the timeframe sufficient so that one could reasonably expect to see an association between exposure and outcome if it existed?	NA	NA	NA
8. For exposures that can vary in amount or level, did the study examine different levels of the exposure as related to the outcome (e.g., categories of exposure, or exposure measured as continuous variable)?	NO Regression model	No Regression model	No Linear Regression
9. Were the exposure measures (independent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?	Yes no alphas	Yes	Yes - Alphas reported Validity reported
10. Was the exposure(s) assessed more than once over time?	No		No
11. Were the outcome measures (dependent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?	Yes	Yes	Yes DP .59
12. Were the outcome assessors blinded to the exposure	NA	NA	NA

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status of participants?			
13. Was loss to follow-up after baseline 20% or less?	NA	NA	NA
14. Were key potential confounding variables measured and adjusted statistically for their impact on the relationship between exposure(s) and outcome(s)?	Yes	No	Yes
	5	4	6

Criteria	Studies		
	Pompili et al (2006)	Rzwszutek & Schier. (2014)	Somoray et al. (2016)
1. Was the research question or objective in this paper clearly stated?	Yes	Yes	Yes
2. Was the study population clearly specified and defined?	Yes	Yes	Yes
3. Was the participation rate of eligible persons at least 50%?	NR- unclear	Yes – 74%	No – 41%

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4. Were all the subjects selected or recruited from the same or similar populations (including the same time period)? Were inclusion and exclusion criteria for being in the study prespecified and applied uniformly to all participants?	No – different nurses	Yes	Yes
5. Was a sample size justification, power description, or variance and effect estimates provided?	No	No	No
6. For the analyses in this paper, were the exposure(s) of interest measured prior to the outcome(s) being measured?	No	No	No
7. Was the timeframe sufficient so that one could reasonably expect to see an association between exposure and outcome if it existed?	NA	NA	NA
8. For exposures that can vary in amount or level, did the study examine different levels of the exposure as related to the outcome (e.g., categories of exposure, or exposure measured as continuous variable)?	No	No regression analysis	NA
9. Were the exposure measures (independent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?	NR		Yes – alphas reported (openness = .67) good convergent validity

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10. Was the exposure(s) assessed more than once over time?	No	No	No
11. Were the outcome measures (dependent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?	Yes No alphas reported	Yes	Yes Good construct validity and reliability -Alphasreported
12. Were the outcome assessors blinded to the exposure status of participants?	NA	NA	NA
13. Was loss to follow-up after baseline 20% or less?	NA	NA	NA
14. Were key potential confounding variables measured and adjusted statistically for their impact on the relationship between exposure(s) and outcome(s)?	No	No	Yes
	2	5	6

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Criteria	Studies			
	Thompson et al. (2014)	Veague et al. (2014)	Villardaga et al. (2011)	Wallace et al. (2010)
1. Was the research question or objective in this paper clearly stated?	Yes	Yes	yes	Yes
2. Was the study population clearly specified and defined?	Yes	yes	yes	Yes
3. Was the participation rate of eligible persons at least 50%?	Unknown	NR	Unknown	No -37%
4. Were all the subjects selected or recruited from the same or similar populations (including the same time period)? Were inclusion and exclusion criteria for being in the study prespecified and applied uniformly to all participants?	Yes	Yes	Yes	Yes – cross countries
5. Was a sample size justification, power description, or variance and effect estimates provided?	No	No	No	No
6. For the analyses in this paper, were the exposure(s) of interest measured prior to the outcome(s) being measured?	No	No	No	no

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7. Was the timeframe sufficient so that one could reasonably expect to see an association between exposure and outcome if it existed?	NA	NA	NA	NA
8. For exposures that can vary in amount or level, did the study examine different levels of the exposure as related to the outcome (e.g., categories of exposure, or exposure measured as continuous variable)?	NA	NA	NA	NA
9. Were the exposure measures (independent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?	Yes Brief COPE: Validity and alphas reported Mindfulness: Alphas reported Validity not reported	No validity or reliability for card sorting task	AAQ & SAB: alpha but nor validity reported WVQ: No reliability or validity	Brief COPE: Alpha reported. No validity reported
10. Was the exposure(s) assessed more than once over time?	No	No	No	No

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11. Were the outcome measures (dependent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?	ProQOL: Cronbachs alpha reported. No validity reported	Yes – alphas reported	MBI – DP .69	CBI – alpha .88 Construct validity
12. Were the outcome assessors blinded to the exposure status of participants?	NA	NA	NA	NA
13. Was loss to follow-up after baseline 20% or less?	NA	NR	NA	NA
14. Were key potential confounding variables measured and adjusted statistically for their impact on the relationship between exposure(s) and outcome(s)?	Yes	No	Yes	No
		Data part of another study too	Data part of a bigger study: Did not include longitudinal findings. Only	

			used baseline scores. Skewed sample agreeing to take part in 2 day workshop = more burnout?	
	5	4	4	3

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Appendix B: Areas of Worklife Survey

For use by Juanita Merriam only. Received from Mind Garden, Inc. on June 9, 2016



www.mindgarden.com

To whom it may concern,

This letter is to grant permission for the above named person to use the following copyright material for his/her thesis or dissertation research:

Instrument: *Areas of Worklife Survey*

Authors: Michael P Leiter & Christina Maslach

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Three sample items from this instrument may be reproduced for inclusion in a proposal, thesis, or dissertation.

The entire instrument may not be included or reproduced at any time in any published material.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert Most", with a long horizontal line extending to the right.

Robert Most
Mind Garden, Inc.
www.mindgarden.com

Areas of Worklife three sample items:

1. I do not have time to do the work that must be done (Workload)
2. I have control over how I do my work (Control)
3. I receive recognition from others for my work (Reward)

Appendix C: New General Self-efficacy Scale

doi: 10.1037/t08800-000

New General Self-Efficacy Scale
NGSE

Items

1. I will be able to achieve most of the goals that I have set for myself.
2. When facing difficult tasks, I am certain that I will accomplish them.
3. In general, I think that I can obtain outcomes that are important to me.
4. I believe I can succeed at most any endeavor to which I set my mind.
5. I will be able to successfully overcome many challenges.
6. I am confident that I can perform effectively on many different tasks.
7. Compared to other people, I can do most tasks very well.
8. Even when things are tough, I can perform quite well.

Note. 1. More specific information with regard to the search we have conducted is available upon request from the first author. 2. Participants were told that (a) general self-efficacy relates to "one's estimate of one's overall ability to perform successfully in a wide variety of achievement situations, or to how confident one is that she or he can perform effectively across different tasks and situations," and (b) self-esteem relates to "the overall affective evaluation of one's own worth, value, or importance, or to how one feels about oneself as a person."

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Appendix D: Maslach Burnout Inventory – Human Services Survey

For use by Juanita Merriman only. Received from Mind Garden, Inc. on June 16, 2016



www.mindgarden.com

To whom it may concern,

This letter is to grant permission for the above named person to use the following copyright material for his/her thesis or dissertation research:

Instrument: *Maslach Burnout Inventory, Forms: General Survey, Human Services Survey & Educators Survey*

Copyrights:

MBI-General Survey (MBI-GS): Copyright ©1996 Wilmar B. Schaufeli, Michael P. Leiter, Christina Maslach & Susan E. Jackson. All rights reserved in all media. Published by Mind Garden, Inc., www.mindgarden.com

MBI-Human Services Survey (MBI-HSS): Copyright ©1981 Christina Maslach & Susan E. Jackson. All rights reserved in all media. Published by Mind Garden, Inc., www.mindgarden.com

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Three sample items from a single form of this instrument may be reproduced for inclusion in a proposal, thesis, or dissertation.

The entire instrument may not be included or reproduced at any time in any published material.

Sincerely,

Robert Most
Mind Garden, Inc.
www.mindgarden.com

MBI-General Survey: Copyright ©1996 Wilmar B. Schaufeli, Michael P. Leiter, Christina Maslach & Susan E. Jackson.
MBI-Human Services Survey: Copyright ©1981 Christina Maslach & Susan E. Jackson.
MBI-Educators Survey: Copyright ©1986 Christina Maslach, Susan E. Jackson & Richard L. Schwab.
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Maslach Burnout Inventory – HSS three sample items:

1. I feel used up at the end of my work day (Emotional Exhaustion)
2. I've become more callous towards people since I took this job (Depersonalisation)
3. I deal very effectively with the problems of my clients (Personal Accomplishment)

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Appendix E: Email to Recruit Services

Dear xxx

I am a Trainee Clinical Psychologist and am contacting you in regards to my thesis project which is on burnout in CAMHS staff. I hope you do not mind me contacting you; your help is much appreciated.

I am looking to recruit CAMHS employees to complete an online questionnaire (25 minutes). I hope to ask the service manager whether they would agree to me contacting staff within your service to participate.

I would be more than happy to discuss the study in more detail with yourself or the manager, I would also be able to provide time to meet with the employees to answer any of their questions prior to participation.

I have attached for you the information sheet which provides more information on the study, as well as a potential email to staff and recruitment poster.

Please do let me know if this seems viable or not. Many thanks again for your time.

Kind regards

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Appendix F: Email to Employees

Dear all

Would you like to win a £50 amazon voucher?

I am looking for staff who work in CAMHS to take part in my Clinical Psychology doctoral research on burnout.

As long as you work in a clinical role rather than an administrative role you can take part.

Please follow this link to take part:

Participation: The online questionnaire takes about 25 minutes. If you take part you can choose to be entered into a prize draw to win one of four £50 amazon vouchers. All of your information will remain confidential and your data will be anonymous so you will not be identifiable.

Study Background: CAMHS employees manage multiple demands within their clinical roles, the nature of which can lead to great job satisfaction but can also cause staff to become burnt-out. This study aims to understand the organisational and individual factors that may protect or contribute towards burnout in CAMHS employees. This could help our understanding of how to best support CAMHS staff in the future. I plan on discussing the findings with the service once the project is complete.

This study has gained ethical approval from the University of Southampton, NHS HRA approval and trust approval.

Thank you very much for your participation. If you have any questions then please do not hesitate to get in touch, I would be happy to arrange a time to come and meet with the team in person to discuss the project.

Kind regards

Researcher name: Juanita Merriman

ERGO Study ID number: 21339

Date: 10.08.2016

IRAS Project ID: 213414

Version no. 2

Do you work with children with mental health difficulties?

Win a £50 High Street Voucher

I am looking for CAMHS staff (clinical staff NOT admin staff) to complete a questionnaire for a psychology study

The study aims to find out what factors contribute to burnout in mental health professionals who work with children. This can help to understand how to best support CAMHS practitioners.

Whether you feel burnt out or not, please could you take 25 minutes to help?

There are 4 £50 amazon vouchers to be won!
(1/21 chance of winning)

For more information contact: jm9g14@soton.ac.uk

Please follow this link to take part:

<https://www.isurvey.soton.ac.uk/21241>

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Appendix H: Informed Consent and Study Information Form

CONSENT FORM

Researcher name:

ERGO Study ID number: 21339

Date: 10.08.2016

IRAS Project ID: 213414

Version no. 2

UNIVERSITY OF
Southampton

**Study title: Burnout in Child and Adolescent Mental Health
Staff: The Role of Self-efficacy and Intolerance of
Uncertainty**

Consent to Continue

By clicking the button below I confirm the following:

1. I confirm that I have read the information sheet dated 10.08.2016 (version no. 2) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my medical care or legal rights being affected.

3. I agree to take part in the above study.

By clicking 'Continue' you are consenting to participate in this survey

PARTICIPANT INFORMATION SHEET

Researcher name: Juanita Merriman

ERGO Study ID number: 21339

Date: 10.08.2016

IRAS Project ID: 213414

Version no. 2

UNIVERSITY OF
Southampton

**Study title: Burnout in Child and Adolescent Mental Health
Staff: The Role of Self-efficacy and Intolerance of
Uncertainty**

What is the research about?

This study is interested in understanding the organisational and individual factors which may protect or contribute towards burnout in CAMHS staff. Whether you feel burnout or not, you will be asked to complete an online questionnaire (about 25 minutes long). The questions are related to your work life, how your work impacts you as a practitioner and how you respond to certain events/tasks. Importantly this information could help to understand burnout in CAMHS staff and highlight possible areas to intervene to protect CAMHS staff from burnout in the future.

This research will form part of a Clinical Psychology doctoral thesis within the University of Southampton.

Purpose of the research:

CAMHS employees manage multiple demands within their clinical roles, the nature of which can lead to great job satisfaction but can also cause staff to become burnt-out. Burnout can affect the employee's wellbeing, their ability to work effectively which can then impact service users.

It is essential to better understand which factors may contribute towards or protect staff from becoming burnout, both for their own and their service users' wellbeing. Previous studies have highlighted how organisational and individual factors can contribute towards burnout, however, there is limited research on this within CAMHS settings.

This study aims to understand which organisational and individual factors could protect or contribute towards burnout in CAMHS employees. This will extend the current literature and hopes to contribute towards future interventions, which

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could protect CAMHS employees from burnout and therefore improve services.

What will happen to me if I take part?

- You will be asked to complete an online questionnaire
- You will be able to enter a prize draw for £50 amazon voucher
- The questionnaire should take approximately 25 minutes
- Your data will remain anonymous and confidential and will not be linked to you (your email address for the prize draw will be kept separately from your data)

Why have I been chosen?

You have been chosen because you work in CAMHS in a clinical role. All clinical staff will be invited to take part in order to understand your experience.

Are there any benefits in my taking part?

- It will generate literature to better understand burnout in CAMHS staff.
- This could highlight how CAMHS services and staff could be supported to prevent burnout in the future.

Are there any risks involved?

We do not envisage any risk to you if you choose to take part in this study. However, the questionnaire does require you to think about how your work affects you, if you feel concerned about your wellbeing you can contact your line/manager or GP. Alternatively you can contact IAPT (iapt.nhs.uk), your occupational health service or the employee assistance program for free and confidential counselling (0800 243 458).

Will my participation be confidential?

Your questionnaire data will be anonymous. If you have entered your e-mail address for the prize draw this will be stored separately from your questionnaire answers. The service will remain anonymous too.

All data and personal identifiable information will remain confidential and stored in a locked cabinet for five years after publication of any resulting paper. Data on computers will be password protected to ensure that only the researcher is able to access it.

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What happens if I change my mind?

Your participation is voluntary and you may withdraw from completing the questionnaire. Due to the anonymity of the answers, we will be unable to withdraw your data after you have completed the questionnaire.

What happens if something goes wrong?

The study has been approved by the ethics committee at the University of Southampton. In the case of concern or complaint, you are able to contact:

Chair of the Ethics Committee, Psychology, University of Southampton, Southampton, SO17 1BJ. Phone: +44 (0)23 8059 3856, email fshs-rso@soton.ac.uk

Where can I get more information?

For further information about this study, either before deciding to take part, during or following, you are welcome to contact me:

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Appendix I: Debriefing Statement

Debriefing Statement

Researcher name: Juanita Merriman

ERGO Study ID number: 21339

Date: 10.08.2016

IRAS Project ID: 213414

Version no. 2

UNIVERSITY OF
Southampton

Burnout in Child and Adolescent Mental Health Staff: The Role of Self-efficacy and Intolerance of Uncertainty

Thank you for taking part, the time and information you have given is appreciated.

Prize Draw

You can be entered into a prize draw to win one of four amazon vouchers of £50 each. Please enter your email address to take part in the prize draw.

Email.....

Your email address will be stored separately to the questionnaire data and there will be no way of linking the two. The four winners will be contacted at the end of the study.

The Study

The aim of this research was to develop an understanding of burnout in CAMHS employees by exploring the organisational factors associated with burnout and how these may interact with individual factors of self-efficacy and tolerance of uncertainty.

It is expected that an employee's self-efficacy and tolerance of uncertainty may influence whether they experience burnout or not, even when there are stressful organisational factors. Your data will help our understanding of which organisational factors contribute towards burnout and whether employee's self-efficacy and tolerance of uncertainty can protect them from burnout.

Once again results of this study will not include your name or any other identifying characteristics. The research did not use deception. You may have a copy of this summary if you wish or if you would like a summary of the research findings once the project is completed, please contact me.

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If you have any further questions please contact xxx at xx@soton.ac.uk.

What to do if you are feeling distressed

Some of the questions you were asked may have left you feeling low or worried. It is likely these feelings will pass within a short space of time. If you remain distressed or feel concerned about your wellbeing, you can contact your line manager or GP. Alternatively you can contact IAPT (iapt.nhs.uk), your occupational health service or the employee assistance program for free and confidential counselling (0800 243 458).

Thank you for your participation in this research.

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, Psychology, University of Southampton, Southampton, SO17 1BJ. Phone: +44 (0)23 8059 3856, email fshs-rso@soton.ac.uk

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Appendix J: University of Southampton Ethics Approval

Date	Activity	Comments
13/09/2016 8:56 am	RGO reviewed and approved	<p>Dear Juanita</p> <p>Please amend IRAS to reflect appropriate start date (A69-1) and the University policy of 10 year data retention (A44/45).</p> <p>The insurance certificate you have requested has been sent to you via email.</p> <p>Submission ID : 23562</p> <p>Submission Name: Burnout in Child and Adolescent Mental Health Staff: The Role of Self-efficacy and Intolerance of Uncertainty (Amendment 1)</p> <p>Date : 13 Sep 2016</p> <p>Created by : Juanita Merriman</p> <p>I am writing to confirm that the University of Southampton is prepared to act as Research Sponsor for this study under the terms of the Department of Health Research Governance Framework for Health and Social Care (2nd edition 2005). We encourage you to become fully conversant with the terms of the Research Governance Framework by referring to the Department of Health document which can be accessed at:</p> <p>http://www.dh.gov.uk/en/Aboutus/Researchanddevelopment/Researchgovernance/DH_4002112</p> <p>If your study has been designated a Clinical Trial of an Investigational Medicinal Product, I would like to take this opportunity to remind you of your responsibilities under Medicines for Human Use Act regulations (2004/2006), The Human Medicines Regulations (2012) and EU Directive 2010/84/EU regarding pharmacovigilance. If your study has been designated a 'Clinical Investigation of a Medical Device' you also need to be aware of the regulations regarding conduct of this work.</p>

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Appendix K: NHS Health Research Authority Approval

Letter of HRA Approval

Study title:	Burnout in Child and Adolescent Mental Health Staff: The Role of Self-efficacy and Tolerance of Uncertainty
IRAS project ID:	213414
REC reference:	16/HRA/4995
Sponsor	Organization not set

I am pleased to confirm that HRA Approval has been given for the above referenced study, on the basis described in the application form, protocol, supporting documentation and any clarifications noted in this letter.

Participation of NHS Organisations In England

The sponsor should now provide a copy of this letter to all participating NHS organisations in England.

Appendix B provides important information for sponsors and participating NHS organisations in England for arranging and confirming capacity and capability. Please read Appendix B carefully, in particular the following sections:

- *Participating NHS organisations in England* – this clarifies the types of participating organisations in the study and whether or not all organisations will be undertaking the same activities
- *Confirmation of capacity and capability* - this confirms whether or not each type of participating NHS organisation in England is expected to give formal confirmation of capacity and capability. Where formal confirmation is not expected, the section also provides details on the time limit given to participating organisations to opt out of the study, or request additional time, before their participation is assumed.
- *Allocation of responsibilities and rights are agreed and documented (4.1 of HRA assessment criteria)* - this provides detail on the form of agreement to be used in the study to confirm capacity and capability, where applicable.

Further information on funding, HR processes, and compliance with HRA criteria and standards is also provided.

It is critical that you involve both the research management function (e.g. R&D office) supporting each organisation and the local research team (where there is one) in setting up your study. Contact details

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**Appendix L: NHS Trusts Research and Development Teams Approval
(Solent NHS Trusts, Isle of Wight NHS Trust, Sussex Partnership Trust**

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rse
t)

Study Title: Burnout in Child and Adolescent Mental Health Staff: The Role of Self-efficacy and Tolerance of Uncertainty
IRAS No.: 213414
Solent R&D No.: SR/034/16

In accordance with the Department of Health's Research Governance Framework for Health and Social Care, all research projects taking place within the Trust must receive a favourable opinion from the Health Research Authority (HRA) and confirmation from the Trust Research and Development (R&D) Department that capacity and capability to deliver the study has been assessed and they are happy for you to commence recruitment of participants.

We confirm HRA assurance was granted on 20th October 2016.

Solent NHS Trust has reviewed the Statement of Activities submitted for the above research study and we are pleased to confirm that you may proceed with recruitment. The Sites where you are recruiting are listed in the attached appendix. Please notify us of any additional Sites / PICs.

I would like to bring your attention to the attached list of requirements when undertaking research within Solent NHS Trust.

- a) The mandatory requirement to ensure recruitment is recorded both onto the e-edge™ database and NIHR portfolio regularly.
- b) The mandatory requirement to report annually to the Trust on the study progress, and submit all publications resulting from the study to Solent NHS Trust for them to share with patients and staff.



Solent NHS Trust Headquarters
Highpoint Venue, Bunleedon Southampton SO19 8BR
Telephone: 023 8060 8900 Fax: 023 8053 8740 Website: www.solent.nhs.uk

- c) The understanding that your study will be subject to monitoring and / or audit by the research team.
- d) Please notify us of the date of your First Patient First Visit (FPFV). If you experience any problems recruiting, please contact the Research department for advice and support.
- e) Ensuring any staff working on this study have been issued with the appropriate Letters of Access / Honorary Research Contracts prior to commencing work on the study.

We wish you every success with your study. If you require support or assistance at any time with the involvement of Solent NHS Trust in this study, please do not hesitate to contact us.

Yours sincerely

Dr Sarah Williams
Associate Director of Research & Clinical Effectiveness

Running head: BURNOUT IN CAMHS

IRAS Project ID : 213414
Study Title : Burnout In Child and Adolescent Mental Health Staff: The role of self-efficacy and tolerance of uncertainty
Sponsor : University of Southampton

With effect from 1 April 2016, all research projects taking place within the Trust must now have prior approval from the Health Research Authority (HRA). We note that HRA Approval was granted on 20 October and whilst noting participating NHS organisations are expected to formally confirm their capacity and capability to host this research, on this occasion we confirm that this is not necessary for our site, because our involvement relies only on completion of an online questionnaire by healthcare professionals.

The Trust has reviewed the Statement of Activities submitted and this letter confirms the Trust's readiness to host the study and that there are no objections to our participation. Please find attached our agreed Statement of Activities as confirmation.

In accordance with our Trust Policy for R&D, I draw your particular attention to the following:

- In the event of a serious adverse event, which is linked to your research study, you must report any occurrence to the Research Department in accordance with the Trust's Incident Reporting Procedure
- The requirement to report annually to the Trust on the study's progress, and submit all publications resulting from the study to the Trust's Research Department for them to share with patients and staff.
- The requirement to ensure recruitment is recorded onto the NIHR portfolio regularly once we become a participating site.
(<http://www.crn.nihr.ac.uk/can-help/funders-academics/nihrcom-portfolio/>)
- The understanding that your study will be subject to monitoring and/or audit by the research team.

Study Title: Burnout in Child and Adolescent Mental Health Staff: The Role of Self-efficacy and Tolerance of Uncertainty
Trust Ref: CSP 213414

Thank you for your application to Sussex Partnership Trust to conduct the above named study with in the Trust. I am pleased to inform you that Sussex Partnership has the capacity and capability to conduct this study at the following sites:

- Hampshire CAMHS

Our confirmation of capacity and capability to host this research study relates to the specific protocol and informed consent procedures described in your HRA application form approved by the HRA, and by the Statement of Activities agreed with SPFT. Any deviation from this will be deemed to invalidate this confirmation.

The documents reviewed for this approval were:

Document	Version	Date
Copies of advertisement materials for research participants [study poster]	1	10 August 2016
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only) [Sponsor Insurance]	1	13 September 2016
Letters of invitation to participant [Email to Staff]	1	10 August 2016
Other [Schedule of Events]	2	10 October 2016
Other [Debrief form]	2	10 August 2016
Other [Letter from Sponsor]	1	13 September 2016
Other [Statement of Activity]	2	20 October 2016
Participant Consent Form	2	10 August 2016
Participant Information Sheet (PIS)	2	10 August 2016
Research protocol or project proposal [Project Proposal]	1	10 August 2016
Summary CV for Chief Investigator (CI)	1	10 August 2016
Summary CV for supervisor (student research)	1	27 July 2016

Chair: Caroline Armitage

Chief Executive: Colin Donaghy

Head office: Sussex Partnership NHS Foundation Trust, Swandean, Arundel Road, Worthing, West Sussex, BN11 3EP

www.sussexpartnership.nhs.uk

Letter of Access for Research

This letter should be presented to each participating organisation before you commence your research at that site:

Dorset HealthCare University NHS Foundation Trust

In accepting this letter, each participating organisation confirms your right of access to conduct research through their organisation for the purpose and on the terms and conditions set out below. This right of access commences on 9 December, 2016 and ends on 31 March, 2017 unless terminated earlier in accordance with the clauses below.

As an existing NHS employee you do not require an additional honorary research contract with the participating organisation(s). The organisation(s) is/are satisfied that the research activities that you will undertake in the organisation(s) are commensurate with the activities you undertake for your employer. Your employer is fully responsible for ensuring such checks as are necessary have been carried out. Your employer has confirmed in writing to this organisation that the necessary pre-engagement checks are in place in accordance with the role you plan to carry out in the organisation(s). Evidence of checks should be available on request to Dorset HealthCare University NHS Foundation Trust.

You have a right of access to conduct such research as confirmed in writing in the letter of permission for research from this organisation. Please note that you cannot start the research until the Principal Investigator for the research project has received a letter from us giving the organisation(s) permission to conduct the project.

You are considered to be a legal visitor to Dorset HealthCare University NHS Foundation Trust premises. You are not entitled to any form of payment or access to other benefits provided by the organisation to employees and this letter does not give rise to any other relationship between you and the organisation, in particular that of an employee.

While undertaking research through the organisation(s) you will remain accountable to your substantive employer but you are required to follow the reasonable instructions of the organisation(s) or those instructions given on their behalf in relation to the terms of this right of access.

References

- Adriaenssens, J., De Gucht, V., & Maes, S. (2015). Determinants and prevalence of burnout in emergency nurses: A systematic review of 25 years of research. *International Journal of Nursing Studies*, *52*(2), 649–661. <http://doi.org/10.1016/j.ijnurstu.2014.11.004>
- Alarcon, G., Eschleman, K. J., & Bowling, N. A. (2009). Relationships between personality variables and burnout: A meta-analysis. *Work & Stress*, *23*(3), 244–263. <http://doi.org/10.1080/02678370903282600>
- Aliyev, R., & Tunc, E. (2015). Self-efficacy in Counseling: The Role of Organizational Psychological Capital, Job Satisfaction, and Burnout. *Procedia - Social and Behavioral Sciences*, *190*(November 2014), 97–105. <http://doi.org/10.1016/j.sbspro.2015.04.922>
- Allport, G.W. (1961). *Pattern and Growth in Personality*, Holt, Rinehart & Winston, New York.
- Anderson, D. G. (2000). Coping strategies and burnout among veteran child protection workers. *Child Abuse and Neglect*, *24*(6), 839–848. [http://doi.org/10.1016/S0145-2134\(00\)00143-5](http://doi.org/10.1016/S0145-2134(00)00143-5)
- Bahner, A. D., & Berkel, L. a. (2007). Exploring burnout in batterer intervention programs. *Journal of Interpersonal Violence*, *22*(8), 994–1008. <http://doi.org/10.1177/0886260507302995>
- Baker, L. M., O'Brien, K. M., & Salahuddin, N. M. (2007). Are shelter workers burned out?: An examination of stress, social support, and coping. *Journal of Family Violence*, *22*(6), 465–474. <http://doi.org/10.1007/s10896-007-9103-1>
- Bakker, A. B., Van der Zee, K. I., Lewig, K. a, & Dollard, M. F. (2006). The relationship between the Big Five personality factors and burnout: a study among volunteer counselors. *The Journal of Social Psychology*, *146*(1), 31–50. <http://doi.org/10.3200/SOCP.146.1.31-50>

Running head: BURNOUT IN CAMHS

- Bandura, A. (1977). Toward a unifying theory of behavioral change. *Psychological Review*, *84*(2), 191–215. <http://doi.org/10.1037/0033-295X.84.2.191>
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall
- Bandura, A. (1993). Perceived Self-Efficacy in Cognitive Development and Functioning. *Educational Psychologist*.
http://doi.org/10.1207/s15326985ep2802_3
- Bandura, A. (2006). Toward a Psychology of Human Agency. *Perspective on Psychological Science*, *1*(2), 164–180. <http://doi.org/150.131.73.116>
- Barnett, R. C., Gareis, K. C., & Brennan, R. T. (1999). Fit as a mediator of the relationship between work hours and burnout. *Journal of Occupational Health Psychology*, *4*(4), 307–317.
- Baron, R. M., & Kenny, D. A. (1986). The moderator mediator variable distinction in social psychological research - Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173-1182. doi: 10.1037//0022-3514.51.6.1173
- Beck, A.T., Rush, A.J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guildford Press. Ben-Porat, A., & Itzhaky, H. (2014). Burnout among trauma social workers: The contribution of personal and environmental resources. *Journal of Social Work*, *15*(6), 606–620. <http://doi.org/10.1177/1468017314552158>
- Blackledge, J. T., Spencer, R., & Ciarrochi, J. (2007, May). *Initial validation of the personal values questionnaire*. Paper presented at the 33rd Annual Convention of the Association for Behavior Analysis International, San Diego, CA
- Bollen, K. A., & Stine, R. (1990). Direct and indirect effects: Classical and bootstrap estimates of variability. *Sociological Methodology*, *20*, 115-140.

Running head: BURNOUT IN CAMHS

Bond FW, Hayes SC, Baer RA, Carpenter K, Orcutt HK, Waltz T, Zettle RD. Preliminary psychometric properties of the Acceptance and Action Questionnaire-II: A revised measure of psychological flexibility and acceptance. *Behavior Therapy*.42, (4), 676-688.

doi:org/10.1016/j.beth.2011.03.007

Bono, J.E., & Judge, T.A. (2003). Core self-evaluations: A review of the trait and its role in job satisfaction and job performance. *European Journal of Personality*, 17,15-18

Bowers, L., Nijman, H., Simpson, A., & Jones, J. (2011). The relationship between leadership, teamworking, structure, burnout and attitude to patients on acute psychiatric wards. *Social Psychiatry and Psychiatric Epidemiology*, 46(2), 143–148. <http://doi.org/10.1007/s00127-010-0180-8>

Boyd, N. G., Lewin, J. E., & Sager, J. K. (2009). A model of stress and coping and their influence on individual and organizational outcomes. *Journal of Vocational Behavior*, 75(2), 197–211.

<http://doi.org/10.1016/j.jvb.2009.03.010>

Boyer, S. L., & Bond, G. R. (1999). Does Assertive Community Treatment Reduce Burnout? A Comparison with Traditional Case Management. *Mental Health Services Research*, 1(1), 31–45.

Bresó, E., Schaufeli, W. B., & Salanova, M. (2011). Can a self-efficacy-based intervention decrease burnout, increase engagement, and enhance performance? A quasi-experimental study. *Higher Education*, 61(4), 339–355. <http://doi.org/10.1007/s10734-010-9334-6>

Bride, B. E. (2007). Prevalence of secondary traumatic stress among social workers. *Social Work*, 52(1), 63-70. Doi: 10.1093/sw/52.1.63

Brinkborg, H., Michanek, J., Hesser, H., & Berglund, G. (2011).

Acceptance and commitment therapy for the treatment of stress among social workers: A randomized controlled trial. *Behaviour Research and Therapy*, 49(6–7), 389–398. <http://doi.org/10.1016/j.brat.2011.03.009>

Running head: BURNOUT IN CAMHS

- Brown, C. G. (2012). A systematic review of the relationship between self-efficacy and burnout in teachers. *Educational & Child Psychology*, 29,47–63.
- Brown, K.W. & Ryan, R.M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84, 822-848.
- Burke, R. J., Berge Matthiesen, S., & Pallesen, S. (2006). Workaholism, organizational life and well-being of Norwegian nursing staff. *Career Development International*, 11(5), 463–477.
<http://doi.org/10.1108/13620430610683070>
- Cañadas-De la Fuente, G. A., Vargas, C., San Luis, C., García, I., Cañadas, G. R., & De la Fuente, E. I. (2015). Risk factors and prevalence of burnout syndrome in the nursing profession. *International Journal of Nursing Studies*, 52(1), 240–249.
<http://doi.org/10.1016/j.ijnurstu.2014.07.001>
- Canfield, J. (2005). Secondary Traumatization, Burnout, and Vicarious Traumatization. *Smith College Studies in Social Work*, 75(2), 81–101.
http://doi.org/10.1300/J497v75n02_06
- Carson J & Kuipers E (1998) *Stress management interventions*. In: S Hardy, J Carson, B Thomas, eds.Occupational stress: personal and professional approaches. Cheltenham: Stanley Thornes, 157-74.
- Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the Brief COPE. *International Journal of Behavioural Medicine*, 4, 92–100.
- Carver, C. S., & Connor-Smith, J. (2010). Personality and coping. *Annual Review of Psychology*, 61, 679–704.
<http://doi.org/10.1146/annurev.psych.093008.100352>
- Carver, S.C., & Scheier, M.F. (2002). *Optimism*. In C.R. Snyder & S.J. Lopez (Eds.), *Handbook of positive psychology* (pp. 231- 243). New York: Oxford.

Running head: BURNOUT IN CAMHS

Chang, Y. (2012). The relationship between maladaptive perfectionism with burnout: Testing mediating effect of emotion-focused coping.

Personality and Individual Differences, 53(5), 635–639.

<http://doi.org/10.1016/j.paid.2012.05.002>

Chen, G., Gully, S. M., & Eden, D. (2001). New General Self-Efficacy Scale [Database record]. Retrieved from PsycTESTS. doi:

10.1037/t08800-000

Cicognani, E., Pietrantonio, L., Palestini, L., & Prati, G. (2009). Emergency workers' quality of life: The protective role of sense of community, efficacy beliefs and coping strategies. *Social Indicators Research*, 94(3), 449–463. <http://doi.org/10.1007/s11205-009-9441-x>

Code, S., & Langan-Fox, J. (2001). Motivation, cognitions and traits:

Predicting occupational health, well-being and performance. *Stress and Health*, 17(3), 159–174. <http://doi.org/10.1002/smi.897>

Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155–159.

<http://doi.org/10.1037/0033-2909.112.1.155>

Cooper CL, Dewe P, O'Driscoll,MP. (2001). *Organizational Stress*.

London: SAGE

Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Odessa, FL: Psychological Assessment Resources

Costa, P. T., & McCrae, R. R. (2010). The Five-Factor Model, Five-Factor Theory, and Interpersonal Psychology. In *Handbook of Interpersonal Psychology* (pp. 91–104). John Wiley & Sons, Inc.

<http://doi.org/10.1002/9781118001868.ch6>

Coyle, D., Edwards, D., Hannigan, B., Fothergill, A., & Burnard, P. (2005). A systematic review of stress among mental health social workers.

International Social Work, 48(2), 201–211.

<http://doi.org/10.1177/0020872805050492>

Running head: BURNOUT IN CAMHS

- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multi- dimensional approach. *Journal of Personality and Social Psychology*, 44, 113–126.
- Demerouti, E., Bakker, A.B., Nachreiner, F. and Schaufeli, W.B. (2001), The job demands-resources model of burnout. *Journal of Applied Psychology*, 86, 499-512
- Demerouti, E., Bakker, A.B., Vardakou, L., & Kantas, A. (2003). The convergent validity of two burnout instruments: A multitrait-multimethod analysis. *European Journal of Psychological Assessment*, 19,12?23.
- Duffy, B., Oyeboode, J. R., & Allen, J. (2009). Burnout among care staff for older adults with dementia: The role of reciprocity, self-efficacy and organizational factors. *Dementia*, 8(4), 515–541.
<http://doi.org/10.1177/1471301209350285>
- Dunkley, J., & Whelan, T. A. (2006). Vicarious traumatisation: current status and future directions. *British Journal of Guidance & Counselling*, 34(1), 107–116.
<http://doi.org/10.1080/03069880500483166>
- Dunn, L. B., Iglewicz, A., & Moutier, C. (2008). Promoting Resilience and Preventing Burnout. *Academic Psychiatry : The Journal of the American Association of Directors of Psychiatric Residency Training and the Association for Academic Psychiatry*, 32(February), 44–53.
<http://doi.org/10.1176/appi.ap.32.1.44>
- Edwards, D., & Burnard, P. (2003). A Systematic Review of the Effects of Stress and Coping Strategies used by Occupational Therapists Working in Mental Health Settings. *British Journal of Occupational Therapy (College of Occupational Therapists Limited)*, 66(8), 345–355 11p.
Retrieved from
<http://search.ebscohost.com/login.aspx?direct=true&db=jlh&AN=104135261&site=ehost-live>

Running head: BURNOUT IN CAMHS

- Efron, B., & Tibshirani, R. (1986). Bootstrap methods for standard errors, confidence intervals, and other measures of statistical accuracy. *Statistical Science, 1*(1), 54- 77.
- Efron, B., & Tibshirani, R. (1993). *An introduction to the bootstrap*. New York: Chapman & Hall.
- Elliott, K. A., & Daley, D. (2013). Stress, coping, and psychological well-being among forensic health care professionals. *Legal and Criminological Psychology, 18*(2), 187–204.
<http://doi.org/10.1111/j.2044-8333.2012.02045.x>
- Ellis, A. (1957). Rational Psychotherapy and Individual Psychology. *Journal of Individual Psychology, 13*: 38-44.
- Emold, C., Schneider, N., Meller, I., & Yagil, Y. (2011). Communication skills, working environment and burnout among oncology nurses. *European Journal of Oncology Nursing, 15*(4), 358–363.
<http://doi.org/10.1016/j.ejon.2010.08.001>
- Figley, C. R. (1995). *Compassion fatigue as secondary traumatic stress disorder: An overview*. In C. R. Figley (Ed.), *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized* (pp. 1–20). Philadelphia, PA, USA: Brunner/Mazel
- Fothergill, A., Edwards, D., & Burnard, P. (2004a). Stress and stress management in clinical psychology: Findings from a systematic review. *Journal of Mental Health, 13*(3), 235–245.
<http://doi.org/10.1080/09638230410001700871>
- Friedman, M., & Rosenman, R. (1974). *Type A behavior and your heart*. New York: Knopf.
- Freudenberger, H.J. (1974). Staff burnout. *Journal of social issues, 30*(1), 159-165. Doi: 10.1111/j.1540-4560.1974.tb00706.x
- Gadecka, W., Piskorz-Ogórek, K., Regin, K. J., & Kowalski, I. M. (2015). Social competence of mental health nurses. *Polish Annals of Medicine,*

Running head: BURNOUT IN CAMHS

22(2), 105–109. <http://doi.org/10.1016/j.poamed.2015.03.014>

Garman, A. N., Corrigan, P. W., & Morris, S. (2002). Staff burnout and patient satisfaction: evidence of relationships at the care unit level. *Journal of Occupational Health Psychology, 7*(3), 235–241.

Gilibert, D., & Daloz, L. (2008). Disorders associated with burnout and causal attributions of stress among health care professionals in psychiatry. *Revue Europeene de Psychologie Appliquee, 58*(4), 263–274. <http://doi.org/10.1016/j.erap.2008.09.009>

Goldberg, L. R. (1993). The structure of phenotypic personality-traits. *American Psychologist, 48*(1), 26-34. Doi: 10.1037//0003-066x.48.1.26

Goldberg, I. (1999). The development of markers for the Big Five factor structure. *Psychological Assessment, 4*, 26-42. doi:10.1037/1040-3590.4.1.26

Gowdy, E. L., Carlson, L. S., & Rapp, C. A. (2003). Practices differentiating high-performing from low-performing supported employment programs. *Psychiatric Rehabilitation Journal, 26*(3), 232–239.

Greco, P., Laschinger, H. K. S., & Wong, C. (2006). Leader empowering behaviours, staff nurse empowerment and work engagement/burnout. *Nursing Leadership, 19*(4), 41–56. <http://doi.org/10.12927/cjnl.2006.18599>

Green, A., Albanese, B., Shapiro, N., & Aarons, G. (2014). The roles of individual and organisational factors in burnout among community based mental health service providers. *February, 11*(1), 41–49. <http://doi.org/10.1016/j.surg.2006.10.010.Use>

Guitierrez, D., & Mullen, P. (2016). Emotional intelligence and the counselor Examining the relationship of trait emotional. *Journal of Mental Health Counseling, 38*(3), 187–200.

Running head: BURNOUT IN CAMHS

- Gupta, S., Paterson, M. L., Lysaght, R. M., & Von Zweck, C. M. (2012). Experiences of burnout and coping strategies utilized by occupational therapists. *Canadian Journal of Occupational Therapy, 79*(2), 86–95. <http://doi.org/10.2182/cjot.2012.79.2.4>
- Hahn, V. C., Binnewies, C., Sonnentag, S., & Mojza, E. J. (2011). Learning how to recover from job stress: Effects of a recovery training program on recovery, recovery-relates self-efficacy, and well-being. *Journal of Occupational Health Psychology, 16*, 202–216. doi:10.1037/a0022169
- Hayes, A. F., & Rockwood, N. J. (2016). Regression-based statistical mediation and moderation analysis in clinical research: Observations, recommendations, and implementation. *Behaviour Research and Therapy, 1–19*. <http://doi.org/10.1016/j.brat.2016.11.001>
- Hayes, S. C., Levin, M. E., Plumb-villardaga, J., & Villatte, J. L. (2013). Acceptance and Commitment Therapy and Contextual Behavioural Science: Examining the Progress of a Distinctive Model of Behavioural and Cognitive Therapy. *Behavior Therapy, 44*(2), 180–198. <http://doi.org/10.1016/j.beth.2009.08.002>.Acceptance
- Hayes, S. C., Strosahl, K., Wilson, K. G., Bissett, R. T., Pistorello, J., Toarmino, D., et al. (2004). Measuring experiential avoidance: A preliminary test of a working model. *Psychological Record, 54*, 553–578.
- Healthcare Commission. (2013). NHS staff survey. London: Healthcare Commission. Retrieved from <http://www.nhsstaffsurveys.com>
- Hendriks, J., Hofstee, W., & De Raad, B. (1999) The Five Factor Personality Inventory (FFPI). *Personality and Individual Differences, 27*(2), 307-325. [http://doi.org/10.1016/S0191-8869\(98\)00245-1](http://doi.org/10.1016/S0191-8869(98)00245-1)
- Hobfoll, S. E. (1989). Conservation of resources. A new attempt at conceptualizing stress. *The American Psychologist, 44*(3), 513–524. <http://doi.org/10.1037/0003-066X.44.3.513>
- Holmqvist, R., & Jeanneau, M. (2006). Burnout and psychiatric staff's

Running head: BURNOUT IN CAMHS

feelings towards patients. *Psychiatry Research*, *145*(2–3), 207–213.
<http://doi.org/10.1016/j.psychres.2004.08.012>

Hornowska, E. (2011). Cloninger's psychobiological model of personality and strelau's regulative theory of temperament – analysis of their associations in a Polish sample. *Polish Psychological Bulletin*, *42*, 71–80. doi:10.2478/v10059-011-0011-0

Horwood, S., Anglim, J., & Tooley, G. (2015). Type D personality and the Five-Factor Model: A facet-level analysis. *Personality and Individual Differences*, *83*, 50–54. <http://doi.org/10.1016/j.paid.2015.03.041>

Howard, R., Rose, J., & Levenson, V. (2009). The psychological impact of violence on staff working with adults with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*, *22*(6), 538–548. <http://doi.org/10.1111/j.1468-3148.2009.00496.x>

Hutchison, C. (1999). Social support: Factors to consider when designing studies that measure social support. *Journal of Advanced Nursing*, *29*(6), 1520–1526. <http://doi.org/10.1046/j.1365-2648.1999.01041.x>

Jimmieson, N. L., Terry, D. J., & Callan, V. J. (2004). A longitudinal study of employee adaptation to organizational change: The role of change-related information and change-related self-efficacy. *Journal of Occupational Health Psychology*, *9*, 11–27. doi:10.1037/1076-8998.9.1.11

Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits--self-esteem, generalized self-efficacy, locus of control, and emotional stability--with job satisfaction and job performance: a meta-analysis. *The Journal of Applied Psychology*, *86*(1), 80–92.
<http://doi.org/10.1037/0021-9010.86.1.80>

Judge, T. A., Locke, E. A., & Durham, C. C. (1997). The dispositional causes of job satisfaction: A core evaluations approach. *Research in Organizational Behavior*, *19*, 151-188.

John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The Big Five*

Running head: BURNOUT IN CAMHS

Inventory-Versions 4a and 54. Berkeley, CA: University of California, Berkeley, Institute of Personality and Social Research.

Johnson, J. V., & Hall, E. M. (1988). Job strain, work place social support, and cardiovascular disease: a cross-sectional study of a random sample of the Swedish working population. *American Journal of Public Health, 78*(10), 1336-1342. doi: 10.2105/AJPH.78.10.1336

Kabat-Zinn, J. (1994). *Wherever you go there you are: Mindfulness meditation in everyday life*. New York, NY: Hyperion.

Karasek, R., & Theorell, T. (1990). *Stress, productivity, and the reconstruction of working life*. New York: Basic Books.

Kay-Eccles, R. (2012). Meta-analysis of the relationship between co-worker social support and burnout using a two level hierarchical linear model. *Western Journal of Nursing Research, 34*, 1062–1063. doi:10.1177/0193945912453684

Kandler, C., Held, L., Kroll, C., Bergeler, A., Riemann, R., & Angleitner, A. (2012). Genetic links between temperamental traits of the regulative theory of temperament and the big five. *Journal of Individual Differences, 33*, 197–204. doi:10.1027/1614-0001/a000068

Killian, K. D. (2007, October). *The Emotional Self-Awareness Questionnaire (ESQ): Development of a measure of emotional intelligence*. Invited presentation at the annual meeting of the American Association of Marriage and Family Therapy, Long Beach, California.

Killian, K. D. (2008). Helping till it hurts? A multimethod study of compassion fatigue, burnout, and self-care in clinicians working with trauma survivors. *Traumatology, 14*(2), 32–44. <http://doi.org/10.1177/1534765608319083>

Lakin, B. L., Leon, S. C., & Miller, S. a. (2008). Predictors of Burnout in Children's Residential Treatment Center Staff. *Residential Treatment For Children & Youth, 25*(3), 249–270.

Running head: BURNOUT IN CAMHS

<http://doi.org/10.1080/08865710802429697>

- Langdon, P., Yaguez, L., & Kuipers, E. (2007). Staff working with people who have intellectual disabilities within secure hospitals. *Journal of Intellectual Disabilities, 11*(4), 1–15.
- Lasalvia, A., Bonetto, C., Bertani, M., Bissoli, S., Cristofalo, D., Marrella, G., ... Ruggeri, M. (2009). Influence of perceived organisational factors on job burnout: Survey of community mental health staff. *British Journal of Psychiatry, 195*(6), 537–544.
<http://doi.org/10.1192/bjp.bp.108.060871>
- Laschinger, H. K. S., & Grau, A. L. (2012). The influence of personal dispositional factors and organizational resources on workplace violence, burnout, and health outcomes in new graduate nurses: A cross-sectional study. *International Journal of Nursing Studies, 49*(3), 282–291. <http://doi.org/10.1016/j.ijnurstu.2011.09.004>
- Lazarus, R. S. and Folkman, S. (1984). *Stress, Appraisal and Coping*. New York, USA: Springer.
- Lee, S. M., Baker, C. R., Cho, S. H., Heckathorn, D. E., Holland, M. W., Newgent, R. A., . . . Yu, K. (2007). Development and initial psychometrics of the Counselor Burnout Inventory. *Measurement and Evaluation in Counseling and Development, 40*, 142–154.
- Leiter, M. P. (1991). Coping Patterns as Predictors of Burnout : The Function of Control and Escapist Coping Patterns, *12*(2), 123–144.
- Leiter, M. P., Frank, E., & Matheson, T. J. (2009). Demands, values, and burnout: Relevance for physicians. *Canadian Family Physician, 55*(12).
- Leiter, M. P., & Harvie, P. (1996). Burnout among mental health workers: A review and a research agenda.
- Leiter, M. P., & Harvie, P. (1997). The correspondence of supervisor and subordinate perspectives on major organizational change. *Journal of*

Running head: BURNOUT IN CAMHS

Occupational Health Psychology, 2, 1–10.

Leiter, M. P., & Maslach, C. (1999). Six Areas Of Worklife A model of organisational context of burnout.

Leiter, M. P. & Maslach, C. (2000, 2011). Areas of Worklife Survey. Mind Garden, Inc., California.

Leiter, M. P., & Maslach, C. (2003b). Areas of Worklife: a Structured Approach To Organizational Predictors of Job Burnout. *Research in Occupational Stress and Well Being*, 3(March 2017), 91–134.
[http://doi.org/10.1016/S1479-3555\(03\)03003-8](http://doi.org/10.1016/S1479-3555(03)03003-8)

Lent, J., & Schwartz, R. (2012). The Impact of Work Setting, Demographic Characteristics and Personality Factors Related to Burnout Among Professional Counselors. *Journal of Mental Health Counseling*, 34(4), 355–372.

Leon, S. C., Visscher, L., Sugimura, N., & Lakin, B. L. (2008). Person-job match among frontline staff working in residential treatment centers: The impact of personality and child psychopathology on burnout experiences. *American Journal of Orthopsychiatry*, 78(2), 240.
<http://doi.org/10.1037/a0013946>

Lizano, E. L., & Mor Barak, M. E. (2012). Workplace demands and resources as antecedents of job burnout among public child welfare workers: A longitudinal study. *Children and Youth Services Review*, 34(9), 1769–1776. <http://doi.org/10.1016/j.childyouth.2012.02.006>

Lubin, B., & Van Whitlock, R. (2002). Development of a measure that integrates positive and negative affect and personality: The Comprehensive Personality and Affect Scales. *Journal of Clinical Psychology*, 58, 1135-1156.

Lumpkin, J., 1985. Validity of a brief locus of control scale for survey research. *Psychological Reports* 57, 655–659

Luthans. F., Youssef, C.M., & Avolio, B.J. (2007). *Psychological capital*.

Running head: BURNOUT IN CAMHS

New York: Oxford University Press.

- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods, 7*(1), 83-104. doi: 10.1037/1082-989x.7.1.83
- MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research, 39*(1), 99-128. doi: 10.1207/s15327906mbr3901_4
- MacKinnon, D. P., & Fairchild, A. J. (2009). Current directions in mediation analysis. *Current Directions in Psychological Science, 18*(1), 16-20. doi: 10.1111/j.1467- 8721.2009.01598.x
- Madathil, R., Heck, N. C., & Schuldberg, D. (2014). Burnout in Psychiatric Nursing: Examining the Interplay of Autonomy, Leadership Style, and Depressive Symptoms. *Archives of Psychiatric Nursing, 28*(3), 160–166. <http://doi.org/10.1016/j.apnu.2014.01.002>
- Malinowski, A. J. (2013). Characteristics of job burnout and humor among psychotherapists. *Humor*. <http://doi.org/10.1515/humor-2013-0007>
- Martins Pereira, S., Fonseca, A. M. A. M., Sofia Carvalho, A., Pereira, S. M., Fonseca, A. M. A. M., & Carvalho, A. S. (2011). Burnout in palliative care: A systematic review. *Nursing Ethics, 18*(3), 317–326. <http://doi.org/http://dx.doi.org/10.1177/0969733011398092>
- Maslach, C. (2015). *Burnout, Psychology of. International Encyclopedia of the Social & Behavioral Sciences* (Second Edi, Vol. 2). Elsevier. <http://doi.org/10.1016/B978-0-08-097086-8.26009-1>
- Maslach, C., & Jackson, S. (1981). The measurement of experienced Burnout. *Journal of Occupational Behavior, 2*(2), 99–113. <http://doi.org/10.1002/job.4030020205>
- Maslach, C. & Jackson, S (1981). Maslach Burnout Inventory – Human

Running head: BURNOUT IN CAMHS

Services Survey. Mind Garden, Inc., California.

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

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job Burnout. *Control*, 397–422. <http://doi.org/10.1146/annurev.psych.52.1.397>

Maxwell, S. E., & Cole, D. A. (2007). Bias in cross-sectional analyses of longitudinal mediation. *Psychological Methods*, 12(1), 23–44. <http://doi.org/10.1037/1082-989x.12.1.23>

McCrae, R. R., Costa, P. T., Ostendorf, F., Angleitner, A., Hrebícková, M., Avia, M. D., ... Smith, P. B. (2000). Nature over nurture: Temperament, personality, and life span development. *Journal of Personality and Social Psychology*, 78(1), 173–186. <http://doi.org/10.1037/0022-3514.78.1.173>

McFadden, P., Campbell, A., & Taylor, B. (2015). Resilience and burnout in child protection social work: Individual and organisational themes from a systemic literature review. *British Journal of Social Work*, 45(November 2013), 1546–1563. <http://doi.org/10.1093/bjsw/bct210>

Mehrabian, A., & Epstein, N. (1972). A measure of emotional empathy. *Journal of Personality*, 40, 525–543.

Miller, T. R. (1991). The Psychotherapeutic Utility of the Five-Factor Model of Personality: A Clinician's Experience. *Journal of Personality Assessment*. http://doi.org/10.1207/s15327752jpa5703_3

Morse, G., Salyers, M. P., Rollins, A. L., Monroe-DeVita, M., & Pfahler, C. (2012). Burnout in mental health services: A review of the problem and its remediation. *Administration and Policy in Mental Health and Mental Health Services Research*, 39(5), 341–352. <http://doi.org/10.1007/s10488-011-0352-1>

Murberg TA, Bru E, Stephens P. (2002) . Personality and coping among congestive heart failure patients. *Personal. Individual. Differences*.

Running head: BURNOUT IN CAMHS

32:775–84

- Nota, L., Ferrari, L., & Soresi, S. (2007). Self-Efficacy and Quality of Life of Professionals Caring for Individuals with Intellectual Disabilities. *Journal of Policy and Practice in Intellectual Disabilities, 4*(2), 129–140. <http://doi.org/10.1111/j.1741-1130.2007.00110.x>
- Oddie, S., & Ousley, L. (2007). Assessing burn-out and occupational stressors in a medium secure service. *The British Journal of Forensic Practice, 9*(2), 32–48. <http://doi.org/10.1108/14636646200700011>
- Ogińska-Bulik, N. (2006). Occupational stress and its consequences in healthcare professionals: the role of type D personality. *International Journal of Occupational Medicine and Environmental Health, 19*(2), 113–122. <http://doi.org/10.2478/v10001-006-0016-7>
- Onyett, S., Pillinger, T., & Muijen, M. (1997). Job satisfaction and burnout among members of community mental health teams. *Journal of Mental Health, 6*(1), 55–66. <http://doi.org/10.1080/09638239719049>
- Paris, M., & Hoge, M. A. (2010). Burnout in the mental health workforce: A review. *Journal of Behavioral Health Services and Research, 37*(4), 519–528. <http://doi.org/10.1007/s11414-009-9202-2>
- Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European Journal of Personality, 15*, 425–448.
- Petrides, K. V., & Furnham, A. (2003). Trait emotional intelligence: Behavioural validation in two studies of emotion recognition and reactivity to mood induction. *European Journal of Personality, 17*, 39–57.
- Pearlin, L. I., & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior, 19*, 2–21. doi: 10.2307/2136319.
- Piedmont, R. (1993). A Longitudinal Analysis of Burnout in the Health Care Setting: The Role of Personal Dispositions. *Journal of*

Running head: BURNOUT IN CAMHS

Personality Assessment, 61(3), 457–473.

<http://doi.org/10.1207/s15327752jpa6103>

Pines, A. M. (1984). Shehika nafshit: Mahuta vedarkei hitmodedut ima [Burnout: Characteristics and patterns of coping]. Tel Aviv, Israel: Cherikover. Roe

Podsakoff, P. M., Mackenzie, S., Lee, J., & Podsakoff, N. (2003). Common method biases in behavioural research: A critical review of the literature and recommendation remedies . *Journal of Applied Psychology*, 88, 879-903. doi: 10.1037/0021-9010.88.5.879

Pompili, M., Rinaldi, G., Lester, D., Girardi, P., Ruberto, A., & Tatarelli, R. (2006). Hopelessness and Suicide Risk Emerge in Psychiatric Nurses Suffering From Burnout and Using Specific Defense Mechanisms. *Archives of Psychiatric Nursing*, 20(3), 135–143. <http://doi.org/10.1016/j.apnu.2005.12.002>

Prati, G., Pietrantonio, L., & Cicognani, E. (2011). Coping strategies and collective efficacy as mediators between stress appraisal and quality of life among rescue workers. *International Journal of Stress Management*, 18(2), 181–195.

<http://doi.org/10.1037/a0021298>Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods Instruments & Computers*, 36(4), 717-731. doi: 10.3758/Bf03206553

Prins, J. T., Gazendam-Donofrio, S. M., Tubben, B. J., Van Der Heijden, F. M. M. A., Van De Wiel, H. B. M., & Hoekstra-Weebers, J. E. H. M. (2007). Burnout in medical residents: A review. *Medical Education*, 41(8), 788–800. <http://doi.org/10.1111/j.1365-2923.2007.02797.x>

Prosser, D., Johnson, S., Kuipers, E., Szmukler, G., Bebbington, P & Thornicroft, G. (1997). Percieved sources of work stress and satisfaction among hospital and community mental health staff, and their relation to mental health, burnout and job satisfaction. *Journal of Psychosomatic Research*, 43(1), 51-59

Running head: BURNOUT IN CAMHS

- Ray, S. L., Wong, C., White, D., & Heaslip, K. (2013). Compassion satisfaction, compassion fatigue, work life conditions, and burnout among frontline mental health care professionals. *Traumatology, 19*(4), 255–267.
- Rollins, A. L., Salyers, M. P., Tsai, J., & Lydick, J. M. (2010). Staff turnover in statewide implementation of ACT: relationship with ACT fidelity and other team characteristics. *Administration and Policy in Mental Health, 37*(5), 417–426. <http://doi.org/10.1007/s10488-009-0257-4>
- Rosenberg, M. (1965). *Society and adolescent self image*. Princeton, NJ: Princeton University Press.
- Ruotsalainen, J., Verbeek, J., Mariné, A., & Serra, C. (2015). Preventing occupational stress in healthcare workers (Review). *Cochrane Database of Systematic Reviews, (4)*, 152. <http://doi.org/10.1002/14651858.CD002892.pub5>
- Rzeszutek, M., & Schier, K. (2014). Temperament traits, social support, and burnout symptoms in a sample of therapists. *Psychotherapy*. <http://doi.org/10.1037/a0036020>
- Schaufeli, W. B. (2007). Burnout in health care. *Handbook of Human Factors and Ergonomics in Health Care and Patient Safety*.
- Schaufeli WB, Buunk BP.(2003). *Burnout: An overview of 25 years of research and theorizing*. In: SchabracqMJ,Winnubst JAM, Cooper CL editor(s). *The Handbook of Work and Health Psychology*. 2nd Edition. Chichester: Wiley, 383–424.
- Schaufeli WB, Enzmann D. (1998). *The Burnout Companion to Study & Practice: A Critical Analysis*. Philadelphia: Taylor & Francis
- Sebastian, V. (2013). A Theoretical Approach to Stress and Self-efficacy. *Procedia - Social and Behavioral Sciences, 78*, 556–561. <http://doi.org/10.1016/j.sbspro.2013.04.350>

Running head: BURNOUT IN CAMHS

- Sherer, M., Maddux, J., Mercandante, B., Prentice-Dunn, S., Jacobs, B. & Rogers, R. (1982). The Self-Efficacy Scale: Construction and validation. *Psychological Reports, 51*, 663-671.
- Shoji, K., Cieslak, R., Smoktunowicz, E., Rogala, A., Benight, C. C., & Luszczynska, A. (2015). Associations between job burnout and self-efficacy: a meta-analysis. *Anxiety, Stress, and Coping, 5806*(October), 1–20. <http://doi.org/10.1080/10615806.2015.1058369>
- Siegrist, J. (1996). Adverse health effects of high effort-low reward conditions. *Journal of Occupational Health Psychology, 1*, 27–41.
- Smith, G., & Ebrahim, S. (2002). Data dredging, bias or confounding. *Bmj, 325*(7378), 1437–8.
- Sobolewski, A., Strelau, J., & Zawadzki, B. (2001). The temperamental determinance of stressors as life changes. *European Psychologist, 6*, 287–295. doi:10.1027//1016-9040.6.4.287
- Somoray, K., Shakespeare-Finch, J., & Armstrong, D. (2016). The Impact of Personality and Workplace Belongingness on Mental Health Workers' Professional Quality of Life. *Australian Psychologist*. <http://doi.org/10.1111/ap.12182>
- Strelau, J., & Zawadzki, B. (1995). The Formal Characteristics of Behavior – Temperament Inventory (FCB-TI): Validity studies. *European Journal of Personality, 9*, 207–229. doi:10.1002/per.2410090304
- Stalker, C.; Harvey, C. (2002). Partnerships for Children and Families Project. Wilfrid Laurier University; Professional burnout: A review of theory, research, and prevention.
- Stamm, B. H. (2010). The Concise ProQOL Manual. Pocatello, ID: Pro-QOL.org
- Tabachnick, B. G., & Fidell, L.S. (2007). *Using Multivariate Statistics* (5th ed.). London: Pearson.
- Tabachnick, B., & Fidell, L. (2013). *Pearson New International Edition*

Running head: BURNOUT IN CAMHS

Using Multivariate Statistics (6th ed.). London, Pearson.

Thompson, I., Amatea, E., & Thompson, E. (2014). Personal and Contextual Predictors of Mental Health Counselors Compassion Fatigue and Burnout. *Journal of Mental Health Counseling, 36*(1), 58–77.

Toppinen-Tanner, S., Ojajarvi, A., Väänänen, A., Kalimo, R., & Jäppinen, P. (2005). Burnout as a predictor of medically certified sick-leave absences and their diagnosed causes. *Behavioral Medicine, 31*(1), 18–27. <http://doi.org/10.3200/BMED.31.1.18-32>

Veage, S., Ciarrochi, J., Deane, F. P., Andresen, R., Oades, L. G., & Crowe, T. P. (2014). Value congruence, importance and success and in the workplace: Links with well-being and burnout amongst mental health practitioners. *Journal of Contextual Behavioral Science, 3*(4), 258–264. <http://doi.org/10.1016/j.jcbs.2014.06.004>

Vilardaga, R., Luoma, J. B., Hayes, S. C., Pistorello, J., Levin, M. E., Hildebrandt, M. J., ... Bond, F. (2011). Burnout among the addiction counseling workforce: The differential roles of mindfulness and values-based processes and work-site factors. *Journal of Substance Abuse Treatment, 40*(4), 323–335. <http://doi.org/10.1016/j.jsat.2010.11.015>

Volker, R., Bernhard, B., Anna, K., Fabrizio, S., Robin, R., Jessica, P., ... Norbert, S. (2010). Burnout, coping and job satisfaction in service staff treating opioid addicts - From Athens to Zurich. *Stress and Health, 26*(2), 149–159. <http://doi.org/10.1002/smi.1276>

Wallace, S. L., Lee, J., & Lee, S. M. (2010). Job stress, coping strategies, and burnout among abuse-specific counselors. *Journal of Employment Counseling, 47*(September), 111–123. <http://doi.org/10.1002/j.2161-1920.2010.tb00096.x>

Webster, L., & Hackett, R. K. (1999). Burnout and leadership in community mental health systems. *Administration and Policy In Mental Health, 26*(6), 387–399

Running head: BURNOUT IN CAMHS

Wood, S., Stride, C., Threapleton, K., Wearn, E., Nolan, F., Osborn, D., Johnson, S. (2011). Demands, control, supportive relationships and well-being amongst British mental health workers. *Social Psychiatry and Psychaitric Epidemiology*, *46*(10), 1055-1068. Doi: 10.1007/s00127-010-02636

Zapf, D., Seifert, C., Schmutte, B., Mertini, H., & Holz, M. (2001). Emotion work and job stressors and their effects on burnout. *Psychology & Health*, *16*(5), 527–545. <http://doi.org/10.1080/08870440108405525>

Zimmerman, B. J. (2000). Self-efficacy: An essential motive to learn. *Contemporary Educational Psychology*, *25*(March), 82–91. <http://doi.org/10.1006/ceps.1999.1016>