

Applying integrative therapeutic approaches across organisational and clinical settings

**Portfolio for Professional Doctorate in
Counselling Psychology (DPsych)**

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Chapter B – Journal Article pg. 300 - 340

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ACT Therapist 3 (373-383) - ACT Therapist 3 (484-500): Description of an individual that may make them identifiable pg.117-118

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City University Declaration

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Preface

This doctoral portfolio is comprised of three pieces of work: an original empirical research study, a journal article prepared for publication, and an advanced client study. The three pieces are linked by a theme of integration in research and practice, and reflective of my own journey and development as a practitioner-researcher.

Prior to studying psychology, and subsequently training as a counselling psychologist, my academic focus, career background and overall outlook placed me firmly in a 'realist' philosophical camp (e.g., Willig, 2013). My first degree was in economics, followed by an MBA. I later became an associate teaching fellow at a UK Russell Group university, teaching on and developing marketing and strategic management programme modules, consistently emphasising 'rational decision-making based on robust data', which invariably meant statistics relating to market size, growth and economic trends. In that world, everything, including apparently subjective concepts such as 'fashionability' and 'quality', can be reduced to a quantitative unit of measure. Likewise, much of my career prior to retraining was spent working in organisations and roles where financial targets and performance were paramount. I still retain a respect for precision and rigour, but over time realised that the 'human dimension' was fundamentally important in understanding perception, motivation and behaviour, even in the business world. Accordingly, I developed an interest in the use of qualitative research alongside quantitative methods, becoming an experienced interviewer and focus group moderator, with a focus on consumer behaviour. I also became much more interested professionally in the 'people side' within organisations, developing and facilitating management training and development programmes.

My training in counselling psychology has both enabled and required me to deconstruct and re-examine some of my previously held views, and to fully embrace the subjective experience of each client that I encounter. Nonetheless, I am equally committed to counselling psychology's aspirations towards a 'scientist-practitioner' stance (Blair, 2010), and find the challenge of holding and reconciling these two values, with their associated tensions in research and practice, both fascinating and motivating.

Given my background prior to training as a counselling psychologist, it seems unsurprising that I was initially drawn to Cognitive Behavioural Therapy (CBT) as a modality. As a first-year trainee, it seemed to be the most 'scientific' of the 'core' approaches to therapy. At the same time, my early clinical placements soon gave me exposure to genuine human suffering, and I recognised the need to apply Rogerian principles (e.g., Thorne, 1992) to ensure a compassionate encounter with each client, creating building blocks towards a 'therapeutic alliance' in CBT language. My experience of psychoanalytic/psychodynamic theory was simultaneously puzzling and challenging at first, but began to make huge sense when focusing more on psychopathology in my second year of study. Although I still considered CBT to be my 'core modality' I could see that complex, developmental client presentations might demand a formulation approach which looks beyond CBT. Although I am fully aware of, and involved in, the ongoing debates around the 'medicalisation' of mental health issues, and the controversies surrounding diagnosis and the DSM in particular, I found the ability to conceptualise such diagnoses as personality disorders in terms of object relations and attachment theories (e.g., Patrick, Hobson, Castle, Howard & Maughan, 1994) both helpful and enlightening.

This learning drew me towards integrative modalities, in particular Schema Therapy and ACT. From my perspective as a trainee, both of these approaches can be understood from a 'CBT base', and both enable different formulation and intervention possibilities. I am beginning to develop my professional identity as a counselling psychologist, and an understanding of my working preferences and strengths as a practitioner. Equally, I believe that clients bring with them a sense of which modality may be most helpful, requiring flexibility from a therapist.

I believe that my doctoral portfolio is reflective of my personal and professional journey towards becoming a counselling psychologist, which is one that has embraced ideas of individuality and subjectivity while retaining respect for the usefulness of 'scientific methods', especially when considering the external environment of public mental health service provision in which many counselling psychologists are inevitably required to practice. The first two elements of the portfolio reflect my interest in applying integrative therapeutic concepts to a specific problem (here, burnout), and

the third (the client study) encapsulates my first attempt as a trainee to record my tentative transition from 'CBT therapist' to an increasingly mature 'integrative practitioner', here using ACT. The research and journal article are also reflective of my interest in bridging the gap between organisational and clinical domains, drawing from my own organisational experience and subsequent counselling psychology training.

Part A: The Research

The first piece of work presented is an original empirical research study exploring the relationships between Psychological Inflexibility (the central concept of Acceptance and Commitment Therapy, 'ACT'), Early Maladaptive Schemas (a key concept of Schema Therapy), and Burnout, and how these factors might inform appropriate interventions. The study is a sequential, mixed methods design, which draws from a large quantitative sample of working adults (n=506) who completed an online survey combining key psychometric instruments measuring the above constructs, alongside relevant demographic data. This was followed by the analysis of qualitative data drawn from interviews with six ACT and Schema Therapists with experience of client burnout.

Part B: Journal Article

This piece of work draws from the empirical study outlined above, and offers a focused interpretation of the quantitative data relationships established by the study. It has been formatted in accordance with the submission requirements for the British Psychological Society's Journal of Occupational and Organizational Psychology, although would also meet the requirements for the British Journal of Psychology for a broader readership base.

Part C: Client Study

Withheld for reasons of anonymity.

References:

Blair, L. (2010). A critical review of the scientist-practitioner model for counselling psychology. *Counselling Psychology Review*, 25 (4), 19-30.

Patrick, M., Hobson, R. P., Castle, D., Howard, R., & Maughan, B. (1994). Personality disorder and the mental representation of early social experience. *Development and Psychopathology*, 6(2), 375-388.

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Part A – THE RESEARCH

**Exploring the relationship between
Early Maladaptive Schemas,
Psychological Inflexibility and Burnout:
How might these factors inform
appropriate interventions?**

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1 Abstract

This study used a sequential, primarily explanatory, mixed methods analysis to investigate the relationships between Psychological Inflexibility (the central concept of Acceptance and Commitment Therapy, 'ACT'), Early Maladaptive Schemas (a key concept of Schema Therapy) and Burnout, and how these factors might inform appropriate interventions.

The first component of this study used an online survey combining the Maslach Burnout Inventory–General Survey (MBI-GS, Maslach et al., 1996), the AAQ-ii (Acceptance and Action Questionnaire, Bond et al., 2011) and the Young Schema Questionnaire (YSQ-S3, Young, 2005), along with additional demographic items. A total of 506 participants completed the survey. Quantitative results demonstrated significant relationships between Psychological Inflexibility, a number of Early Maladaptive Schemas, specific demographic variables, and Burnout. Based on these relationships, a number of regression models were created to explain variance in the three dimensions of Burnout measured (Emotional Exhaustion, Cynicism and Professional Efficacy). Additionally principal components ('factor') analysis was used to create a single burnout factor, used in additional regression-modelling.

The second component of this study used thematic analysis to analyse data collected from interviews with six therapists experienced in working with symptoms of burnout, three identifying themselves as ACT Therapists and three as Schema Therapists. The analysis of the ACT Therapist data resulted in four superordinate themes: 1) Key ACT Concepts and Burnout, 2) Clinical Observations, 3) Assessment and Intervention Principles, and 4) Intervention Specifics. The analysis of the Schema Therapist data also resulted in four superordinate themes: 1) Coping styles, 2) Schema Modes, 3) Understanding Burnout - The Clinician's Perspective, and 4) Formulation and Intervention.

The results from both components are discussed in the context of published literature, relevance to counselling psychology, potential interventions and opportunities for future research.

2 Introduction

This research aims to bring a new perspective to the study of Burnout, in terms of prediction, early risk identification and appropriate therapeutic interventions, drawing from the theoretical, research and clinical knowledge bases of Acceptance and Commitment Therapy (ACT) and Schema Therapy. The author also hopes to contribute towards a better shared dialogue among helping professionals who encounter individuals experiencing Burnout, including psychologists from Counselling, Clinical, Occupational and Coaching divisions and SIGs within the British Psychological Society, as well as professionals from psychiatry and medicine more broadly.

The author's interest in this research stems from over two decades working as a manager within, and consultant to, a number of large commercial organisations where employee wellbeing, engagement and resilience were never a formal 'agenda item', and were at best a by-product of business success. I have been personally aware of the huge work demands placed on aspirational employees, and the potentially devastating personal costs that can result, despite 'compensatory' rewards in terms of salary and status.

As a Counselling Psychology trainee I have been able to combine my interest in Burnout with growing knowledge and expertise in therapeutic interventions. Reflecting my own interest in theory, research and practice, I have been drawn towards integrative approaches, particularly Acceptance and Commitment Therapy (ACT) and Schema Therapy.

There is no shortage of research literature on Burnout; indeed, an online database search conducted on 29.12.14 (combining PsychArticles and PsychInfo) returned a total of 4,743 items with 'Burnout' in the title. Although extensively researched, much theoretical and empirical debate still remains in regard to Burnout, not least its clinical 'credentials'.

The current study will review the current position of this debate, but will focus on presenting new quantitative and qualitative research data, which it is hoped will offer new insights, and present future research opportunities into, Burnout interventions.

2.1 Burnout

2.1.1 Definition of Burnout

Work-related wellbeing is affected by numerous factors, including occupational stress, stress management, engagement, coping strategies and burnout (Narainsamy & Van Der Westhuizen, 2012). These are all terms that exist in everyday language and discourse, certainly in modern industrialised economies, and are widely quoted in both popular and specialist media. In particular, notions of the impact of stress and burnout are often interchangeable, particularly in media coverage. Indeed, in exploring the broader impact of burnout, the opening paragraphs of this thesis will refer to statistics which include a broader discourse of 'work-related distress.'

However, the focus of this study is on the specific psychological construct of Burnout, which can be defined, based on extensive research, as "a psychological syndrome in response to chronic interpersonal stressors on the job" (Maslach, Leiter & Schaufeli, 2008, p.90). Such stressors, according to the authors, can result from a number of 'situational factors' such as the specific nature of a job, profession or organisation, or from 'individual factors' such as demographics, personality or attitudes to work.

2.1.2 Significance of Burnout

Burnout is a significant challenge to organisations, evidenced by 2008 figures released by the Health and Safety Executive (HSE) in the UK reporting that an estimated 415,000 people "believed that they were suffering from stress, depression or anxiety caused or made worse by their current or past work" (2010, p. 13). Further HSE figures for 2011/12 reported that 10.4 million working days were lost in the UK due to occupational stress (56% females, 44% males), and that on average each individual suffering from this took 24.2 days off work (44% above the average number of days lost for all illness and injury combined). Occupational stress was responsible for 428,000 cases (40%) out of a total of 1,073,000 cases for all work-related illnesses. More broadly, 57% of total working days lost were due to GP-certified mental ill-health (HSE, 2013).

Burnout leads to issues of absenteeism, performance, staff turnover and lack of engagement (e.g., Swider & Zimmerman, 2010). A study by Smith (1999) quantified the costs to American business of mediocre performance due to Burnout as up to \$200 billion annually. In the United Kingdom, the business costs of mental ill-health at work to employers have been estimated by the Sainsbury Centre for Mental Health at just under £26 billion each year, equating to £1035 for every single employee. This figure includes reduced productivity, sickness absence and staff replacement costs, and is a consequence of the fact that, at any one time, one in six UK workers will be experiencing mental health problems such as anxiety and depression due to stress. The broader costs to UK society of this phenomenon were estimated by these researchers to be £105.2 billion during 2009/10, fuelled significantly by welfare, health and social care costs.

In addition to psychological and psychiatric research, Burnout is increasingly reported in the media. A 2011 study of employee Burnout at the University of Zaragoza was reported in the UK by a number of national newspapers, particularly findings that: employees working over 40 hours per week were around six times more likely to suffer Burnout than colleagues working fewer than 35 hours per week; that workers in support roles were around three times more likely to suffer Burnout than colleagues in research or teaching roles ('underchallenged Burnout'); and, that workers with more than 16 years of service were around 4.5 times more likely to suffer Burnout than those with less than four years of service ('worn-out Burnout'), (Montero-Marin et al., 2011). A CNN.com article (Lorenz, 2006) entitled 'Five warning signs of job Burnout' reported statistics from a survey of American workers carried out in 2005 by Careerbuilder.com, including: 33% said they would be checking in with the office while on vacation; 50% reporting that they feel 'a great deal of stress on the job'; 44% of working mothers admitting to being preoccupied with work while at home, and 25% bringing home work projects at least one day a week; 36% of working fathers bringing home work at least once a week and 30% often or always working weekends; and, that 37% of working fathers would consider the option of taking a new job with less pay if it offered a better work/life balance.

The US organisation ComPsych, describing themselves as the world's largest provider of employee assistance programs (EAP), annually produce the 'ComPsych StressPulse Survey', widely reported in American business media, tracking the incidence and impact of workplace stress among American employees. Its 2014 study reported the following key data:

- 64% of employees have high levels of stress, with extreme fatigue/feeling out of control.
- 31% of employees have constant but manageable stress levels.
- 5% of employees have low stress levels.
- 42% lose 15-30 minutes per day in productivity due to stress.
- 35% lose 1 hour or more per day in productivity due to stress.
- 84% of employees miss one to six days per annum due to stress, with 16% missing more than six days.
- 48% of employees come to work one to four days per year when too stressed to be effective, and 28% for five or more days when too stressed to be effective.

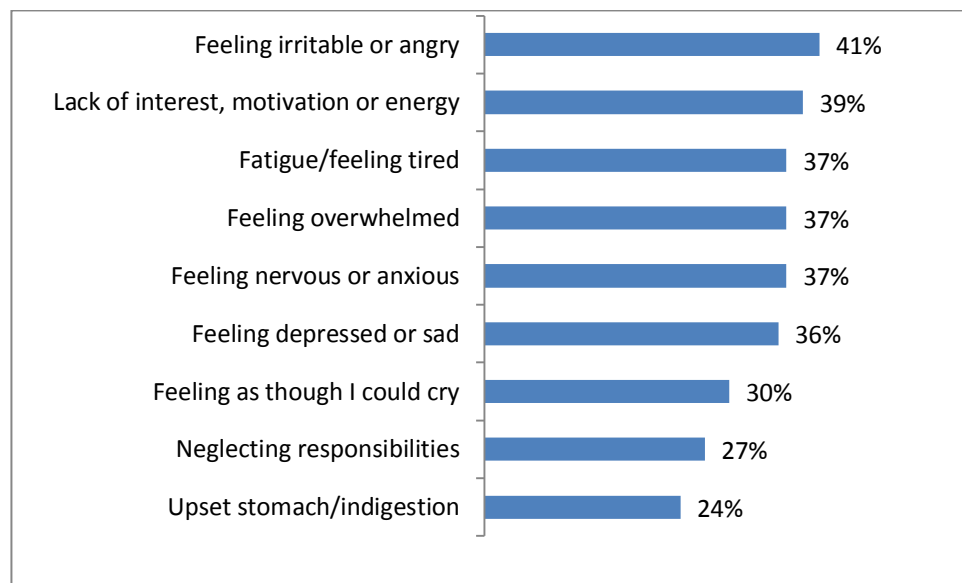
2.1.3 Symptoms of Burnout

The American Psychological Association (APA) has commissioned the Stress in America™ survey annually since 2007 to monitor effects of stress on psychological and physical health within the general population. Its 2013 data, drawn from 1950 adults and 1018 teenagers, weighted to reflect national demographics, revealed the following key findings:

- 42% of adults report increased stress levels over the past five years.
- 61% of adults say that stress management is extremely or very important, but only 35% say they are doing an excellent or very good job at it.

- 44% of adults say they are not doing enough or are unsure whether they are doing enough to manage their stress, and 19% say they never engage in stress management activities.
- Money (71%), work (69%) and the economy (59%) remain the most commonly reported sources of stress.

Figure 1 – Symptoms reported as a result of stress among all adults in the month prior to the survey (adapted from APA Stress in America survey, 2013)



Focusing on the specific construct of Burnout, Kahill's (1988) meta-analytic study grouped symptoms attributed to Burnout in qualitative and quantitative research under five category headings: physical/somatic, emotional, behavioural, interpersonal and attitudinal. Table 1 summarises Kahill's findings.

Table 1 - Symptoms of Burnout (adapted from Kahill, 1988)

Category	Common symptoms
Physical/somatic	<ul style="list-style-type: none"> physical exhaustion sleep disturbance gastrointestinal problems back pain headaches colds/influenza
Emotional	<ul style="list-style-type: none"> irritability/anger anxiety depression guilt helplessness
Behavioural	<ul style="list-style-type: none"> consumption (e.g., reliance on alcohol and/or prescription drugs) excessive rule following absenteeism/poor timekeeping turnover poor job performance (e.g., neglectful of job duties, making errors) theft personal injury at work
Interpersonal	<ul style="list-style-type: none"> reduced communication poor concentration worsening family/social relationships impersonal/hostile behaviour towards clients
Attitudinal	<ul style="list-style-type: none"> lack of personal effectiveness at work withdrawal from others (at work and at home) reduced commitment reduced satisfaction with self/life generally negative attitudes (e.g., cynicism, callousness, pessimism)

More recently, Toppinen-Tanner, Väänänen, Kalimo, & Jäppinen (2005) identified three possible developmental links between Burnout and future illness: firstly, by affecting physiological function, increasing the risk of future physical illness such as cardiovascular disease; secondly, through diminishing psychological function to the extent that work capacity and social relationships are negatively impacted; and thirdly, through poor health habits, including excessive smoking and alcohol consumption. Their longitudinal study, among 3895 employees of a large multinational corporation, adds further weight to the impact of Burnout by establishing clear links with future work absences due to mental and behavioural disorders, along with diseases of the circulatory, respiratory and musculoskeletal systems.

2.1.4 Development of the Burnout construct

The earliest identification of Burnout as a specific phenomenon is usually credited to Freudenberg (1974). As a visiting psychiatrist, he described a process of emotional depletion, demotivation and declining commitment among volunteer workers in a New York free clinic, working with homeless people suffering addiction. This initial focus on Burnout among human service workers was initially maintained by Christina Maslach and her social psychology research colleagues, who found such workers often felt emotional exhaustion, developed negative cognitions and emotions towards their clients or patients, and consequently perceived significant loss of personal professional competence (Schaufeli, Leiter & Maslach, 2008).

This multidimensional construct of Burnout was encapsulated during the late 1970s by Maslach and colleagues via the Maslach Burnout Inventory. Although this psychometric instrument was initially developed for professionals working within human services contexts (MBI-HSS), subsequent versions were developed for educational settings (MBI-ES) and broader workplace environments (the MBI General Survey; MBI-GS) (Maslach, Jackson & Leiter, 1996).

Burnout can be viewed as incongruence between an individual and their organisationally-determined role, with three specific dimensions: debilitating psychological exhaustion; feelings of cynicism and detachment from the job; and,

personal sense of ineffectiveness and under-achievement. The exhaustion element, a basic stress response, is most commonly linked with workplace-stress studies. The further dimensions distinguish Burnout, identifying an individual's response to their working environment (cynicism and detachment) and their response to self-image (ineffectiveness and under achievement). In this respect, the dimension of Exhaustion is a necessary but insufficient criterion for Burnout (Maslach, 2003).

Numerous challenges have been made to the multidimensional MBI construct of Burnout, including suggestions that a single factor (normally that of Emotional Exhaustion) is a sufficient measure of Burnout (e.g., Shirom, 1989; Kristensen, Borritz, Villadsen & Christensen, 2005). Despite alternative instruments being developed, e.g., the Copenhagen Burnout Inventory (Kristensen et al., 2005) and the Oldenburg Burnout Inventory (Demerouti, Bakker, Vardakou & Kantas, 2002), the MBI remains almost ubiquitous in scientific research, being used in 93% of journal articles and dissertations relating to Burnout by the late 1990s (Schaufeli & Enzmann, 1998, p.71).

2.1.5 Diagnostic validity

The MBI's multidimensional Burnout construct also poses challenges to its diagnostic usefulness. Within each Burnout dimension, individuals are classified as 'high', 'medium' or 'low' based on evenly distributed normative values. Researchers are, however, encouraged to use actual continuous values rather than these classifications in order to derive more precision from statistical analyses (Maslach et al., 1996).

Psychological, psychiatric and medical practitioners find continuous and multidimensional measures relatively unhelpful in diagnostic terms and prefer a more categorical decision-making tool, i.e., does an individual have Burnout or not? This has implications in determining clinical treatment options, and potential insurance /compensation funding (Schaufeli et al., 2008).

In addressing this need, MBI Burnout scores have been compared with external diagnostic criteria. For example, Maslach, Schaufeli and Leiter (2001) selected the International Classification of Diseases 10th revision (ICD-10, 1992) diagnosis of work-related neurasthenia as the basis for the first clinical validation of the MBI, concluding

that work-related neurasthenia could be differentiated from other mental health disorders such as anxiety and depression. Further research (e.g., Brenninkmeijer & Van Yperen, 2003; Roelofs, Verbraak, Keijsers, de Bruin & Schmidt, 2005) confirms this validation while adding decision rules combining scores across the three dimensions. Critics of this approach include Kleijweg Verbraak and Van Dijk (2013), who state that the Diagnostic and Statistical Manual of Mental Disorders (DSM) is the most prevalent diagnostic manual used within specialised mental health services in the USA and Europe, and that the diagnosis of neurasthenia has been omitted from the DSM since its third edition, having been renamed and moved to the category of undifferentiated somatoform disorder (USD). Although USD as defined within the DSM 4th edition revised (DSM IV-TR, 2000) appears largely analogous to MBI-defined Burnout (therefore to work-related neurasthenia), its validation as such is less clear, with a tendency for the MBI to overstate Burnout among a clinical population.

Burnout as a psychiatric diagnosis has been most notably introduced in Sweden and The Netherlands. It was introduced into the Swedish version of the ICD-10 in 1997, and made more specific as a category of “Exhaustion Disorder” in 2005, including criteria of: physiological or mental symptoms exhaustion lasting two weeks or more; a clear lack of psychological energy; and, further symptoms including difficulties with concentration, coping with stress, emotional instability, sleep disturbance, muscle pain and palpitations. These symptoms need to occur on a daily basis over a two-week period, lead to impaired work capacity and significant suffering, and not to be related to another psychiatric or medical diagnosis, or to substance abuse. Similarly, the Royal Dutch Medical Association introduced new practice guidelines for stress-related disorders in occupational and primary health care in 2000. These included three diagnostic categories for stress-related disorders, Burnout being the most severe, reflecting an end-stage condition linked to long-term loss of occupational role (Schaufeli et al., 2008).

2.1.6 Cultural specificity

Although initially developed as a construct in North America, a substantial research base demonstrates that Burnout exists beyond both North American and Western culture. Burnout prevalence has been demonstrated in Asia, the Middle East, Latin America and Australasia. Subsequent cultural extension of Burnout research has included Africa, China and the Indian subcontinent. Furthermore, it has been suggested that, as global trends such as economic and political liberalisation spark societal change, resulting pressures on organisations and workforces are a particular catalyst for Burnout in rapidly developing economies (Kulkarni, 2006).

2.1.7 Burnout: Selected literature review

According to Kahill (1988) early Burnout literature was typically not empirically-based, rather dominated by descriptive, anecdotal and theoretically-based work. As noted above, the construct of Burnout was grounded in experiences of health service workers and other 'caring professionals', and empirical studies into Burnout still remain focused on such populations. One study was found (Vredenburg, Carlozzi, & Lawrence, 1999) which specifically focused on Burnout in counselling psychologists, among 521 counselling psychologist members of the American Psychological Association (APA), 43% drawn from private practice and a further 29% from academic institutions. Conclusions included that: counselling psychologists exhibited low to medium levels of Burnout (when compared with MBI norms); private practice settings contributed to lower levels of Burnout; and that a greater number of weekly client contact hours was predictive of higher levels of Personal Accomplishment, but did not result in higher levels of Emotional Exhaustion and Depersonalisation. However, the predictive strength of these relationships was relatively low (e.g., private practice setting explained 9.4% of the variance in Personal Accomplishment and just 2.2% of the variance in Depersonalisation). Additionally, the reports of low to medium levels of Burnout, even though consistent with prior studies (e.g., Ackerley, Burnell, Holder & Kurdek, 1988), seem to be reflective of the predominance of private practitioners in the sample, and are likely to be challenged by psychologists currently working in public sector/managed care environments, alongside the counter-intuitive finding that a

greater number of client contact hours per week is predictive of only positive indicators in relation to Burnout.

Focusing on these issues, Rupert and Morgan (2005) conducted a further US-based study, comparing Burnout across solo psychologist practitioners (47% of sample), those working in group practices (27% of sample) and those in agency services (23% of sample)¹, arguably the closest equivalent to a UK NHS work environment. Their 571 participants were again drawn from the APA, but on this occasion all had to be working in clinical settings, either as clinical (80% of sample) or counselling psychologists (20% of sample). Overall levels of Emotional Exhaustion and Depersonalisation fell within the medium range for Burnout, and reported levels of Personal Accomplishment indicated low levels of Burnout. Emotional Exhaustion was shown to be significantly higher in managed care settings, although the main effect was qualified by a gender interaction which indicated that women in managed care settings were more likely to experience Emotional Exhaustion, as opposed to men in the other two settings. Participants in both solo and group private practice settings reported significantly higher levels of Personal Accomplishment than those in managed care settings, whereas Depersonalisation was not significantly different across settings. The study authors themselves highlight one particular issue in reporting mean overall Burnout levels: in this study, as potentially in many more, a closer examination reveals that although the mean for Emotional Exhaustion levels was in the medium range, 44% of participants fell within the high range, in contrast to 53.4% and 90% of participants falling in the low Burnout range for Depersonalisation and Personal Accomplishment respectively. As Emotional Exhaustion is usually regarded as the core component of Burnout, and may predict subsequent Depersonalisation and loss of Personal Accomplishment (Maslach et al., 2008), it seems imperative not to overlook this 'red flag'.

The most recently known published study examining Burnout in psychologists was conducted by Di Benedetto and Swadling (2013) among 167 Australian registered psychologists, with work-setting once again a central component. The research was

¹ Those participants working in multiple settings were excluded from the work setting analysis.

prompted by recent Australian regulatory changes which increased private practitioners' workload by publicly funding increased access to private psychology services. This study reported no significant difference in Burnout levels between work-settings, and 'high overall levels of Burnout'. However, despite citing Burnout literature from Maslach and Jackson (1981), they used a different Burnout measure to the MBI, the Copenhagen Burnout Inventory (CBI; Kristensen et al., 2005) which makes direct comparison with most Burnout research more difficult. The study did, however, explore interesting factors that may be protective of Burnout, including mindfulness and other 'self-care' or 'career-sustaining' behaviours (CSBs), such as self-awareness, self-compassion or simply maintaining physical fitness. A strong negative relationship was found between mindfulness and Burnout as hypothesised. However, the relationships between CSBs and Burnout proved highly inconclusive, with no individual CSB achieving a correlation coefficient of .3 or above with any Burnout measure used, either before or after controlling for the strong effect of mindfulness. Furthermore, the direction of some of the correlations seems counter-intuitive, as acknowledged by the authors. For example, the CSBs of 'spending time with partner/family', 'maintaining self-awareness', 'engaging in quiet leisure activities' and 'taking regular vacations' were all associated with higher levels of Burnout. The instrument used to measure CSBs (Stevanovic & Rupert, 2004) displayed high internal consistency (Cronbach alpha of .87) but, while providing some interesting discussion points, may benefit from further validation and factor analysis to reduce the 34 items into a smaller number of underlying constructs.

A number of studies have also been conducted in what might be considered an extreme area of 'professional caring', that of oncology. International research has demonstrated that professionals working in this specialism are at exceptionally high risk of experiencing Burnout, with implications for themselves and also for their patients (Le Blanc, Hox, Schaufeli, Taris & Peeters, 2007). Such studies also associated Burnout with increased psychological distress, irregular working patterns, morale issues and extreme job dissatisfaction (e.g., Poulsen, Poulsen, Khan, & Khan, 2011).

A recent Burnout study carried out in New Zealand (Jasperse, Herst, & Dungey, 2014) among 171 oncology workers included oncologists, radiation therapists, radiation

nurses and radiation physicists. The study explored Burnout in relation to pre-identified occupational stressors (subdivided into 'patient-centred' and 'organisational'), pre-identified 'common stress reduction strategies' and job satisfaction. The study reported 'high levels' of Burnout across all three dimensions of the MBI-HSS, and again found a significant difference in Burnout levels between public and private sector work settings, with staff in public hospitals reporting higher levels of Emotional Exhaustion and those in private hospitals reporting higher levels of Personal Accomplishment. Multiple regression analysis produced a model able to explain an impressive 57% of the variance in Emotional Exhaustion, with the most significant predictors being high workload, incidences of patient stressors and organisational stressors. The model for Depersonalisation was able to explain 35% of the variance, most significantly predicted by less work experience, high workload and presence of Emotional Exhaustion. Finally, the model for Personal Accomplishment explained 17% of its variance, predominantly by higher incidences of patient stressors and engagement in stress reduction strategies. It seems there is some ambiguity in the way that Personal Accomplishment is reported in this paper as a 'high Burnout factor', as it does not appear to have been reversed-scored and therefore a high mean score would indicate lower levels of Burnout. Additionally, the inclusion of the other two Burnout dimensions as predictor variables in each regression model is somewhat unusual given that the three dimensions would be expected to correlate highly with each other (Maslach & Jackson, 1996).

Another significant area of Burnout research has examined personality as a predictor of vulnerability. Alarcon, Eschleman, and Bowling (2009) conducted a meta-analytic study exploring this relationship, and concluded that personality is consistently related to Burnout. They also reported an increasing trend towards the use of the Five-Factor Model (FFM) of personality, which specifies personality traits along five dimensions: emotional stability, extraversion, conscientiousness, agreeableness and openness (Costa & McCrae, 1992). The above-mentioned meta-analysis (Alarcon et al., 2009) concluded the following regarding the relationship between the FFM and Burnout²: that Emotional Exhaustion was negatively associated with emotional stability,

² All factors listed in order of the strength of mean correlation relationships, from largest to smallest.

extraversion, conscientiousness and agreeableness; that Depersonalisation was negatively associated with emotional stability³, agreeableness, extraversion and conscientiousness; and, that Personal Accomplishment was positively associated with extraversion, emotional stability, agreeableness, conscientiousness and openness. The study moved on to explore regression modelling, and reported that FFM traits combined explained 29% of the variance in Emotional Exhaustion, 26% of the variance in Depersonalisation, and 23% of the variance in Personal Accomplishment. All five factors uniquely contributed to all three MBI Burnout dimensions, albeit with varying beta values⁴. Alarcon et al. (2009) included other predictor variables along with more sophisticated moderation analysis, but the general conclusion can be drawn that all dimensions of the FFM affect each dimension of the MBI. Implications are discussed in terms of employee selection for stress reduction interventions or in the avoidance of “stressful work assignments” (p.259).

In subsequent research exploring the relationship between personality and Burnout, Morgan and de Bruin (2010) conducted a study among 297 South African university students, using the Maslach Burnout Inventory-Student Survey (MBI-SS; Schaufeli, Martínez, Pinto, Salanova & Bakker, 2002). The authors reported that: Emotional Exhaustion was negatively correlated with conscientiousness ($r = -.17, p < .01$) and extraversion ($r = -.13, p < 0.05$), and positively correlated with neuroticism ($r = .34, p < 0.01$); Cynicism was negatively correlated with extraversion ($r = -.14, p < 0.05$), conscientiousness ($r = -.17, p < .01$) and agreeableness ($r = -.17, p < .01$), and positively correlated with neuroticism ($r = .27, p < .01$); and, Professional Efficacy was positively correlated with extraversion ($r = .21, p < .01$), conscientiousness ($r = .44, p < .01$), openness to experience ($r = .25, p < .01$) and agreeableness ($r = .23, p < .01$), and negatively correlated with neuroticism ($r = -.25, p < .01$). Further multiple regression analyses were conducted using combined personality traits and Burnout dimensions, and the authors reported that the combined traits explained approximately 13% of the variance in Emotional Exhaustion, 13% of the variance in Cynicism and 25% of the variance in Professional Efficacy.

³ Often denoted/reported as the inverse trait of *neuroticism*.

⁴ A measure of relative unique individual contributions to the model.

Although Morgan and de Bruin (2010) position these results as being consistent with prior FFM personality/Burnout research, they acknowledge that most other studies use previous versions of the MBI, and also that caution should be urged in generalising these results beyond their specific single-site student sample. The authors also used an atypical instrument to measure the five personality traits: the Basic Trait Inventory-Short (Taylor & de Bruin, 2006), developed to reflect the cross-cultural nature of South Africa. Despite some subsequent validation, this also makes direct comparisons problematic with studies using more widely used instruments, notably the proprietary NEO Personality Inventory based on the FFM (NEO-PI-R; Costa & McCrae, 1992). Additionally, as with Alarcon et al.'s meta-analysis, the practical implications of personality/Burnout relationships seem quite vague. For example, Morgan and de Bruin (2010) suggest that "university lecturers and counsellors should note these results and integrate learning programs to prevent or reduce Burnout in students" (p188). Given that most comparable studies seem to find relationships with most, if not all, personality traits and each Burnout dimension, it appears challenging to focus interventions based on this information, either in terms of identifying vulnerable individuals or creating anything more specific than generic stress management interventions.

Finally, some Burnout studies have focused on the contemporary topic of 'work-home interference' (WHI), which refers to the blurring of boundaries, and potential conflict of commitments, between job roles and home life. WHI is not only driven by more flexible 'working from home' type arrangements offered (and even imposed) by modern organisations, but also by the increasing use of smartphones and other similarly internet-enabled devices, which potentially render the home-worker permanently available (Derks & Bakker, 2014). Derks and Bakker (2014) conducted a five day diary-based study among 69 Dutch participants exploring the relationship between smartphone use, WHI and Burnout, using the Emotional Exhaustion and Depersonalisation dimensions of the MBI, alongside measures of relaxation and 'psychological detachment from work'. The paper presents some relatively complex variable interactions, due to repeated measures and multilevel modelling, although the use of repeated measures is worthy of interest in itself as it is relatively novel in

Burnout studies. The authors reported that 65% of Emotional Exhaustion and 56% of Cynicism could be explained by within-person variations, which suggests that Burnout is perhaps more volatile between measures than other longitudinal studies report. Looking at the direct Burnout correlations reported by Derks and Bakker (2014), the most notable relationships for Emotional Exhaustion were with WHI (.5, $p < .01$) and smartphone use (.3, $p < .01$), and for Cynicism with WHI (.44) but much less so with smartphone use (.07, $p < .01$). Relaxation and psychological detachment displayed relatively low direct correlations with Burnout dimensions, although featured more strongly in multilevel modelling. The study, although based on a relatively small sample of relatively homogeneous young, highly educated professionals, points towards some future highly salient work-life balance research opportunities.

2.2 Acceptance and Commitment Therapy & Psychological Inflexibility

ACT can be regarded as one of the ‘third wave of behaviour therapies’, following traditional behaviour therapy and cognitive approaches/CBT, and characterised by greater emphasis on context, also including approaches such as dialectical behaviour therapy (DBT) and metacognitive behaviour therapy (MBT) (Hayes, Luoma, Bond, Masuda & Lillis, 2006).

ACT focuses on the study of behaviour within specific contexts, and these contexts become the independent variables that a researcher will manipulate to understand the “prediction and influence of psychological events” (Gaudiano, 2011, p.6). Accordingly, a fundamental source and magnifier of psychological distress is the way for certain individuals that cognition and language interact with different contexts to hinder behaviour that is in the long term interest of those individuals, and in line with their personal values.

A key feature of this ‘Psychological Inflexibility’ is ‘cognitive fusion’ (Hayes et al., 2006, p.6) in which an individual’s behaviour is overly and unhelpfully controlled by verbal processes, with no moderation by contact with environmental contingencies. Problems are created by a literal belief by an individual in their cognitions rather than an awareness of their own mental processes. For many, this rigid belief creates a

restrictive set of language-based rules which do not adapt to behavioural experience or environmental influences. For example, a rule that states that 'anxiety is unhealthy' can lead an individual to focus on eliminating or controlling anxiety in their life rather than accepting that anxiety is a normal human emotion experienced when we step out of our comfort zone, for example to give an important presentation at work. Resulting behaviour may therefore be to avoid all situations where anxiety might occur.

In ACT this is termed 'experiential avoidance', with implications for a broad range of psychopathology (Hayes, Strosahl & Wilson, 2012). Experiential avoidance reduces psychological contact with the present moment, and symbolic language creates fusion with an individual's conceptualised self, and a conceptualised version of their past and future. Excessive psychological energy is diverted into 'problem-solving' and 'reason giving', for example endless rumination over why something happened or reinforcing a verbally constructed view of oneself as 'a failure' or 'a victim' (Hayes et al., 2006).

ACT's therapeutic approach is described as a set of six core processes designed to address the problems raised above. These processes are interlinked and non-linear, and combine to build 'Psychological Flexibility', which is defined as "the ability to contact the present moment more fully as a conscious human being, and to either change or persist with behaviour when doing so serves a valued end" (Hayes, 2004, p.5).

These processes are often presented diagrammatically as a hexagram as seen in Figure 2 and described in Table 2:

Figure 2 - Core ACT processes and their relationship with Psychological Flexibility
(adapted from Hayes et al., 2006, p8).

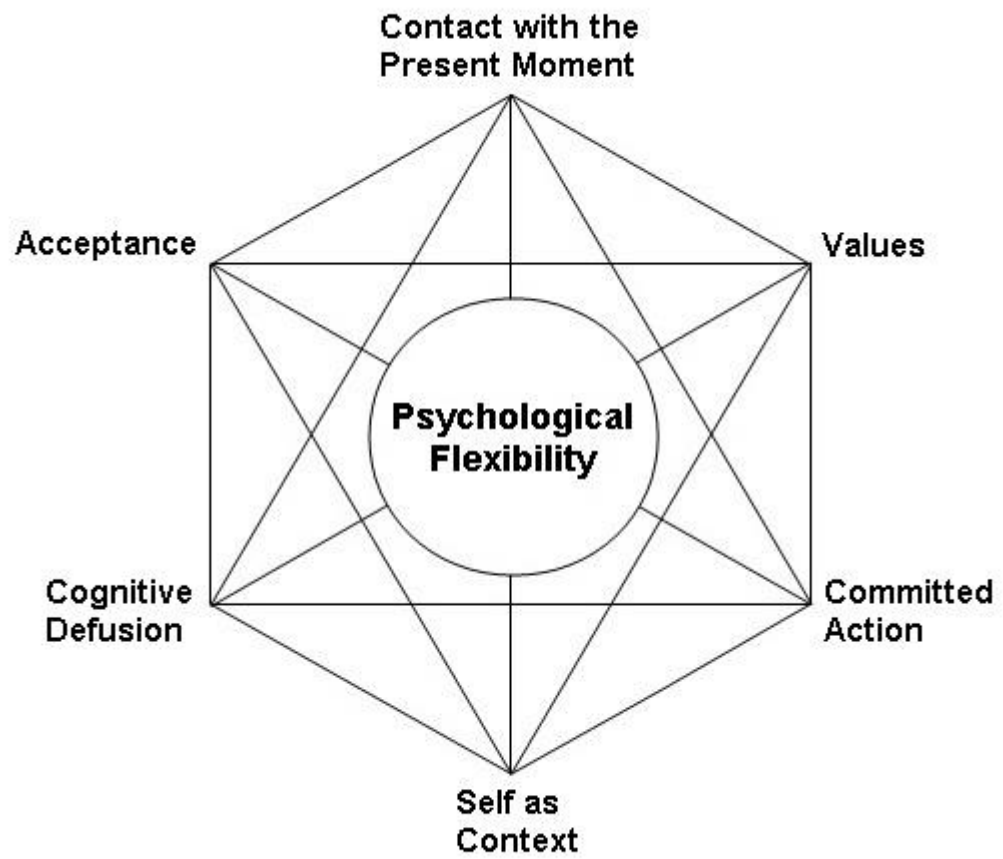


Table 2 - Description of ACT core processes.

<p>Acceptance is an alternative process to avoidance, e.g., rather than trying to avoid or control feelings of anxiety, a client would be helped to experience anxiety for what it is, and with full awareness, namely a physiological response to cognitions related to a valued activity.</p>
<p>Cognitive Defusion is the ability to see a thought for what it is, rather than its literal content (i.e., 'what it says it is'). A painful thought may be labelled as 'just a thought', given a name such as 'Ms. Self Doubt' or recited in different ways out loud to create defusion from the literal content of the thought (Cullen, 2008).</p>
<p>Contact with the Present Moment promotes contact with events as they occur in the 'here and now', and without judging or labelling them. This process makes extensive use of mindfulness techniques (e.g., Williams, Teasdale, Segal & Kabat-Zinn, 2007).</p>
<p>Self as Context involves the ability to be aware of one's psychological experiences without becoming attached to them or seeking to control them. Again this makes use of mindfulness techniques, as well as the use of metaphor and experiential processes.</p>
<p>Values and Committed Action are both processes that underline the behavioural underpinnings of ACT. Values are akin to life directions, and ACT uses a variety of exercises to help a client identify values in various life areas (e.g., family, career, intimate relationships), while seeking to undermine verbal processes that might lead to decisions based on avoidance, compliance or fusion (e.g., religious/social 'rules' on sexuality). Committed action is the process of linking ongoing patterns of effective behaviour in the service of an individual's values, and can be constructed in the form of short, medium and long term goals (Hayes et al., 2006).</p>

One way the ACT community sought to operationalise their approach was to develop a measure of experiential avoidance and Psychological Inflexibility, the 'Acceptance and Action Questionnaire' (AAQ) (Hayes, 2004). The current version is the AAQ-ii (Bond et al., 2011), validated as a unidimensional measure across multiple samples. Higher levels of Psychological Inflexibility, or experiential avoidance, were found to be significantly correlated with higher levels of depression, anxiety, stress and psychological ill-health. Moreover, higher levels of Psychological Inflexibility were associated with greater levels of psychological distress twelve months later, and with greater number of workdays lost (Bond et al., 2011).

Although the AAQ-ii was not designed as a tool to measure clinical psychopathology, its originators were able to relate AAQ-ii scores to clinical thresholds on three separate clinical measures, namely the Beck Depression Index (BDI-ii), the General Health Questionnaire (GHQ-12) and the GSI scale of the SCL-90-R (the latter two being measures of psychological distress) (Bond et al., 2011).

In relation to Burnout, a number of studies have been published exploring relationships between Psychological Inflexibility and a range of work-related outcomes, including mental health, particularly in the United Kingdom. Bond and Bunce (2003) explored the role of acceptance (i.e., the converse of Psychological Inflexibility) and job control in mental health, job satisfaction and work performance, where job control is defined as "a perceived ability to exert some influence over one's work environment in order to make it more rewarding and less threatening" (p.1058). They concluded that, in addition to predicting better mental health and job performance amongst employees, higher levels of acceptance also interact with higher levels of job control to boost these positive outcomes. A further study (Donaldson-Feilder & Bond, 2004) reported that acceptance predicted higher levels of overall emotional and physical wellbeing, whereas emotional intelligence (EI) did not, and that job control was only linked to job satisfaction and no other outcome variables.

Flaxman and Bond (2010) conducted a work-based comparison of interventions based on ACT and stress inoculation training (SIT), and found that both interventions were equally effective in lowering psychological distress (measured by the General Health

Questionnaire (GHQ-12; Goldberg & Williams, 1988), but that the positive impact of the ACT training was mediated (as hypothesised) by increases in Psychological Flexibility whereas the mechanism for improvement in the SIT condition was less clear and therefore unsupportive of SIT's cognitive theoretical underpinnings. Lloyd, Bond and Flaxman (2013) compared an ACT intervention for Burnout with a waitlist control group over four time periods. They reported that significant improvements in Psychological Flexibility within the treatment group mediated a future reduction in Emotional Exhaustion, which in turn appeared to prevent the subsequent increase in Depersonalisation⁵ observed in the control group. This study, which appears to be the first to assess ACT as an intervention for Burnout, is highly significant in that it identifies the potential to reduce Burnout by increasing Psychological Flexibility, and also offers preliminary evidence that, by initially influencing Emotional Exhaustion, it can reduce a later trajectory towards Depersonalisation.

In the USA, Vilardaga et al. (2011) examined Burnout among a large sample of addiction counsellors, exploring the relative contribution of ACT-based processes compared with 'work-site factors'. They found these counsellors had similar levels of overall Burnout to other mental health practitioners, and that, although work-site factors such as job control and social support at work were important predictors of Burnout, ACT-based processes such as mindfulness and commitment to values demonstrated stronger and more consistent relationships with Burnout.

Finally, a recent development is the Work-related Acceptance and Action Questionnaire, or 'WAAQ' (Bond, Lloyd & Guenole, 2013), which aims to measure Psychological Flexibility specifically within the context of the workplace. Although further validation of this measure is limited, it has demonstrated higher correlations with work-specific measures than the AAQ-ii, although the AAQ-ii remains more closely linked to clinical outcomes (Ruiz & Odriozola-Gonzales, 2014).

⁵ This study used the Maslach Burnout Inventory - Human Services Survey (MBI – HSS; Maslach et al., 1996).

2.3 Schema Therapy and Early Maladaptive Schemas

The concept of schemas was introduced by Beck in his cognitive theory of depression (1967), although his similarly introduced concepts of negative automatic thoughts and negative core beliefs have generally received more attention within the overall Cognitive Behavioural Therapy (CBT) movement, possibly due to definitional challenges (Oei & Baranoff, 2007).

Young developed Schema Therapy specifically to address vulnerability based on personality, using core cognitive and behavioural building blocks, but integrating concepts from attachment theory, Gestalt, object relations, constructivism and psychoanalysis. A key aim was to provide a therapeutic alternative to clients making limited progress within Cognitive Behavioural Therapy alone (Young, Klosko & Weishaar, 2003). Schema Therapy has provided key insights into long-standing and seemingly treatment-resistant adult psychopathology, and has been able to demonstrate clinically significant reductions in the symptoms of such enduring mental health conditions (Rafaeli, Bernstein & Young, 2010).

Central to Schema Therapy is the concept of Early Maladaptive Schemas (EMS). According to Young (1990) the most rigid and potentially damaging EMS develop primarily from difficult childhood experiences, and it is these which are at the core of personality disorders and which can manifest themselves in various chronic Axis I disorders. These 'toxic early experiences' can include: traumatisation or victimisation; emotional deprivation and abandonment; over-involvement with, and over-protection from, primary caregivers; and unhelpful internalisation or identification with significant others (e.g., a child learning from an over-anxious parent that the world is highly dangerous).

These EMS form a wide-ranging and pervasive theme or pattern of cognitions, memories and emotional/physiological experiences. They are focused within the individual and on interpersonal relationships and, although established during childhood or adolescence, can develop further across the lifespan. Furthermore, they are significantly dysfunctional (or 'maladaptive') in the way they impact on an

individual's experiences. They are not behaviours, but are highly instrumental in determining behavioural patterns which are often self-defeating and likely to further reinforce the EMS (Young et al., 2003). EMS are believed to be highly resistant to change, as they work at an automatic and unconscious level. They are also likely to engender high levels of negative affect due to their association with major life themes such as intimacy and autonomy (Schmidt, Joiner, Young & Telch, 1995).

Young identified five maladaptive schema domains, namely **disconnection and rejection, impaired autonomy and performance, impaired limits, other-directedness** and **overvigilance and inhibition** (Young et al., 2003). Underpinning these are eighteen specific early maladaptive schemas (EMS) shown in table 3 below.

Table 3 - Young's Schema Domains and underlying EMS (adapted from Young et al., 2003, pp.14-17)

Disconnection and Rejection domain: <i>an expectation that needs for security, safety, stability, nurturance, empathy, sharing of feelings, acceptance, and respect will not be met appropriately. Typical family of origin likely to be detached, cold, rejecting, withholding, lonely, volatile, unpredictable and/or abusive.</i>	
Abandonment/Instability	Perception that significant others will be unable to provide necessary support and connection due to unavailability (e.g., death or departure) or inconsistency.
Mistrust/Abuse	Belief that others will hurt, abuse, humiliate or otherwise take advantage, either wilfully or through extreme neglect.
Emotional Deprivation	An expectation that needs for adequate emotional support will not be met by others, notably nurturance, empathy and protection.
Defectiveness/Shame	The feeling one is bad, unwanted, inferior, invalid or unlovable to significant others if exposed. May involve hypersensitivity to criticism, self-consciousness and shame.
Social isolation/Alienation	Feelings of difference and isolation from other people, and no sense of group/community membership.
Impaired Autonomy and Performance domain: <i>expectations about self/environment that affect perceived ability to separate, survive, and function/perform in an independent or successful manner. Typical family of origin is enmeshed, overprotective and undermining of child's confidence.</i>	
Dependence/Incompetence	Belief that one is fundamentally incapable of handling everyday responsibilities competently (e.g., self-care, daily problem-solving, showing good judgement).
Vulnerability to Harm/Illness	Excessive fear of imminent catastrophe and inability to avoid this. Can take the form of medical (e.g., terminal disease), emotional (e.g., going insane) or external (e.g., air crash) catastrophes.
Enmeshment/Undeveloped Self	Excessive emotional involvement/closeness with one or more significant others (often parents) inhibiting individuation and normal social development.
Failure	Belief of fundamental inadequacy and that failure has occurred, or will occur, in areas of expected achievement. Often involves beliefs of inferiority.
Impaired limits domain: <i>problems in respecting the rights of or co-operating with</i>	

<i>others, making commitments or working towards realistic personal goals. Typical family of origin is permissive, overindulgent, arrogant and lacking in discipline.</i>	
Entitlement/Grandiosity	Belief that one is superior to others and entitled to special rights/privileges.
Insufficient Self-control/Self-discipline	Inability or unwillingness to demonstrate self-control and frustration management in the achievement of personal goals.
Other-directedness domain: <i>excessive focus on the needs of others in order to gain love/approval, often suppressing one's own emotions. Typical family of origin is based on conditional acceptance and the prioritisation of parents' emotional needs.</i>	
Subjugation	Surrender of control to others due to feelings of coercion, relating to needs and emotions.
Self-Sacrifice	Excessive focus on helping behaviours at the expense of one's own needs.
Approval Seeking / Recognition Seeking	Self-esteem based primarily on the reactions of others rather than one's own assessment - can include overemphasis on status and financial values.
Overvigilance and Inhibition domain: <i>an emphasis on suppressing emotions/impulses or meeting high internal standards at the expense of happiness, health and relationships. Typical family of origin is demanding and can be punitive; priority is placed on duty and perfectionism over recreation, and the sense that any lack of vigilance will result in potential disaster.</i>	
Negativity/Pessimism	A pervasive, enduring focus on life's negative aspects, historically and in terms of future predictions, even when things are currently going well.
Emotional Inhibition	Non-expression of spontaneous behaviour, communication or emotion, to avoid disapproval by others, shame or loss of control.
Unrelenting Standards/Hypercriticalness	Constant drive to achieve very high internalised levels of behaviour and performance, to avoid failure or criticism. Significant negative impact on enjoyment, health, self-esteem and relationships; often associated with perfectionism.
Punitiveness	Belief that mistakes (by others or self) should be harshly punished, resulting in a lack of empathy and intolerance of imperfection.

Any individual may have one or more EMS, but these are only considered to be pathological when they relate to emotional problems and issues with social/interpersonal functioning. They can be identified using the Young Schema Questionnaire, and clients with severe personality disorders would typically score highly on many EMS (Schmidt et al., 1995), whereas many clients presenting for psychological therapy, who do not meet such diagnostic criteria and who function at a higher level socially, would usually score highly on only two or fewer EMS. It is also important to note that the origins of the EMS definitions and structure are largely based on clinical case observations rather than empirical research, although empirical research has shown support for their existence. The overall number of EMS has varied theoretically and in terms of factor structures, but the emergence of an 18-EMS typology has overall been supported by psychometric research (Arntz & Jacob, 2013).

Links have been established between maladaptive schemas and various types of psychopathology among clinical populations, notably depression. Oei and Baranoff (2007) review a number of studies using various versions of the Young Schema Questionnaire, including long and short versions, and report regression-based models using EMS that accounted for between 33% and 63.3% of the variance in reported depression levels, using tools such as the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock & Erbaugh, 1961). The most significant EMS vary between studies, but a common inclusion of Defectiveness/Shame was noted in at least two studies. However, Oei and Baranoff (2007) also note that there are various inconsistencies between these studies, including clinical/nonclinical samples, and differences in measures and statistical modelling.

A study by Waller, Meyer and Ohanian (2001) established Emotional Inhibition as a significant predictor of bingeing behaviour. Additionally, Defectiveness and low scores on the Subjugation EMS were significant predictors of vomiting behaviour. An interesting study by Thimm (2011) explored the additional predictive validity of EMS above the more typically used 'five factor model (FFM)' personality trait indicator in accounting for personality disorders (PD), within a Norwegian outpatient clinical sample. Thimm found that adding EMS into FFM regression models improved their ability to account for variance in PD symptoms in all but Schizoid and Antisocial PD, by

an average of seven percent and up to 12% (Schizotypal PD). Individual EMS⁶ were also reported: Entitlement as a significant individual predictor of Narcissistic PD; Mistrust of Paranoid, Schizotypal and Borderline PD; Failure of Avoidance PD; Subjugation and Dependent EMS of Dependent PD; and Unrelenting Standards of Obsessive-Compulsive PD.

Although much of the existing EMS/schema research has been focused on PDs (Hawke & Provencher, 2012), Young et al. (2003) also discuss its relevance to Axis I disorders which may have underlying characterological origins.

Relevant to the current study, the construct of schemas has been applied more specifically to work-related stress and broader psychological health problems, with the development of a schema-focused model of occupational stress. This proposes that individuals unconsciously seek out work situations which recreate toxic childhood experiences responsible for their EMS, in unconscious attempts to produce better outcomes, and achieve EMS 'self-healing'. This can work unless EMS are too severe or rigid, when it is suggested this 're-enactment' will continue across workplace scenarios leading to dysfunctional coping strategies and stress-related problems (Bamber & Price, 2006).

Price (2006) empirically tested this model among 544 participants drawn from four trainee occupational groups (paramedic trainees, police probationers, student mental health nurses and clinical psychology trainees), each occupational group being split equally between those starting and those completing training. The main hypothesis was that, if individuals (in this case from helping professions) are drawn to their profession by an unconscious drive to address EMS, then there should be a difference in EMS profiles between the 'starters' and 'completers', along with an accompanying improvement in general psychological health. Additionally, Price was also looking for evidence of PTSD symptoms in completers who had not been able to achieve 'schema healing' due to hypothesised EMS rigidity, and who had subsequently become further traumatised.

⁶ This study used an earlier form of the Young Schema Questionnaire (SQ-SF; Young, 1999) which assesses 15 EMS and therefore does not correspond directly to Table 3.

Price found significant differences between starting and completing EMS in three out of the four occupational groups, but only for one EMS respectively in each group: for the paramedic group this was Dependency; for the police group it was Mistrust/Abuse; and, for the clinical psychology group it was Self-Sacrifice. In each case the EMS score was higher on completion, which would seem to contradict the main hypothesis, although as Price discusses, even the completing groups were still at a relatively early stage of their careers, and this result could indicate an early stage of schema healing or 'working through' where EMS are initially activated before the healing process takes place. This suggestion is perhaps supported in that, where differences were found in general psychological health (using the General Health Questionnaire, GHQ-28; Goldberg, 1978), these similarly demonstrated a worsening position; for the police group it was for somatic complaints; for the mental health nursing group it was for social dysfunction; and, for the clinical psychology group it was for both somatic complaints and anxiety.

Additionally, Price developed a regression model which demonstrated that six EMS were able to explain a notable 38.9% of the variance in PTSD symptoms, as measured by the Impact of Events Scale (IES; Horowitz, Wilner & Alvarez, 1979). These EMS⁷ were Failure, Mistrust/Abuse, Isolation, Defectiveness/Shame, Enmeshment and Insufficient Self-Control. Only one of these was a salient EMS in the initial analysis (that of Mistrust/Abuse from the police group), which provided little evidence linking Bamber and Price's (2006) re-enactment model to PTSD as measured. Although it can be argued that Price's (2006) study was inconclusive in terms of supporting this model, it offered some fascinating insights into the relationships between EMS and career choice, as well as between EMS and PTSD among these occupational groups.

In the only study found by the author directly exploring the relationships between EMS and Burnout, Bamber and McMahon (2008), among a population of NHS employees, were able to demonstrate significant relationships between Burnout (among other pathologies) and EMS. Specifically with regard to Burnout, regression analysis

⁷ This study used the Young Schema Questionnaire-Short Form (YSQ-S1, Young, 1998), accounting for EMS differences with the YSQ-S3 (Young, 2005) used in the current study.

demonstrated that⁸: the EMS of Emotional Deprivation was predictive of Emotional Exhaustion; Subjugation and Entitlement EMS were predictive of Depersonalisation; and the Emotional Inhibition EMS was predictive of reduced Personal Accomplishment.

2.4 The current study

2.4.1 Project rationale

Growing economic pressure is a global challenge, whether in established modern economies where ever-increasing efficiency and austerity have become watchwords, or in developing economies where economic growth may be prioritised over general welfare. In addition, cultural trends towards individualism and materialism have increasingly challenged the notions of both personal and organisational values (e.g., Doyle, 1999; Schaufeli et al., 2008).

Despite extensive overall Burnout research, it warrants ongoing investigation due to its extensive mental and physical impact on individuals, as well as a significant financial impact on such individuals, their employers and society more broadly.

The research base exploring the relationship between either Psychological Inflexibility or Early Maladaptive Schemas with Burnout remains limited. Few studies have been identified linking concepts from ACT directly to Burnout (e.g., Vilardaga et al., 2011; Lloyd et al., 2013), and the author is only aware of one study (Bamber & McMahon, 2008) relating EMS to Burnout.

This study aims to bring a counselling psychology perspective to a condition which is an obvious cause of distress to individuals, while remaining largely ambiguous from a mental health diagnostic and intervention perspective. It aims to build on the existing base of empirical work linking Psychological Inflexibility and EMS with Burnout, and to conduct a novel study involving EMS and Burnout with participants outside of the UK National Health Service.

⁸ This study used the Young Schema Questionnaire-Short Form (YSQ-S1, Young, 1998) and the original MBI, accounting for definitional differences with the YSQ-S3 and the MBI-GS used in the current study.

More specifically, it aims to quantify data relationships between Psychological Inflexibility, individual EMS and the three Burnout dimensions of the MBI-GS. Regression models will include measures of both Psychological Inflexibility and EMS alongside other key demographic/biographic variables to explain how variance in Burnout levels between individuals can potentially be best explained.

The study will draw from both quantitative and qualitative methods, using qualitative interviews with experienced therapists from both ACT and Schema Therapy communities to further explore the data relationships identified, and to draw from their theoretical and clinical expertise to consider how underlying mechanisms of Burnout might relate to, and be informed by, both therapeutic approaches.

2.4.2 Research questions and hypotheses

2.4.2.1 Quantitative component

Based on the review of existing literature detailed above, two main hypotheses have been generated:

Hypothesis A is that higher levels of Psychological Inflexibility will be associated with higher levels of Burnout across all three dimensions of the Maslach Burnout Inventory.

Hypothesis B is that relationships will be identified between specific EMS and the three dimensions of the Maslach Burnout Inventory. Due to the different nature of the current sample, and inconsistencies in EMS relationships reported in previous studies, no specific EMS have been identified as part of this hypothesis.

2.4.2.2 Qualitative component

This element of the research will examine the following research questions:

1. Do the data relationships identified in the quantitative component make sense to practitioners from ACT and Schema Therapy in the context of their own training and clinical experience?
2. How might these relationships inform appropriate interventions?

2.4.3 Relevance to counselling psychology

Although the workplace is not the most typical practice setting, increasing numbers of counselling psychologists work in a variety of organisational roles and, in addition to providing counselling, may also be involved in designing and delivering stress management programs, providing coaching and consultancy services and conducting research (Palmer & Gyllensten, 2010).

However, operating within organisations may present fundamental challenges to the professional identity of a counselling psychologist, whose unique training is informed by counselling psychology's humanistic vision, prioritising a client's subjective

experience above interventions based on common diagnostic approaches. In seeking to reconcile these challenges, we can refer to the concept of 'evidence-based practice' which counselling psychologists also aspire to (Corrie, 2010). Additionally, the premise of the 'scientist-practitioner' model for counselling psychology is that research and practice should lead to an integrated approach supported by a scientific attitude (Blair, 2010). Jordan (2009) discusses the implications for counselling psychology of the implementation of evidence-based practice in both public and private sectors, and warns of the potential pitfalls to both individual careers and the profession as a whole of a failure to engage in research relating to the strategic development of organisations such as the UK's National Health Service.

This study seeks to add to the minimal existing base of research exploring Burnout from a counselling psychology perspective, hopefully offering the profession a current and relevant 'voice' on the topic. The author believes that a counselling psychology approach is well-suited to a study which combines robust quantitative data relationships with rich qualitative data generated by practitioners working therapeutically with Burnout, and that a 'counselling psychology lens' may be of interest to colleagues from other applied psychology disciplines who have experienced the phenomenon of Burnout and may find a different perspective helpful.

3 Methodology

3.1 Rationale for adopting a mixed methods approach

Quantitative research is characterised by measuring and quantifying phenomena, is usually highly controlled in terms of design, and focuses on causal and predictive factors. It is also the dominant method in psychology research. In comparison, qualitative research has a more open-ended approach to research and participants, an emphasis on subjectivity, and can enable the researcher to explore different social worlds from the perspective of interviewees (Langdrige & Hagger-Johnson, 2009). Mixed methods is viewed as “research in which the investigator collects and analyses data, integrates the findings and draws inferences using both qualitative and quantitative approaches or methods in a single study” (Tashakkori & Creswell, 2007, p.4).

As highlighted in the Literature Review, Burnout research began in a qualitative, case-study based manner, later becoming predominantly informed by quantitative, psychometrically based studies. For the current study, the research hypotheses and questions sought to build on the body of existing quantitative literature but also to explore from a more open-ended perspective how the identified data relationships might inform appropriate interventions. As discussed, both ACT and Schema Therapy ‘communities’ have developed psychometric tools which have attracted a substantial base of further quantitative research, and the key measures of Psychological Inflexibility and Early Maladaptive Schemas were chosen for the quantitative element of this study. However, in order to validate the results of this element, and to explore the meaning of these results in the context of current therapeutic practice, a qualitative component was considered essential.

Although the epistemological challenges in reconciling quantitative and qualitative methods will be discussed subsequently, the author is confident that a clear delineation exists between the suitability of each within the overall research objective.

3.2 Counselling psychology and mixed methodology

As outlined, counselling psychology faces a challenge in adopting a scientist-practitioner stance while remaining congruent to the profession's humanistic core values. Kasket and Gil-Rodriguez (2011, p.21) explore this by dividing the scientist-practitioner stance into competing positions of "empirical-scientist" and "subjective-scientist-practitioner". It is argued that mixed methods offers an ideal approach for counselling psychology which, as a discipline, is not only well-placed to negotiate methodological pluralism (Rafalin, 2010) but also to make optimal use of the approach.

Johnson and Onwuegbuzie (2004, p.15) describe mixed methods as "the third research paradigm" and discuss how it can help bridge the gap between quantitative and qualitative approaches. They also suggest that, in practice, most researchers draw from both approaches. Moving this debate into therapeutic practice, it also appears to sit comfortably within the challenges presented by Bury and Strauss (2006) who question how counselling psychology can possibly 'deliver' on its core values when called on by such key employers as the UK National Health Service to deliver standardised/manualised interventions and psychological testing. However, in drawing preliminary conclusions the authors suggest that, whether as an individual counselling psychologist we have a preference in drawing from 'science' or reflective therapeutic practice, it is perhaps in recognising the strength of blending these two informative bases that counselling psychologists are enabled to hone a unique approach to our clients' distress and/or requirements from therapy.

It is these skills in 'dialectical pluralism' (McAteer, 2010, p.8) that enable counselling psychologists to negotiate and manage the philosophical and practical tensions between quantitative and qualitative research methods, which many regard as irreconcilable and polar opposites (Doyle, Brady & Byrne, 2009). This ability should enable a focus on the research objectives and questions at hand, and selection of the most appropriate research methods outside the confines of dogma and without the inevitable collateral damage resulting from 'method wars' (Rafalin, 2010, p.4).

3.3 Epistemological position

Epistemology is an element of philosophy focused on the theory of knowledge and truth, attempting to provide answers to the question 'How, and what, can we know?' (Willig, 2013, p.4). By adopting an epistemological position, the researcher is able to understand and communicate how knowledge, truth and reality are defined, how they are created, and what can be determined about them via research. This 'standpoint' will then become a critical determining factor in the researcher's choice of methodology, or 'research paradigm'. Underpinning both epistemology and methodology is the researcher's 'ontological position', which Ponterotto (2005, p.130) defines as "the form and nature of reality, and what can be known about that reality".

It has been suggested that epistemologies can be classified on a spectrum, with a 'realist/positivist' position at one extreme and a 'radical constructionist' position at the other (Madill, Jordan, & Shirley, 2000). This view was expressed in the context of qualitative research but can be extended to quantitative approaches. The realist/positivist position holds that an objective reality exists, and that a direct unproblematic relationship exists between individuals and this reality, i.e., that reality directly reflects our experience of it. Within this position, the role of the researcher is to produce objective, bias-free knowledge. This fits with the notion of 'empiricism', the belief that any claim of knowledge must be grounded in data, and that systematic, observation-based research, based on sense perception (including experiments), is the cornerstone of knowledge creation. Modern 'post-positivists' accept that there is an inevitable degree of researcher-bias in all research, even if purely quantitative. This can vary based on the amount of pre-existing knowledge the researcher has about a specific phenomenon, or across the vast range of decisions made in any research project, e.g., inclusion criteria, geographic location, research materials.

Although the realist position is typically associated with quantitative research methods, Willig (2013) includes realism as one of three main epistemological bases for qualitative research. Qualitative researchers can still set out to capture and report something that is happening in the 'real world' as accurately as possible, in a skilled approach which can generate knowledge of a reality which exists "independently of

the researcher's awareness of it" (Willig, 2013, p. 15). This position can range from a 'naive realism', in which participants' accounts are taken at face value, to a 'critical realism' in which the researcher looks for underlying social, physiological or psychological structures (e.g., peer pressure, media trends, behavioural avoidance) which offer a more accurate understanding of reality.

Secondly, a phenomenological approach to knowledge production focuses explicitly on the subjective experience of the individual, and does not seek to explain or establish the causality of this experience, or to look for external validation. Phenomenological approaches can range from purely descriptive to those which are more interpretative and seek to identify the possible meaning of experience, linking this to a broader understanding of societal and psychological contexts.

Finally, Willig (2013) describes a 'social constructionist' approach which focuses on the role of language in constructing knowledge and 'versions of reality'. This approach tends to study discourses and how they lead to a process of knowledge generation, and is often described as a 'relativist' position, asserting that language (discourse) is a social mechanism which constructs reality rather than reflects it. This reality can be contingent on different (e.g., social or political) objectives.

As stated above, the current study adopted a mixed methods approach, and therefore it is important to situate this within a justifiable epistemological position. The 'method wars' described by Rafalin (2010) can be linked to the 'incompatibility thesis' (Howe, 1988) which argues that quantitative and qualitative research paradigms are mutually exclusive and therefore cannot be combined. However, mixed methods research is increasingly emerging as a dominant paradigm in health care research (Doyle et al., 2009), adopted by 30% of studies commissioned by the Health Research and Development Programme in the United Kingdom between 2000 and 2004 (O'Cathain, Murphy & Nicholl, 2007). The goal of mixed methods is not to prioritise either quantitative or qualitative methods, but to optimise the strengths and mitigate the weaknesses of each (Johnson & Onwuegbuzie, 2004).

Bishop (2014) outlines two key challenges to the use of mixed methods, namely philosophical (i.e., epistemological) and technical. She proposes pragmatism to resolve the epistemological challenge, an approach becoming increasingly adopted (Tashakorri & Teddlie, 2012). As an epistemological position, pragmatism is more than simply 'whatever works', and is rooted in the works of pragmatist philosophers such as Dewey, James, Peirce and Rorty, dating back to the late 19th century. Some key tenets of pragmatism are: that knowledge is both constructed and based on the reality of the world we experience and inhabit; rejection of traditional dualisms (e.g., subjectivism versus objectivism); recognition that the natural/physical world exists materially alongside a social/psychological world; inner human experience is valid and important; replaces the historic subject-external object distinction with a more naturalistic organism-environment interaction; theories should be endorsed instrumentally (i.e., how well do they work on the basis of predictability and applicability); endorsement of eclecticism and pluralism; belief in lower case 't' truths (that are provisional and instrumental); preference for action over philosophising; explicitly value-oriented approaches to research (especially shared, cultural values); endorsement of theory which informs effective practice; understanding that organisms are constantly adapting to new challenges and environments; and, rejection of reductionism (e.g., that neurobiological processes cannot account for 'mind', Johnson & Onwuegbuzie, 2004).

DeForge and Shaw (2012) address pragmatism's ontological position, and note that critics of pragmatism assume that it has no ontological base. While they acknowledge that even the original pragmatist philosophers could not agree about the nature of physical reality, and can be positioned along a continuum from realism to pluralism, they also argue that pragmatists do not deny the existence of physical reality but only value inquiry into it that has consequences for humanity. Furthermore, pragmatic research is interested in how reality or truth is represented by humans, and therefore allows for multiple, and even contradictory, 'truths' to exist.

Sylvester and Hayes (2010), however, state that pragmatic research must be conducted 'a-ontologically', as the very behaviour of identifying ontology would inevitably be influenced by the researcher's sociocultural and political context. For

them, ontology is superseded by pragmatism's "truth criterion of successful working" (p.93). This requires explicit goal setting by the researcher, and also a tolerance for ambiguity and uncertainty. Arguments about whose truth is more 'true' can be replaced more helpfully with questions such as 'what are the consequences of regarding this is true?', 'if this wasn't true what would you like to happen?' and 'do you already see this preferred outcome at certain times - how could we make this happen more?'. In adopting this position, Sylvester and Hayes (2010) refer to 'functional pragmatic' approaches as comparable to the 'functional contextual' perspective adopted by Acceptance and Commitment Therapy.

Rorty (2000) addresses criticisms of pragmatism, e.g., that it is akin to relativism, lacks rationality and has little regard for 'the truth'. He defends pragmatism against these charges, or 'misunderstandings', by reassuring critics that pragmatists do believe in 'expert cultures' which can reach agreement on such things as medical diagnosis and lawmaking. However, he also states that pragmatists do not believe that such agreement implies a 'closeness to reality'. Johnson and Onwuegbuzie (2004) identify Rorty himself as a focal point for criticisms of pragmatism, in that he is seen as a 'neo-pragmatist' who rejects correspondence truth⁹ in any form. They also acknowledge that concepts such as 'usefulness' or 'workability' can be ambiguous unless explicitly specified by the researcher (as do Sylvester & Hayes, 2010, above), that pragmatism may lead to incremental rather than fundamental societal changes, that pragmatic theories of truth are unable to address 'useful but non-true' or 'non-useful but true' beliefs or propositions, and that pragmatism is unable to resolve philosophical disputes logically (rather than practically).

Bishop (2014) notes that pragmatist approaches to mixed methods typically acknowledge the epistemological differences between qualitative and quantitative approaches but do not view these as irreconcilable in reaching a collective aim for all research, namely to generate beneficial change in the world, i.e., does the research produce "valuable external consequences in the context of the researcher's own time and place" (p.3). Bishop addresses the 'technical challenges' of mixed methods by

⁹ That truth is a relational property involving a characteristic relation (to be specified) to some portion of reality (to be specified).

referring to the diverse typologies available to the researcher. Four broad designs have been proposed for mixed methods, differing along the two dimensions of timing and emphasis. In terms of timing, 'exploratory' and 'explanatory' designs are sequential, with one component (i.e., the quantitative or qualitative element of the study) completed before the other one is begun, whereas in 'triangulation' and 'embedded' designs both components are typically concurrent. Exploratory designs emphasise the qualitative component, explanatory designs emphasise the quantitative component, triangulation designs tend to give equal emphasis to both components, while embedded designs can emphasise either (Creswell & Plano-Clark, 2007). Within this conceptual framework, the current study is positioned most closely to an explanatory design, although it is argued that its substantial qualitative component adds an exploratory perspective.

3.4 Pragmatism and the current study

On the basis of the above discussion, a pragmatist position for the current study enables the justification of a mixed methods approach which is focused above all on the research question. As mentioned earlier, the multifaceted nature of the research question enables quantitative and qualitative methods to be applied with differing focuses.

Quantitative approaches are typically associated with numerical data, measuring and/or exploring relationships between clearly defined variables. They also tend to be driven by positivist ideas of an objective reality which can be uncovered by the correct methodology (Tashakkori & Teddlie, 2003). In contrast, qualitative approaches are typically associated with discourse and texts, a deep understanding of individual experience, and the use of language in the social construction of meaning. In light of this, even adopting a 'post-positivist' (i.e., acknowledging the subjectivity of research decisions) or critical realist perspective (Willig, 2013) in regard to the quantitative element of this project would still leave the need for a different epistemological position for the qualitative element.

From a quantitative perspective, the use of psychometric approaches such as the MBI, AAQ and YSQ can be helpful to create common points of reference among mental health professionals, and allow clients access to appropriately defined psychological treatments. However, therapeutic relationships represent multiple constructed realities (Ponterotto, 2005) and therefore a research process designed to access these realities must be sympathetic to individual experience and perception, social context and researcher-participant interaction. As such, the study includes semi-structured qualitative interviews with practitioners, and employs an analytic approach which will be deductive to the extent that data coding will inevitably be informed by the author's own understanding and clinical experience of Burnout, ACT and Schema Therapy. However, an inductive element is also included in the qualitative data analysis to allow a richness of data description that is able to capture perspectives from participants that would lie outside a theoretical coding approach. Within pragmatism this method could be described as 'abduction', which is an experimentally-motivated process of cycling between deductive and inductive methods (Butt, 2000).

The adoption of a pragmatist epistemology for the current study allows recourse to Rorty's (2000) position as stated above. The development of, and further quantitative research into, psychometric tools and empirically tested psychological therapies appears to sit comfortably within Rorty's acceptance of an 'expert culture'. Qualitative interviews with professionally qualified and experienced psychological therapists could also be considered to be part of this culture, but it is suggested that this qualitative component is also an acknowledgement that the value of the 'knowledge' generated by the study is in the benefit it potentially delivers to the various stakeholders affected by Burnout, in this case by an improved understanding of the relationship between Burnout, Psychological Inflexibility and Early Maladaptive Schemas. The key tenets of pragmatism extracted from Johnson and Onwuegbuzie's article (2004) above were selected by the study author in specific support of the epistemological position of this study, in particular that knowledge is both constructed and based on the reality of the world we experience and inhabit, that theories should be endorsed instrumentally, that endorsement of theory informs effective practice, and that organisms are constantly adapting to new challenges and environments.

3.5 Quantitative analysis

The current study used a cross-sectional, non-experimental research design for its quantitative component, to explore the relationships between Burnout, Psychological Inflexibility (PI) and Early Maladaptive Schemas (EMS).

The author adopted a number of widely used and recognised statistical methods, conducted within IBM SPSS v.21. These methods are all reported using typical statistical reporting conventions in the Results section of this study. The data-set was screened for errors, and checked for normality of distribution and homogeneity of variance using descriptive statistics. Having considered the outcome of this preliminary analysis, a decision was taken to use parametric tests even though the data violated some of the necessary assumptions. This decision was taken on the basis that parametric tests have greater ‘statistical power’ than non-parametric tests (i.e., errors in identifying relationships are less likely), and was further supported by evidence that parametric tests have been shown to be highly robust to violations of normality (Langdridge & Hagger-Johnson, 2009; Field, 2013). Additionally, such violations are a common finding in both larger samples and social science studies which typically use parametric tests despite a lack of normally distributed data (Pallant, 2013).

Descriptive statistics were used to analyse and report participant characteristics, ‘profiling’ participants by a number of demographic and biographical variables (e.g., age, gender, job role). Descriptive statistics were also used to analyse and report levels and patterns of Burnout, PI and EMS among the sample.

Following this, a number of two-way between-groups analyses of variance (‘anova’) and one-way between groups multivariate analyses of variance (‘manova’) were conducted to explore statistical relationships between demographic/biographical variables and dimensions of Burnout.

The focus of data analysis then turned to relationships between the key hypothesised ‘predictor variables’ of PI and EMS with Burnout. This began with exploring correlations, then using the predictor variables correlating most closely with Burnout dimensions to build standard (or ‘forced’) regression models. These models were those

that were presented to the ACT and Schema Therapists interviewed during the study's qualitative component, as these permitted a focus on either PI or EMS respectively.

Further regression modelling was then conducted using a 'stepwise' approach, which allowed predictive models of Burnout to be generated automatically by SPSS and which initially included all independent variables (demographic/biographic, PI and EMS). The final models only included variables which significantly and uniquely accounted for variance in each Burnout dimension.

As a final stage of quantitative analysis, principal components analysis (PCA) or 'factor analysis' (Pallant, 2013) was employed to explore whether the three dimensions of Burnout could be reduced to a single factor, making a predictive model simpler than one including three dimensions of Burnout. PCA sufficiently supported the creation of a single 'Burnout dimension' using items from the MBI-GS. This new Burnout factor was then used to generate a stepwise regression model as a singular, simplified 'Burnout predictor'.

3.6 Thematic analysis

Thematic analysis was chosen for the qualitative component of this study. Thematic analysis is a method focused on identifying, analysing and reporting themes or patterns in content and meaning (Braun & Clarke, 2006). It involves the search for, and identification of, common ideas that recur or extend over a series of interviews, or even within the same interview (DeSantis & Noel Ugarriza, 2000). In this sense, thematic analysis is a fundamental technique on which most approaches to qualitative data analysis are based, although it has only been recognised as a self-contained approach relatively recently (Willig, 2013). Its recognition as a unique methodology remains subject to debate (Ryan & Barnard, 2000), but comprehensive and structured approaches to conducting Thematic Analysis exist to support its use (e.g., Braun & Clarke, 2006; Joffe, 2012).

Braun and Clarke (2006) propose that a key strength of thematic analysis is its independence of theory and epistemology, unlike an approach such as Interpretive Phenomenological Analysis (IPA; Smith, 2004) which is largely tied to a specific analytic

method. However, Willig (2013) urges caution in viewing thematic analysis as an approach which is 'free from theory', and stresses that it is essential for research to be positioned within a theoretical and epistemological frame to be meaningful. As argued above, the current study was approached from a pragmatist perspective, and thematic analysis identified as the most appropriate qualitative analytic method, specifically due to its theoretical flexibility in combination with its ability to provide accounts of data which are rich, detailed and complex. Additionally, it enables the researcher to adopt an approach akin to a (non-naïve) realist position (Braun & Clarke, 2006) in respecting the expert view of the practitioners involved, while simultaneously embracing the pluralistic nature of their own individual perspectives.

An important distinction in thematic analysis is between deductive and inductive approaches. A deductive or 'top-down' approach involves the researcher using prior theory and knowledge of the research topic, typically to create 'coding frames' which are then used to identify relevant patterns and themes in the data. An inductive or 'bottom-up' approach involves approaching the data with no preconceptions or theoretical bases, and allowing patterns and themes to emerge in a more 'organic' manner (Braun & Clarke, 2006). For this study, the author attempted to benefit from elements of both of these approaches. By using quantitative data drawn from the use of pre-existing validated psychometric tools (with theoretical links to specific therapeutic interventions) it is inevitable that a significant part of the analysis would be driven by a theoretical understanding. However, it was decided not to adopt a rigid coding approach, rather to use the author's theoretical understanding and clinical experience to organise the emerging themes within a theoretical framework for ACT and Schema Therapy. This approach also allowed for a degree of inductive analysis, resulting in the identification of themes relevant to Burnout that lay outside of or were perhaps tangential to the theoretical approaches used. Fereday and Muir-Cochrane (2006, p.1) refer to this as a 'hybrid approach of inductive and deductive coding and theme development'.

A related distinction is that which determines the 'level' at which themes are identified, described by Boyatzis (1998) as either 'semantic/explicit' or 'latent/interpretative'. The former identifies themes within the data which reflect

participants' accounts directly, whereas the latter seeks to identify themes which provide a sense of the underlying psychological mechanisms which are informing and shaping those accounts. The current study adopts a semantic analytic approach, but strives to go beyond thematic description and organisation to demonstrate the significance and implications within the identified themes, linking them to existing literature where appropriate (Patton, 1990).

Braun and Clarke (2006) outline a six-phase process of thematic analysis, which has been adopted as a basis for the current study. These phases are outlined in the table below.

Table 4 - Phases of thematic analysis

Phase	Process involved
Familiarisation with data	Data transcription, researcher 'becomes immersed' in transcribed data, reading/re-reading and making initial notes.
Generation of initial codes ('first order coding')	Systematically coding salient features within the whole data-set, collating data relating to each code.
Searching for and identifying themes ('second order coding')	Developing codes into a smaller number of potential themes, linking underlying data to these.
Reviewing themes/'third order coding'	Checking the validity of these themes in relation to coded extracts and whole data-set. Identifying a smaller number of increasingly 'superordinate' themes, which may now draw further from theoretical ideas. Creating a 'thematic map' of the analysis.
Finalising themes	Iterative process (referring back to original data-set as appropriate), refining theme specifics and the overall 'story' the analysis tells, creating clear theme names and descriptions.
Report production	Selection of the most illustrative and supportive extract examples, and relating the overall analysis back to the research question and literature, creating a 'scholarly' report.

Adapted from Braun & Clarke (2006); Langdridge & Hagger-Johnson (2009).

3.7 Reflexivity

Willig (2013, p.10) articulates a distinction between ‘personal reflexivity’, which refers to the ways in which the qualitative researcher’s “own values, experiences, interests, beliefs, political commitments, wider aims in life and social identities have shaped the research”, and ‘epistemological reflexivity’, which requires the researcher to reflect on the assumptions made in designing and conducting the research (e.g., ontology, epistemology and methodology), and the implications of these assumptions for the research and its conclusions. As such, reflexivity represents an acceptance of subjectivity (e.g., motivations and interests) on the researcher’s part, as opposed to positivist assumptions that such ‘biases’ invalidate research findings (Gough, 2003).

In considering my own personal reflexivity, I have earlier acknowledged my own career experience prior to training as a counselling psychologist, during which I worked as an employee within large organisations, later becoming a consultant largely reliant on larger organisations as clients. Despite my continued financial reliance on larger organisations, my decision to work independently was influenced by my increasing dissatisfaction with corporate cultures that seemed to place disproportionate value on long working hours, conformity and ‘political game-playing’. As such, I experienced increasing incongruence between my own personal and professional values and those of my employers. As a consultant, I was able to build more flexibility into my work and personal life, and (to a degree) work with colleagues who shared similar values to my own.

As noted earlier, my interest in Burnout also stems from personal observations and experiences of friends and colleagues experiencing ‘meltdowns’ due to sustained exposure to work-related stress, and their own inability to deal with this. I have witnessed the consequences of this at close hand, including loss of career, health and relationships, often preceded by clearly dysfunctional coping behaviour, including alcohol and substance abuse.

In conducting this research, it was important for me to acknowledge that these are my own subjective experiences, and not to assume that all large organisations behave in

the way I experienced, or that my own observations of Burnout are representative of my study sample or the wider working population. Additionally, I need to be aware that I may have been particularly receptive to critical views towards larger organisations expressed by my therapist interviewees.

I also have a strong theoretical and clinical interest in both ACT and Schema Therapy, and plan to invest in further training in both approaches as part of my post-doctoral continuing personal development (CPD). The emphasis of my interviews was on validating and interpreting the quantitative data relationships from the first part of the study, and I need to take care not to overemphasise the therapeutic possibilities that may emerge.

In terms of epistemological reflexivity, I believe this has been largely addressed in my justification of pragmatism above. My main motivation for training as a counselling psychologist, and my continued focus as a practitioner, is on helping clients make practical changes in their lives. Within that context, I'm comfortable in using psychometric assessment tools and working with psychiatric diagnoses. For me, a psychiatric diagnosis is a useful 'truth' only in as much as it helps a client makes sense of their distress, or in gaining access to mental health services and support. Beyond that 'entry point' my therapeutic focus is on understanding my client's subjective experience, and my engagement with this.

3.8 Validity and reliability

Thomas and Magilvy (2011) observe that validity and reliability are terms normally associated with quantitative research, and serve to establish confidence in research study findings. They suggest the term 'rigour' to serve comparable purposes for qualitative research, often referred to as 'quality' (e.g., Willig, 2013; Yardley, 2008). Onwuegbuzie and Corrigan (2014) state that rigour is essential for both approaches, and involves complete accountability for study design, data collection, analysis and choice of interpretative methodologies. In mixed methods studies, validity is strengthened when researchers can demonstrate that each component focuses on, and adds to, the research question. This study aimed to maintain that focus through

the use of supervision at each phase of research development, analysis and report writing, also ensuring that all findings are grounded in the data. Morse, Niehaus, Wolfe and Wilkins (2006) stress the importance of understanding and maintaining focus on the 'theoretical drive' in mixed methods designs, understanding tensions between quantitative and qualitative components, and ensuring that moving between deductive and inductive analysis is conducted in a conscious, planned manner.

3.8.1 Quantitative validity and reliability

The psychometric instruments used for this study are widely recognised and validated, ensuring construct validity. Additionally, each has demonstrated reliability over a number of years and studies. For the current sample, reliability was calculated, and found to be acceptable for each instrument (Pallant, 2013), as reported in the Results section. These are described in detail in the Method section. A recognised, established online survey tool was used to host the quantitative survey, which was publicised across a range of different potential participant sources to ensure findings that can be generalisable. The sample size was sufficiently large to be representative of a broader working population and to ensure good statistical power, significantly exceeding the minimum sample size required. All statistical techniques used are reported in the results section using standard reporting conventions.

3.8.2 Qualitative rigour

Willig (2013) synthesises attempts by various authors to establish criteria by which the quality of qualitative research can be assessed, and observes that although issues such as reflexivity, credibility and transferability are regularly featured, each approach reflects the authors' methodological standpoints, drawing from specific terminology from those paradigms. Madill et al. (2000) argue that, due to this diversity, there can be no unified approach to evaluation, and that evaluation criteria must be specific to the epistemological and ontological framework adopted. Willig (2013) uses Madill et al.'s (2000) classification of epistemologies to locate different qualitative approaches on a continuum from 'direct realist' to 'radical relativist', though still concludes that thematic analysis could be potentially located anywhere along this continuum.

Furthermore, pragmatism's argued 'a-ontological' perspective (Sylvester & Hayes, 2010) further complicates any positioning of thematic analysis on the continuum.

Given this challenge, Yardley's (2008) proposal of an overarching evaluative framework for qualitative research seems appropriate. This assesses quality across the following four key criteria: sensitivity to context; commitment and rigour; transparency and coherency; and impact and importance.

'Sensitivity to context' involves the understanding and appropriate use of pre-existing theory and literature relevant to the research question, particularly important in qualitative research where decisions of relevance are not necessarily made on the basis of a 'statistical balance of evidence'. Sensitivity to context also refers to an understanding of socio-cultural factors which may apply to both participants and researcher, and the implications of this for the research. This links closely to what Sylvester and Hayes (2010) refer to as 'contextual pragmatism'. The author believes that the current study demonstrates sensitivity to the theoretical and empirical research-base of Burnout, ACT and Schema Therapy. The Discussion will include further reflexive observations on how the context of participants (for both quantitative and qualitative components) and the researcher's own context may have influenced the study findings.

Yardley's criteria of 'commitment' refers to an extended engagement with the research topic, which may involve personal or vicarious experience alongside the willingness to develop skills in the research methods used as well as "immersion in the relevant data (whether theoretical or empirical)" (p.221). Again, I believe that my rationale for this study demonstrates a high level of commitment to the research topic. I also believe that I demonstrate the research skills I have developed during this study, from the initial proposal through to final report writing.

The criteria of 'rigour' refers to the completeness of data collection and analysis. The study sample must be able to deliver the required level of data at a qualitative level, which makes the choice of participants and interview structure/approach highly important. There is an implication here for the breadth and depth of the data

generated, with both needing to be adequate in relation to the research question. Interpretation of the data must also be thorough and complete, and demonstrate the ability to move beyond 'face value' reporting. Considerable planning went into the selection of practitioner participants for this study, ensuring relevant levels of experience and expertise, and also into the interview structure adopted. Analysis involved careful reading, re-reading and coding of the data, with continual reference back to published literature in order to validate or query study findings, and to make theoretical links where helpful and appropriate.

'Transparency and coherence' refer to how open the researcher is about their process and how well different aspects of the research process synthesise to deliver a convincing study. Transparency is especially relevant to data analysis and coding, and the researcher should detail each stage of data collection, transcription and coding/theme creation, including excerpts to demonstrate this latter process. Coherence involves ensuring consistency between the research question, the philosophical standpoint chosen and the methods of data collection and analysis adopted. Again, the author believes that transparency and coherence have been addressed and demonstrated in the current study, and supported by a reflexive approach throughout.

Finally, 'impact and importance' seem relatively self-explanatory. The rationale for this study has been developed throughout the study introduction and will be re-examined within the discussion and conclusion. The author hopes to contribute to the theoretical literature base for Burnout, ACT and Schema Therapy, as well as a multidisciplinary dialogue between helping professionals.

In concluding this section, it seems important to refer back to pragmatism and its focus on the instrumental nature of truth and reality, as well as the imperative to be free from imposed 'methodolotry' (Willig, 2013) and to maintain a focus on the research question. The author's aim throughout this study has been to improve the 'practical understanding' of Burnout, specifically with regard to vulnerability, intervention and possible prevention.

3.9 Design

As specified, the current study adopted a mixed methods design which can be described as ‘explanatory’ using Bishop’s (2014) typology. It is sequential, using a second phase of qualitative interviews with ACT and Schema Therapy practitioners to validate the quantitative data relationships established in the initial phase.

3.9.1 Procedure – quantitative phase

3.9.1.1 Sampling and participants

The quantitative phase was conducted via a single online survey questionnaire, administered via Survey Gizmo (<http://www.surveygizmo.com/>), a widely recognised online survey hosting service.

The overall recruitment objective was to generate a large, general sample of working adults. No attempt was made to manipulate or control the characteristics of participants. The sample is best described as a ‘convenience sample’ (e.g., Langdridge & Hagger-Johnson, 2009), as the researcher used a variety of personal and professional contacts, social media and relevant organisations for recruitment. These included LinkedIn, The International Stress Management Association (ISMA) and the mental health charity MIND (<http://www.mind.org.uk/>). The latter two agreed to promote the study within and via their own organisations. The reach of this sampling approach was further extended via ‘snowball sampling’ (e.g., Langdridge & Hagger-Johnson, 2009) whereby participants were encouraged to forward the survey link to any appropriate contacts they might have. An example of the survey invitation can be found in Appendix 1.

In total, 506 participants completed the online survey. Eighty percent of the sample was drawn from the United Kingdom. With the exception of a limited number of personal contacts in the USA and Canada, the vast majority of networking/promotion took place in the UK.

3.9.1.2 Inclusion/exclusion criteria

Participants had to indicate a minimum age of 18. No upper limit was placed on age, although the 65+ age category only contributed two percent of participants.

3.9.1.3 Measures

The online survey was presented to participants as a single instrument consisting of 120 items (Appendix 2). This combined the Maslach Burnout Inventory (MBI-GS; Maslach et al., 1996, items 1-16), the Acceptance and Action Questionnaire (AAQ-ii; Bond et al., 2011, items 17-23) and the Young Schema Questionnaire, short form, (YSQ-S3; Young, 2005, items 24-113), along with demographic questions (items 114-120).

The MBI-GS consists of 16 items, each of which relates to one of its three subscales (Emotional Exhaustion, Cynicism and Professional Efficacy). Each item is scored on a Likert-type scale from 0 ("never") to 6 ("every day").

The AAQ-ii is a unidimensional measure of Psychological Inflexibility, and consists of seven items, scored on a Likert-type scale from 1 ("never true") to 7 ("always true").

The YSQ-S3 has 90 items, each of which relates to one of 18 early maladaptive schemas. Each item is scored on a Likert-type scale from 1 ("completely untrue of me") to 6 ("describes me perfectly").

Permissions were obtained for the use of the MBI-GS and YSQ-S3 items. The AAQ-ii is free of copyright.

3.9.1.4 Ethics

Participants were informed that by continuing past the first page (participant information) of the survey they were giving consent; therefore, informed consent was implied by beginning the survey. To maintain confidentiality and anonymity, no identifiable information was collected on the database, and IP address recording was disabled.

It was recognised that this research topic has the potential to be distressing for some individuals, in that it may raise awareness of their own levels of Burnout and, particularly in the case of the YSQ-S3, increase awareness and concern about cognitive, emotional and behavioural problems.

To manage this risk, participants were informed of the nature of the study beforehand with the risks of participating highlighted. They were also informed that, should they feel distressed upon completion of the study, details of services and agencies that can offer further support would be provided (e.g., their own GP, MIND, BPS/BACP therapist databases). Additionally, contact details were provided for the researcher and research supervisor. These were all communicated by a final (debriefing) page, which also expressed appreciation for the time and commitment taken to complete the survey. Both sections can be found in Appendix 3.

All necessary procedures were taken to ensure participants' best interests in accordance with British Psychological Society (BPS, 2011) and Health and Care Professions Council (HCPC, 2012) ethical codes. Ethical approval was granted for this research by City University London's Department of Psychology (see Appendix 4).

3.9.2 Procedure – qualitative phase

3.9.2.1 Sampling and participants

Within phenomenological approaches to qualitative research, the term 'purposive sampling' is used to reflect the recruitment of participants with a 'shared experience' pertinent to the research question, creating a homogeneous sample (Willig, 2013). The current study adopts a purposive sampling approach, in that all interview participants were psychological therapists who shared an experience of working with Burnout symptoms in clients, albeit split between knowledge and experience in either ACT or Schema Therapy.

Six participants were recruited in total, divided equally between orientations towards ACT or Schema Therapy. This number was reached following review with the research supervisor, and was felt to be sufficient to address the research question without

placing an undue logistical burden on the study in terms of recruitment and analysis, particularly as this was not a 'stand-alone' qualitative methodology.

Participants were identified via the researcher's own professional contacts as well as relevant professional associations and online networking forums for ACT and Schema Therapy. It had been initially intended that all interviews would take place on a face-to-face basis, but in view of geographical location and participants' diary constraints it was decided to use a combination of face-to-face and online audio/video interviews.

Of the six participants recruited, as shown in Table 5, five were qualified Clinical Psychologists and one was a qualified Counselling Psychologist. Four participants were female and two were male. It was not intended that the sample would be directly representative of any broader ACT/Schema Therapy therapist community, and it is acknowledged that insights gained from the data may be specific to the sample. However, although no assumptions about the generalisability of insights can be made, findings can be considered 'transferable' to groups in similar settings to groups in similar settings (Lincoln & Guba, 1985). This transferability can be further enhanced by 'accumulative techniques' which seek to strengthen findings by integrating them with findings from comparable studies (Willig, 2013).

Table 5 – Brief profile of therapist participants

	Primary qualification	Current practice setting(s)	UK Based	Published (journals and/or books)	Gender	How recruited
ACT Therapist 1	Clinical Psychology	NHS	Y	Y	M	ACT forum
ACT Therapist 2	Clinical Psychology	Private practice	N	Y	F	ACT forum
ACT Therapist 3	Counselling Psychology	NHS/Private practice	Y	N	F	Direct approach
Schema Therapist 1	Clinical Psychology	NHS	Y	N	F	Direct approach
Schema Therapist 2	Clinical Psychology	Private practice	Y	Y	M	Direct approach
Schema Therapist 3	Clinical Psychology	Private practice	Y	N	F	Direct approach

3.9.2.2 Inclusion/exclusion criteria

Participants were given a broad outline of the project and purpose of the interviews to ensure all were happy to engage with the study and psychometric constructs involved.

3.9.2.3 Interview procedure

Data generation was via semi-structured interviews, each lasting approximately one hour, conducted at times convenient to participants, and via the most appropriate communication method (face-to-face, online video or online audio-only). The interview structures were similar, but not identical, between ACT and Schema Therapy participants.

Stimulus material was emailed to each participant approximately 48 hours ahead of the interview, in the form of PowerPoint slides (see appendices 5 and 6). These slides included: background data on Burnout and occupational stress; an outline of the

construct of Burnout as defined by the MBI; a rationale for the study based on current interventions and ACT/Schema Therapy; and, selected quantitative data from the study findings, including demographic profiles, incidence of Burnout across the MBI dimensions, and correlations/standard regression models relating to either Psychological Inflexibility or Early Maladaptive Schemas depending on the participant's therapeutic orientation.

It is acknowledged that the provision of this stimulus material will have had an impact on the data generated, but the author believes that, by providing this information in advance of the interviews, more focus was possible on the research questions rather than on explaining the project rationale or the specific theoretical underpinnings of the MBI, with which none of the participants were familiar.

3.9.2.4 Ethics

Along with interview stimulus material as noted above, each therapist was provided with a participant information sheet in advance of their interview, and a debriefing sheet following the interview (Appendix 7). These formed the basis of informed consent.

The purpose of the participant information sheet was to make explicit the nature of the research being undertaken, and the context of the interviews in relation to the prior collection and analysis of quantitative data. In recognition of the participants' valued 'expert knowledge', the researcher also felt it was important to be explicit about his commitment to the research process, which was summarised by the following written bullet points:

- To maintain complete confidentiality and only use anonymised examples and quotes in my research
- To try to represent the views expressed in the interview as accurately as possible in my thesis
- To intervene only as I think necessary to make best use of our time together and 'maintain agenda'

- To ask open questions as much as possible and not to impose any views or preconceptions I may have on the process

The participant debriefing sheet expressed gratitude for participation and provided contact details for the researcher and research supervisor for any follow-up questions or feedback. While acknowledging that each participant was a therapist, it also pointed out the possibility that the subject matter of the interview might cause emotional distress to participants, and advised consultation with an appropriate professional if this should be the case, providing links to BPS and BACP therapist databases.

No identifying data was included in the filenames or transcripts. All material has been stored securely (i.e., password protected on computer or in locked cabinet) and will be destroyed after completion of the study and related publications.

Ethical approval for the qualitative interviews was also obtained within the overall study approval by City University London's Department of Psychology¹⁰ (see Appendix 4).

3.9.2.5 Transcription

Each interview was transcribed using a professional transcription service, and subject to confidentiality and data protection agreements. As this study is not using a phenomenological methodology, the style of transcription selected was 'intelligent verbatim' which provides accurate transcription but without extraneous language and sounds (e.g., 'hmmm' and 'you know'). Similarly 'non-verbal language' such as sighs, long pauses and 'body language' (where the participant could be seen) were not noted.

Due to the technical nature of some of the language used, the transcripts inevitably contained some omissions and errors. To correct for these, the researcher listened again to the audio recordings and made amendments as appropriate.

¹⁰ It was originally intended that two focus groups would be run, but this was changed during the research process (using supervision) to individual interviews, to improve the depth of qualitative data, and to benefit more from individual perspectives.

3.9.2.6 Analytic strategy

The researcher's analytic strategy in approaching the transcripts was informed by Butt's (2000) description of 'abduction' and a motivation to conduct an analysis which was informed by the theoretical underpinnings of the psychometric instruments used in the quantitative phase, but also allowed for inductive elements to emerge from the data. Therefore, a rigid pre-constructed coding frame was not used.

The transcripts were formatted with line numbers, and with spacing sufficient to allow notes to be made on each line if required. Each transcript was carefully read and re-read, in conjunction with listening to the audio recordings. Repeated listening to the interviews allowed the researcher to become immersed in the data and identify nuances in emphasis.

Handwritten notes were made on the transcripts during this stage, which included simple underlining of interesting sections of text, annotations of lengthy but interesting passages, and links and associations with theory or specific aspects of the research question. Transcripts from ACT and Schema Therapy participants were read and analysed separately from the perspective of each orientation.

Tables were then created in a word document for each transcript, populated by a large number of initial sub-themes, referenced back by line number to the original text. The next phase of analysis involved re-reading the sub-themes, returning to the original text as necessary, and then creating a number of overarching themes (again keeping ACT and Schema Therapy separate). These new themes were then numbered and used as a key to organise the sub-themes below them within a hierarchy. This process then continued on an iterative basis, returning to the text and theoretical literature in order to arrive at a final number of super-ordinate and subordinate themes for the ACT and Schema Therapy participants respectively. This 'thematic mapping' (Braun & Clarke, 2006) appeared to account for the majority of data in the transcripts, and was further refined in both structure and labelling during write-up. This systematic process also retained coded links back to specific quotes in the original text, allowing these to be included under the appropriate thematic headings. Examples of the coding and theme generation process can be found in Appendices 8 and 9.

4 Results

4.1 Quantitative

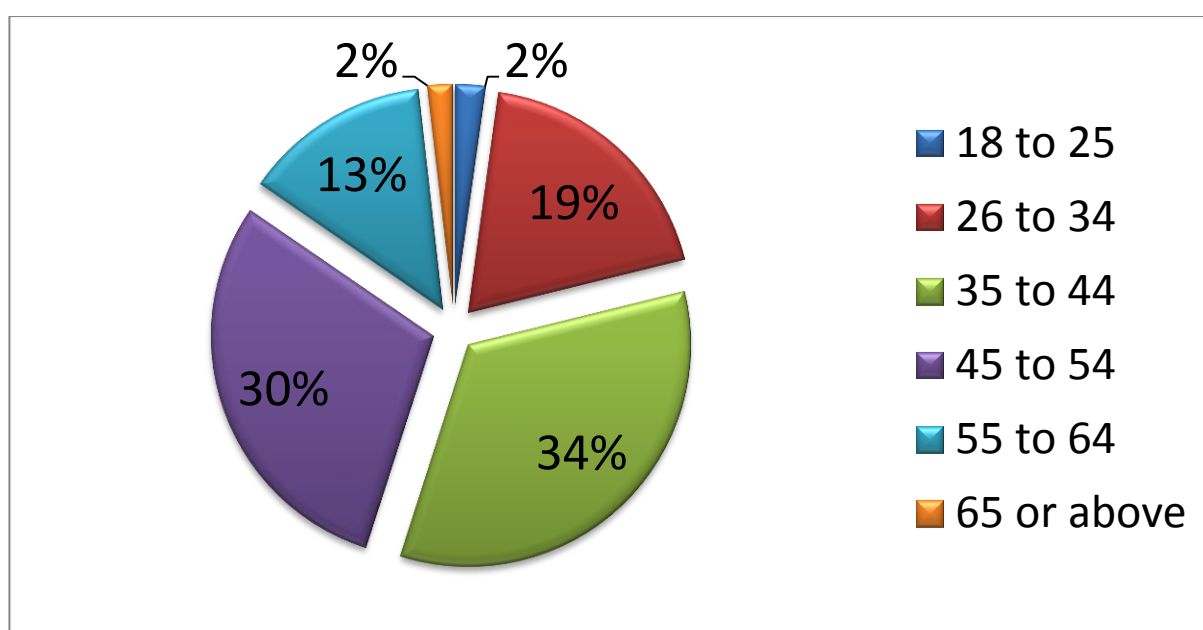
4.1.1 Response rate

Due to the method of recruitment, the response rate of people that began the survey in relation to those who saw the invitation is unknown. However, of those who started the survey, only 17 failed to complete it, with 506 individuals fully completing. This is particularly pleasing due to the length of the survey, and indicates an excellent level of engagement with the content.

Of the 17 participants who failed to complete the survey, there were no obvious points of dropout, and the majority answered most of the items but did not ultimately choose to submit.

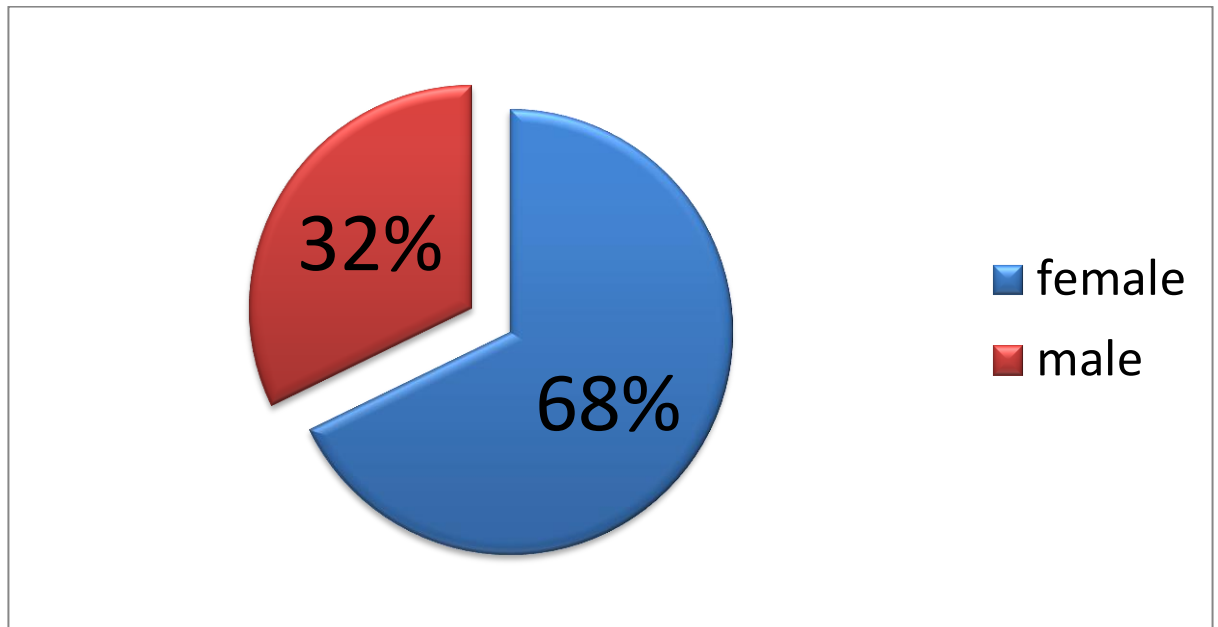
4.1.2 Participant characteristics

Figure 3 - Sample age profile



As seen in Figure 3, the sample represents a broad range of ages, with 64% of participants between 35 and 54 years of age, and only four percent in total either below 26 years of age or above 64 years of age.

Figure 4 - Sample gender profile



As Figure 4 demonstrates, the sample represents approximately two thirds female participants and one third male. Although not representative of the working population, the researcher does not believe this to be a function of the sampling approach but possibly a higher level of willingness among females to engage with and report emotion-related problems¹¹.

¹¹ For example the Mental Health Network NHS Confederation Factsheet (2011) reported that women account for 61.2% of 'common mental problems'. No suggestion is made that the current sample are experiencing mental health issues but this statistic is cited to reflect gender differences in reporting emotion-related problems.

Table 6 - Breakdown of participants by industry sector

Sector	Frequency	Percentage
education	88	17.4%
communications & information technology	45	8.9%
healthcare	43	8.5%
business consultancy	40	7.9%
other	37	7.3%
professional, scientific and technical	36	7.1%
media/broadcast/arts	26	5.1%
'third sector'/charity	26	5.1%
law	24	4.7%
investment banking	22	4.4%
local/national government	18	3.6%
manufacturing	16	3.2%
advertising & marketing	12	2.4%
energy/utilities	12	2.4%
pharmaceuticals	12	2.4%
property & construction	11	2.2%
retailing	10	2.0%
leisure/hospitality	7	1.4%
insurance	6	1.2%
transport (not aviation)	6	1.2%
aviation	4	0.8%
armed forces	2	0.4%
police	2	0.4%
retail banking	1	0.2%

Table 6 shows the range of industry sectors that participants were drawn from.

Education is the only sector with a response rate of over 10%, demonstrating a broad range of organisational settings within the sample.

Figure 5 - Size of organisation by number of employees

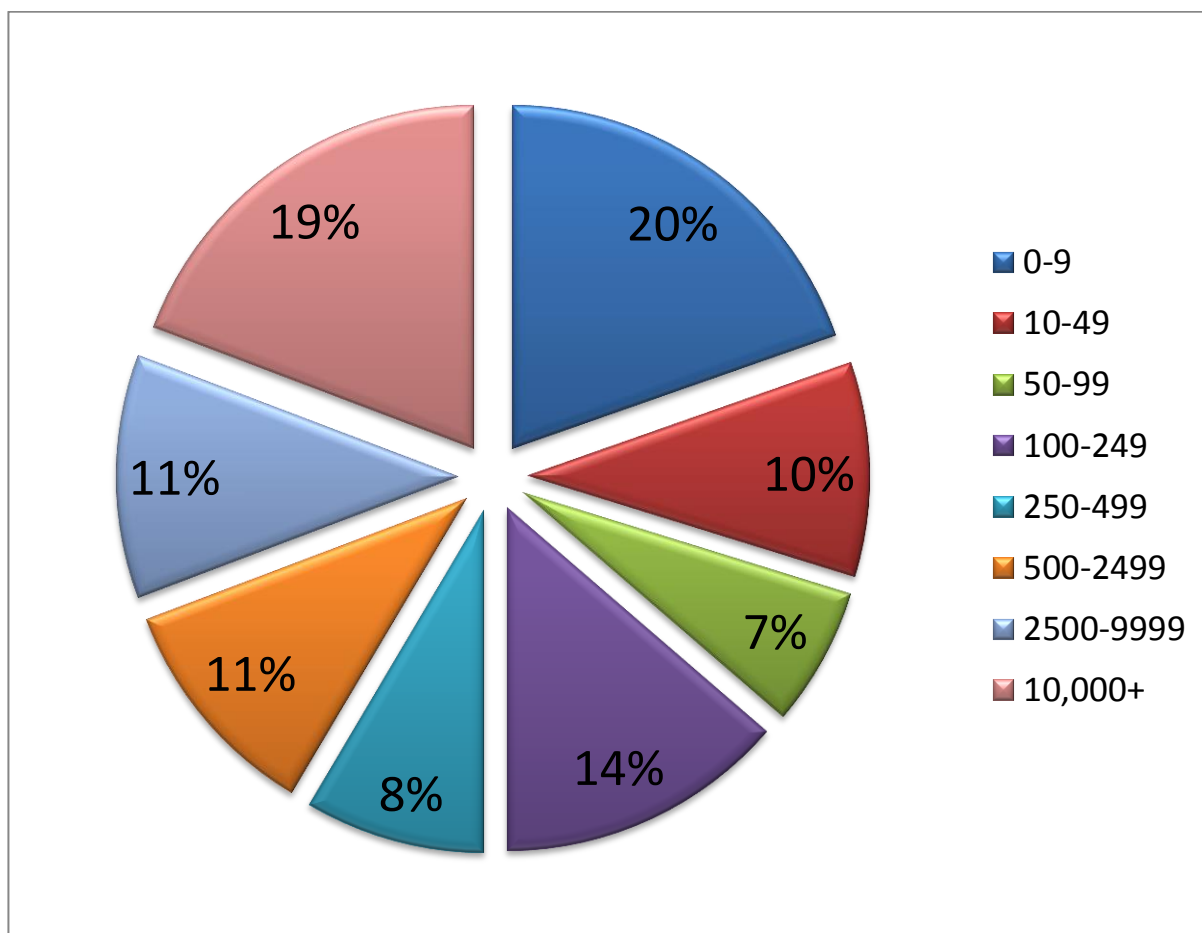


Figure 5 demonstrates the range of organisation sizes that participants were drawn from. As can be seen, the sample draws from a broad range of organisation sizes, with micro-organisations below 10 employees being broadly as well represented as very large organisations with more than 10,000 employees.

Table 7 - Functional roles

Functional role	Frequency	Percentage
consultant	61	12.1%
lecturer/teacher/academic	54	10.7%
operations	54	10.7%
planning and strategy	31	6.1%
health professional	32	6.3%
human resources	30	5.9%
sales	29	5.7%
research and development	28	5.5%
finance	26	5.1%
marketing	26	5.1%
information technology	23	4.6%
other	112	22.1%

Table 7 shows a broad range of functional roles, with the three most prominent being consultant (12.1%), lecturer/teacher/academic (10.7%) and operations (10.7%).

Table 8 - Management level

Management level	Frequency	Percentage
non-management	91	18.0%
supervisory/junior management	58	11.5%
middle management	104	20.6%
senior management	90	17.8%
board level/CEO	43	8.5%
professional/consultant	89	17.6%
other	31	6.1%

Table 8 shows a broad range of management roles, with good representation from non-management through to board level/CEO. However, 43.9% of the sample describe themselves as either senior management, board level/CEO or professional/consultant.

Figure 6 - Geographic location of participants

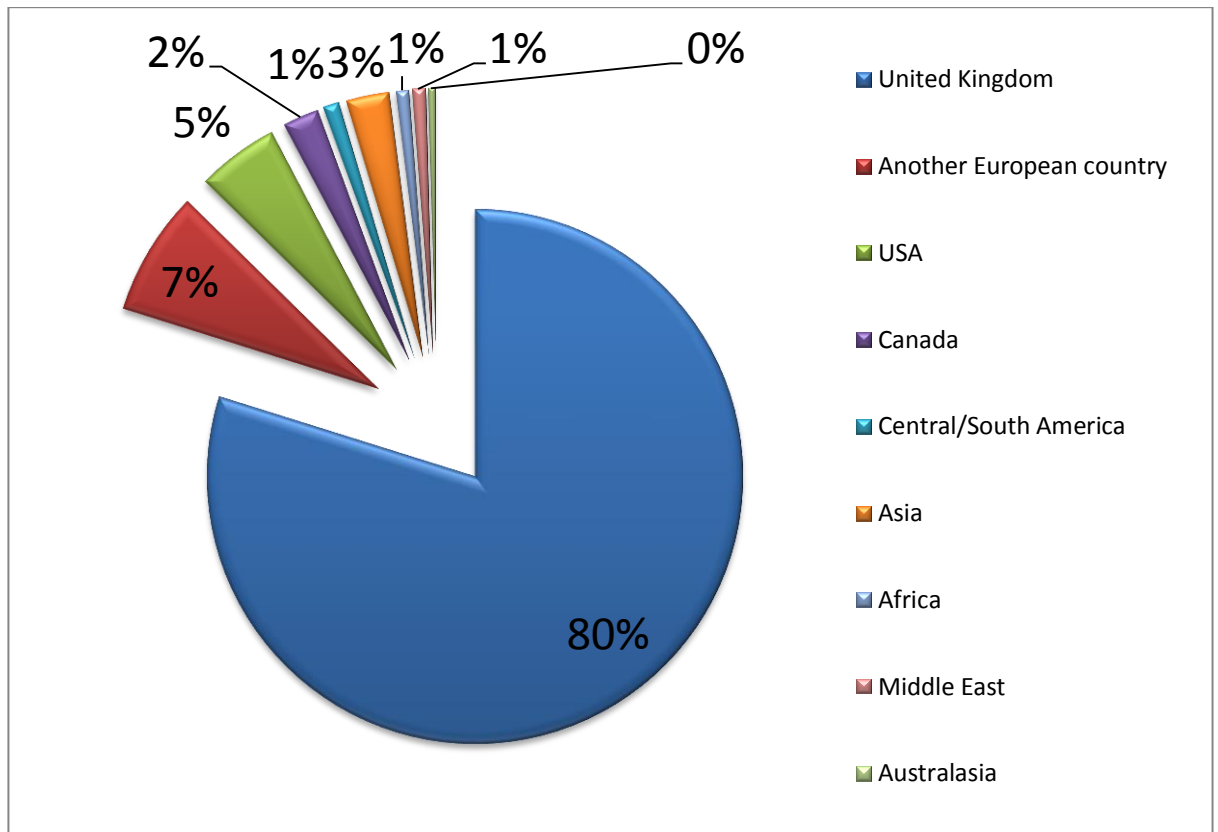


Figure 6 illustrates that the sample was predominantly drawn from the United Kingdom (80%). Of the remaining 20% the most significant other locations were 'another European country' (seven percent) and the USA (five percent).

4.1.3 Reliability of scales used

Reliability analysis was conducted for all three scales involved in the study, using Cronbach's alpha, a coefficient which measures the internal consistency of a psychometric instrument.

MBI-GS

For all items Cronbach's alpha coefficient was .75, which is considered acceptable (Pallant, 2013). If each dimension is considered separately then Cronbach's alphas of .92, .87 and .85 are found for Emotional Exhaustion, Cynicism and Professional Efficacy respectively. It is unsurprising that the individual dimensions achieved higher reliability scores as Professional Efficacy is a fundamentally different construct to the other two Burnout dimensions, with a low score indicating Burnout rather than higher scores.

This is comparable with reliability studies carried out by Leiter and Schaufeli (1996) which found Cronbach alpha coefficients ranging from .84 to .90 for Emotional Exhaustion, .74 to .84 for Cynicism, and from .70 to .78 for Professional Efficacy.

AAQ

For the AAQ, the Cronbach's alpha coefficient was 0.94.

YSQ-S3

For the YSQ-S3, the Cronbach's alpha coefficient was 0.97.

On this basis it can be concluded that all three scales used demonstrated a high level of reliability.

4.1.4 Distribution of Burnout data and descriptive statistics

Table 9 - Distribution of Burnout data

	N	Min	Max	Mean	SD	Skewness	Kurtosis
Emotional Exhaustion	506	0.00	30.00	13.71	7.92	.33	-.85
Cynicism	506	0.00	30.00	11.45	8.33	.61	-.73
Professional Efficacy	506	0.00	36.00	27.30	6.64	-.97	.53

As seen in Table 9 both skewness and kurtosis measures indicate that the data does not come from a normally distributed sample, which potentially presents an issue for the subsequent use of parametric tests. Further normality tests were conducted on the three dimensions of Burnout using SPSS. For all three dimensions, the Kolmogorov-Smirnov significance value was 0.000, further suggesting violation of normality. However, this is a common finding in both larger samples and social science studies which typically use parametric tests despite a lack of normally distributed data (Pallant, 2013).

Pallant (2013) recommends looking more closely at histogram, normal Q-Q plots and box plots under these circumstances to gain a more visual view of the distributions. The output for these analyses can be seen in Appendix 10, and indicate the following:

Histogram

From these histograms it can be seen that the distribution of Emotional Exhaustion, often viewed as the key Burnout dimension (Schaufeli & Salanova, 2007), looks reasonably normally distributed, Cynicism with some skew to lower values, and Professional Efficacy skewed to higher values.

Q-Q plots

For all three MBI dimensions of Burnout, Q-Q plots do not deviate dramatically from the expected line, implying an acceptable level of normality in the data (Pallant, 2013).

Boxplots

In examining boxplots, only Professional Efficacy shows any outliers, and there are only four cases of these among 506 observations. Removing these did not make a substantial difference to the data, nor did trimmed means show a significant difference to true means, providing no rationale to omit these cases.

On the basis of these examinations it was decided to proceed with the use of parametric tests. Even if the visual examination of the data distribution had been less satisfactory there is a strong weight of opinion in the literature that parametric tests

can be acceptably used with large samples even with non-normal distributions, which can typically be expected in social science research (e.g. Field, 2013; Pallant, 2013).

4.1.5 Overall levels of Burnout within sample

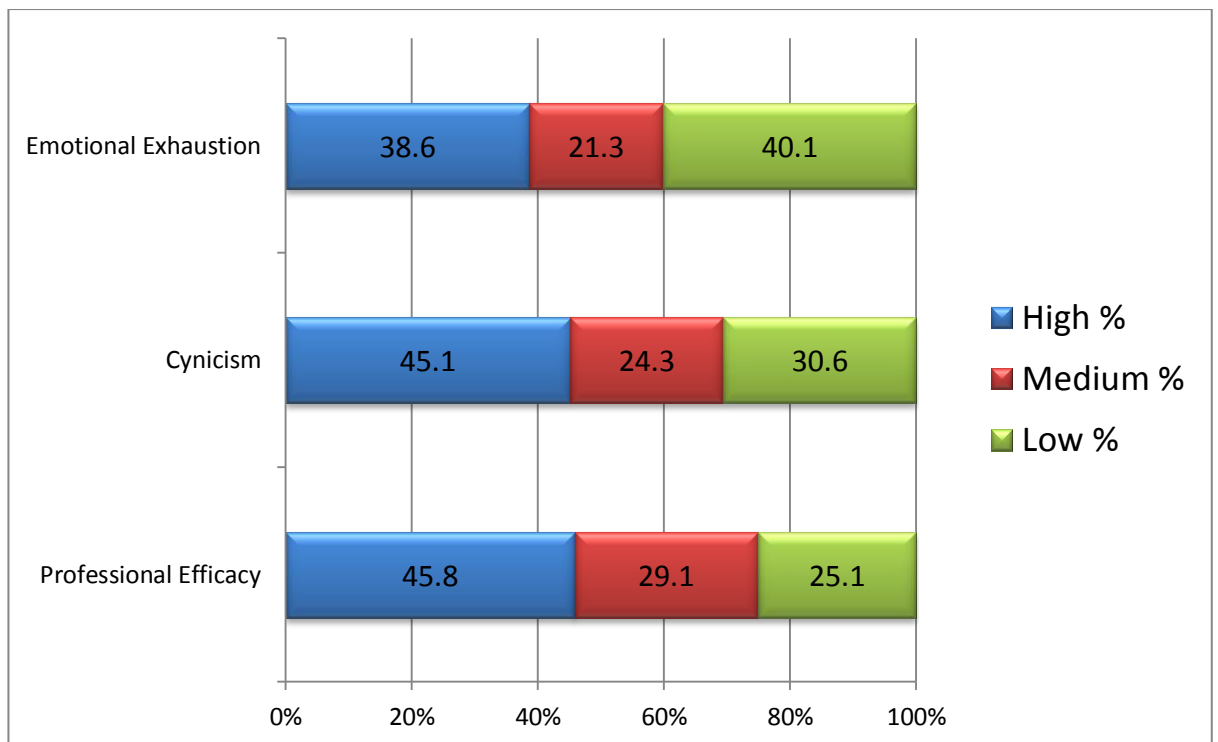
As previously discussed, the MBI-GS measures Burnout across three dimensions; Emotional Exhaustion, Cynicism and Professional Efficacy. For each dimension, participants can be classified as high, medium or low (Maslach et al., 1996). It should be noted that a 'high' score for the first two dimensions represents high Burnout whereas a 'low' score for Professional Efficacy represents high levels of Burnout.

Table 10 - MBI-GS cut-off scores

MBI dimension	Emotional Exhaustion	Cynicism	Professional Efficacy
High	16 or above	11 or above	30 or above
Medium	11-15	6-10	24-29
Low	0-10	0-5	0-23

Table 11 and Figure 7 - Levels of Burnout among the sample across the three MBI-GS dimensions

Level	Emotional Exhaustion	Cynicism	Professional Efficacy
High	195 (38.6%)	228 (45.1%)	232 (45.8%)
Medium	108 (21.3%)	123 (24.3%)	147 (29.1%)
Low	203 (40.1%)	155 (30.6%)	127 (25.1%)



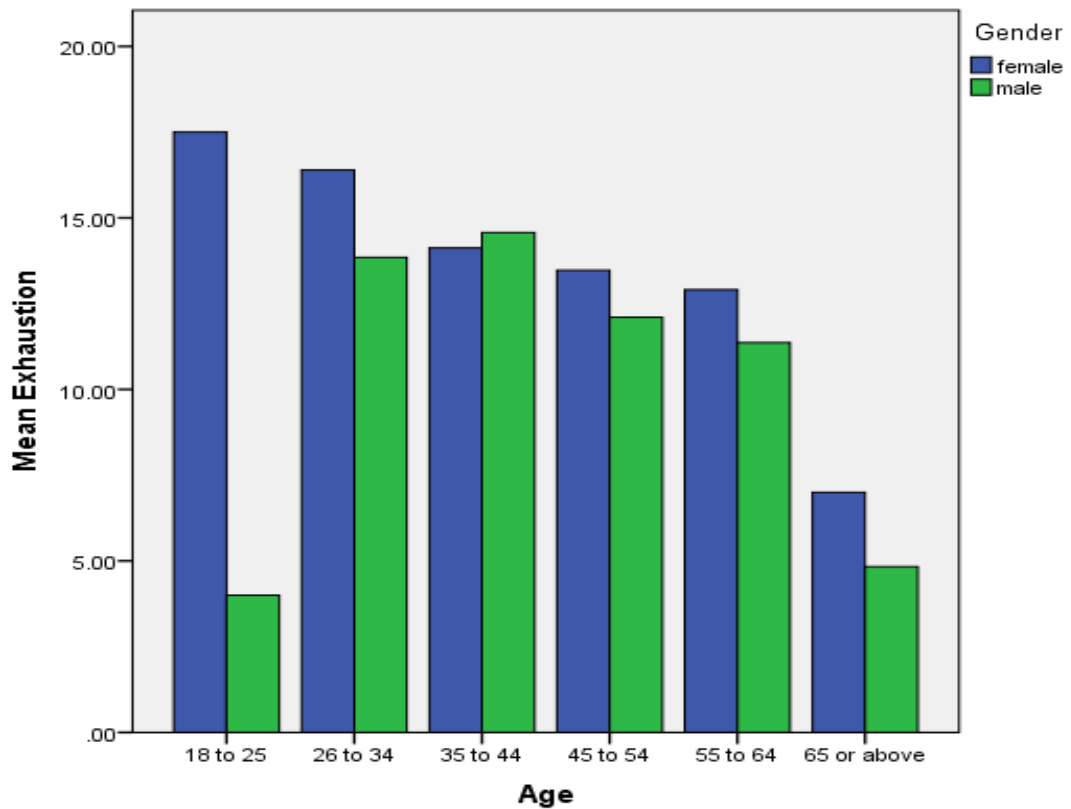
It can be seen that the sample demonstrates high levels of Emotional Exhaustion (38.5%) and Cynicism (45.1%) but retains a high level of Professional Efficacy (45.8%), which would not be expected when using the MBI-GS.

If high and medium scores are combined, the sample demonstrates 59.8% of participants with characteristics of Emotional Exhaustion and 69.4% of Cynicism, with 74.9% maintaining a medium to high sense of Professional Efficacy.

4.1.6 Differences in Burnout by age and gender

4.1.6.1 Emotional Exhaustion

Figure 8 - Emotional Exhaustion by age and gender



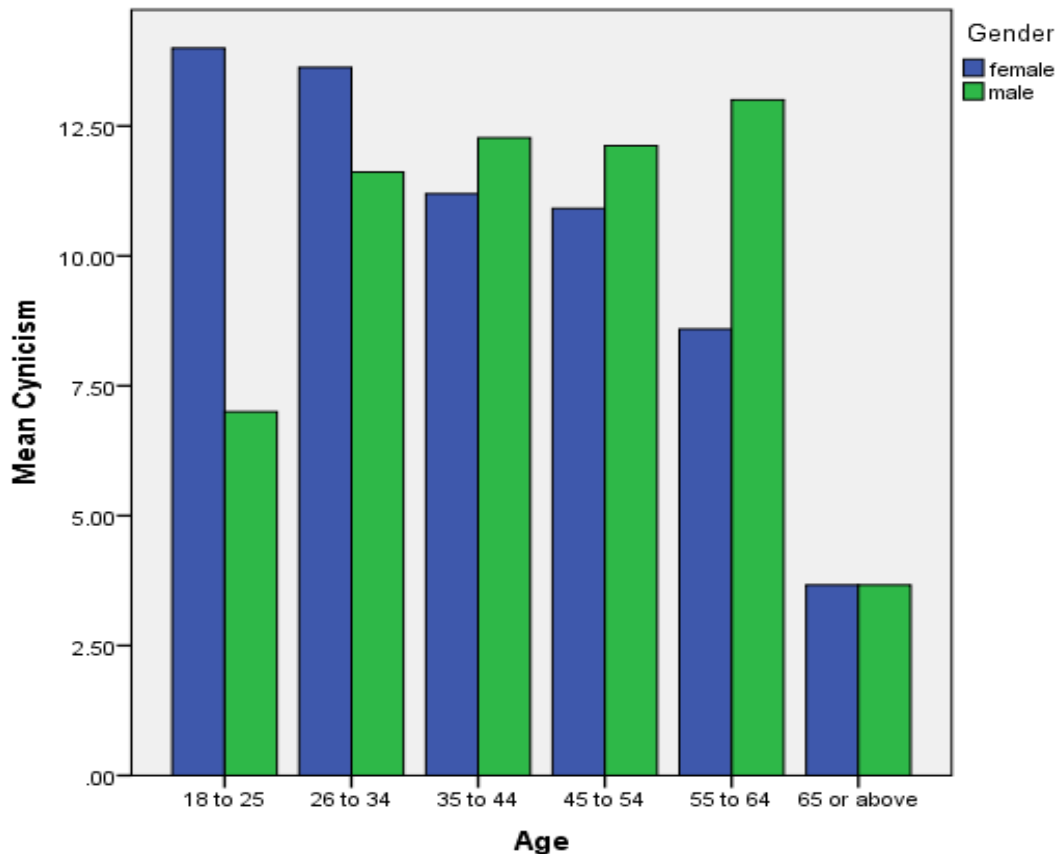
A two-way between-groups analysis of variance was conducted to explore the impact of gender and age on Emotional Exhaustion. The interaction effect between gender and age group was not statistically significant, $F(5, 494) = 1.51$, $p = 0.18$. According to Levene's Test of Equality of Error Variances there was an unequal variance of Emotional Exhaustion across gender and age and therefore a more stringent significance level of 0.01 was applied. At this level of significance there was a statistically significant main effect for age, $F(5, 494) = 3.34$, $p = 0.01$ and for gender, $F(5, 494) = 6.27$, $p = 0.01$. However, the effect size was small for both variables (age: partial eta squared = 0.03, gender: partial eta squared = 0.01).

Post-hoc comparisons on age using the Tukey HSD test indicated that the mean score for the 65+ age group ($M = 5.56$, $SD = 5.10$) was significantly different from both the 26-34 ($M = 15.71$, $SD = 6.89$) and the 35-44 ($M = 14.24$, $SD = 7.69$) age groups.

However, it should be noted that the 65+ age group only contained 9 participants (under 2% of the total sample).

4.1.6.2 Cynicism

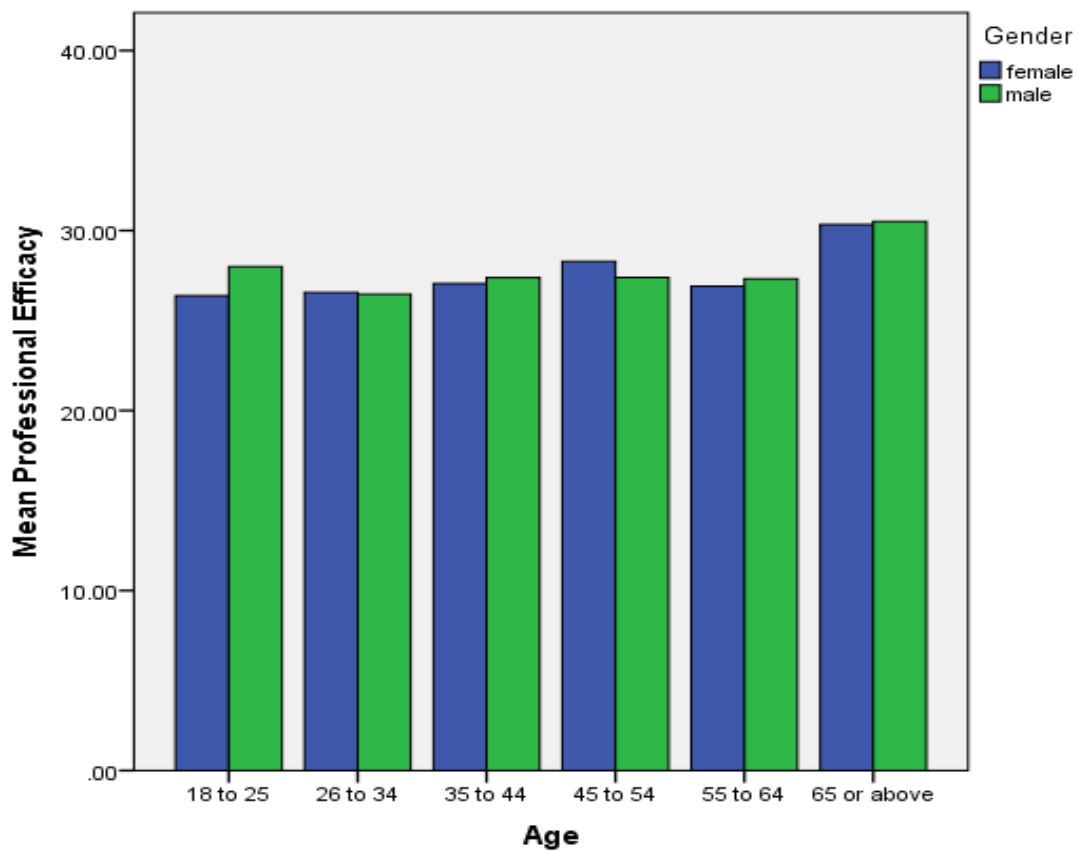
Figure 9 - Cynicism by age and gender



A two-way between-groups analysis of variance was conducted to explore the impact of gender and age on Cynicism. The interaction effect between gender and age group was not statistically significant, $F(5, 494) = 1.47$, $p = 0.20$. According to Levene's Test of Equality of Error Variances there was an unequal variance of Cynicism across gender and age and therefore a more stringent significance level of 0.01 was applied. At this level of significance there were no significant main effects for age or gender.

4.1.6.3 Professional Efficacy

Figure 10 - Professional Efficacy by age and gender



A two-way between-groups analysis of variance was conducted to explore the impact of gender and age on Professional Efficacy. The interaction effect between gender and age group was not statistically significant, $F(5, 494) = 0.18$, $p = 0.97$. Levene's Test of Equality of Error Variances was not violated and therefore a significance level of 0.05 was applied. At this level of significance there were no significant main effects for age or gender.

4.1.7 Further demographic analysis using Manova

A number of one-way between-groups multivariate analyses of variance were performed to investigate demographic differences in Burnout. The three Burnout dimensions from the MBI-GS (Emotional Exhaustion, Cynicism and Professional Efficacy) were used as dependent variables. The independent variables were age, gender, size of organisation, functional role and level of management.

Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariates matrices, and multicollinearity, with no serious violations noted.

4.1.7.1 Manova results for age

There was a significant difference between age groups on the combined dependent variables, $F(15, 1500) = 1.74$, $p = 0.04$; Pillai's Trace = 0.05; partial eta squared = 0.02. When the results of the dependent variables were considered separately, the only difference to reach statistical significance, using a Bonferroni adjusted alpha level of .017, was Emotional Exhaustion, $F(5, 500) = 4.10$, $p = .001$, partial eta squared = .04.

Inspection of the mean scores indicated that, consistent with the anova analysis performed above, the largest difference was between the 65 or above age category ($M = 5.56$, $SD = 5.10$) and the 26 to 34 age category ($M = 15.71$, $SD = 6.89$).

4.1.7.2 Manova results for gender

There was a significant difference between gender groups on the combined dependent variables, $F(3, 502) = 4.03$, $P = .01$; Wilk's Lambda = .98; partial eta squared = .02. When the results of the dependent variables were considered separately, using a Bonferroni adjusted alpha level of .017, none reached statistical significance.

4.1.7.3 Manova results for size of organisation

Levene's Test of Equality of Error Variances was violated for the dependent variables of Cynicism and Professional Efficacy, and therefore Pillai's Trace was used for assessing multivariate tests. There was a significant difference between sizes of organisations on the combined dependent variables, $F(21, 1488) = 1.88$, $P = .01$; Pillai's Trace = .08; partial eta squared = .03. When the results of the dependent variables were considered separately, using a Bonferroni adjusted alpha level of .017, both Cynicism and Professional Efficacy reached statistical significance, even when using a pre-adjusted alpha level of .025 to account for the violation of Levene's Test (as suggested by Tabachnik and Fidell, 2013, in Pallant, 2013).

Cynicism $F(7, 496) = 3.28, P = .002$, partial eta squared = .01. An inspection of the mean scores indicated that participants from the largest organisations (10,000+ employees) reported the highest levels of Cynicism ($M = 13.91, SD = 8.83$) whereas those from the smallest organisations (up to 9 employees) reported the lowest levels of Cynicism ($M = 9.00, SD = 6.84$).

Professional Efficacy $F(7, 496) = 2.89, P = .01$, partial eta squared = .04. An inspection of the mean scores indicated that participants from the second-largest category of organisation (2500-9999 employees) reported the lowest levels of Professional Efficacy ($M = 25.93, SD = 7.60$) whereas those from the second smallest category of organisation (10- 49 employees) reported the highest levels of Professional Efficacy ($M = 29.10, SD = 5.79$).

4.1.7.4 Manova results for functional role

There was a significant difference between functional roles on the combined dependent variables, $F(33, 1450) p = .01$; Wilk's Lambda = .88, partial eta squared = .04. When the results of the dependent variables were considered separately, using a Bonferroni adjusted alpha level of .017, Professional Efficacy reached statistical significance, $F(11, 494) = 2.88, P = .001$, partial eta squared = .06 (medium effect size). An inspection of the mean scores indicated a range in reported Professional Efficacy ranging from the lowest values within planning and strategy roles ($M = 23.68, SD = 6.78$) to the highest values within sales roles ($M = 29.41, SD = 4.90$). Health professionals were the second highest ranking group in terms of Professional Efficacy, achieving the same mean score to two decimal places as sales professionals.

4.1.7.5 Manova results for level of management

Levene's Test of Equality of Error Variances was violated for the dependent variables of Cynicism and Professional Efficacy, and therefore Pillai's Trace was used for assessing multivariate tests. There was a statistically significant difference between levels of management on the combined dependent variables, $F(18, 1497) = 3.16, P = .000$; Pillai's Trace = .11; partial eta squared = .04. When the results for the dependent variables were considered separately, both Cynicism and Professional Efficacy reached statistical significance.

Cynicism $F(6, 499) = 5.21, p = .000$, partial eta squared = .06. An inspection of the mean scores indicated that the lowest levels of Cynicism were reported by board level/CEO participants ($M = 6.44, SD = 5.67$) and that the highest levels were reported by those in middle management roles ($M = 13.25, SD = 8.58$).

Professional Efficacy $F(6, 499) = 5.76, p = .000$, partial eta squared = .07. An inspection of the mean scores indicated that the lowest levels of Professional Efficacy were reported by those in non-management roles ($M = 24.62, SD = 7.48$) and that the highest levels were reported by those in board level/CEO roles ($M = 31.05, SD = 4.42$).

4.1.8 Analysis of main IV/predictor variables

Separate analyses were subsequently conducted on the main independent variables of Psychological Inflexibility (as measured by the AAQ-ii) and the 18 Early Maladaptive Schemas (EMS: as measured by the YSQ-S3), and reported below.

4.1.8.1 Psychological Inflexibility

The mean score for Psychological Inflexibility (PI) was 20.99, with individual scores ranging from 7.0 to 49.0.

Table 12 - Descriptive statistics for Psychological Inflexibility

	N	Min	Max	Mean	SD	Skewness	Kurtosis
PI	506	7.0	49.0	20.99	9.7	0.7	-0.1

As with the MBI Burnout dimensions, normality tests were conducted, and these also showed violation of assumptions of normality (Kolmogorov-Smirnov significance value of .000). Inspection of histogram and outliers, alongside the large sample size, indicated that use of parametric measures was acceptable.

4.1.8.2 Early Maladaptive Schemas (EMS)

Table 13 - Descriptive statistics for EMS

EMS	N	Min	Max	Mean	SD	Skewness	Kurtosis
Unrelenting Standards/ Hypercriticalness	506	6.00	30.0	19.5	4.9	-.1	-.4
Self-Sacrifice	506	5.00	30.0	17.0	5.3	.3	-.5
Approval/Recognition Seeking	506	5.00	30.0	15.0	5.1	.5	-.2
Entitlement	506	5.00	29.0	14.5	4.7	.6	.2
Insufficient Self Control/ Discipline	506	5.00	30.0	13.9	5.1	.7	.3
Punitiveness	506	5.00	30.0	13.5	5.1	.5	.1
Social Isolation/ Alienation	506	5.00	30.0	13.1	6.1	.9	.0
Negativity/Pessimism	506	5.00	30.0	13.0	5.8	.9	.2
Emotional Inhibition	506	5.00	28.0	12.7	5.3	.7	-.1
Mistrust/Abuse	506	5.00	30.0	12.5	5.4	.9	.4
Subjugation	506	5.00	30.0	11.5	5.0	.9	.5
Emotional Deprivation	506	5.00	30.0	11.2	6.4	1.1	.4
Abandonment /Instability	506	5.00	30.0	11.1	5.4	1.1	.7
Vulnerability to Harm/Illness	506	5.00	29.0	10.9	5.2	1.1	.5
Failure	506	5.00	30.0	10.1	4.9	1.5	2.6
Defectiveness/Shame	506	5.00	30.0	9.7	5.2	1.5	1.8
Dependence /Incompetence	506	5.00	26.0	9.0	3.8	1.2	1.5
Enmeshment /Undeveloped Self	505	5.00	28.0	8.2	4.3	2.2	5.7

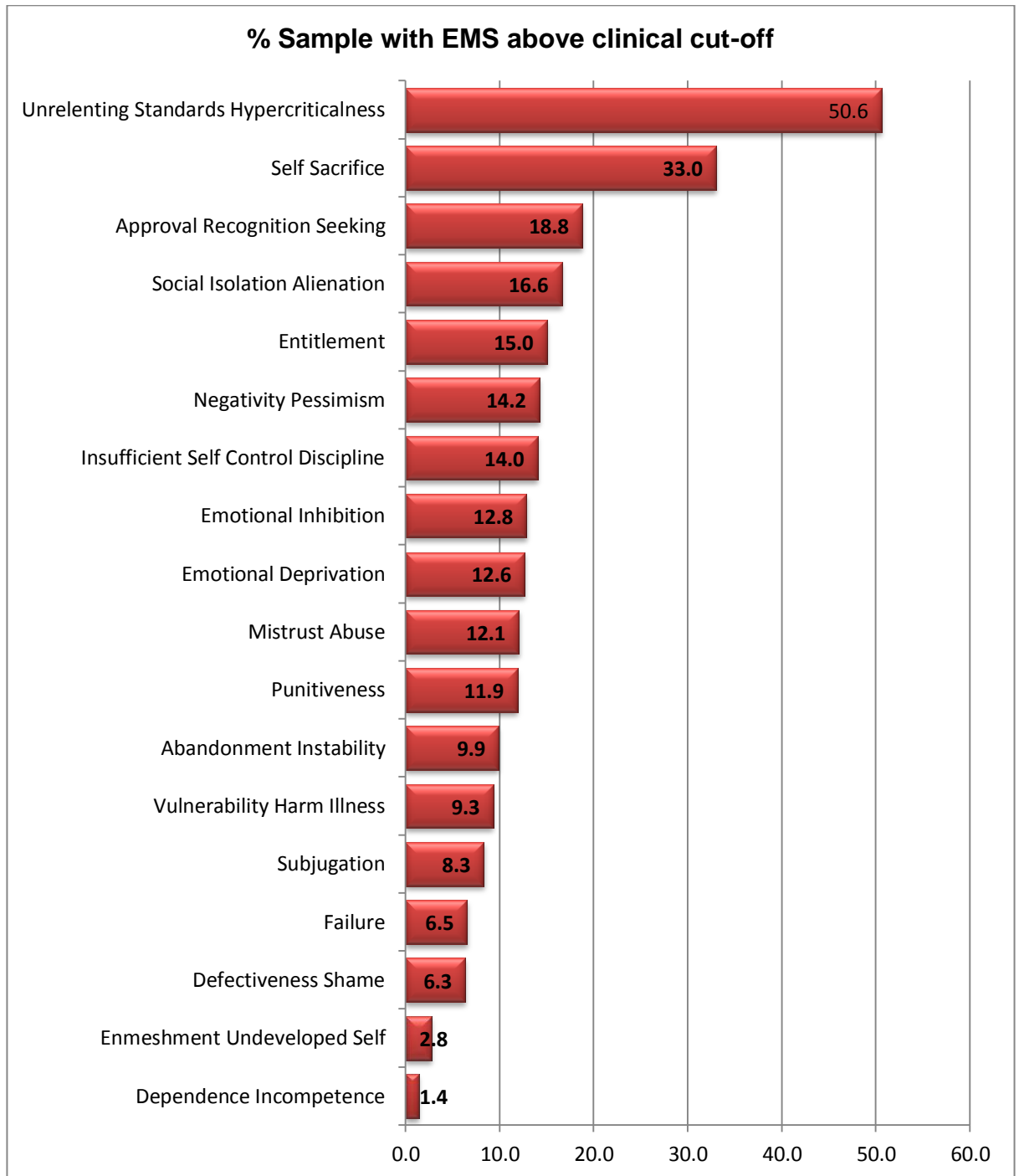
Normality tests were conducted across all EMS, and all showed violation of assumptions of normality (Kolmogorov-Smirnov significance value of .000) other than

Unrelenting Standards and Hypercriticalness with significance value of .003).

Inspection of histograms and outliers, alongside the large sample size, again suggested use of parametric measures was acceptable.

4.1.8.2.1 Overall levels of EMS within sample

Figure 11 - Participants reporting clinically significant¹² levels of EMS



¹² Calculated using an individual average score of 4 or above for YSQ-S3 items relating to each EMS (Rafaeli et al., 2010).

The EMS of Unrelenting Standards/Hypercriticalness and Self-Sacrifice demonstrate a much higher level of 'schema pathology' than the remaining 16 EMS prevalent in the sample, using the clinical cut-offs specified above. These two EMS also have the two highest mean scores in the sample, although there is not such a marked difference in mean score with the subsequent EMS.

4.1.9 Predictors of Burnout: Multiple regression analysis

To address the main research hypothesis, and to explore the extent that Burnout is predicted by levels of PI and EMS, a multiple regression analysis was conducted. This was initially conducted on a forced basis, using the EMS most highly correlated with each Burnout dimension. Subsequently, a stepwise process was used to identify predictors and to identify a best fitting model where each predictor variable has a significant and unique contribution to the model's predictive power.

4.1.9.1 Correlation between predictor variables and Burnout dimensions

Table 14 - Correlation matrix: EMS, Psychological Inflexibility and Burnout dimensions

MS (all n=506)		Emotional Exhaustion	Cynicism	Professional Efficacy
Emotional Deprivation	Pearson Correlation	.344**	.388**	-.274**
	Sig. (2-tailed)	.000	.000	.000
Abandonment/Instability	Pearson Correlation	.379**	.299**	-.156**
	Sig. (2-tailed)	.000	.000	.000
Mistrust/Abuse	Pearson Correlation	.435**	.395**	-.212**
	Sig. (2-tailed)	.000	.000	.000
Social Isolation/Alienation	Pearson Correlation	.384**	.435**	-.244**
	Sig. (2-tailed)	.000	.000	.000
Defectiveness/Shame	Pearson Correlation	.382**	.399**	-.271**
	Sig. (2-tailed)	.000	.000	.000
Failure	Pearson Correlation	.364**	.325**	-.377**
	Sig. (2-tailed)	.000	.000	.000
Dependence/Incompetence	Pearson Correlation	.414**	.366**	-.276**
	Sig. (2-tailed)	.000	.000	.000
Vulnerability to Harm/Illness	Pearson Correlation	.478**	.411**	-.239**
	Sig. (2-tailed)	.000	.000	.000
Enmeshment/Undeveloped Self	Pearson Correlation	.286**	.223**	-.123**
	Sig. (2-tailed)	.000	.000	.006
Entitlement	Pearson Correlation	.065	.130**	-.002
	Sig. (2-tailed)	.147	.003	.972

EMS (all n=506)		Emotional Exhaustion	Cynicism	Professional Efficacy
Insufficient Self-Control/ Discipline	Pearson Correlation	.419**	.411**	-.342**
	Sig. (2-tailed)	.000	.000	.000
Subjugation	Pearson Correlation	.396**	.398**	-.296**
	Sig. (2-tailed)	.000	.000	.000
Self-Sacrifice	Pearson Correlation	.249**	.125**	-.006
	Sig. (2-tailed)	.000	.005	.895
Approval/Recognition Seeking	Pearson Correlation	.277**	.222**	-.168**
	Sig. (2-tailed)	.000	.000	.000
Emotional Inhibition	Pearson Correlation	.354**	.389**	-.277**
	Sig. (2-tailed)	.000	.000	.000
Unrelenting Standards/ Hypercriticalness	Pearson Correlation	.252**	.120**	-.015
	Sig. (2-tailed)	.000	.007	.733
Negativity/Pessimism	Pearson Correlation	.487**	.398**	-.284**
	Sig. (2-tailed)	.000	.000	.000
Punitiveness	Pearson Correlation	.253**	.200**	-.190**
	Sig. (2-tailed)	.000	.000	.000
Psychological Inflexibility	Pearson Correlation	.584**	.525**	-.359**
	Sig. (2-tailed)	.000	.000	.000

4.1.9.2 EMS forced regression

An initial examination of the above correlation table was carried out, and the highest correlating EMS¹³ with each Burnout dimension (highlighted in bold in the above table) were placed into a forced regression analysis. For Emotional Exhaustion and Cynicism, all EMS had Pearson Correlation coefficients between $r = 0.3$ and $r = 0.5$, which would be considered medium effect size (Cohen, 1988). For Professional Efficacy, only two EMS indicated medium effect size, with the next three most highly correlating EMS indicating a weak effect size below $r = 0.3$.

4.1.9.2.1 Emotional Exhaustion

The initial forced regression was run using the EMS of Mistrust/Abuse, Dependence/Incompetence, Vulnerability to Harm/Illness, Insufficient Self-Control/Discipline and Negativity/Pessimism. Multicollinearity was found between Vulnerability to Harm/Illness and Negativity/Pessimism ($R = 0.829$), and therefore the regression was re-run without Vulnerability to Harm/Illness, which had the lower of the two initial correlations with Emotional Exhaustion.

The results of the forced regression analysis indicated that, combined, the EMS of Mistrust/Abuse, Dependence/Incompetence, Insufficient Self-Control/Discipline and Negativity/Pessimism significantly predicted 29% of the variance of Emotional Exhaustion ($R^2 = .29$, $F(4,501) = 50.79$, $p < 0.001$).

Table 15 shows that Negativity/Pessimism made the largest unique contribution to the model ($\beta = 0.24$), followed by the other predictor variables as ranked.

¹³ Five EMS each for Emotional Exhaustion and Professional Efficacy, and six EMS for Cynicism (as Subjugation and Negativity/Pessimism had identical Pearson Correlation coefficients with Cynicism).

Table 15 - EMS beta coefficients for Emotional Exhaustion

EMS	β
Negativity/Pessimism	.24
Insufficient Self-Control/Discipline	.16
Mistrust/Abuse	.13
Dependence/Incompetence	.12

4.1.9.2.2 Cynicism

The initial forced regression was run using the EMS of Social Isolation/Alienation, Defectiveness/Shame, Vulnerability to Harm/Illness, Insufficient Self-Control/Discipline, Subjugation and Negativity/Pessimism. Multicollinearity was found between Vulnerability to Harm/Illness and Negativity/Pessimism ($r = 0.829$) and also between Social Isolation/Alienation and Defectiveness/Shame ($r = 0.715$). Due to this, regression was re-run without Negativity/Pessimism and Defectiveness/Shame, which both had the lower of the two initial correlations with Cynicism.

The results of the forced regression analysis indicated that, combined, the EMS of Social Isolation/Alienation, Vulnerability to Harm/Illness, Insufficient Self-Control/Discipline and Subjugation significantly predicted 27% of the variance of Cynicism ($R^2 = .29$, $F(4,501) = 47.28$, $p < 0.001$).

Table 16 shows that Social Isolation/Alienation made the largest unique contribution to the model ($\beta = 0.23$), followed by the other predictor variables as ranked.

Table 16 - EMS beta coefficients for Cynicism

EMS	β
Social Isolation/Alienation	.23
Insufficient Self-Control/Discipline	.20
Vulnerability to Harm/Illness	.14
Subjugation	.09

4.1.9.2.3 Professional Efficacy

The initial forced regression was run using the EMS of Failure, Insufficient Self-Control/Discipline, Subjugation, Emotional Inhibition and Negativity/Pessimism. No evidence of multicollinearity was found

The results of the forced regression analysis indicated that, combined, these EMS significantly predicted 18% of the variance of Professional Efficacy ($R^2 = .18$, $F(5,500) = 22.13$, $p < 0.001$).

Table 17 shows that Failure made the largest unique contribution to the model ($\beta = .23$), followed by the other predictor variables as ranked.

Table 17 - EMS beta coefficients for Professional Efficacy

EMS	β
Failure	-.23
Insufficient Self-Control/Discipline	-.17
Emotional Inhibition	-.11
Subjugation	-.03
Negativity/Pessimism	.01

4.1.10 Broadening the regression analysis for each Burnout dimension

The next stage of analysis sought to improve the regression model for each Burnout dimension, by including Psychological Inflexibility and the other demographic variables gathered, and by running stepwise regression models allowing SPSS to run iterative regression models to identify best fit.

4.1.10.1 Emotional Exhaustion

The results of the new multiple regression analysis indicated that, combined, Psychological Inflexibility, the EMS of Unrelenting Standards/Hypercriticalness, Vulnerability to Harm/Illness, Punitiveness, Insufficient Self-Control/Discipline and Entitlement, organisation size and age significantly predict 42% of the variance of Emotional Exhaustion ($R^2 = .42$, $F(8,494) = 44.19$, $p < 0.001$).

Table 18 shows that Psychological Inflexibility made the largest unique contribution to the model ($\beta = 0.41$), followed by the other predictor variables as ranked. Of additional interest in this model is the fact that the EMS of Punitiveness and Entitlement produce a negative predictive effect, suggesting that they may be protective factors for Emotional Exhaustion. The model also suggests that age may have a mildly protective effect.

Table 18 - Stepwise regression summary for Emotional Exhaustion

	B	SE	β	t	p	95% CI for B	
						Lower	Upper
Psychological Inflexibility	.34	.04	.41	8.53	.000	.26	.42
Unrelenting Standards/ Hypercriticalness	.32	.07	.20	4.59	.000	.18	.45
Vulnerability to Harm/Illness	.29	.07	.19	4.05	.000	.15	.43
Punitiveness	-.25	.07	-.16	-3.60	.000	-.39	-.12
Insufficient Self-Control/ Discipline	.23	.07	.15	3.14	.002	.09	.37
Entitlement	-.18	.07	-.11	-2.76	.006	-.32	-.05
Organisation Size	.26	.11	.08	2.43	.016	.05	.47
Age	-.58	.27	-.08	-2.18	.029	-1.11	-.06

4.1.10.2 Cynicism

The results of the new multiple regression analysis indicated that, combined, Psychological Inflexibility, organisation size, and the EMS of Social Isolation/Alienation, Insufficient Self-Control/Discipline, Punitiveness and Emotional Inhibition significantly predict 39% of the variance of Cynicism ($R^2 = .39$, $F(6,496) = 48.62$, $p < 0.001$).

Table 19 shows that Psychological Inflexibility made the largest unique contribution to the model ($\beta = 0.33$), followed by the other predictor variables as ranked, with organisation size being much more predictive of Cynicism than of Emotional Exhaustion ($\beta = 0.20$). Of additional interest in this model is the fact that the EMS of Punitiveness produces a negative predictive effect, suggesting that it may be a protective factor for Cynicism.

Table 19 - Stepwise regression summary for Cynicism

	B	SE	β	t	p	95% CI for B	
						Lower	Upper
Psychological Inflexibility	.28	.04	.33	6.40	.000	.20	.37
Organisation Size	.65	.12	.20	5.60	.000	.42	.88
Social Isolation/Alienation	.21	.07	.15	3.07	.002	.08	.34
Insufficient Self-Control/ Discipline	.28	.07	.17	3.94	.000	.14	.42
Punitiveness	-.20	.07	-.12	-2.92	.004	-.34	-.07
Emotional Inhibition	.18	.07	.12	2.49	.013	.040	.33

4.1.10.3 Professional Efficacy

The results of the new multiple regression analysis indicated that, combined, Psychological Inflexibility, organisation size, management level and the EMS of Failure, Insufficient Self-Control/Discipline, Abandonment/Instability, Self-Sacrifice and Emotional Deprivation significantly predict 26% of the variance of Professional Efficacy ($R^2 = .26$, $F(8,494) = 21.23$, $p < 0.001$).

Table 20 shows that Psychological Inflexibility was less predictive of Professional Efficacy than for the other two Burnout dimensions ($\beta = -0.19$), with the EMS of Failure making the largest unique contribution to the model ($\beta = -0.22$). It should be noted that Professional Efficacy is interpreted in the opposite direction to Emotional Exhaustion and Cynicism, i.e., a lower score for Professional Efficacy would be an indicator of Burnout. As such it is of interest to note that the EMS of Abandonment/Instability and Self-Sacrifice produced a positive predictive effect, suggesting these may be protective factors against the loss of Professional Efficacy.

Of additional interest in this model is the appearance of management level ($\beta = 0.09$) suggesting that more senior managers are less likely to suffer loss of Professional Efficacy, though the effect of this is relatively weak compared to other predictors.

Table 20 - Stepwise regression summary for Professional Efficacy

	B	SE	β	T	p	95% CI for B	
						Lower	Upper
Failure	-.30	.07	-.22	-4.28	.000	-.44	-.17
Psychological Inflexibility	-.13	.04	-.19	-3.07	.002	-.21	-.05
Insufficient Self-Control/ Discipline	-.22	.07	-.17	-3.42	.001	-.35	-.09
Abandonment/Instability	.19	.06	.16	3.06	.002	.07	.31
Self-Sacrifice	.17	.05	.14	3.28	.001	.07	.27
Organisation size	-.33	.11	-.13	-3.10	.002	-.54	-.12
Emotional Deprivation	-.12	.05	-.12	-2.46	.014	-.22	-.02
Management level	.32	.15	.09	2.17	.030	.03	.61

4.1.11 Developing a single Burnout factor

4.1.11.1 Principal Components Analysis

The 16 items of the MBI-GS were subjected to principal components analysis (PCA) using SPSS version 21. Prior to performing PCA, the suitability of data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many coefficients of .3 and above. The Kaiser-Meyer-Olkin value was .89, exceeding the recommended value of .6 (e.g., Kaiser, 1974) and Bartlett's Test of Sphericity (Bartlett, 1954) reached statistical significance, supporting the factorability of the correlation matrix.

PCA revealed the presence of three components with Eigenvalues exceeding 1, explaining 42.1%, 16.5% and 9.1% of the variance respectively. An inspection of the screeplot revealed a clear break after the second component. Using Catell's (1966) scree test, it was decided to retain two components for further investigation.

The two component solution explained a total of 58.6% of the variance, with Component 1 contributing 42.1% and Component 2 contributing 16.5%. To aid in the interpretation of these two components, oblimin rotation was performed. The rotated solution revealed the presence of simple structure (Thurstone, 1947), with both components showing a number of strong loadings and all variables loading substantially on one component.

The MBI-GS items loading onto Component 1 exactly reflect the items which map onto Emotional Exhaustion and Cynicism respectively, with the highest loadings being those from Emotional Exhaustion. Therefore, Component 1 represents a single factor of Burnout which is the most effective at explaining overall variance in the underlying construct of Burnout (42.1%) and is most closely related to the dimension of Emotional Exhaustion in the MBI-GS, often regarded as the key Burnout dimension (Schaufeli et al., 2008). Therefore, Component 1 represents a justifiable single measure of Burnout. Relevant SPSS output for the PCA is contained in Appendix 11.

Participant scores for this new single Burnout factor were calculated, and a new stepwise regression was conducted, using the same independent variables as with the three separate MBI-GS Burnout dimensions.

4.1.11.1 Single Burnout factor – stepwise regression

The results of the new multiple regression analysis indicated that, combined, Psychological Inflexibility, organisation size, and the EMS of Vulnerability to Harm/Illness, Punitiveness, Insufficient Self-Control/Discipline, Emotional Inhibition and Unrelenting Standards/Hypercriticalness significantly predict 47% of the variance of the single Burnout factor ($R^2 = .47$, $F(7,495) = 62.99$, $p < 0.001$).

Table 21 shows that Psychological Inflexibility made the largest unique contribution to the model ($\beta = 0.43$), followed by the other predictor variables as ranked. Of additional

interest in this model is the fact that the EMS of Punitiveness produced a negative predictive effect, suggesting that it may be a protective factor for Burnout.

Table 21 - Stepwise regression summary for single Burnout factor

	B	SE	β	T	p	95% CI for B	
						Lower	Upper
AAQ	.65	.07	.43	9.26	.000	.51	.65
Organisation size	.92	.19	.16	4.97	.000	.56	.92
Vulnerability to Harm Illness	.45	.13	.16	3.59	.000	.20	.70
Punitiveness	-.45	.12	-.16	-3.68	.000	-.69	-.21
Insufficient Self Control Discipline	.45	.12	.16	3.79	.000	.21	.68
Emotional Inhibition	.28	.11	.10	2.50	.013	.06	.50
Unrelenting Standards Hypercriticalness	.25	.12	.08	2.12	.035	.02	.47

4.2 Qualitative results

Note: Any identifying details (of therapists or their clients) have been anonymised to maintain confidentiality.

4.2.1 ACT Therapists

4.2.1.1 Introduction

Following thematic analysis as detailed in the Method section, four main ('superordinate') themes were identified. These were labelled as follows: Key ACT Concepts and Burnout ('explaining the pathology'); Clinical Observations; Assessment and Intervention Principles; and Intervention Specifics. Secondary ('subordinate') themes were also identified, supporting each superordinate theme. The typology of these is presented in Table 22 below.

Table 22 – ACT Therapists: Superordinate and subordinate themes

Superordinate Themes	Subordinate Themes
Key ACT Concepts and Burnout (‘explaining the pathology’)	<p>Experiential avoidance</p> <p>Private experiences versus external behaviour</p> <p>Rule-Governed Behaviour</p> <p>Cognitive Fusion and loss of ‘Self As Context’</p> <p>Values</p>
Clinical Observations	<p>Burnout trajectory</p> <p>Organisational characteristics and Burnout</p> <p>‘Burnout creep’ - a new norm?</p> <p>Psychological Inflexibility or economic inflexibility?</p> <p>How helpful is the construct of Burnout?</p> <p>Bridging clinical and organisational domains</p>
Assessment and Intervention Principles	<p>Assessment and formulation</p> <p>‘Confronting the agenda’</p> <p>‘Being present’ and ‘<i>feeling</i> better’</p> <p>Focusing on values</p>
Intervention Specifics	<p>Engagement</p> <p>ACT ‘Burnout inoculation’</p> <p>‘Tuning into physiology’</p> <p>Facilitating change</p>

4.2.1.2 Superordinate theme one: Key ACT concepts and Burnout ('explaining the pathology')

This theme represents participants' interpretation and reflection on how the research question and quantitative data link to, inform, and are informed by their understanding of key ACT concepts.

4.2.1.2.1 Experiential avoidance

The therapists were able to explore linkages between experiential avoidance, a key component of ACT 'pathology', and the dimensions of Burnout.

Therapist 1 illustrates how he believes experiential avoidance combines with another key component of ACT pathology, cognitive fusion, to contribute to Emotional Exhaustion.

ACT Therapist 1 (380-388):...Emotional Exhaustion...I'm guessing there's quite a lot of experiential avoidance loading onto that combined with fusion with beliefs about how one should or shouldn't be in your working environment.

Therapist 3 conveys a sense of Emotional Exhaustion triggering experiential avoidance, as the individual becomes tired of experiencing difficult emotions.

ACT Therapist 3 (203-205): ...in terms of Emotional Exhaustion...if you think of the quality of that...it's the tiredness of being with difficult emotions I guess.

Therapist 2 draws from clinical experience to give an example of how experiential avoidance might present in therapy, specifically a lack of mindfulness or 'contact with the present moment'. Clients are either focusing on painful memories or problematic future scenarios.

ACT Therapist 2 (215-217): ... Emotional Exhaustion, what I see in those people is that they are not mindful, so they are not here. They are in the past or the future.

The following two quotes frame experiential avoidance in a slightly more proactive way. Firstly it is described as a (flawed) control strategy by Therapist 2.

ACT Therapist 2 (262-263): It's more a control strategy that doesn't work when you talk about experiential avoidance.

Therapist 3 positions experiential avoidance as a more cynical defence/coping mechanism in response to increasing exhaustion. The two quotes show how experiential avoidance can function as an externalising mechanism, placing responsibility for feelings of exhaustion within the working environment and co-workers.

ACT Therapist 3 (430-436): It is in a way experiential avoidance because if we're cynical about our work environment then it's less about ourselves and also helps us to cope more with the exhaustion because we have a very good reason...we can say it's such a 'whatever' environment so of course I feel like this. They do go together and deal with the avoidance bit... it's your defence isn't it?

AT3 (444-446): 'It's not down to me not being ok or not being well or not being good enough. It's very much about those people out there and it's nothing to do with me'.

This section highlights the possible links between experiential avoidance and Burnout. With Emotional Exhaustion, it may be that experiential avoidance is a consequence of becoming tired of experiencing difficult emotions, or alternatively a failed control strategy. With Cynicism, experiential avoidance may be interpreted as a defence/coping mechanism which seeks to externalise problems in the working environment.

4.2.1.2.2 Private experiences versus external behaviour

This quote from Therapist 1 is helpful in linking ACT theory to all three dimensions of Burnout, building from the premise that experiential avoidance is an attempt to avoid unwanted private experiences. Within this conceptualisation, Emotional Exhaustion would be a result of experiential avoidance towards unwanted feelings, Cynicism a result of experiential avoidance towards unwanted thoughts and Professional Efficacy

would be more about how an individual presents themselves to the world i.e. an external behaviour.

ACT Therapist 1 (270-275): ...distinction between internal private behaviour and external behaviour...so to feel emotionally drained is a comment on your feelings which is internal state, to have cynical thoughts is a comment on thoughts that occur to you which is an internal event, an internal behaviour, whereas professional competence is about external behaviour.

This distinction potentially allows an ACT formulation specific to each Burnout dimension, with interventions targeted accordingly (see later themes focusing on intervention).

4.2.1.2.3 Rule-governed behaviour

There was some discussion of another key ACT concept, that of ‘rule-governed behaviour’, and an attempt to understand why individuals will consistently overstep healthy personal boundaries, whether consciously or unconsciously. One therapist gave the example of bankers that she had worked with, who seemed to consciously adopt the rule that ‘being the best’ within their company and making the most money takes priority over family life and looking after themselves.

Therapist 3 underlines this with the following quote, paraphrased from her clinical experience.

ACT Therapist 3 (95-97):...“well if I get a migraine, and I want to see my children, and I will get ill, but I want to get this done.”

This discussion also highlighted the role of language or ‘verbal rules’. These often present themselves in the form of ‘musts’ or ‘shoulds’ where individuals accept or tolerate increasingly punitive workloads to try and achieve their rigid (and possibly unachievable) goals, or in the form of ‘buts’ where individuals recognise a problem in neglecting self-care or family life, for example, but follow verbal rules which place their work ahead of all other needs in a pathological way.

Therapist 2 highlights this issue in the following quote.

ACT Therapist 2 (695-701): I always say 'and' because it's the one verbal thing in ACT that we can use...everything is verbal... when you talk about this there is one other thing; the rules they have...many verbal rules and also 'I must'. It's 'but' but also 'must'...the control thing is connected with verbal rules.

This section explores the importance of language and verbal rules in ACT theory, and how this can directly drive Burnout. Such rules can lead individuals to prioritise work over family life and their own health. The second quote also provides an insight into how these verbal rules can be relaxed to include more 'ands' rather than 'buts', in non-ACT language developing a more dialectical approach to thinking.

4.2.1.2.4 Cognitive fusion and loss of 'self as context'

Cognitive fusion was mentioned in relation to all three MBI dimensions of Burnout, but particularly with regard to Professional Efficacy. All three participants found it notable that levels of Burnout pathology were high across Emotional Exhaustion and Cynicism but remained relatively low in terms of diminished Professional Efficacy. There was some consensus that this could be explained in terms of cognitive fusion - an individual being 'fused' or tangled up in a self-concept of being competent and professional despite the objective evidence contradicting this view.

ACT Therapist 1 (322): They're hooked by the idea that 'I am a competent professional'.

Furthermore, the apparent inconsistency in the way in which Professional Efficacy behaves amongst this sample may indicate that this particular cognitive fusion is actually a contributory factor to Burnout (especially in relation to the dimension of Emotional Exhaustion).

ACT Therapist 3 (69-74): I think that those people who have high self-efficacy and are good at their jobs are much more likely to burn out, and they care as well. They want to get it right and they're working hard, they can do it, so they're pulling it off.

An interesting idea emerged that there might exist a ‘feedback loop’ between Burnout and cognitive fusion. As Burnout increases, an individual finds it increasingly hard to defuse from unhelpful cognitions, which in turn weakens their ability to clearly see the context in which Burnout is happening, and their own role in this. Consequentially they are able to do nothing to alter their own Burnout trajectory or exit this feedback loop. This idea of cognitive fusion weakening the ability to place events in context, and how this then spirals to more global self-fusion, is illustrated in the quote below from Therapist 3.

ACT Therapist 3 (207-218): Maybe when we are feeling strong and well, we can say ‘yes that’s just a difficult secretary and that’s a long waiting list’ or ‘I didn’t make as much money as a banker last month as the month before’ or something like that. I think Emotional Exhaustion is when...it doesn’t bounce off us in the same way so we can’t say ‘oh it’s just a long waiting list’ we say ‘oh my God! It’s such a long waiting list!’... ‘Oh I didn’t make as much money as the month before’ can then of course lead towards all sorts of other things about how I perceive myself as a banker, but it has ... a heaviness and a bleakness and a numbness to it..

Finally within this idea of cognitive fusion and self as context, Therapist 2 provides another nuance to the idea of ‘fused Professional Efficacy’. Here she compares being attached to a fused concept of ‘I am an effective professional’ to that of an addict. The implication here is that, unless some flexibility can be achieved around this fusion, the individual will find any change difficult. The challenge here is to help the individual experiencing Burnout to accept that perhaps they are not effective within their current work context, but that this is not a global evaluation about them.

ACT Therapist 2 (341-348): ...attachment to the conceptualised self...I think that’s very important there... it’s always about ‘I am’. They say ‘I am that person’...that’s also with people who say ‘I’m addicted’... ‘I’m an addictive person’. There is much ‘I am’ and ‘I cannot change it any more’ and then I have to do a lot of work with the conceptualised self and I think that’s the relation of inflexibility with Professional Efficacy.

This section has explored the links between the ACT concepts of cognitive fusion and self as context with the MBI-GS dimensions of Burnout. Ideas have been presented that individuals can simply get ‘hooked up’ with the idea that they are competent professionals even when objective evidence suggests otherwise; that fusion can be most entrenched in individuals that are inherently good at their jobs and also genuinely care about what they’re doing; that a negative ‘feedback loop’ may exist between Burnout and cognitive fusion with each in turn magnifying the other; and finally an illustration of how fusion to a self-concept of high Professional Efficacy can be considered a form of ‘addiction’.

4.2.1.2.5 Values

Not living in line with values

The topic of values was something that came up with all three participants, unsurprisingly due to its central role within ACT. The ‘fundamental pathology’ of not being able or willing to live in accordance with one’s true values is highlighted in the following quote.

ACT Therapist 2 (248-254): ...they don’t live to their values and I see that...it connects with Emotional Exhaustion but also with Cynicism because they love their family but they cannot give them what they really want to give them, so that’s lack of clarity of values and also...they cannot take the action. What they really want to do, they don’t do that, they choose other things.

Within the discussion around the relevance of values and ‘valued action’ to Burnout, four questions or challenges to the presenting individual emerged:

Is your work and working environment in line with your values?

Are your work and personal life balanced in terms of values?

Are your values compatible with those of the organisation you work for?

Are your values the result of ‘free will’ or somehow adopted without question?

Losing contact with values

All participants reinforced the key message from ACT that long-term emotional wellbeing can only be ensured by living in line with one's values, and that this has to embrace the workplace. Motivations for choosing jobs and careers are myriad, and an interesting spectrum was sketched out using case/clinical experience.

Therapist 1 discussed a nurse working on a cancer ward, who was experiencing a form of Burnout, feeling at the end of her tether and unable to witness another death. To this therapist it seemed that the client had totally chosen a vocation in line with her values, but that something else was happening that was possibly inhibiting her ability to continue connecting with these (see later theme on interventions).

ACT Therapist 1 (282-305): Somebody I'm supporting...would exactly represent that because she is a palliative care nurse with many years of experience, she has in that time probably helped well over a thousand people and their families where the person is dying, and strikes me and all my colleagues as being a very competent person... yet she sits in my office in floods of tears and says she is genuinely not sure whether she would deal with the suffering of watching one more person die.... maybe she decides she's reached the end of her shelf life...and she doesn't want any more deaths in her head, and that would be fine if that's what she wants, but the other one is that she could learn to deal differently with all sorts of feelings when they occur whilst acting in accordance with her values.

He later confirms his view that losing contact with important values is a form of Psychological Inflexibility.

ACT Therapist 1 (422-424): ...the inflexibility is when people lose contact with the values that brought them into the work...

Whose values are these?

Therapist 3 in particular made some very powerful observations that values may be externally imposed on individual, either explicitly or implicitly. She had particularly observed this when working with financial institutions, and was able to give a very

specific example of this ‘value toxicity’. Therapist 3 had been acting in a consulting role, and had developed a workshop to help build resilience and manage stress. One of her suggestions was for employees to always take a break from their desks at lunchtime. She was asked to remove the slide relating to this from her presentation, and she was informed that the organisation expressly discouraged their employees from leaving their desks during working hours, as this would reduce their focus on market developments.

ACT Therapist 3 (307-321): I was recruited by a very large bank...to do stress management for their senior people and I had to provide my slides to them prior to actually doing their workshop. Part...of the workshop...was actually that part of good stress management was to have lunch! To go out, even if it's only for ten minutes, leave your desk, eat something, drink something, maybe even have a cigarette which is totally unhealthy! But do something that has a relaxing effect on you to then return to work because actually productivity is likely to be increased, and that actually many companies don't allow people to have lunch at their desk because of all the things it does to your system. Basically they literally said to me 'you have to take this out' and I said to them 'but you want me to teach them stress management' and they said 'yes but we don't really want them to have a break' so that's basically the bottom line.

Therapist 3 also believes that perhaps sometimes what feel like values might be organisational or societal norms that we do not question but adopt in a way that feel like our own choice. An example of this might be culturally specified values. The same therapist talked of working with clients in Asian financial markets where excessive hard work and financial reward were adopted as personal values by employees. She cited a particularly harrowing example of a female employee who tried to compensate for setbacks at work by working longer and longer hours, despite the fact that her husband was also a very high-earning individual, and just one of their salaries could easily have supported their family. This employee was eventually sectioned after an attempted suicide, illustrating the level of trauma involved.

ACT Therapist 3 (373-383): [REDACTED]
[REDACTED]

[REDACTED]

A further example was given of a professional colleague who had recently experienced increasing levels of Burnout. This was someone who had been incredibly focused on achieving professional status as a Clinical Psychologist, driven by her parents' wishes for her. This focus had not only contributed to her having very little in terms of a social life, but also meant that achieving her goal provided very little in terms of emotional satisfaction as it seemed more in line with her parents' values than her own.

ACT Therapist 3 (484-500): I'm thinking about one colleague who was very sick and is under a psychologist and she's quite pathological in that sense. She's very burnt out, she has been on sleeping tablets for years, she's been on tummy tablets for years, is not coping at all, has no private life but she [REDACTED] and that's the most important thing to keep that up... [REDACTED]

[REDACTED]

[REDACTED] there was nothing else in terms of values. It was like 'well that's it now' and it all literally went downhill because then what's the point?

However, Therapist 3 also pointed out that individuals can often be complicit in this unhealthy value-setting process, proactively making the choice of a financial or prestige-driven lifestyle above values of happiness and health, and therefore need to take responsibility for their own choices.

ACT Therapist 3 (330-333): ...basically their value system was financially placed and keeping their lifestyle were higher values compared to actually 'whether I'm happy, whether my life is good, whether I'm healthy.'

This section focused on the role of values as part of a broader discussion about Psychological Inflexibility and Burnout. It is suggested that Burnout might be precipitated by individuals not making occupational choices that are in line with their values, losing sight of values, subjugating to organisational, cultural or parental values, or making value choices that may not be good for long-term emotional and physical health.

4.2.1.3 Superordinate theme two: clinical observations

4.2.1.3.1 Burnout trajectory

Therapist 2 expressed a view, based on her own extensive experience of Burnout presentations, that the three MBI-GS dimensions of Burnout describe a trajectory, beginning with Emotional Exhaustion, leading to Cynicism and then finally to loss of Professional Efficacy.

ACT Therapist 2 (130-134): ...in my own practice I see those people and it's kind of a level one, level two, level three; so first there is Emotional Exhaustion and then when it's worse there is the Cynicism and when they're very bad – when everything is bad then there is also the (loss of) Professional Efficacy.

4.2.1.3.2 Organisational characteristics and Burnout

The correlation identified between larger organisations and higher levels of Cynicism was not a surprise to the therapists, and was also thought to be a factor in individuals ultimately leaving such organisations.

ACT Therapist 2 (328-334): This may be a good point because the Cynicism is more in the large settings. Then...they say... 'It's not worth it any more', 'Why am I doing this?' 'There are more important things in my life' and 'I don't have to do that'. Sometimes they make a switch; they stop working there or they say 'I'm working on other things and I will let it go, and I'm going to do something I really would like to do in my life'.

Therapist 2 here describes how, in smaller organisations, owner-managers find it difficult to 'stand back' and let others manage. This could be due to a lack of trust, a sense of fused identity with their business, or perhaps even an ego-driven sense of Professional Efficacy which makes it hard to imagine anyone else being able to run the business as successfully.

ACT Therapist 2 (245-247): Yes they're managers of their own company so if they don't work they have to leave it with the employees and they don't trust them, because '20 years I did this job and I cannot leave it because...'

4.2.1.3.3 'Burnout creep' - a new norm?

An interesting view was expressed that at a societal level we may be suffering from a form of 'Burnout creep' where we are accepting increasingly high levels of workplace stress - what might have been considered Burnout historically may now represent a new norm, analogous to increasing levels of obesity within society. This offers additional insight into the relatively high levels of MBI Burnout reported in the survey data from this study. Additionally, these potentially higher 'base levels' of Burnout make it increasingly difficult for an individual to notice when this is becoming pathological.

ACT Therapist 3 (272-285): ...it's taken for granted these days that we're all a bit tired and all a bit stressed out so at what stage does that become Burnout and at what stage is it still the 'norm'? And the 'norm' doesn't mean it's normal, it just means statistically the 'norm'...it's a bit like now with people who are overweight; it's kind of the 'norm' that everybody is a bit heavy but that doesn't make it ok. There's already a shift that's unhelpful for all of us because we think it's ok not to sleep and be tired and all of these things. Also in the individual I think the skills to actually maybe really notice the finer qualities of when it goes from being a bit tired and being a bit stressed out, which is maybe still ok, to actually 'yes this goes overboard. and it's not OK anymore'..

4.2.1.3.4 Psychological Inflexibility or economic inflexibility?

Linking to the above point, it was also pointed out that, as clinicians, it is important to view the wider economic context when working with clients. Although a fundamental objective of ACT is to improve the Psychological Flexibility of the individual, this perhaps needs to be balanced with an understanding that for many clients there is an economic reality that may, in the short and medium term at least, prevent them from making some of the behavioural changes needed to reduce overall Burnout vulnerability. This is especially pertinent in recession-haunted economies.

ACT Therapist 3 (156-162): I don't think that's the same as Psychological Inflexibility because that's more economical inflexibility isn't it? I would think that, if economically it wasn't an issue, then unless they have issues with their self-esteem that they have to do this job in this way, then many people would actually choose to step back a bit and slow down a bit so I'm not sure – I don't know whether I would call it inflexibility on their part.

4.2.1.3.5 How helpful is the construct of Burnout?

Although the symptomology of Burnout was familiar to all three therapists, there were varying views on its diagnostic use from an ACT perspective. At one extreme, there was a high degree of discomfort in using any form of diagnostic/syndromal language to describe human suffering, and the idea that Burnout could be a 'thing' as opposed to a description of behaviours.

ACT Therapist 1 (144-156): the concept of Burnout...from where I'm standing is... a quasi-diagnosis. I don't know whether it's in DSM-V, I don't care, it's the kind of thing that probably would show up there and that's kind of irrelevant to me, but it's an example of that kind of diagnostic way of describing human suffering but fundamentally isn't how we work within ACT. That's not to say that I don't meet people who, through the work they are doing and in the context of the work that they are doing, are experiencing a level of unwanted emotion and intrusive thoughts that is very difficult for them, and where they are ceasing to function in the way that they

would choose to, or that their managers think is ok...and they are becoming people that they don't recognise as themselves.

At the other extreme Therapist 2 was aware of actual Burnout levels in her country and was able to quote these in terms of workforce percentage affected and also annual days lost per individual affected by Burnout.

ACT Therapist 2 (173-174): In my country the percentage in 2011 was 14% out of all employees...the days they didn't work was 189.

AT2 (187-190): We have a very big problem in my country with Burnout, a very big problem; it's rising and rising and rising so if we can prevent people from getting Burnout earlier in the process it would be great.

4.2.1.3.6 Bridging clinical and organisational domains

Two of the ACT therapists reported extensive experience working in organisational settings and both reflected on their own clinical training and how they have applied this in non-clinical settings. There was acknowledgement of a gap between performance-type coaching, seen as being proactive and well-resourced by organisations, and attention to emotional and behavioural problems, which can be handled in a more reactive way by organisations, and more likely to be resourced via medical/health insurance away from the workplace.

ACT Therapist 2 (59-63): They don't give the attention it needs to behavioural change and they have coaches but the coaches cannot do the things that I do with people, and the bridge between the clinical and what's going on in an organisation; I want to try to make the bridge.

4.2.1.4 Superordinate theme three: Assessment and intervention principles

4.2.1.4.1 Assessment and formulation

Each ACT therapist was asked to consider the high correlation between Psychological Inflexibility (as measured by the AAQ–ii) and Burnout, especially with the dimensions

of Emotional Exhaustion and Cynicism. Given this relationship, each therapist was asked to evaluate the usefulness of measuring Psychological Inflexibility in working with Burnout.

Each therapist acknowledged the centrality of psychological (in)flexibility to ACT, but had different perspectives on its direct application to interventions. Only one therapist believed that measuring Psychological Flexibility alone would be sufficient in helping her address client's presenting issues.

ACT Therapist 3 (559-561): Well I honestly think that one measure, if you could just measure the Psychological Flexibility, that's all I'm really interested in because for me everything else I can do from there.

The other two therapists both believed that psychological (in)flexibility is useful as a headline measure, but that it is vital to understand the component processes which contribute to this, as illustrated by this quote from therapist 1.

ACT Therapist 1 (496-501): Now it could be very helpful for something like measuring change... but we are talking about these kinds of links overlapping and yet still being distinct processes, and flexibility is just kind of like a headline measure for it. In terms of helping one individual I wouldn't tend to be thinking in terms of flexibility - I'd be thinking about the component processes.

Therapist 2, particularly experienced in working with organisation-related Burnout, referred to a specific tool, recently developed and previously unknown to the researcher, known as the Flexibility Index Test (FIT-60, Batink, Jansen, & de Mey, 2012), a 60 item psychometric tool which allows an individual to be assessed on the six core processes of ACT¹⁴, also referred to as the Hexaflex (e.g., Hayes, 2007). This therapist finds the FIT-60 very helpful as a formulation tool as it allows her to understand where her client's overall Psychological Inflexibility is focused, notably whether their current issues are relatively due (in ACT terms) to experiential avoidance, cognitive fusion or a lack of connection with values.

¹⁴ These processes are acceptance, de-fusion, self as context, present moment, values & commitment (Hayes, 2004).

ACT Therapist 2 (210-220): Yes, first of all I always use the FIT test, it's the Flexibility Index Test...and it measures six core processes of ACT... and a man is doing his PhD on it. I use always this questionnaire and... Emotional Exhaustion...I also see a lot of fusion, so they're in their head having negative fused thoughts...

On reflection, a further perspective was offered by therapist 3 that, due to the physical nature of the consequences of Burnout, more physical measures should be used in assessment.

ACT Therapist 3 (617-622): ...I would want something physical in there as well. I think it loses something because you know self-efficacy is a...psychological thing and as we said Cynicism is a bit of an avoidance strategy and defence, and Emotional Exhaustion...there is something in there but it loses something for me...

This section summarises different perspectives on assessment and formulation within ACT. These range from finding a single measure of Psychological Flexibility sufficient, through to the use of a detailed ACT assessment and formulation tool which provides a measure of Psychological Flexibility across the six main processes identified within ACT.

Additionally, in relation specifically to Burnout, a view was expressed that more physiological measures should be included as part of the assessment process.

4.2.1.4.2 'Confronting the agenda'

The therapist with most current exposure to corporate/organisational clients described how many of her clients arrive with a large amount of paperwork relating to previous psychometric tests and/or documentation of previous coaching and developmental input that they have received at work. She viewed this as a potential barrier to connecting with these clients in the present moment, and therefore will always challenge this kind of presentation as soon as possible.

ACT Therapist 2 (561-567): Sometimes a little bit more confronting, especially with managers who come with a suitcase full of papers. Yes 'I have scans and I have coaches and I did already that'...so I have to be more...behavioural. Then I say to the

man 'leave the stuff in your suitcase because did it work for you? If it worked then you wouldn't have to come here...'

4.2.1.4.3 'Being present' and 'feeling better'

Unsurprisingly with ACT, the therapists talked a lot about the need to help clients to become more mindful and therefore to connect with the present moment. The first quote below typifies a problem that they experience with clients - a recognition that something is wrong but a pathological pattern of connecting with difficult and painful memories as well as 'fast forwarding' to a potentially catastrophic future.

ACT Therapist 2 (216-219): What I see in those people is that they are not mindful, so they are not here; they are in the past or the future because they want to get better and be doing things they cannot do now.

Therapist 2 here discusses the importance of helping clients to connect with the present moment. Sometimes, and this appears to be directed to male clients in particular, she finds a need to help clients to experience and name emotions. She also describes how this might be facilitated through an understanding of physiology and exploring with clients how emotions might 'physically feel' to them.

ACT Therapist 2 (532-539): It's very important for me to work with them on feeling... not to 'feel better' but to 'feel' better. A lot of men who burn out, they cannot feel or they say 'I have no emotions' or 'I have no negative emotions'. It's very surprising because they're here and they talk about that nothing works and everything is bad and they say 'no I have no emotions'. When they learn to feel then they are more aware of what happens in their body and in their mind and then they can choose better.

This quote from Therapist 3 perhaps highlights some of the subtleties working with high-powered professionals, in that they may well have a very robust defence mechanism (in the form of experiential avoidance) which enables them to either ignore concerns (or Burnout symptoms) or to interpret them in a way which negates a need to face up to them.

ACT Therapist 3 (690-699): I think it's very much about helping the individual to read their own stuff...what we call 'mindfulness', I've just done this two-year training and I've realised that many people can't even read their stuff. If you say to them what's coming up for you then they don't even know what you mean by that. So I think, especially with people who are very highly strung, powered professionals, they're so used to – 'neglecting' is a strong word – 'putting aside' whatever comes up that they might have difficulty initially to even understand what mindfulness is and to see the value of that...

In this section, ideas have been explored which underline the importance of developing mindfulness in Burnout clients. For some clients this will be focused on enabling them to open up to, and name, difficult emotions. For others, this process will be trying to address long-term patterns of side-lining unwanted 'stuff' by demonstrating the value of mindfulness to these individuals.

4.2.1.4.4 Focusing on values

All three therapists consistently referred back to the need to work on values with clients, with a consistent message that aligning a client's behaviour with their values is the ultimate goal for long-term emotional wellbeing and resilience.

Therapist 1 makes this point, while also mentioning the reality of context, suggesting that it is important to maintain a sense of realism with clients.

ACT Therapist 1 (711-714): ...you're leading values in this or you're leading goals... values-inspired goals to help this person to live as fulfilling a life they can within the context they find themselves in.

Therapist 2 here highlights that often it is personal/family values that are compromised by work commitments.

ACT Therapist 2 (248-252): They don't live to their values...it connects with Emotional Exhaustion but also with Cynicism because they love their family but they cannot give them what they really want to give them, so that's lack of clarity of values.

Therapist 3, recounting her own clinical experience, questions the relative value choices made by some clients she has worked with.

ACT Therapist 3 (330-333):...so basically their value system was financially placed and keeping their lifestyle were higher values compared to actually whether I'm happy, whether my life is good, whether I'm healthy.

Within this section, the therapists have highlighted some different perspectives on values-work with clients. The importance of helping clients set values-based goals within their own context has been identified, alongside the need to recognise personal/family values, and finally to help a client question whether the values they are acting in accordance with are in the interest of their long-term happiness and health.

4.2.1.5 Superordinate theme four: Intervention specifics

4.2.1.5.1 Engagement

The point was made that even the perfect intervention will be undermined by a lack of engagement. Relating specifically to organisational-level work, practitioners will be faced with individuals who are pressed for time and quite possibly already cynical towards interventions.

Therapist 3 described a recent medical General Practitioner conference that she had presented at, where she had invited the sizeable audience to bring their attention to their own bodies as part of an experiential exercise to demonstrate to them how mindfulness can work.

ACT Therapist 3 (725-738): There's a bit of selling involved I think with professionals but it should be totally possible...recently I was talking in front of a large group of GPs, which is not my favourite thing to do, about ACT and pain management and...it needs to get to people and it needs to make sense to people experientially...to the GPs I said 'you know if you take attention to your buttocks now on the chair' and they were all like 'huh? What is this woman all about?'

So it's...to actually get them to see that there is something in there and 'I might not be so aware of it because I'm so busy with my life and what's that about? Maybe this has value to me?'

4.2.1.5.2 'ACT Burnout inoculation'

Building on the earlier identified ideas about Burnout trajectory, a theme emerged that interventions should be timely, and focused on building resilience through skills training. All three therapists mentioned group interventions, and the idea of an 'ACT course' outlined by Therapist 1 encapsulates this type of approach.

ACT Therapist 1 (589-598): ...a sort of ACT introductory course that helps people deal differently with thoughts, develop some mindfulness skills, identify their values, take committed action towards their values and learn how to put up with the stuff you're going to have to put up with to live by your values. Then those will be the protective factors and protective skills...You know you could be boosting those universal processes. It's likely to have a protective function.

4.2.1.5.3 'Tuning into physiology'

Therapist 3 placed a particular focus on the physicality of Burnout, and expressed a general concern that psychologists do not receive sufficient training to work with the human body, despite the brain using the same neural infrastructure to receive both emotional and physical feedback.

ACT Therapist 3 (751-754): I mean we have as many neurotransmitters in the gut as we have in the brain and there's so much feedback coming from the body... but we're so used to ignoring that and not dealing with that.

Additionally, she went on to make the point that, in her clinical experience, clients can be unable to distinguish between physical and emotional sensations, with a potentially double-edged implication being that serious physical symptoms could be dismissed as being purely emotional, or conversely that no connection is made between physical symptoms and underlying emotional strain or distress.

ACT Therapist 3 (628-633): I think you can be really unwell physically and misread it either way, so it can be very physical and you might think 'oh it's just emotional' or it's very emotional but actually the body picks it up because of your inability to read emotions...it's alexithymic...

Consequently this therapist favoured physical/experiential interventions above all, endeavouring to trigger a physiological/neurological change in state and linking this to cognitive de-fusion.

This combination of experiential work and ACT-based psycho-education is set out in the three quotes below.

ACT Therapist 3 (767-768): My key hook would be to get them on the floor, dim the light and do the best body scan that's out there, and get the person to feel their brainwaves changing...

AT3 (772-774): Once they've tapped into that, which we could kind of equate to tapping into the parasympathetic nervous system...this is why it's actually quite important.

AT3 (784-789): If you then combine that with the right kind of mental labelling and de-fusion...the regulation of the body has to come before the mindful bit in my view. I do not think you can be mindful when you do not know the body and you're hooked into the wrong part of the nervous system...

This section has presented ideas of how to integrate ACT interventions with a deeper understanding of physiology, and how this can be used both to promote engagement and to illustrate how key ACT concepts such as cognitive fusion can be linked to physical responses/feedback within the body.

4.2.1.5.4 Facilitating change

Unsurprisingly with ACT, the use of metaphor emerged as a theme. One therapist favoured the use of the 'Chinese Finger Trap'¹⁵ as a metaphor for moving towards difficult private experiences rather than trying to pull away from them. Another mentioned her own metaphor which she referred to as the 'mountain of inconvenience' which also represents these same experiences which need to be faced and ultimately overcome in order to make helpful and fulfilling change, described in this quote.

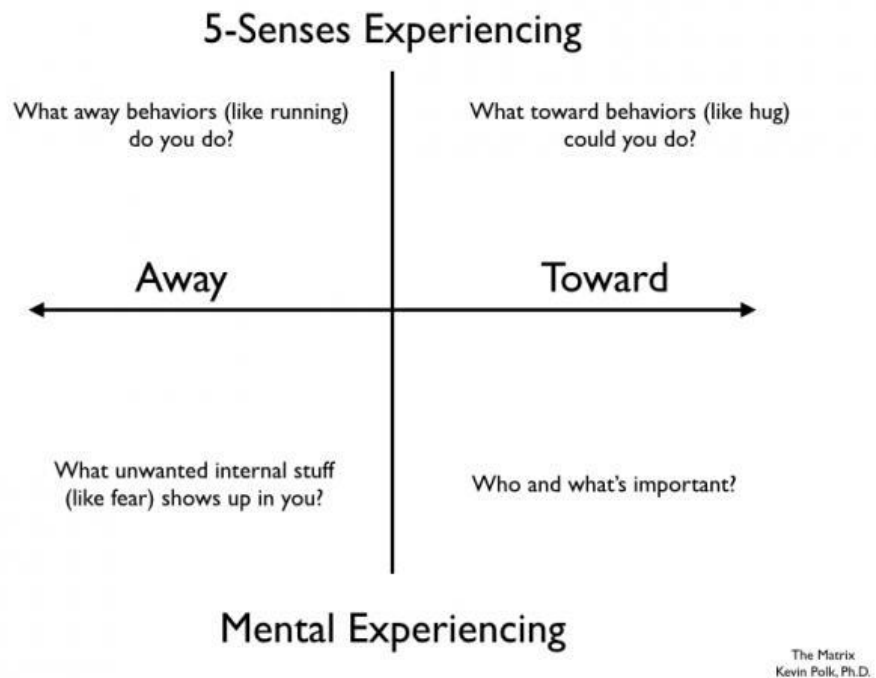
ACT Therapist 2 (822-829): And the mountain...on this scale it's intensity and on this scale it's time. When something happens at work or something...you get ill or a negative feeling, the feelings are like this and you have the highest level and then it's tailing off. People...don't want to experience it...I call this the 'mountain of inconvenience'...if it's possible to climb the mountain, every time for a little bit longer ...you don't have to stay there but please stay a minute or two minutes.

The same therapist also referred to an ACT framework, previously unknown to this researcher, called 'the Matrix' (Polk, 2014), which she found particularly helpful with her Burnout clients. She has also found it useful to promote engagement with organisations because it feels like a helpful 'tool'.

ACT Therapist 2 (580-586): The Matrix is a powerful tool...and it's great for organisations. If you wanted to do ACT in organisations and with managers please look for the Matrix. The Matrix is also a book and it's perfect for organisations because they like to have a tool...the six processes of ACT go in the matrix.

¹⁵ Woven bamboo tubes. Index fingers are placed in both ends, and when an attempt is made to pull them out, the tube constricts, trapping the fingers. When the fingers are pushed inward, it causes the tube to loosen. This is used as a metaphor in ACT for moving towards difficult private experiences.

Figure 12 – ‘The Matrix’ (Polk, 2014)



As shown above, the Matrix can be used for any given situation or problem that a client is facing. At any stage of engagement with this problem the client’s ACT position can be plotted on the Matrix, with the vertical axis mapping how they experienced the situation, either using their physical senses (helpful in ACT terms) or their cognitive appraisal of the situation (typically less helpful in ACT terms), and the horizontal axis mapping whether they are moving towards their chosen values or away from difficult emotions. This can be used as a formulation tool, a measure of improving Psychological Flexibility, or a problem-solving tool for specific scenarios.

The final point in this section relates to helping clients come to terms with the pain and loss that might be associated with removing themselves from their work situation completely, even when they have identified this as the best option for them in managing Burnout. The example below relates to a case example where a client (the nurse mentioned earlier) of Therapist 1 was facing a dilemma as to whether or not to

leave her role in palliative care due to her own current levels of Burnout. By resigning she realised that she would suffer a huge sense of loss in not being able to care for patients, but equally realised she could not continue in her current mode of working. This same notion could equally be applied to an individual working in a commercial organisation, and who might face a loss of status and living standards by resigning.

ACT Therapist 1 (718-723): By doing more of the active kind of stuff can this nurse continue to do the work that ticks many values for her, or actually is it the right thing to say for everybody's sake move onto something else now and put up with the pain and the sense of loss, and what my passengers on the bus¹⁶ in my head are going to say to me for resigning?

This section has focused on ideas of how to facilitate change in clients, spanning the use of metaphor, the use of a specific ACT concept called 'The Matrix' (which can work as a 'change tool' for individuals and also appeals to organisations due to its 'technical appeal'), and finally by addressing potential issues of loss which may be preventing an individual from making values-based changes in their work situation.

¹⁶ An ACT metaphor designed to reduce experiential avoidance and increase acceptance, the 'passengers on the bus' representing unwanted private experiences.

4.2.2 Schema Therapists

4.2.2.1 Introduction

Following thematic analysis as detailed in the Method section, four main ('superordinate') themes were identified. These were labelled as follows: Coping Styles; Schema Modes; Understanding Burnout – The Clinician's Perspective; and, Formulation and intervention.

Secondary ('subordinate') themes were also identified, supporting each superordinate theme. The typology of these is presented in Table 23 below.

Table 23 - Schema Therapists: Superordinate and subordinate Themes

Superordinate Themes	Subordinate Themes
Coping Styles	Over-compensation Linking specific EMS to over-compensatory coping strategies Surrender
Schema Modes	Vulnerable Child mode Dysfunctional parent modes Organisation as dysfunctional parents? Healthy Adult mode Maladaptive coping modes
Understanding Burnout – The Clinician's Perspective	Professional Efficacy – 'the wildcard' Triggers and tipping points Resources versus demands Burnout as a combination of depression and anxiety
Formulation and Intervention	Clinical cut-offs for EMS EMS and mode/coping Signposts to intervention

4.2.2.2 Superordinate theme one: Coping styles

All three schema therapists stressed the importance of understanding Early Maladaptive Schemas (EMS) in the context of coping styles. A common theme was that knowledge of a client's EMS (from the YSQ) is helpful from a clinical assessment perspective, particularly with regard to establishing levels of pathology, but that for comprehensive formulation and therapeutic work it is essential to understand how the client is relating to their EMS by way of coping response. These coping responses may reflect the activation of particular EMS by environmental/situational triggers.

4.2.2.2.1 Over-compensation

The participants referred to the three main maladaptive coping responses described in Schema Therapy: overcompensation, surrender, and avoidance, and linked this to their understanding of how these relate to an individual's physiological response to stressors: 'fight', 'freeze' and 'flight' respectively.

In the opinion and experience of these therapists the most likely coping style that would be seen in a work environment is overcompensation. Typically, individuals will respond to increased pressure and the possibility of failure in a 'workaholic' or 'perfectionistic' manner, and this can soon become pathological, potentially leading to major Burnout.

Therapist 1 linked this to the Hans Selye General Adaptation Model of stress response (Szabo, Tache & Somogyi, 2012) which proposes that increased performance can initially be facilitated by the body's sympathetic nervous system response, but that over time exhaustion will prevail, ultimately leading to a physical breakdown.

Schema Therapist 1 (44-49): So maybe they're tuning out their body sensations and exhaustion...the model that fits in my mind is the Hans Selye exhaustion curve where people initially do more and more...so they use the over-compensation strategies of maybe a Demanding Parent...and unrelenting standards so they push themselves... 'if I try harder I can get through and I'll be fine'.

The following quotes illustrate how this idea can then be developed using a clinical and organisational understanding of Burnout presentations, and how individuals can receive external validation for their increased efforts, even though these can be maladaptive in terms of long-term physical, emotional and psychological health.

Schema Therapist 1 (253-259): ...I think people cover up a lot when they're at work and they put on the coping façade. Once they get to a point where they cannot go on any more, and the compensatory strategy doesn't work anymore, they really go crunch because...their underlying vulnerability is exposed...it looks as if they've failed or...not competent in some way or another so that becomes very shaming, which adds to it.

ST1 (349-357): ...you can get somebody who's...scored high on a Failure schema. But because their coping strategy is to over-compensate, they may be quite perfectionistic and hard-working and...compensate for it so well that you wouldn't even know...and if they weren't in an adverse situation they wouldn't burn out because they may be getting all sorts of positives from performing well.

Care also needs to be taken in making a distinction between an EMS and a coping strategy - one therapist felt that they could even be interpreted as the same thing in certain circumstances, in particular when thinking about the EMS of Unrelenting Standards/(Hypercriticalness)¹⁷.

Schema Therapist 2 (326-332): If you look at workaholism we're seeing that as an Over-compensatory coping strategy...equally Unrelenting Standards could be seen as an Over-compensatory coping strategy...the thing about the schema questionnaire is it doesn't...tell you...what he (Jeffrey Young) calls schemas might be coping strategies and others are actually the core early maladaptive schemas themselves.

In this section, the therapists have explored the strong link they clinically identified between Over-compensatory maladaptive coping responses and Burnout. This is especially important as it seems to point to a danger that, in the short-term, an individual's 'performance', as measured organisationally, may actually improve, fuelled

¹⁷ The therapists often shortened the EMS of Unrelenting Standards/Hypercriticalness to 'Unrelenting Standards' conversationally.

by an adrenaline-type response. Terms such as 'hard-working' and 'perfectionistic' may even sound attractive to an employer or manager, but are shown in this context to have a potentially dysfunctional element which could ultimately lead to undesirable consequences for the individual and organisation.

4.2.2.2.2 Linking specific EMS to over-compensatory coping strategies

A link was made between Cynicism (Burnout dimension) as an Over-compensatory coping strategy, and the EMS of Defectiveness and Vulnerability to Harm/Illness (these two EMS both correlating highly with Cynicism).

Schema Therapist 3 (384-390): The cynical response would be an Over-compensatory, almost like, 'I'm going to put myself above all of this and be critical,' and that's got more of a narcissistic edge, which is highly correlated with Defectiveness. 'I feel rubbish about myself. I'm going to cope by being one up and putting others in the situation down or being cynical about it all and protecting my sense of vulnerability by being one up'.

Therapist 2 spoke about Unrelenting Standards/(Hypercriticalness) in the context of 'workaholism' and how this can offer a defence against a failure or similarly negative EMS. Of particular interest here is the explicit identification of the EMS of Unrelenting Standards/Hypercriticalness as a coping response in itself.

Schema Therapist 2 (333-343): ...workaholism...Unrelenting Standards being the Over-compensatory coping strategy really to distance the person from feelings of failure. So 'as long as I'm working well and I'm being successful and I'm achieving then I'm not a failure'...And I think for a lot of people that constant striving and Unrelenting Standards is a way of defending themselves against an underlying negative schema.

In this section, an idea has emerged that the Burnout dimension of Cynicism could be an Over-compensatory coping mode in itself, responding to the EMS of Defectiveness and Vulnerability to Harm/Illness, and also how the EMS of Unrelenting Standards/Hypercriticalness can be viewed specifically as an Over-compensatory mode relating to underlying EMS, such as that of Failure.

4.2.2.2.3 Surrender

One therapist in particular picked up on the EMS of Negativity/Pessimism, which correlated highly with all MBI three Burnout dimensions, and viewed this as a possible link to a coping response of 'surrender'.

Schema Therapist 3 (284-286): But Negativity/Pessimism is the schema that in my mind points to a coping mode of hopelessness and defeat - a sort of 'give up' mode.

In this case, compensation has either failed or is not being attempted, leaving the individual with a strong Negativity/Pessimism EMS to surrender or 'freeze' in physiological terms.

4.2.2.3 Superordinate theme two: Schema Modes

All three therapists were in agreement that their therapeutic focus was on schema mode work. They made consistent reference to the four main mode categories; child, maladaptive coping, dysfunctional parent and Healthy Adult.

4.2.2.3.1 Vulnerable Child mode

All three therapists reported that the child mode most likely to be witnessed when working with Burnout presentations would be that of Vulnerable Child. Their focus was on the Burnout dimension of Emotional Exhaustion, with an implicit conclusion that the concepts of Cynicism and Professional Efficacy would not sit within a conceptualised child mode.

The therapists could relate all five highest correlating EMS to both child mode and Emotional Exhaustion, as illustrated by the following quotes.

Therapist 1 illustrates also makes an interesting link in her second quote between the schema mode of Punitive Parent as a trigger to Vulnerable Child mode, with the implication that both would need to be engaged as part of an intervention.

Schema Therapist 1 (669-671): ...the issue about mood work is that Emotional Exhaustion, if we were describing that in Schema Therapy terms...would probably be about vulnerability and so we'd be probably saying it's Vulnerable Child.

ST1 (673-677): A Vulnerable Child mode can be anxiety, it can be depression, it can be tiredness but it could be, depending on how the person talks about it...Punitive Parent because if the person is talking about it as if 'I really can't do any more, I'm useless, I've stuffed up again'...that's Punitive Parent that may then trigger Vulnerable Child.

Therapist 2 makes some direct links between the EMS of Vulnerability to Harm/Illness, Pessimism/Negativity and Insufficient Self-Control and the Vulnerable Child mode.

Schema Therapist 2 (731-735): ...that sort of increased Vulnerability to Harm/Illness, Pessimism, Insufficient Self-Control...that could well be...Vulnerable Child mode might be the closest one to that with feeling vulnerable, mistrusting, incompetent, negative and pessimistic.

Therapist 3 reiterates the link and also suggests a need to try to protect the individual from feelings of excessive responsibility, while at the same time promoting self-care and recreational activities, both of which seem to be neglected during the Burnout trajectory.

Schema Therapist 3 (565-570): ...Emotional Exhaustion would be located within a schema mode model in the Vulnerable Child. So, that mode - unmet need or whatever it might be, but certainly...rest or to be protected from being overly burdened with responsibility. Those would be two things that would immediately come to my mind, protection or prompting play and rest.

The EMS of Vulnerability to Harm/Illness is seen to have a childlike quality, perhaps in feeling vulnerable compounded by not feeling capable of taking responsibility to look after oneself.

ST3 (625-627): Vulnerability to harm and illness? Again...like the idea of a Vulnerable Child, typically lack of a sense of protection, subjugation..

In this section all three schema therapists have shown consensus in locating a Vulnerable Child mode within the Burnout dimension of Emotional Exhaustion, offering a range of different interpretations of formulation within this theme.

4.2.2.3.2 Dysfunctional Parent modes

The two EMS most closely linked with parent modes were Insufficient Self-Control /Discipline (which appeared as one of the highest correlating EMS) and Unrelenting Standards/Hypercriticalness (which they were surprised not to see among the highest correlating EMS, but which did feature in subsequent statistical analysis).

In general, the therapists did not make a strong distinction between the relative importance of demanding vs. Punitive Parent schema modes, but more a sense of likely interplay between the two modes creating a typical Burnout scenario.

Therapist 1 attempts to make a distinction between Emotional Exhaustion and loss of Professional Efficacy, and suggests that Emotional Exhaustion is more likely to be driven by an abusive/punitive childhood, but that the loss of Professional Efficacy may also be sensitive to a Demanding Parent internalised voice.

In the context of Emotional Exhaustion:

Schema Therapist 1 (483-485): You could say that people who are vulnerable...why are they feeling vulnerable?...well perhaps they had emotionally abusive or otherwise abusive parents.

In the context of loss of Professional Efficacy:

Schema Therapist 1 (691-692): So, again, the personal sense of ineffectiveness and under-achievement, that's sounding like Punitive Parent or Demanding Parent.

The same participant discusses the EMS of Insufficient Self-Control/Discipline at different points in our interview, again illustrating that both parent modes will potentially be evident when working with Burnout presentations.

Schema Therapist 1 (310-312): Insufficient Self-Control/Discipline is something you normally see where there's...children who have had very, very critical parents.

ST1 (724-727): With Insufficient Self-Control/Discipline, if you're somebody who believes that it's up to you to apply harder, try harder, do more, that's like the other side of the Demanding Parent, that's the internalised, the intraject of 'I must do more, I mustn't fail, I must get everything right'.

The following quotes emphasise the practitioner's expected link between the EMS of Unrelenting Standards/Hypercriticalness and the mode of Demanding Parent. The sense here is of an ever-increasing spiral of effort to meet impossible goals, and that at some point this spiral will exceed the individual's available resources, triggering a Burnout-related breakdown.

This quote highlights how Burnout vulnerability might develop, and conveyed a strong sense of an inner parental voice that has become so normalised at an early developmental stage that it is not questioned by the individual. It also seems clear in these situations that so much of the individual's efforts will inevitably be unfocused and wasted.

Schema Therapist 3 (696-710): Well Demanding Parent is the under-achiever, Demanding Parent and Unrelenting Standards go together and the message is 'do more, do more, do more' and the standard is so high that it's absolutely unachievable and unrealistic but the person feels they have to keep trying because...they acquired this set of schemas when they were a child so have a sense that this is the right way to be and they don't question it...these are the people that are particularly set up for Burnout because they feel they should be trying harder, doing more, that they've failed if they haven't met these standards, but actually it could be about the standards and expectations being unrealistic. So if you've got, say, a mother who is always...pointing out you're doing something wrong and never telling you when you're doing something right, it can engender a sense of 'I've got to try harder and I've also got to guess what's required of me, even though nobody has explained it to me and told me what the rules are'.

Therapist 3 here adds the notion of a 'stress equation' with a mismatch between an individual's resources and the demands or threats placed upon them. The explicit role of the Unrelenting Standards/Hypercriticalness EMS is implicated in creating this imbalance.

ST3 (219-234): I call it the 'stress equation' where perceived demands or threats exceed the person's perceived resources to address or...meet demands. And with that kind of model in mind, a Demanding Parent voice is one that is over-demanding, that pushes the person right to the limits and beyond of what they actually have in the way of resources, skill, emotional resource, time, whatever. And in terms of schemas...Unrelenting Standards would be a schema that you'd typically see in that pattern.

This quote places Burnout within an understanding of organisational processes, and a distinction between healthy and unhealthy motivation strategies. The two ideas contained here are that a Demanding Parent mode may prompt an unrealistic view of being able to do 'everything at once' rather than more helpful project planning, combined with a Punitive Parent mode as an ultimately destructive motivational strategy, i.e., 'stick rather than carrot'.

Schema Therapist 3 (599-608): OK, failure of healthy self-motivation, over demanding, which is likely to be a Demanding Parent combined with a punitive voice...so poor motivational strategies...motivate an idea through punishment...a failure of understanding that you break down tasks into smaller chunks as opposed to the over-Demanding Parent and 'just do it all at once'... just looking at the outcomes, the idea/belief that it's possible, but also a failure of limit-setting and tolerance of discomfort.

This section highlights the substantial contribution that both demanding and Punitive Parent modes can make to Burnout, beginning with the internal demanding voice which increasingly pushes an individual beyond their available resources and defences, compounded by a punitive voice which seeks to motivate through punishment.

4.2.2.3.3 Organisations as Dysfunctional Parents?

A question emerged from the researcher during discussions around parent mode, inviting therapists to reflect on the role that an organisation might play in this - could the organisation in effect be the dysfunctional parent?

This question resonated with the therapists, although each was careful to point out that the parent mode is an internalised state. However, observations were made that organisations can be increasingly demanding and punitive, and this will trigger or reinforce internal dysfunctional parent modes. The organisation may impose 'dysfunctional parenting' through demanding and punitive cultures and systems.

Therapist 1 discusses how both organisations and clients can play the role of demanding and Punitive Parent. The individual is at the bottom of this 'food chain' which begins with ever-increasing work demands, intensified by the threat of losing business.

Schema Therapist 1 (752-757): ...in the private sector...clients of companies are getting very demanding...saying 'well I want this, this and this' so...the service company has to say 'well how high?'...so it reinforces that punitive and demanding, Dysfunctional Parent mode...and there are real consequences of it because if you don't do these things, there will be punishment, usually in the form of not getting funding, not getting payment.

Therapist 3 articulates how the internal parent mode acquiesces to the organisational demands placed on them, and also potentially intensifies them.

Schema Therapist 3 (332-338): ...the Demanding Parent mode is an internalised mode, but...if the organisation was also over-demanding...the Demanding Parent mode, voice if you like, inside the person, would just kind of nod and agree.

For an individual who is struggling, the organisation may also play its part in ostracising them so that the problem is positioned with the individual and not the organisation.

Schema Therapist 1 (773-778): Organisational procedures are often quite punitive and critical in themselves. People are labelled as 'can't cope, they're mad, they've got a problem, they can't pull their weight'. There's all that fear about somebody being away from work, what happens when you go back to work, people are resentful 'Oh you've been away...what's the matter with you?, We're all the same, we're all suffering, you know'.

This section has highlighted a number of additional challenges placed by the interaction between clients, the organisation and the individual, conceptualised in dysfunctional parent mode terms. Challenges have been identified at an external level, with demands placed by both organisations and clients. Clients have a punitive ability with the threat of taking their business elsewhere, whereas organisations can foster a punitive internal culture which can result in an individual feeling isolated and vulnerable. When the individual also has their own internal dysfunctional parent mode(s), the combination can become toxic.

4.2.2.3.4 Healthy Adult mode

There was relatively little mention of Healthy Adult due to the structure of the interviews, but a couple of interesting observations were made by the therapists. Therapist 3 describes her own experience which could be seen as an activation of a Healthy Adult mode in the context of a 'healthy' form of Cynicism (if interpreted as distancing or detachment from a toxic work environment). This provides an interesting alternate qualitative understanding of Cynicism as a Burnout dimension.

Schema Therapist 3 (413-431): I'm actually thinking about some of my own experience where I wasn't burning out, but I certainly was detaching myself a little bit more from the work because the context was such that I did not adhere to its values or priorities or whatever, and it actually led me to leave.

It was part of almost a healthy strategy to just be able to stand back and go, 'You know what, my manager is telling me to do the impossible. I'm not so invested in being seen to be over-competent and proving that I've done everything that she asked. She doesn't care and I can leave'. And I did, and it was a lot better.

...it's likely to feed less investment, but then you could argue whether that's self-protective in a slightly healthy way, because it's giving less power to the demanding voices, saying, 'Actually you're not going to control my life. I'll make a decision about what's reasonable and what isn't, and I'm not going to fear the punishment that you'd bring because it would be unreasonable if it did come'.

Therapist 2 thinks in terms of Healthy Adult mode with respect to Vulnerable Child (as evident in Emotional Exhaustion), and then with respect to Cynicism. In the former, he proposes a very compassionate, emotionally focused form of intervention, whereas with Cynicism the approach becomes noticeably more pragmatic, and could be viewed as a form of empathic confrontation.

Schema Therapist 2 (573-582): Healthy Adult in relation to Vulnerable Child is attuned to a compassionately deep understanding, accurately understand un-met needs and do something to meet the emotional-relational needs.

Healthy Adult in relation to coping mode? More the Cynicism/Depersonalisation would be: 'How's this helping? Where has this coping mode come from? How is it helping now? How is it not helping now? Let's see if we can moderate it'. But, really in relation to: 'How can we get your needs met in a more healthy way?'

This section provides insight into how a Healthy Adult mode can start to be nurtured by the therapist. This appears to be a combination of a deeply empathic approach to the Vulnerable Child and a more pragmatic/Socratic intervention which helps the individual to see their own processes in a broader context.

4.2.2.3.5 Maladaptive coping modes

Schema Therapy identifies three maladaptive coping modes ('Compliant Surrenderer', 'Detached Protector' and 'Over-compensator'). These are analogous to the coping styles referred to in the previous superordinate theme but emerge in combination with EMS in response to 'trigger situations' (Young et al., 2003).

All three maladaptive coping modes were discussed in relation to Burnout. Detached Protector was typically linked to Emotional Exhaustion, as a way of distancing or

'zoning out' from Burnout symptoms. Cynicism was viewed by different therapists as being either a form of Detached Protector or alternatively as an Over-compensatory coping mode. Cynicism could be a way of detaching or putting distance between oneself from the reality of the organisational setting, or even 'giving up', but could also be viewed as a way of overcompensating or 'self-aggrandising' in a narcissistic sense e.g. 'I'm better than this'. Compliant Surrenderer was linked to the loss of Professional Efficacy.

Detached Protector - Emotional Exhaustion

Therapist 1 referred to a recent unpublished study looking at schemas and Burnout in Australian psychologists, and how this identifies Detached Protector as the strongest predictive mode for Burnout, which resonates with her own clinical expertise.

Schema Therapist 1 (29-31): ...the strongest predictors (of Burnout) are Subjugation, Detached Protector and Social Isolation

ST1 (35-36): ...the Detached Protector mode was the most problematic and... intuitively that makes sense to me...

Therapist 1 here talks about Detached Protector as a coping mode, but also makes the point that modes are transient whereas EMS are more analogous to personality traits. From a formulation perspective she makes the point that it is important to identify the predominant mode that an individual exhibits, suggesting this may need to be monitored over a specific time period.

Schema Therapist 1 (691-696): That could be going to Detached Protector so it's a coping mode, and the point about all the modes is that they are momentary states whereas the schemas are more about traits, and so people could move very quickly between the different modes. And again, you'd have to have a sense of what was a predominant mode for somebody in a particular time span...

Therapist 2 here links the EMS of social isolation/alienation to Detached Protector mode, describing a state that sounds quite dissociative and clearly not likely to be helpful or adaptive as a long-term strategy.

Schema Therapist 2 (699-714): And...feeling distant and detached from others...particularly the one on alienation...could be seen as more going to Detached Protector mode. That's a shutting down and objectifying everything and distancing yourself from everything which would be what quite a lot of people do. It's more of a non-thinking, non-feeling state where people go into automatic pilot in order to cope with situations.

Cynicism – Detached Protector or Over-compensator?

Therapist 3 here is thinking specifically about MBI terminology - and the fact that the dimension of Cynicism in the MBI-GS is referred to as 'Depersonalisation' in the MBI-HS. For her, Depersonalisation qualitatively positions itself within a Detached Protector mode, whereas Cynicism qualitatively positions itself within an over-compensatory mode.

Schema Therapist 3 (369-374): Cynicism feels like it's got slightly more of a disdainful contemptuous sort of feel, which would be a different coping mode from Depersonalisation to me, suggests more of a Detached Protector mode which doesn't have...that disdainful or cynical edge to it. It's just more blocking off and being disconnected emotionally from yourself or others, or lacking feeling really.

ST3 (384-390): The cynical response would be over-compensatory, almost like, 'I'm going to put myself above all of this and be critical,' and that's got more of a narcissistic edge which is highly correlated with defectiveness, 'I feel rubbish about myself. I'm going to cope by being one up and putting others on the situation down or being cynical about it all and protecting my sense of vulnerability by being one up.'

Compliant Surrenderer - loss of Professional Efficacy

Again drawing from therapist 3, two quotes are presented which position a loss of Professional Efficacy in the Compliant Surrenderer mode, which for her is reflective of the EMS correlating most highly with Professional Efficacy¹⁸. The overriding sense of failure described can also be linked to the idea that loss of Professional Efficacy may

¹⁸ Failure, Insufficient Self-Control/Discipline, Emotional Inhibition, Subjugation and Negativity/Pessimism

reflect the final stages of Burnout, given that the quantitative data in this study showed relatively resilient levels of Professional Efficacy despite relatively high levels of Emotional Exhaustion and Cynicism.

Schema Therapist 3 (478-493): ...the Failure schema...obviously that relates back to vulnerability likely from childhood, so the loss of sense of Professional Efficacy would be totally understandable, because it's congruent with the Failure schema. I mean it perceives loss of professional skills; it almost describes the Failure schema.

ST3 (512-514): ...in terms of the coping styles within Schema Therapy, there seems to be a predominance of surrender style of coping within these five schemas...

This section has explored the maladaptive coping modes of Detached Protector, Over-compensator and Compliant Surrenderer with regard to Burnout, with Detached Protector being viewed as a response to Emotional Exhaustion. It highlights different qualitative perspectives on the Burnout dimension of Cynicism, as to whether it is a passive-detached state, or possesses more aggressive over-compensatory aspects. Some of this may be due to linguistic differences between the Depersonalisation dimension of the original MBI and MBI–HS, and the Cynicism dimension of the MBI–GS used in this study.

Compliant Surrenderer has been placed within the dimension of Professional Efficacy, especially with regard to the prominence of the failure EMS, with its inherent vulnerability stemming from childhood.

4.2.2.4 Superordinate theme three: Understanding Burnout – the clinician's perspective

4.2.2.4.1 Professional Efficacy – 'the wildcard'

This theme reflects the discussions prompted by the finding mentioned above that the MBI dimension of Professional Efficacy seems to behave in a different way from the other two dimensions of Emotional Exhaustion and Cynicism within this study sample.

Each therapist was specifically asked to comment on this apparent phenomenon, i.e., 'why would the sample show such high levels of Emotional Exhaustion and Cynicism without similar loss of Professional Efficacy?'

Overall, the therapists seemed to find this a challenging question. There appeared to be some consistency in a view that maintaining a sense of Professional Efficacy, much like with Cynicism, might be a compensatory coping strategy. Within this overall observation, there were different nuances, including a sense of denial, self-promotion, putting others down (and therefore themselves 'up') or perhaps a transitory feeling of Professional Efficacy due to short-term achievements based on increased efforts.

Therapist 2 describes the sense of being 'in denial' and maintaining a sense of Professional Efficacy even though objective evidence suggests otherwise. The idea of 'maintaining a sense of one's integrity' here could be interpreted to mean that self-belief is the only remaining motivation to carry on when things begin to fall apart.

Schema Therapist 2 (227-233): 'I'm still doing a good job and my standards aren't dropping although other people might disagree with that'...I suppose it's partly to try and maintain a sense of your own integrity.

Therapist 1 captures an idea that Professional Efficacy is a kind of 'occupational habit' that remains quite resilient, especially perhaps for those in leadership positions who have created a successful persona for themselves that is hard to relinquish.

Schema Therapist 1 (41-42): They're used to problem solving, maybe talking themselves up and being very...proactive.

Therapist 3 echoes the sense of talking oneself up, adding that this may be achieved by putting others down.

Schema Therapist 3 (388-390): 'I'm going to cope by being one up and putting others in the situation down, or being cynical about it all and protecting my sense of vulnerability by being one up.'

Here, Therapist 2 offers an interpretation that over-compensatory coping strategies may offer an increased sense of Professional Efficacy, but again within the context of ‘workaholism’ and the resulting Burnout spiral that can be created.

Schema Therapist 2 (348-354): We go from workaholism, and that leads to increased motivation, and then it's increased sense of Personal Accomplishment and increased helping factors...so when the Over-compensatory coping strategy is working and it's being effective, then the sense of Personal Accomplishment is high and helping factors are high... that positive feedback loop there.

Therapist 1 thought that an individual's sense of Professional Efficacy might relate to locus of control, although it's not clear whether this refers to a characteristic which is trait-based and therefore somehow inherent in an individual's EMS profile, ultimately contributing to Burnout, or something more state-based which could therefore be interpreted as a coping strategy

Schema Therapist 1 (596-599): ...you could almost look at that like a locus of control, couldn't you?

Therapist 2 speculates that robust Professional Efficacy might be a feature of this sample, with a relatively high proportion of senior managers, who would be less likely to question their own professional abilities than a non-management sample.

Schema Therapist 2 (193-197): That might be something that, you know, buffers against that in terms of Personal Accomplishment and efficacy. It might be something that's pretty well established and something that is not threatened by people who are relatively senior and more experienced. I'm just thinking out loud here.

This section has summarised attempts by the schema therapists to make sense of the way in which Professional Efficacy has been reported as relatively high in the study, and therefore much less indicative of Burnout than the other two MBI-GS dimensions of Emotional Exhaustion and Cynicism. The lack of commonality within their observations suggests that this is not an easy phenomenon to interpret.

4.2.2.4.2 Triggers and tipping points

This theme draws from Therapist 1's clinical experience working within a critical trauma service which engaged with organisations, and clearly being struck by the trajectory of some of the Burnout-type presentations she experienced. Rather than a gradual development of Burnout, she describes how high-achieving individuals can experience a sudden dramatic breakdown, triggered by challenging context changes such as a difficult boss, an impossible organisational situation at work, or an unpredictable traumatic event.

Here she describes how really successful professionals with long track records can be undermined by a change in working environment or clash with a superior which means they can no longer cope, and go into crisis.

Schema Therapist 1 (155-163): Really high achievers, really high level in their organisations, doing really well, at a very senior level in their organisation and then they had a difficult situation with a particular boss or a particular set of circumstances. And they find themselves in an impossible situation, and all their usual coping strategies are not available because they don't apply...and they can only tolerate a certain amount of that before they go crunch in my experience.

Therapist 1 then illustrates this with a dramatic case study of a client who was already diagnosed with numerous psychiatric disorders alongside very challenging family circumstances. His environmental stressors then became worse following the London Tube bombings, with elevated anxiety levels travelling to and from work due to claustrophobia. Despite all this it appears he was able to 'successfully' use compensation strategies until a tipping point was reached due to a bullying boss who placed impossible demands on him.

ST1 (233-247): I was just...reflecting on one of the cases of somebody who was one of the most...damaged by his work situation and this was somebody who had a whole series of Axis 1 disorders including OCD, panic disorder, body dysmorphic disorder...he'd taken on a lot of family commitments...he was doing a commute to London that he hated and he got very anxious about because it was at the time of the London

bombings and there was always worry...he was getting claustrophobic on the train and he was holding on, holding on, carrying huge amounts of responsibility until he was in a situation at work...where a bullying boss just made impossible demands and...it was the straw that broke...the camel's back if you like. But this is somebody who's actually very, very capable, is used to taking on lots of responsibility...using their over-compensatory mode to cope so over-achieving and keeping going.

Therapist 1 shares more specialist clinical experience to show how a normally high functioning organisational system can break down due to a single traumatic incident outside of its control. Suddenly, a team normally run with logic and rationality experiences emotional responses such as guilt and feelings of loss of control.

ST1 (535-548): When I was working routinely with...critical incident trauma...the management was really quite effective because they were used to being in control, running things, fixing things, organising people and then an event happened that was completely outside their control and which was unpredictable...they felt really bad about it. Now, logically, they couldn't have known, it wasn't predicable, it wasn't their fault but...perhaps because they're used to...scoring high on autonomy and achievement...when people have experiences that don't fit with that, that's the difference I suppose, really, between viewing yourself as being confident and capable and then being in a situation where bad things still happen despite all your hard work and good efforts.

Therapist 1 additionally offers insights from her experience working with clients who are clearly dependent on their job roles for social approval needs, potentially relating to developmental issues from childhood. It would seem that these individuals perhaps become overly dependent on their job role for their own sense of self-esteem and self-efficacy - blurring the lines between professional and personal identity.

Schema Therapist 1 (810-819): What's amazing to me is that these are really very capable high achievers until they go crunch and it's suddenly about people who get their emotional needs met by social approval for work and there was one person who said 'I'd work for nothing just to have people appreciate me and value me'. He had such

an emotionally deprived background and had such a punitive, narcissistic mother that the money was a side issue, he needed this approval...work as a way of getting some kind of social needs met and approval needs and a sense of self-efficacy and self-esteem.

This section has been informed by Therapist 1's specialist clinical experience working with critical incidents. She highlights how key triggers can lead to a tipping point of Burnout, often with individuals achieving huge amounts at work despite significant personal challenges. They can only over-compensate for so long, however, and as described earlier this can paradoxically lead to ever-increasing work demands which reinforce the cycle of Burnout vulnerability. We also see a description of how whole business teams can be affected by critical incidents outside of their normal experience or locus of control. Guilt and self-blame can prevail even though from a rational perspective the incident could not have been predicted.

4.2.2.4.3 Resources versus demands

These observations emphasise the importance of taking into account both demand and supply characteristics in understanding Burnout, with a clear implication for organisational design and workload monitoring. Vulnerability is not just located within the individual, but is also a function of workplace demands and available resources.

Schema Therapist 1 (296-299): I see it as possibly a consequence of being emotionally exhausted at work and it could be through factors like excessive workload or expectations if they're under-resourced. I don't know anywhere where people aren't saying 'we don't have enough resources'.

Schema Therapist 3 (220-226): I call it the 'stress equation' where perceived demands or threats exceed the person's perceived resources to address or deal with demands/meet demands. And with that kind of model in mind, a Demanding Parent voice is one that is over-demanding, that pushes the person right to the limits and beyond what they actually have in the way of resources, skill, emotional resource, time, whatever.

The point was also made by Therapist 1 that it is extremely difficult to draw a line between work-related stress and pressure from personal lives, further blurring boundaries.

Schema Therapist 1 (114-117): Now you don't know how much of that is work, how much of that is personal factors...or personal situations...they're going through and how much is due to personal characteristics.

This section makes the point that Burnout may not be entirely located within the individual, and that is important to take a systemic perspective, both in terms of working environment and demands, but also personal situations that someone might be experiencing. An individual going through divorce or bereavement, for example, might need support for these issues alongside a Burnout intervention.

4.2.2.4.4 Burnout as a combination of depression and anxiety

An interesting theme that emerged was that Burnout can be viewed as a form of depression, characterised by the EMS of Negativity/Pessimism alongside guilt, but also with features of anxiety linked more to the EMS of Vulnerability to Harm/Illness, and more catastrophic thinking. This seems to be an especially toxic combination from a clinical perspective.

Therapist 1 describes her perception of a process beginning with physical exhaustion which then progresses via a depressive psychological response towards Burnout.

Schema Therapist 1 (51-59): And then later on as the exhaustion sets in, it's hard keeping going, and that's when they're actually starting probably to go into some sort of a depression but certainly the tiredness and...along with that will come the Burnout and the Cynicism...

The following quote illustrates the unhelpful thought processes resulting from EMS, which in cognitive therapy terms might be described as attribution errors and cognitive distortions.

ST1 (550-553): Then people can start attributing it to self rather than to the world. It's a sort of depressogenic thinking...like going into the early stages of depression rather than thinking 'well, hang on, what's going on here, it's not my fault' and getting some kind of perspective on it.

Therapist 2 talks about the specificity of Burnout as a 'work-related depression', with an implication that the individual may not be impacted across all areas of their life, but may solely adopt a depressive approach to their work environment, role and experiences.

Schema Therapist 2 (536-544): Some people have talked about Burnout being similar to depression...it's sort of work-related depression. Different from depression because depression is general, it's across all areas of a person's life...and so the Negativity/Pessimism, the focus on negative outcomes and the belief that ultimately everything's falling apart would be quite a reasonable one, wouldn't it, if someone is becoming quite burnt out?

Therapist 2 makes a distinction between the EMS of Vulnerability to Harm/Illness as a forward-looking, anxiety-provoking schema, and Negativity/Pessimism as being a schema more related to depression.

ST2 (573-578): I mean, the Vulnerability to Harm/Illness again is an interesting one because it's the idea that disaster is just around the corner and everything's going to fall apart. It's sort of similar to Negativity/Pessimism except I've found that Vulnerability to Harm/Illness seems to be more anxiety-based whereas Negativity/Pessimism is more depression-based.

Therapist 3 also identifies the EMS of Negativity/Pessimism as being linked to a depressive, hopeless state, and which might be a consequence of 'threat schemas' such as Vulnerability to Harm/Illness and Mistrust/Abuse.

Schema Therapist 3 (284-298): But Negativity/Pessimism is the schema that in my mind points to a coping mode of hopelessness and defeat; a sort of give-up mode...overlapping with Cynicism in a way.

Vulnerability to Harm/Illness points to...destitution, natural disaster or health issues. There's Mistrust/Abuse; that's another form of threat but from other people, and then the insufficient resources to deal with it is the lack of self-discipline and Dependency/Incompetence...they experience themselves as not having sufficient resources to survive well, to do well, and so they end up in the pessimistic hopeless mode or that schema being triggered because they can't see a way out.

In this section the therapists link Burnout to their own clinical understanding of depression and anxiety, and also related EMS. The quotes highlight the fact that, although Burnout is not a clinical diagnosis in itself, it is still strongly embedded within a clinical approach. Additionally, we are offered insight into how the EMS of Negativity/Pessimism and Vulnerability to Harm/Illness might link to depression and anxiety.

4.2.2.5 Superordinate theme four: Formulation and intervention

4.2.2.5.1 Clinical cut-offs for EMS

Therapists 1 and 2 reported that they look for YSQ scores of four and above when assessing for EMS pathology, whereas Therapist 3 looks for scores above four. These appear to be 'rules of thumb' rather than driven by any clinical protocols, and are often used on a 'scanning basis' across all questions rather than computed for overall EMS averages.

Schema Therapist 1 (397-401): Clinically, we really just look at anything four and above on the individual scores so if you multiplied the number of questions by four, you would get an overall total picture because anything above that is clinically significant information.

Schema Therapist 2 (289-290): In terms of clinical significance... I would use four.

Schema Therapist 3 (780-787): Clinically, the way I use it is any scores of 5 or 6 suggest a presence of a schema. If there's only one, then I would ask about it and try and make sense of that within the context, and then I would add up totals for each schema and

then pick out the top 3 or 4. If there are a lot that are in the 20s then it suggests that they're all essentially present, but it isn't so much this number and above suggests the presence of a schema, it's more which shows up as more strong than others.

These responses illustrate a general approach in terms of EMS clinical significance, but also an emphasis on individual formulation and using EMS scores to ask relevant questions of clients in developing this formulation.

4.2.2.5.2 EMS and mode/coping

As mentioned previously, these therapists were keen to convey the importance of looking beyond the presence of EMS to incorporate coping strategies and schema modes when thinking about formulation and intervention, illustrated by these quotes from Therapists 3 and 2.

Schema Therapist 3 (194-199): I use the YSQ and I think in both schema terms and mode terms, but in terms of my working model with my clients...we start off by looking at schemas and then they feed an understanding of their modes. So, my work ends up being primarily mode model, but with ongoing reference to the idea of schemas. So, for me I span both.

Schema Therapist 2 (656-661): That's what we're saying, you know, some people might be developing coping strategies. Some people might be developing a surrender coping strategy and some might be developing an Over-compensatory coping strategy. So people with the same underlying schemas might be presenting...in a very different way.

Therapist 2 makes an additional point to exercise some caution in adapting Schema Therapy to applications beyond personality disorders, although he acknowledges that it has already been extended to presentations such as anxiety and stress, which are linked to Burnout. He also offers encouragement in developing a mode conceptualisation for Burnout in relation to potential interventions.

Schema Therapist 2 (753-762): So it will be better to clump them into modes. But then again you have to be careful not to pathologise things too much because a mode...originates from working with people with originally quite severe personality

disorders. It's being used a lot more with milder kind of presentations and people with anxiety and stress and so on. But I think you just have to be careful not to overstate it really. But, yes, I think having a mode conceptualisation might make it easier to extrapolate and maybe work therapeutically.

Therapist 1 notes that EMS may have a dynamic nature when measured by the YSQ at various stages, from assessment through to the end of a therapeutic intervention.

Schema Therapist 2 (200-206): ...it's not completely fixed...if I understand it correctly, because what I see is are changes on the YSQ at different stages in therapy so when somebody's seeking therapy and they're more distressed, they'll score high on the YSQ. And it will come down to lower levels when there's been some resolution of the issues that are bothering them.

This section reiterates the importance of incorporating coping strategies and schema modes into overall formulation. Mode work forms the basis of Schema Therapy interventions and therefore it seems important to link any EMS profiling to an understanding of prevalent modes for the client, as this will provide insight into which EMS are being activated. Encouragement is then provided to develop conceptualisations linking EMS and modes, although some caution is urged in adapting Schema Therapy to 'pathology' such as Burnout, given Schema Therapy's origins in addressing personality disorders. Finally, it includes an important assertion that schemas are not completely fixed and rigid. Changes in EMS profile are seen pre/post-successful Schema Therapy interventions.

4.2.2.5.3 Signposts to intervention

Therapist 1 stresses the difference between standard CBT interventions and a Schema Therapy-based intervention which addresses deeply held beliefs about the self, suggesting that standard CBT may offer a temporary reduction in symptoms but will not address rigid schemas and therefore underlying vulnerability.

Schema Therapist 1 (791-797): The point is that if people don't have treatment, the schemas won't change and then they get activated and cause a lot of distress for

people...if they don't get into the kind of therapy that addresses those aspects of their functioning then even with treatment, things may not improve...so if they went to a standard CBT intervention, they may get some improvement but it's not going to necessarily address the underlying sense of themselves.

As a final contribution, participant 2 offers some thoughts about potential Burnout interventions informed by this study and Schema Therapy in general. Specifically, he talks about workshops that could help people become more aware of their own schemas in the context of their working environments. He refers to background information in the stimulus material and suggests that such interventions would be positioned at a 'secondary level' of intervention, i.e., sub-clinical and designed to build resilience skills, reducing the need for tertiary (clinical) interventions at a point when Burnout has fully taken hold.

Schema Therapist 2 (673-687): I think you could come out with...more general kind of indicators for interventions that would help people more broadly... a general ...manualised kind of approach. Because hopefully you're not talking about clinical levels, you're talking about... primary, secondary and tertiary levels of intervention, probably talking about more stress management at level two aren't you...stress management workshops and becoming more aware of your own schemas. And the way they interact on your working environment and what triggers activate them and what kind of interventions you can use to reduce those.

Previous sections have included a number of observations relating to potential Burnout interventions informed by Schema Therapy. In addition to an overall rationale, this final point provides a signpost towards a potential format for delivery. It offers a distinction between clinical-type interventions and something that might appeal more broadly to organisations, providing an upstream training-based intervention that will enable individuals to become aware of their own EMS and how they interact with the workplace, and offer techniques to mitigate potentially harmful effects.

5 Discussion

In this chapter, the study findings will be reviewed and explored in the context of the existing literature. A critical evaluation of the research study will take place, paying particular attention to the methodological considerations, including limitations of the research and further research possibilities. Implications of the findings will then be considered in the context of assessment, formulation and interventions addressing Burnout, ending with final reflections and conclusions.

5.1 Overview

Burnout presents significant psychological, physical and economic threats to both individuals and organisations (Schaufeli et al., 2008). In the UK alone, more than 10 million working days annually are reported as lost to occupational stress (HSE, 2013), and the total costs of mental health illness at work estimated at more than £100 billion annually (Sainsbury Centre for Mental Health, 2007).

Although Burnout is not a clinical diagnosis in itself, it potentially has a correlate in work-related neurasthenia (ICD-10; World Health Organisation, 1992), and arguably can be considered an adjustment disorder (DSM-5; American Psychiatric Association, 2013), or potentially “undifferentiated somatoform disorder” (USD; Bankier, Aignier & Bach, 2001). It can be clinically linked to anxiety and depression, and is also believed to lead to circulatory, respiratory and musculoskeletal disorders (Toppinen-Tanner et al., 2005).

The aim of this study was to open a dialogue linking a clinical understanding of both Acceptance and Commitment Therapy (ACT) and Schema Therapy to the construct of Burnout. This was conducted in two phases: firstly, a quantitative study exploring the relationships between Psychological Inflexibility (from ACT and measured by the AAQ-ii) and Early Maladaptive Schemas (from Schema Therapy and measured by the YSQ-S3) and the three dimensions of Burnout as measured by the MBI-GS; and secondly, qualitative interviews conducted with therapists drawn from the two therapeutic approaches to explore the data relationships found, and to create a broader theoretical and clinical discussion around how ACT and Schema Therapy can be applied to Burnout.

5.2 Discussion of main findings

5.2.1 Quantitative study

A total of 506 participants completed the online survey, representing a broad cross-section of occupations, management levels and sizes of organization. Participants were primarily UK-based (80%), and predominantly females (68%). Both these figures are unsurprising, as the study was conducted by a UK-based researcher from a UK-based academic institution (City University London) and also it is known that women are more likely to engage with mental health-related material (Mental Health Network NHS Federation, 2011). Furthermore, during the survey stage of the study, the researcher was more often contacted by women in connection with discussing and promoting the research.

5.2.1.1 ‘Burnout pathology’

Substantial levels of Burnout were indicated by participants across two of the three MBI–GS dimensions. High levels of Emotional Exhaustion were reported by 38.5% of the sample and high levels of Cynicism by 45.1%. Interestingly, low levels of Professional Efficacy (which would normally indicate Burnout) were only reported by 25.1% of participants. The cut-offs for ‘low’, ‘medium’ and ‘high’ are drawn from the MBI manual and reflect the normative distribution of scores from the original samples divided into thirds (Maslach et al., 1996). On a direct comparison with the current study’s sample, a profile emerges demonstrating somewhat higher levels of Emotional Exhaustion than the norm, and substantially higher levels of Cynicism, but somewhat lower levels of diminished Professional Efficacy.

Various approaches have been developed to determine clinical cut-offs for Burnout, reflecting a medical practitioner-driven need for dichotomy and diagnosis, and linking to potential medical insurance funding decisions (Maslach et al., 2008). One established decision-rule is to diagnose clinical Burnout in individuals with a ‘high’ score on the exhaustion dimension combined with a ‘high’ score on either of the other two MBI dimensions (Brenninkmeijer & Van Yperen, 2003; Roelofs et al., 2005). Using this diagnostic rule, adopted by the Royal Dutch Medical Association in 2000 (Maslach et al.,

1996), it is evident that a significant proportion of the current sample would receive a diagnosis of clinical Burnout.

A key validation study carried out into the MBI-GS (Bakker, Demerouti, & Schaufeli, 2002) published mean scores for Emotional Exhaustion of 2.22/1.96 for females/males respectively. The equivalent scores in the current study were 2.74 across both genders, substantially higher. For Cynicism, the 2002 study's mean scores were 2.23/2.06 (current study 2.29). For Professional Efficacy the scores were 3.75/3.93 (current study 4.55). Only on this final dimension did the current study indicate lower levels of Burnout.

Another Dutch study, published by Kleijweg et al. (2013), sought to examine the clinical utility of the MBI in a clinical population, and in this instance demonstrated higher levels of Burnout across all three dimensions than the current study (overall mean scores of 3.81/2.76/3.78 across the three MBI dimensions respectively), although this reflects a sample all referred by occupational physicians or general practitioners to a centre specialising in treating work-related psychological disorders, including depression, anxiety and adjustment disorders, so it could be expected that mean Burnout scores would be significantly higher than the current study's general sample.

The MBI manual offers a range of comparison means, though points out that these are all convenience samples therefore not representative of national or occupational populations. If the current sample is compared against the Dutch MBI sample, levels of Burnout look high.

Table 24 - Sample means for MBI Dutch sample and current study

Sample	N	Exhaustion	Cynicism	Efficacy
Dutch civil servants	956	1.57	1.54	4.14
Dutch rural workers	761	1.28	1.39	4.86
Current study	506	2.74	2.29	4.55

It is also interesting to note here that Professional Efficacy is highest among Dutch rural workers, which contrasts with the findings from the current study (reported in section 4.1.7.5) which indicates that Professional Efficacy increases with more senior management positions. This may relate to a point made by one of the schema therapists interviewed that Professional Efficacy is a proxy for locus of control, and this may imply that a rural worker unaffected by complex modern managerial structures has a strong sense of personal control only matched by those at the top of the 'corporate ladder' in modern society. To feel like 'a small cog in a large machine' could arguably be a key predisposing factor to Burnout.

To provide contrast, among a sample of Canadian management workers from the MBI manual, Burnout levels in the current study look less alarming for Emotional Exhaustion and Professional Efficacy but still show dramatically higher levels of Cynicism. Given that Cynicism is seen as a dysfunctional and time-limited coping mechanism to mitigate Emotional Exhaustion (Maslach et al., 2008), unusually high levels of Cynicism imply a potential crisis in future Exhaustion levels.

Table 25 - Sample means for MBI Canadian sample and current study

Sample	N	Exhaustion	Cynicism	Efficacy
Canadian management	310	2.55	1.32	4.73
Current study	506	2.74	2.29	4.55

5.2.1.2 Differences in Burnout by age and gender

5.2.1.2.1 Analysis of variance on Individual Burnout dimensions (Anova)

The two-way anova analyses carried out showed a significant but small main effect of both age and gender on levels of Emotional Exhaustion.

The mean score for females was 2.86 and 2.50 for males. This gender difference reflects the overall findings in most earlier MBI studies and the MBI-GS validation study carried out by Bakker et al. (2002), although the latter study showed higher levels of Cynicism

among females, whereas the current study showed marginally higher mean scores for both Cynicism and Professional Efficacy among males.

Attempts have been made to explain the gender difference in exhaustion. Shaufeli and Enzmann (1998) argue that women in occupations requiring a high level of educational qualification (likely in the current study due to the high proportion of middle to senior managers) are required to demonstrate their competence more than their male counterparts in order to succeed, potentially leading to Burnout. It is also argued that women are more responsive emotionally, and accordingly more likely to reveal emotional and mental health problems than men (Ogus, Greengrass, & Burke, 1990). A societal perspective is provided by Merllie and Paoli (2001) observing that working females experience greater overall workload than working males, due to added domestic responsibilities.

With age, post-hoc analysis demonstrated a significantly lower mean Emotional Exhaustion score for the 65+ age group than both the 26-34 and 35-44 age groups. This is consistent with the demographic norms reported in the MBI manual (Maslach et al., 1996) which show a steady decline in the dimensions of Emotional Exhaustion and Depersonalisation (MBI-HSS and MBI-ES) with increasing age alongside increasing Personal Accomplishment, although this last dimension shows a decline above age 50 (still remaining above that of those aged 40 and under). However, the later MBI-GS validation study mentioned above (Bakker et al., 2002) was unable to demonstrate a significant Burnout:age relationship, and it is important to note that the 65+ age group is under-represented in the current sample (less than two percent) which makes a 'real world' inference difficult.

No significant main effects were found for age or gender on either Cynicism or Professional Efficacy.

5.2.1.2.2 Multiple analysis of variance on combined Burnout dimensions (MANOVA)

MANOVA analysis for age and gender was consistent with the above results and literature references. A significant effect was found for age on the combined Burnout dimensions, but when the dimensions were considered separately using Bonferroni adjustment, only Emotional Exhaustion was significant, with the largest difference being between the 26-34 age group and the (under-represented) 65+ age group.

For gender, again a significant effect was found on the combined Burnout dimensions, but when considered separately using Bonferroni adjustment, none reached statistical significance.

5.2.1.2.3 Differences in Burnout by other biographic variables using MANOVA

Size of organization

MANOVA analysis showed a significant effect for size of organisation on the combined Burnout dimensions. When the dimensions were explored separately using a Bonferroni adjusted alpha level, significant effects were found on Cynicism and Professional Efficacy. A clear relationship was demonstrated that Cynicism increased with size of organization, whereas Professional Efficacy diminished overall. Effect size was larger for Professional Efficacy, but both remained within the small effect category.

This appears to signal that larger organisations need to be aware of these markers of Burnout, especially with Cynicism seen as a potential precursor for Emotional Exhaustion. Little analysis of Burnout by organisation size was found when conducting a literature search, although Koustelios (2009) found a significant relationship between organisation size and Burnout on the Emotional Exhaustion and Personal Accomplishment dimensions of the MBI among employees working in Greek sports centres. Additionally, a 2013 study carried out by UK recruitment company Robert Half¹⁹ found that human resource

¹⁹ <http://www.roberthalf.co.uk/id/PR-03557/Employee-Burnout>, accessed 20.11.14

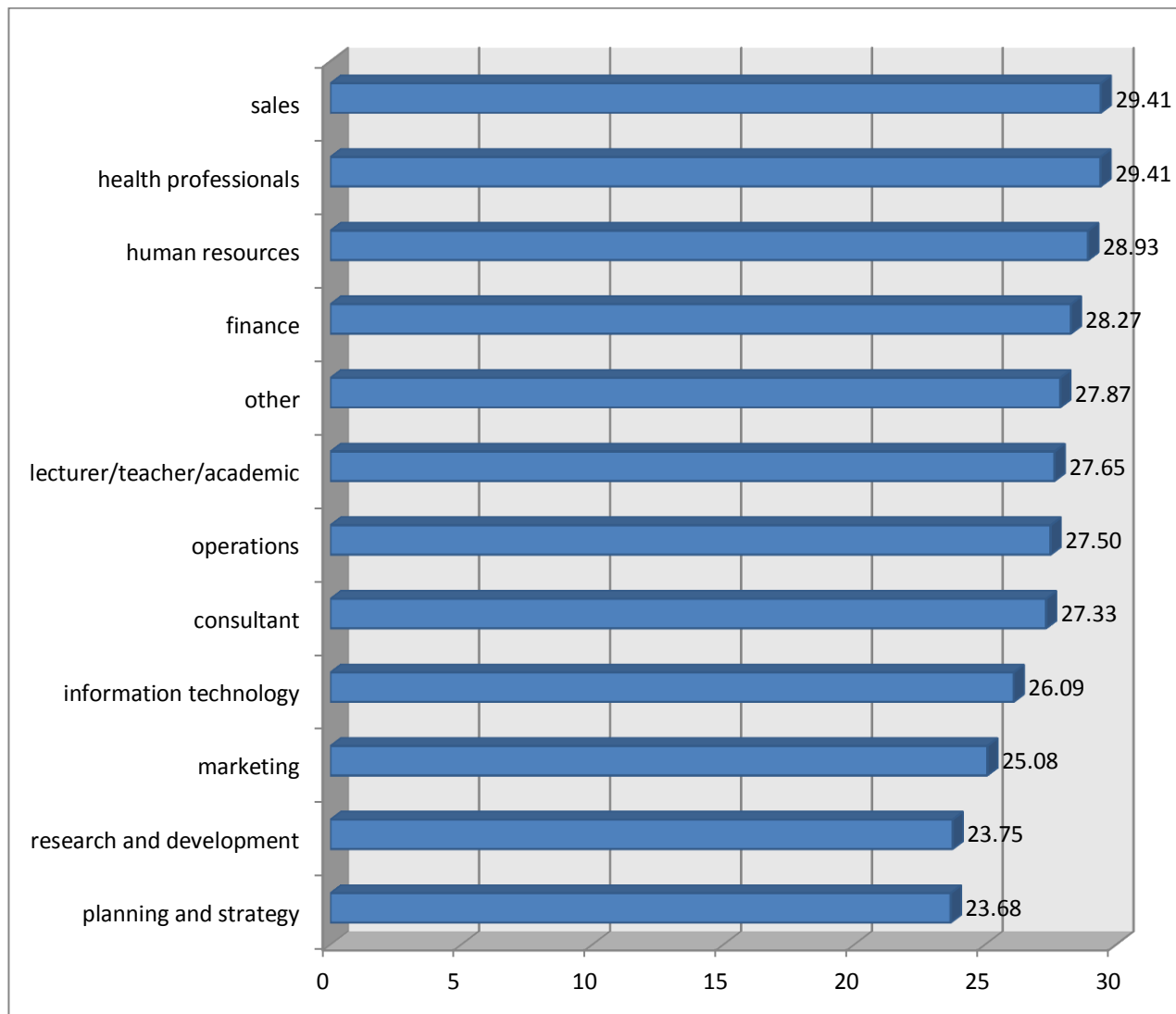
directors in the largest UK companies were most likely to cite workload as the main factor in causing Burnout.

Functional role

A significant effect was found between functional role on the combined Burnout factors, and separately for Professional Efficacy when using Bonferroni adjustment. The effect size was medium (partial eta squared of .6).

Figure 13 shows that, for this sample, Professional Efficacy is highest amongst those in sales roles and lowest among those working in planning and strategy functions.

Figure 13 - Professional Efficacy mean values by job function



Level of management

MANOVA demonstrated a significant difference between levels of management on the combined Burnout dimensions. When the dimensions were considered separately, both Cynicism and Professional Efficacy reached statistical significance.

The lowest levels of Cynicism were found amongst board level/CEO participants (mean 6.44), but interestingly were highest among those in middle management roles, potentially employees with increased responsibility over non-management colleagues, but possibly lacking the authority and autonomy of those in more senior positions.

The relationship between management level and Professional Efficacy seems to be more straightforward, in that the most senior participants reported the highest levels of Professional Efficacy (mean 31.05) whereas those in non-management roles reported the lowest levels (mean 24.62).

The researcher was unable to find any published literature directly linking management level with Burnout, but a number of studies exist which have explored the concept of 'job control' in this context. Job control refers to the amount of control an individual has over their work situation (Taris, Stoffelsen, Bakker, Schaufeli & van Dierendonck, 2005) and can be considered a proxy for management level, as it seems likely that more senior managers have a greater degree of autonomy in day to day work activities. Using an expert panel of raters (validated for inter-rater reliability) to assess job control, Taris et al., (2005), in their study of 9,503 Dutch workers representing 28 occupational groups, reported that job control was inversely correlated with Burnout (measured via the MBI), explaining 16% of Burnout variance. Additionally, Hatinen, Kinnunen, Pekkonen and Kalimo (2007) conducted a quasi-experimental study which compared two 'Burnout rehabilitation programmes', one featuring a strong element of organisational redesign to improve perceived job control, and one which focused solely on 'individual cognitive strategies'. The study, among 52 Finnish workers from a range of organisations, used a validated psychometric measure of perceived job control (Bergstrom, Jarvisalo, Kaleva, Lappalainen, Moilanen, Forss et al., 1997; cited in Hatinen et al., 2007), and concluded

that the experimental condition resulted in significant decreases in Exhaustion and Cynicism compared with the control group.

5.2.1.3 Analysis of main IV/predictor variables

5.2.1.3.1 Psychological Inflexibility

Overall the sample demonstrated a mean Psychological Inflexibility score (as measured by the AAQ-II) of 20.99, with a broad range of individual scores from seven (the minimum level of Psychological Inflexibility possible) through to 49 (the maximum level possible).

As with the MBI-GS, the AAQ-II is not intended as a clinical diagnostic tool, but a measure of a specific psychopathology integral to the theoretical underpinnings of Acceptance and Commitment Therapy (ACT). However, for comparative purposes, Psychological Inflexibility has been linked to clinical cut-off values as defined by such common mental health diagnostic tools as the BDI-II (depression), GHQ-12 (general mental health) and the GSI (Global Severity Index) scale of the SCL-90R (measure of 'current psychopathology'). This analysis has led to establishing a 'clinical cut-off' of 24 to 28 on the AAQ-II (Bond et al., 2011). On this basis, using the lower value of 24 as a cut-off, 180 participants (35.6% of the current sample) can be viewed as having a level of Psychological Inflexibility likely to cause clinical distress.

There is some ambiguity in comparing studies using the AAQ-II, as studies prior to 2011 and some since) used the original ten-item version before this was reduced to the seven-item version currently promoted by the Association for Contextual Behavioural Science (ACBS) and used in the current study. Researchers who have used the seven-item version include Meyer, Morissette, Kimbrel, Kruse and Bird Gulliver (2013), reporting a mean score of 24.6 among US war veterans, not greatly above the current study, and among a sample that might be expected to show significantly higher levels of Psychological Inflexibility in the form of experiential avoidance than a general working sample.

Gillies, House, Rollock, Salazar, Waller, Zeidan and Stepleman (2013) reported a mean AAQ-II score of 14.81 in a study of 275 US medical students and residents, with 12.2% above the clinical cut-off score of 24. Higher Psychological Inflexibility scores correlated significantly with other measure of distress. As part of a study to establish a Portuguese

version of the AAQ-ii, Pinto-Gouveia, Gregório, Dinis, and Xanier (2012) reported a mean of 20.14 among its non-clinical sample and a mean of 33.47 among its clinical sample meeting a criteria of at least one Axis ii disorder.

The key finding for the current study seems to be that over one third of a non-clinical sample are demonstrating clinical levels of Psychological Inflexibility, suggesting a need for targeted interventions in the workplace.

5.2.1.3.2 EMS

Using the clinical cut-off of an average item response score of four or above within each EMS (Rafaeli et al., 2010), the overall incidence of each EMS within the current sample was calculated. The most prevalent EMS was that of Unrelenting Standards/Hypercriticalness, identified in just over half the total sample (50.6%). The next most prevalent EMS was Self-Sacrifice (33.0%), followed by a further nine EMS identified in more than 10% of the sample (Approval/Recognition Seeking, Social Isolation/Alienation, Entitlement, Negativity/Pessimism, Insufficient Self-Control/Discipline, Emotional Inhibition, Emotional Deprivation, Mistrust/Abuse and Punitiveness).

The author is not aware of any published norms for EMS. Additionally, although early versions of the YSQ have been extensively tested and validated, very little research has been published using the YSQ-S3, as reported by Hawke and Provencher (2012) in their validation study of the YSQ-S3 among 1069 clinical and non-clinical participants (clinical sample all outpatients in treatment for depression, anxiety or mood disorders). Table 26 shows a comparison between the mean EMS scores from Hawke and Provender's (2012) study and the current research.

Table 26 - Comparison of EMS means between current study and Hawke and Provender (2012)

EMS	Current study ²⁰	H & P non-clinical	H & P clinical
Unrelenting Standards/Hypercriticalness	3.90	3.20	3.43
Self-Sacrifice	3.40	2.93	3.46
Approval/Recognition Seeking	3.00	2.49	2.83
Entitlement	2.90	2.47	2.50
Insufficient Self-Control/Discipline	2.78	2.04	2.50
Punitiveness	2.70	2.35	2.70
Social Isolation/Alienation	2.62	2.30	3.11
Negativity/Pessimism	2.60	1.99	2.93
Emotional Inhibition	2.54	2.32	2.71
Mistrust/Abuse	2.50	1.83	2.33
Subjugation	2.30	1.75	2.59
Emotional Deprivation	2.24	1.73	2.46
Abandonment/Instability	2.22	1.96	2.91
Vulnerability to Harm/Illness	2.18	1.68	2.44
Failure	2.02	1.65	2.50
Defectiveness/Shame	1.94	1.43	2.25
Dependence/Incompetence	1.80	1.55	2.23
Enmeshment/Undeveloped Self	1.64	1.47	2.09

For each EMS the highest mean score across the 3 samples is highlighted in bold. Unsurprisingly, the Hawke and Provencher clinical sample shows the highest level of 'EMS pathology' overall, with the highest mean scores for 13 of the EMS. However, the current study shows the highest mean scores for the remaining five EMS, namely Unrelenting Standards/Hypercriticalness, Approval/Recognition Seeking, Entitlement,

²⁰ Reported here as individual item means to enable direct comparison with the Hawke and Provencher study.

Insufficient Self-Control/Discipline and Mistrust/Abuse. The current study shows higher mean scores for all 18 EMS compared with Hawke and Provencher's non-clinical sample. These comparisons suggest that 'schema pathology' exists within the current sample, and that the five EMS listed above warrant further exploration within the context of Burnout, and also the broader implications for wellbeing if this is reflective of schema profiles for senior managers within organisations.

5.2.1.3.3 Relationships between EMS and Burnout

The study found numerous EMS correlating significantly with each Burnout dimension. Twelve EMS had a Pearson Correlation coefficient greater than .3 with Emotional Exhaustion, similarly eleven EMS with Cynicism. Only two EMS achieved this strength of correlation with Professional Efficacy. From this it can be inferred that within this sample there is a strong relationship between levels of EMS and levels of Burnout across the dimensions of Emotional Exhaustion and Cynicism.

As mentioned earlier, the author is only aware of one published study that has explored the relationship between EMS and Burnout (Bamber & McMahon, 2008). This study also reported numerous significant Pearson correlations between EMS and Burnout, but only three EMS achieved correlation coefficients of greater than .3 with Emotional Exhaustion, three with Depersonalisation and one with Personal Accomplishment²¹. On this measure, the current study has found stronger relationships between EMS pathology and Burnout, which may be a characteristic of a more diverse organizational sample rather than Bamber and McMahon's sole-NHS focus.

5.2.1.3.4 Relationships between Psychological Inflexibility and Burnout

Strong significant correlational relationships were found between Psychological Inflexibility (as measured by the AAQ-ii) and all three dimensions of Burnout. These can be compared with correlations reported in the recently published study by Ruiz & Odriozola-González (2014), the only published research the author is aware of that included the MBI-GS and AAQ-ii among its measures.

²¹ This study used the original version of the MBI rather than the MBI-GS, which although closely related is not directly comparable. Additionally, it used an earlier version of the Young Schema Inventory (YSQ-1) which contains three fewer EMS (not including Approval/Recognition-Seeking, Negativity/Pessimism and Punitiveness).

Table 27 – Comparison of Burnout:Psychological Inflexibility correlations between current study and Ruiz and Odriozola-González (2014)

MBI-GS dimension	Correlations with Psychological Inflexibility	
	Ruiz & Odriozola-González	Current Study
Emotional Exhaustion	.43	.58
Cynicism	.36	.53
Professional Efficacy	-.17	-.36

The primary aim of the Ruiz and Odriozola-González study was to explore the psychometric properties of a Spanish version of the recently developed Work-related Acceptance and Action Questionnaire, or 'WAAQ' (Bond et al., 2013) but it is interesting to note that the current study found stronger relationships between the MBI-GS and Psychological Inflexibility. A notable difference between the two samples is that 79.1% of the Ruiz & Odriozola-González sample considered themselves 'line-level workers' whereas in the current study 43.9% classified themselves as 'senior management, board level/CEO or professional/consultant'.

The Ruiz and Odriozola-González study has also added to the nascent debate as to whether a more specific work-based measure of Psychological Flexibility/Inflexibility is required (Bond et al., 2013). The theoretical argument supporting the development of the WAAQ is the centrality of context in Acceptance and Commitment Therapy theory which suggest that any individual may display different levels of Psychological Flexibility across different contexts, for example being able to respond to parenting challenges at home but failing to show the same responsiveness in the workplace (Bond et al., 2013). The Ruiz and Odriozola-González and Bond et al. studies were consistent in finding both stronger relationships between the WAAQ and work-related variables, and stronger relationships between the AAQ-ii and more general mental-health variables. The exception to this was overall job satisfaction measures, which in the Ruiz and Odriozola-González study were more highly correlated with AAQ-ii. The inclusion of the MBI-GS in the Ruiz and Odriozola-González study, and it's higher correlation with AAQ-ii than WAAQ, offers a suggestion

that the MBI-GS is a more clinically focused instrument than the work-related measures utilised in that study such as the Utrecht Work Engagement Scale (UWES-17; Schaufeli, Bakker, & Salanova, 2006) and the Psychological Empowerment Inventory (PEI; Spreitzer, 1995). As such, it would seem appropriate to retain the AAQ-ii for Burnout-related studies and others exploring psychological distress in the workplace, as opposed to those exploring constructs such as work engagement.

5.2.1.4 Regression analysis and predictors

5.2.1.4.1 Forced regression

Two different approaches were adopted in this study towards regression analysis. Due to the mixed methods design, which involved presenting quantitative data relationships to two different groups of qualitative participants, drawn from Acceptance and Commitment Therapy and Schema Therapy respectively, it was decided to keep the YSQ-S3 and AAQ-ii data separate at that stage. By adopting this approach it was possible to keep the data in relatively straightforward form and to avoid potentially confusing overlap between the different data relationships. Additionally, given that no strong initial correlations were found with other demographic and work-related variables, these were excluded at this stage.

As such, a basic forced regression analysis was conducted using the highest correlating EMS with each Burnout dimension, the results of which were presented and discussed with the Schema Therapist participants, whereas the correlational relationships between AAQ-ii and each Burnout dimension were presented and discussed with the Acceptance and Commitment Therapy participants.

For Emotional Exhaustion, the EMS forced regression analysis indicated that, combined, the EMS of Negativity/Pessimism, Insufficient Self-Control/Discipline, Mistrust/Abuse and Dependence/Incompetence significantly predict 29% of the variance, and that Negativity/Pessimism made the largest unique contribution to the model.

For Cynicism, the forced regression analysis indicated that, combined, the EMS of social isolation/alienation, Insufficient Self-Control/Discipline and Vulnerability to

Harm/Illness significantly predict 27% of the variance, and that social isolation/alienation made the largest unique contribution to the model.

For Professional Efficacy, the forced regression analysis indicated that, combined, the EMS of Failure, Insufficient Self-Control/Discipline, Emotional Inhibition, Subjugation and Negativity/Pessimism significantly predict 18% of the variance, and that Failure made the largest unique contribution to the model.

These relationships are largely inconsistent with those reported by Bamber and McMahon (2008) who, following multiple regression analysis (method not specified) reported that the EMS of Emotional Deprivation was predictive of Emotional Exhaustion, the EMS of Subjugation and Entitlement were predictive of Depersonalisation and the EMS of Emotional Inhibition was predictive of reduced Personal Accomplishment. The only EMS to be included in the models from this study is that of Emotional Inhibition in relation to Professional Efficacy. As mentioned earlier, this is not entirely surprising due to significantly different workplace samples, and the use of different YSQ and MBI instruments.

5.2.1.4.2 Multiple regression analysis

Following the qualitative interview stage of this research, it was decided to conduct stepwise multiple regression analysis incorporating both YSQ-S3 and AAQ-ii data, alongside demographic and work-related variables.

This enabled models to be created for the three dimensions of Burnout, each of which explained greater levels of variance within each dimension than the initial forced regression approach.

For Emotional Exhaustion, the results of the stepwise multiple regression analysis indicated that, combined, AAQ, the EMS of Unrelenting Standards/Hypercriticalness, Vulnerability to Harm/Illness, Punitiveness, Insufficient Self-Control/Discipline and Entitlement, organisation size and age significantly predict 42% of the variance.

Only Insufficient Self-Control/Discipline has remained from the initial forced regression approach, and whereas age is associated with lower levels of Burnout in the literature

(Maslach et al., 1996), the EMS of Punitiveness and Entitlement have also emerged as statistically protective factors for Emotional Exhaustion. Although all EMS are by definition maladaptive, it is perhaps possible to consider Punitiveness, if focused outwards, as a way of blaming others for work-related problems. Equally, a sense of entitlement, with its narcissistic undertones, may enable an individual to develop a work situation where others 'take the brunt' of workload, especially if that individual has the charisma and persuasiveness to convince their peers that this sense of entitlement is justified. Within the Entitlement EMS there is also a sense of excessive competitiveness and assertiveness, which again may enable an individual to ensure their job-role is less exposed to the overall pressures of the organisation.

For Cynicism, the results of the stepwise multiple regression analysis indicated that, combined, AAQ, organisation size, and the EMS of Social Isolation/Alienation, Insufficient Self-Control/Discipline, Punitiveness and Emotional Inhibition significantly predict 39% of the variance of Cynicism. For this Burnout dimension, the two largest contributing EMS of Social Isolation/Alienation and Insufficient Self-Control/Discipline both remain from the initial forced regression. It could be argued that Social Isolation/Alienation is compounded by increased home-working and 'hot-desking' in modern organisations, with a consequence that work is no longer able to meet certain key 'social needs'. This is potentially an issue that organisations can address via other mechanisms, e.g. more work-social events or possibly online networking forums for employees. Insufficient Self-Control/Discipline also appears to have a strong relationship with Cynicism, and it may be that organisations can offer specific support to individuals scoring highly on this EMS.

Interestingly, organisation size is the second most significant unique contributor to this model, and this seems to fit with the theoretical construct of Cynicism as a 'distancing mechanism'. The opportunity to disengage from one's colleagues and professional objectives is generally easier within larger organisations where individual visibility is lower and the potential exists to be 'lost in the crowd', which may be attractive to some individuals but can be a toxic combination with the EMS of Social Isolation/Alienation as outline above.

Again, the EMS of Punitiveness emerges as a protective factor, and this begins to lend credence to an idea of 'blame culture' where an individual can protect themselves by focusing on the 'political aspects' of their role rather than direct functional responsibilities. The idea of a blame culture is an important separate topic in the literature, and although often focused on medical organisations such as the NHS (Gorini, Miglioretti & Pravettoni, 2013) where literally life and death are at stake, it is a theme that can potentially be repeated throughout all organisations.

For Professional Efficacy, the results of the stepwise multiple regression analysis indicated that, combined, AAQ, organisation size, management level and the EMS of Failure, Insufficient Self-Control/Discipline, Self-Sacrifice, Emotional Deprivation and Abandonment/Instability significantly predict 26% of the variance. The two greatest contributing EMS are consistent with the forced regression conducted earlier. The Failure EMS seems to define the loss of Professional Efficacy but it is interesting to see Insufficient Self-Control/Discipline feature significantly again. The description of this EMS relates to an inability or unwillingness to manage frustration when goals appear to be thwarted, and it may be that anger management and assertiveness training can be used to mitigate its effects in the workplace.

Whereas for the other two dimensions of Burnout, Psychological Inflexibility (AAQ) made the largest unique model contribution, for Professional Efficacy it was the EMS of Failure that made the largest individual contribution. This is highly consistent with the theoretical construct of the Failure EMS, which is defined by low self-esteem in terms of personal characteristics and a pervasive sense of underachievement in comparison with one's peers (Young et al., 2003).

The EMS of Abandonment/Instability and Self-Sacrifice produce a positive predictive effect, suggesting these may be a protective factor for the loss of Professional Efficacy. For Abandonment/Instability it is possible that the underlying thoughts of not being able to rely on others might lead to a sense of self-reliance, and within a sample such as this featuring a relatively high level of overall achievement, it is possible that this drive for self-reliance has resulted in a strong sense of Professional Efficacy. However, we have also observed within this study that relatively high levels of Professional Efficacy have been

associated with relatively high levels of Burnout, so we cannot assume this EMS has somehow become adaptive for this sample.

Management level has also appeared as something which is significantly related to Professional Efficacy, suggesting that senior managers are more likely to retain a strong sense of Professional Efficacy, although the relative effects of management level within the model are weak.

5.2.1.4.3 A single factor for Burnout?

Maslach et al. (1996) strongly advocate the three-dimensional approach which forms the basis of the MBI in its various forms, and argue that this provides a more helpful understanding than a single dimension. This approach is endorsed by the fact that around 90% of all Burnout research uses the MBI (Schaufeli et al., 2008).

However, the above analysis illustrates that predictive models for Burnout will then have to deal with each dimension separately. As will be addressed in the discussion of the qualitative interviews, the concept of three separate Burnout dimensions also proved challenging to both the Acceptance and Commitment and Schema Therapy therapists when thinking about assessment, formulation and intervention for Burnout.

On this basis, a primary components (factor) analysis was carried out on the dimensions of Burnout to explore whether it was possible to establish a single Burnout factor to streamline the regression modelling process. Although initial factor analysis was supportive of a three-factor construct, inspection of the scree plot also suggested that a two-factor solution could potentially be justified. When the factor analysis was re-calculated on this basis, the individual items from the dimensions of Emotional Exhaustion and Cynicism loaded heavily onto one factor. Given that the models reported above using stepwise regression were able to explain significantly more variance in these two dimensions, it was decided to run further stepwise regression on this new 'single Burnout factor'.

The results of this new analysis indicated that, combined, AAQ, organisation size, and the EMS of Vulnerability to Harm/Illness, Punitiveness, Insufficient Self-

Control/Discipline, Emotional Inhibition and Unrelenting Standards/Hypercriticalness significantly predict 47% of the variance of single factor Burnout.

Again, the EMS of Punitiveness retains its quality of negatively predicting Burnout, once more lending itself to the suggestion that it is a protective factor. The other four EMS all feature clearly as negative predictive factors for Burnout: Vulnerability to Harm/Illness, with its anxiety-related character of predicting imminent and unavoidable disaster, would seem to fit with a model of Burnout given the likely consequences for the sympathetic nervous system and related physical ailments (Toppinen-Tanner et al. 2005); Insufficient Self-Control/Discipline has been discussed above, but appears to be the convex of Emotional Inhibition, where control is everything. The suggested strategy of increased assertive communication skills may offer an intervention helpful to both of these EMS; and, the final EMS of Unrelenting Standards/Hypercriticalness lends a sense of exhaustion-related Burnout in a futile quest for perfection. It is also notable that organisation size features prominently in this model, suggesting that larger organisations need to recognise that increased employee Burnout may be an unwanted consequence of growth, and should therefore consider incorporating Burnout resilience interventions into their growth plans.

The discussion of a single Burnout factor is continued in the ACT Therapist section below.

5.2.1.4.4 Unconditional vs Conditional Schemas

Young et al. (2003) make a distinction between conditional and unconditional schemas. Unconditional schemas are those that are fixed and rigid, and largely developed in early life, based on experiences as a child. In contrast, conditional schemas develop later in life, potentially as an attempt to mitigate the negative effects of unconditional schemas. The authors do not specify a different therapeutic approach to conditional schemas, but it is possible to interpret this distinction to suggest that conditional schemas may be more responsive to intervention due to their less rigid nature. However, it seems that care would need to be taken if these EMS are offering even a short-term mitigating effect.

Of the five conditional schemas identified by Young et al., three appear in the stepwise regression models: Unrelenting Standards/Hypercriticalness in the models for Emotional Exhaustion and single Burnout factor; Emotional Inhibition in the models for Cynicism and single Burnout factor; and Self-Sacrifice in the model for Professional Efficacy. Of these three conditional schemas, only Self-Sacrifice seems to feature in a protective way, in that it has a positive predictive effect for Professional Efficacy. Further exploration of the relationships between identified EMS and Burnout are included in the Schema Therapist qualitative results and discussion sections.

5.2.1.5 Hypotheses

Two main hypotheses for this study were generated:

Hypothesis A: Higher levels of Psychological Inflexibility will be associated with higher levels of Burnout across all three dimensions of the Maslach Burnout Inventory.

Hypothesis B: Relationships will be identified between specific EMS and the three dimensions of the Maslach Burnout Inventory.

On the basis of the preceding quantitative results and discussion, both hypotheses are retained, and can be further developed in future research.

5.2.2 ACT Therapist discussion

5.2.2.1 Verbal rules in the workplace

The role of language, or ‘verbal behaviour’ in ACT terms, is regarded as being central in attempts by individuals to control unwanted emotions and cognitions, and in undermining commitment to achieving value-based goals. Further, ACT theory posits that we inhabit a “verbally constructed world” (Hayes, Biglan & Pistorello., 2008, p.146). Verbally-regulated behaviour is deemed to be inflexible, less responsive to experience and, to a degree, less effective than behaviour developed by actual experience. This in turn leads to experiential avoidance and cognitive fusion, where even thoughts about problematic private experiences are suppressed. Any benefits from this thought suppression are extremely short-lived, and the likely outcome is that the unwanted experiences become more prevalent, acquiring even more importance.

The current study has highlighted how language can be unhelpful in making work such a priority that family and leisure time are precluded. In his 2011 ACT article, Zettle discusses the verbal behaviour of ‘reason-giving’ (or ‘excuse-making’) in which private events or experiences are presented by a client to ‘explain’ dysfunctional behavior. Applying this to the current study, we may hear a client say something like, ‘I didn’t go to my daughter’s school play because I was feeling too anxious about work’.

Another example of how language might be central to unhelpful rule-making in the workplace is provided by Van Wijhe, Peeters and Schaufeli (2014), who suggested that workaholism is driven by a number of rigid cognitive rules (in ACT terms ‘verbally-fused’), including an ‘enough rule’ which leads an individual to believe they never put enough effort into work, often combined with an overestimation of the consequences of failure (this latter point linking to the ACT concept of experiential avoidance, i.e., seeking to work ever harder to avoid emotions associated with failure).

In suggesting appropriate interventions to address these rigid verbal rules, Bond (2004) outlines the ‘Get off your buts’ ACT technique which directly targets the use of the word ‘but’ and attempts to replace it with ‘and’. The use of ‘but’ implies a contradiction, often between two sets of private events. Taking the school play example above, a client may say to us ‘I’m excited about seeing my daughter’s school play *but* I’m too anxious to leave work early’. The suggestion here is that the anxiety has to be resolved before the school play can be attended - this is likely to be an unrealistic expectation, and a helpful suggestion to the client might be that they can experience both excitement and anxiety at this time. This aspect of ACT is comparable to a dialectical approach to language, for example in Dialectical Behaviour Therapy (Linehan, 1993).

5.2.2.2 Self as Context – Professional Efficacy

Within Burnout literature, the MBI-GS dimension of Professional Efficacy (and its counterpart of Personal Accomplishment in the MBI-HSS) has been singled out for particular critique, notably by Willmar Schaufeli (e.g., Schaufeli & Salanova, 2007). Schaufeli notes that, during the original psychometric development of the MBI (Maslach, 1993), the component of reduced Personal Accomplishment emerged

unexpectedly alongside the hypothesised components of Emotional Exhaustion and Depersonalisation. Issue is also taken with the consistently reported relatively low correlation between Professional Efficacy/Personal Accomplishment and the other two Burnout dimensions in subsequent Burnout studies. Schaufeli suggests that part of the problem rests with the conceptual challenge of using positively worded items, and proposing that low scores on these accurately represents Burnout pathology, i.e., that a lack of efficacy is not necessarily the same as inefficacy.

As reported, the current study also shows inconsistencies between relatively high levels of Emotional Exhaustion and Cynicism without corresponding low levels of Professional Efficacy, which may support Schaufeli's critique above. The ACT therapists offered a suggestion that the relatively robust levels of Professional Efficacy reported might reflect issues with the desired ACT process of 'self-as-context'. Harris (2009, p174) refers to 'three senses of self', namely the conceptualised self, self-as-awareness and self-as-context. The conceptualised self reflects all the cognitive processes that sum up one's self-concept (e.g., beliefs, memories, images and 'facts'). Fusion within and between these processes may lead to a problematic self-image which can be summarised as 'I am my thoughts'. Self-as-awareness relates to the mindful ability to notice our current experience, whereas self-as-context can be regarded as the viewpoint from which this noticing happens, sometimes referred to as 'looking *at* our thoughts rather than *from* our thoughts' (Harris, 2009).

Within this ACT perspective, it can be argued that participants in this study are reporting a conceptualised sense of Professional Efficacy, driven by fused cognitions, rather than a mindful awareness of their experience of Emotional Exhaustion and Cynicism. This would highlight a very important role for ACT interventions in 'unpacking' this sense of Professional Efficacy, to help clients better understand the context of their current difficulties, and to experience these from a 'safe and constant viewpoint' (Harris, 2009, p173).

5.2.2.3 Values in the workplace

The ACT literature strongly emphasises values that are experienced as free choices by individuals rather than those they feel externally pressured to adopt. ACT

interventions focus on *value-based personal choice* rather than *reason-based decision making*. Decisions are made taking reasons into account, but are not a direct product of those reasons. However, there is also an acknowledgement that values can be socially and culturally informed, but that a psychologically flexible individual decides whether or not to take ownership of such values (Hayes et al., 2012).

Relating values to the workplace, several studies have explored values in relation to Burnout and other job-related outcome measures and outcomes. A recently published study by Veage, Ciarrochi, Deane, Andresen, Oades and Crowe (2014) explored the relationship between 'value congruence' and Burnout amongst a sample of Australian mental health practitioners. They demonstrated that congruence between life and work values predicted higher levels of wellbeing and perceived efficacy, and that individuals who shared personal values with those of their organisation experienced lower Burnout and higher levels of wellbeing.

Some studies (e.g., Knoop, 2001; Vansteenkiste, Neyrinck, Niemiec, Soenens, De Witte, & Van den Broeck, 2007; Hegney, Plank & Parker, 2006) have focused on the difference between *intrinsic* and *extrinsic* work-related values. An intrinsic work-value orientation encompasses a desire to self-actualise, to build meaningful relationships at work, and a sense of social responsibility. In contrast, an extrinsic work-value orientation is focused on status, power and material rewards (Kasser & Ryan, 1993). This distinction links to self-determination theory (SDT), which posits that extrinsically-focused individuals are likely to neglect personal interests and needs in pursuit of such goals, with negative consequences for psychological wellbeing (Vansteenkiste et al., 2007).

Extrinsic work-value orientations have been shown to correlate with lower levels of dedication and job satisfaction, and with higher levels of work-family conflict, Emotional Exhaustion and turn-over intention (Vansteenkiste et al., 2007). An intrinsic work-value orientation can be viewed as a 'personal resource', has been demonstrated to improve wellbeing, and is a factor in employees' ability to access helpful resources at work, creating a more fulfilling role for themselves (Van den Broek, Van Ruysseveldt, Smulders, & De Witte, 2011).

A fascinating longitudinal study in the USA measuring generational changes in work values (Twenge, Campbell, Hoffman & Lance, 2010) found that, although the value placed on leisure time has increased over time, so has the emphasis on extrinsic values such as status and financial rewards. The authors discuss how this fits with a view of 'Generation Me' (those born between 1982 and 1999) as being increasingly narcissistic in comparison with their predecessors. These value conflicts may increasingly be a source of psychological distress as this generation matures in the workplace.

5.2.2.4 Burnout trajectory

Relatively little empirical data, in the form of longitudinal studies, is available to support hypotheses of Burnout trajectory (Maslach et al., 2001). In terms of those studies looking specifically at the relationship between the three MBI dimensions of Burnout, Golembiewski and Munzenrider (1988) presented a 'phase model' which required each dimension to be categorised into high or low scores, with all possible combinations mapped onto eight phases. Their research suggested two possibilities: firstly, that Cynicism would be the initial dimension affected, followed by inefficacy and finally exhaustion; secondly, that each dimension could develop simultaneously and independently. Maslach's own empirical research into this (Leiter & Maslach, 1988) suggested that the developmental path begins with Emotional Exhaustion, precipitating Cynicism and finally inefficacy. This latter finding is consistent with the developmental views of the ACT therapists interviewed in the current study.

5.2.2.5 The construct of Burnout

Single versus multidimensional model

The MBI construct of Burnout has been subject to much critical review, not least by Christina Maslach herself, alongside key colleagues. Maslach et al. (2008) discuss how both single and multidimensional-measure approaches existed prior to the development of the MBI, and highlight that both were considered in the empirical development of the MBI. They argue that, although three separate dimensions present additional statistical challenges to researchers, they also offer much greater specificity in creating statistical models. However, they also acknowledge that practitioners (and the general public) tend to view Burnout as a single construct, finding a

multidimensional approach challenging. The authors, perhaps unsurprisingly, are critical of attempts to reduce the MBI to a single Burnout score, whether by simple additive approaches, weighted models, or the phase model mentioned above (Golembiewski & Munzenrider, 1988).

Maslach et al. (2008) move on to challenge the suggestion that the dimension of Emotional Exhaustion is a sufficient explanation for Burnout, although acknowledge that it is viewed as the key dimension and is most often reported in Burnout research. They argue that, if Emotional Exhaustion fully explains Burnout, then the construct of Burnout would be superfluous. They argue that Cynicism (or Depersonalisation) is analogous to cognitive distancing, which occurs in response to Emotional Exhaustion or demotivation. Initially, Cynicism was conceptually viewed as a dysfunctional coping response to Emotional Exhaustion (Leiter, 1993), but Taris et al. (2005) also support a theory that exhaustion precipitates Cynicism. In their continued support of the inclusion of Professional Efficacy (or inefficacy) in Burnout assessments, Maslach et al. (2008) acknowledge that this third dimension is somewhat more complex in its relationship to Emotional Exhaustion and Cynicism, but assert that a loss of efficacy further compounds problems related to Burnout, and therefore adds to any simple exhaustion-based model.

However, challenges to the three dimensions of Burnout remain. The recent study by Narainsamy and Ven Der Westhuizen (2013), among a sample of medical laboratory staff in South Africa, concluded that a single Burnout factor combining Cynicism and Emotional Exhaustion contributed to their best fitting overall model of work-related wellbeing. This mirrors the single Burnout factor used in the current study.

5.2.2.6 Burnout versus Engagement

Schaufeli and Bakker (2004) discuss the change in emphasis from the notion of Burnout to that of engagement, originally acknowledged by Maslach et al. (2001). They identify this change as a response to the emerging Positive Psychology movement (e.g. Seligman & Csikszentmihalyi, 2000), but is critical of the assertion (Maslach & Leiter, 1997) that engagement is the exact opposite of Burnout as measured by the MBI, citing the broader debate on the polarity of positive and negative affect (Diener, 1999).

To paraphrase, 'if not being happy is not the same as being sad, then not being burnt out cannot be assumed to be the same as being engaged'. Accordingly, Schaufeli and Bakker (2004) propose a separate measure of engagement, negatively correlated with Burnout but independent from it. This measure is called the Utrecht Work Engagement Scale (UWES), and measures three dimensions termed *Vigour*, *Dedication* and *Absorption*: Vigour refers to qualities of energy resilience and persistence; Dedication is characterised by significance, enthusiasm, inspiration, pride, and challenge; and Absorption is a state of being fully immersed and concentrated on one's work.

Mills, Culbertson and Fullagar (2012) report that the psychometric properties of the UWES have received considerable validation, but are critical of the methodology employed by Schaufeli and Bakker (2004), and state that challenges have been made to the instrument on the basis of high inter-correlation between its dimensions, especially those of Vigour and Dedication (Shirom, 2003). Such challenges have led to suggestions of a single engagement measure, although the individual dimensions of the UWES are still differentially predictive of health and commitment outcomes and therefore supportive of a three-factor solution. Additionally, Mills et al. (2012) conclude from their own studies that the most recent version of the UWES (the UWES-9) appears valid and reliable, and justifies its three dimensions.

5.2.2.7 Assessment and formulation tools

The current study focused on the single measure of Psychological Inflexibility with respect to ACT (using the AAQ-ii), and this remains the overarching research and assessment tool for ACT (Bond et al., 2011). However, discussions with ACT therapists highlighted the use of two other published tools, namely the FIT-60 (Batink et al., 2012) and The Matrix (Polk, 2014), which will be discussed further below.

The ACT community takes pride in its open and collaborative approach to research and other tools, which are often freely shared via open internet resources (Hayes et al., 2012). Additionally, membership of the Association for Contextual Behavioral Science (ACBS) is offered at reasonable and flexible rates, and enables access to its internet portal at <http://contextualscience.org>. Within its resources section, the portal has a section entitled 'assessment measures/ACT-specific measures'. Accessing the section

on 15.12.14, subheadings were found under the following categories: Acceptance & Action Questionnaire (AAQ) and Variations, Values Measures, ACT Daily Diary & Weekly Report, ACT measures in Languages Other than English, Automatic Thoughts Questionnaire - ATQ (F&B), Behavioral Measures for Lab-Based Studies, Child and Adolescent Specific ACT-Related Measures, Computerized measures, Fusion Measures, Mindfulness Measures, Other ACT-Related Measures, Process Measures Packet, Self-Care Monitoring Forms.

Further investigation revealed a large number of specific tools under these headings, supported by published articles and validation studies to underline the commitment of the ACBS and the wider ACT community to scientific and empirically supported development of this approach.

Recently published tools include the Cognitive Fusion Questionnaire (Gillanders et al., 2014), initially validated in studies of over 1800 participants. Its authors hope that it will become the definitive ACT tool to measure cognitive fusion. Wilson, Sandoz, Kitchens and Roberts (2010) developed the Valued Living Questionnaire, and conclude that its psychometric properties qualify it as an effective measure of living in accordance with values. The Survey of Guiding Principles (SGP) is a 'values clarification exercise' which includes a card sorting task involving 60 cards representing values within different domains, and is included in a practitioners' handbook developed by Ciarocchi and Bailey (2008). Other ACT values-related tools include Lundgren's 'Bullseye' (in Harris, 2009, p.76).

Measures of mindfulness include the Five Facet Mindfulness Questionnaire (FFMQ; Baer, Smith, Lykins, Button, Krietemeyer, Sauer, et al., 2008), the Freiburg Mindfulness Inventory (FMI; Walach, Buchheld, Buttenmuller, Kleinknecht, & Schmidt, 2006) and the Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003).

It is beyond the scope of this study to provide a comprehensive review of all ACT measures, and indeed the author was unable to find such a review, suggesting an opportunity for further research in this area.

Returning to the two ACT tools highlighted in this study (the FIT-60 and The Matrix), these both appear to offer a progressive approach to working with ACT. The FIT-60 (Batink et al., 2012) is intended to be the first ACT measure that incorporates all six core processes (acceptance, defusion, self-as-context, attention to the present moment, values and committed action), and was constructed using items related to many of the measures discussed above. Batink et al. carried out their own validation study among a general sample of 1087 participants in the Netherlands, each of which completed an online ACT skills course between pre-and post-intervention FIT-60 measures. The authors state that the initial psychometric properties of the FIT-60 are promising. Further validation studies are currently underway, but they hope that the instrument will be widely used as both a formulation tool and a pre-post intervention measure. Any client can be assessed on their relative position across the six core ACT processes against normative data.

‘The ACT Matrix’ is an approach developed by Kevin Polk, an ACT practitioner in the USA, and is the subject of a recently published book edited by Polk and Schoendorff (2014), endorsed by Steven Hayes, co-founder of ACT. Polk is also featured on the ACBS website, and disseminates ideas relating to The ACT Matrix in various workshop formats, including webinars.²²

The ACT Matrix offers a simple accessible tool, which can be used with any client to explore any given situation or problem that they are facing across two dimensions: firstly, is their current experience based on genuine sensory feedback (i.e., are they really present in the moment?); and secondly, in terms of behaviour, are they moving towards their values (i.e., what’s important) or is their behaviour driven by unwanted private events (such as negative emotions)? The Matrix is shown above in Figure 12 (p.128).

A practitioner working with clients using the ACT Matrix can then use the questions (or variants of them) in each of the four quadrants. By doing so, practical interventions can be identified and targeted on a session by session basis. Although simple in nature, this tool seems to offer a powerful technique to engage clients when, for example,

²² Seminars broadcast using Internet-based video technology.

behavioural change is proving difficult to facilitate. The ACT therapist interviewed in this study who uses The ACT Matrix extensively reported that she finds it extremely effective in working with Burnout clients, and it would seem to fit well with clients who are perhaps more used to a coaching-based approach rather than a therapeutic one, and are familiar with broader business/organisational use of matrices as business tools.

5.2.2.8 Burnout inoculation

A fairly consistent theme across both ACT and Schema Therapists was the idea that Burnout interventions should ideally be preventative, before Burnout takes hold. This could be a one-to-one intervention, but also lends itself to group/workshop formats, offering potential for greater reach within an organisation, as well as cost effectiveness.

Informed by ACT, this type of intervention would focus on increasing Psychological Flexibility, and would preferably cover all key ACT processes. Informed by Schema Therapy, the intervention might focus more on building awareness of schemas and their potential role in creating vulnerability to Burnout. These approaches could both be supported by relevant psychometric tools, drawn from their respective theoretical bases.

Stress management training (SMT) is the most commonly recognised and used form of intervention to promote mental health within organisations (Van der Klink, Blonk, Schene, & van Dijk, 2001), being largely drawn from the stress inoculation training (SIT) protocol developed by Meichenbaum (1995), and typically offering a combination of cognition-challenging, muscle relaxation and/or behavioural skills enhancement (Murphy, 1996).

SIT is a cognitive-behavioural approach, and was originally introduced in clinical settings before being expanded to broader organisational contexts. Saunders, Driskell, Hall Johnston, and Salas (1996) carried out a meta-analysis of 37 studies covering 1837 participants receiving SIT, and concluded that the protocol is effective in reducing performance anxiety and state anxiety, and improving performance under stress.

Flaxman and Bond (2010) conducted a study comparing ACT with SIT among 107 working individuals with above average levels of distress, based on responses to the General Health Questionnaire (GHQ-12). Participants were randomly allocated to either ACT, SIT or a waitlist control group. Both interventions were delivered as two half-day (three-hour) training sessions one week apart. The ACT intervention was derived from existing manuals developed for group worksite interventions (Bond, 2004; Bond & Hayes, 2002), and consisted of mindfulness exercises to “increase present moment awareness, reduce struggle with undesirable thoughts and emotions and locate a core sense of self as distinct from difficult psychological content”. The intervention continued with various cognitive de-fusion exercises to “help participants untangle from the literal content of thoughts and beliefs that interfere with the pursuit of valued behavioural goals” (Flaxman & Bond, 2010, p.818). Finally, participants completed values and goals exercises to identify valued behavioural goals. The SIT intervention was based on Meichenbaum’s (1995) protocol, and consisted of relaxation training (progressive muscle relaxation and controlled abdominal breathing) and cognitive restructuring (e.g., identifying how unhelpful thought patterns and core beliefs contribute to stress, and how these can be challenged).

Significant reductions in GHQ (distress) scores were achieved post-intervention in both ACT and SIT conditions in comparison with the control group, adjusting for pre-intervention GHQ. The baseline of all participants scoring at clinical levels on GHQ reduced to 21% in the ACT group, 26% in the SIT group, and 63% in the control condition. Furthermore, mediation analysis demonstrated that the increase in Psychological Flexibility (measured by AAQ) fully mediated the positive impact of ACT on GHQ scores, rather than a reduction in dysfunctional cognitions (as measured by the Dysfunctional Attitude Scale – DAS). Although substantial, the positive impact of SIT on GHQ scores was not mediated by reduction in DAS, rather it was partially mediated by an increase in Psychological Flexibility, raising some questions about the mechanism of the intervention.

The authors concluded that ACT appears to offer an equally effective alternative to SIT in reducing psychological distress in a workplace-based intervention, and that the

mechanism of change (i.e., an increase in Psychological Flexibility) can be more clearly identified (Flaxman & Bond, 2010).

Another important study supporting the use of ACT in addressing Burnout (Lloyd et al., 2013) reported that an ACT worksite-based intervention among UK government employees resulted in improved Psychological Flexibility. This then mediated a subsequent reduction in Emotional Exhaustion, which appeared to prevent a subsequent increase in Depersonalisation seen in the control condition. Additionally, 'strain' reduced in the ACT group only, between the second and third assessment periods.

The ACT intervention was based on the two manuals mentioned in the previous study (Bond, 2004; Bond & Hayes, 2002), and again was relatively brief, consisting of two three-hour sessions a week apart, followed by a third session two months later. Group size was between eight and twelve participants.

The literature is supportive of ACT Burnout interventions as an alternative to SIT, with a potentially clearer understanding of how reduction in Burnout and related pathology is mediated. Additionally, indications are that significant improvements in Psychological Flexibility can be achieved in relatively short time frames, suggesting that this may be an effective way for organisations to protect their employees from Burnout.

5.2.2.9 ACT and physiology

The discussion point linking ACT and physiology was prompted by the suggestion by one of the ACT therapists that more physical measures should be integrated with ACT interventions. The ACBS website mentioned above lists the Contextual Medicine Special Interest Group (SIG), affiliated in 2012, which includes under 'topics of interest' the following: human physiology, neuroscience, medicine, and their relations within the broader field of evolutionary science.

The author was unable to find any published articles directly linking ACT to the use of physical measures. However, a 2004 study by Spira, Zvolenskyb, Eifert, and Feldner included physiological indices of heart rate and skin conductance alongside subjective

measures of distress following a 'biological challenge' to participants of increased CO₂ levels, to precipitate physical arousal. They concluded that engagement in avoidance-oriented coping strategies predicted greater physical panic symptoms and self-reported anxiety,

Tang and Posner (2012) identify 'mindfulness neuroscience' as "a new, interdisciplinary field of mindfulness practice and neuroscientific research" (p.1). Studies have been carried out exploring neurological responses to mindfulness-based exercises. Chan, Han and Cheung (2008) used EEG technology to measure changes in alpha brainwaves (an indicator of positive emotions) and theta brainwaves (an indicator of internalised attention) in response to a "mindfulness-based triarchic body pathway relaxation technique" (p. 39) in comparison to a control condition of listening to extracts of relaxing classical music. Alpha brainwaves were significantly increased in both conditions, whereas theta brainwaves were only significantly elevated in the mindfulness condition.

Chiesa and Serretti (2010) conducted a systematic meta-analysis of the neurobiological and clinical features of mindfulness meditations, and concluded that EEG studies have demonstrated a significant increase in both alpha and theta activity during meditations. They also reported that neuroimaging studies showed that mindfulness meditation activates both the prefrontal cortex and the anterior singular cortex, and that long-term meditative practice is linked to the enhancement of brain areas linked to attention.

Edwards (2011) offers an accessible overview of biofeedback, neurofeedback and meditation, describing the origins of this scientific approach, citing Green and Green (1989) and their pioneering work with yogis in India, and later in the USA. Edwards summarises the overall research in this field as demonstrating that meditative practices impact the brain by: "EEG changes during meditation, and over time in other states as well; changing patterns of dominance, excitation and inhibition over whole areas of the brain, including subcortical areas; changing the actual physical structure of the brain - prolonged practice has been correlated with increases in cortical thickness in areas of the brain utilized for the practices; changing levels of neurotransmitters and hormones; and changing blood flow to areas of the brain during meditation. These changes have positive effects on mood, focus, empathy, relaxation, sleep, blood pressure, cholesterol, cortisol,

serotonin, seizure activity, health, stress reactivity, addiction recovery, and the list goes on and on.” (p.68).

Despite all these positive, and clearly attractive, benefits from meditative practice, Edwards also goes on to position meditation and mindfulness within broader spiritual, physical and moral traditions. On this basis, he urges caution in isolating meditation and mindfulness from these traditions.

It is again beyond the scope of this study to provide a comprehensive review of the potential links between physiology and ACT, but it is hoped that this section of the discussion may prompt further debate on these links.

5.2.3 Schema Therapists discussion

5.2.3.1 Perfectionism

This study has suggested a key role for the EMS of Unrelenting Standards/Hypercriticalness in precipitating Burnout. The Schema Therapist interviews identified links with notions of ‘workaholism’ and ‘perfectionism’. Scott, Moore and Micheli (1997) identify three specific characteristics of workaholics: firstly, devoting a large proportion of time to work activity; secondly, thinking obsessively about work; finally, working beyond any reasonable requirement of either their organisation or financial needs.

In examining the cognitive antecedents of workaholism, the article cited earlier by Van Wijhe et al. (2014) suggest that it may stem from dysfunctional core beliefs, distorted cognitive rules and punitive automatic thoughts. Viewing workaholism as a compulsive behaviour, the Mood-as-Input (MAI) model has been suggested as a theoretical basis for how rigid personal cognitive rules can be used to evaluate self-performance on a specified task with no clear boundaries (Martin, Ward, Achee & Wyer, 1993). Furthermore, workaholics tend to overestimate the consequences of failure (Berglas, 2004) which supports a view that overinvestment at work is an avoidance behaviour.

Van Wijhe et al. (2014) conducted a six-month longitudinal study to explore both the antecedents and consequences of workaholism, and demonstrated that inflexible

personal beliefs at T1 were predictive of compulsive working patterns at T2, and that compulsive working patterns at T1 increased exhaustion (using the MBI-GS dimension of Emotional Exhaustion) at T2. Overall they report partial mediation from personal beliefs via workaholism to exhaustion. They conclude that targeting rigid personal beliefs may be a helpful intervention in preventing Burnout.

According to Childs and Stoeber (2012), one of the more commonly researched models of perfectionism is that developed by Hewitt and Flett (1991), which differentiates between 'socially-prescribed perfectionism' and 'self-oriented perfectionism'. Socially-prescribed perfectionism reflects the belief that unrealistically high standards are expected by others and that only by striving for these will acceptance be achieved. In contrast, self-oriented perfectionism reflects an internally motivated drive for perfection (e.g. Enns & Cox, 2002). Childs and Stoeber (2012) focus on socially-prescribed perfectionism as it "has been associated with higher levels of professional distress, intolerance of ambiguity, job dissatisfaction, and emotional, bio-behavioural, and physiological manifestations of stress" (p. 349). They add that socially-prescribed perfectionism is consistently associated with higher levels of Burnout among organisational professionals and athletes, whereas self-oriented perfectionism may result in Burnout, but also appears to be a protective factor in a number of studies.

Childs and Stoeber (2012) conducted what they believe to be the first longitudinal study of socially-prescribed perfectionism and Burnout among a sample of 116 managerial and administrative staff within the UK NHS, exploring whether socially-prescribed perfectionism predicted Burnout, across a six-month timeline. They included measures of both socially-prescribed and self-oriented perfectionism, job-role stress and Burnout (using the MBI-GS). They reported that socially-prescribed perfectionism was predictive of both job-stress and Burnout, but only on the MBI dimension of Professional Efficacy. A second study among 349 UK schoolteachers, across a three-month timeline (to reduce attrition) demonstrated that socially-prescribed perfectionism was predictive of job-stress and Burnout across all three dimensions, though in this second study the authors replaced the MBI dimension of Professional Efficacy with the inefficacy scale developed by Schaufeli and Salanova (2007).

Although Childs and Stoeber (2012) consistently describe socially-prescribed perfectionism as a personality trait, they acknowledge in their discussion that future research opportunities include looking into the “cognitive behavioural pathways” (p. 359) that develop from this trait. This can also be conceptualised in Schema Therapy terms, with relationships explored between EMS, coping styles and modes in relationship to socially-prescribed perfectionism. This would potentially offer a way of ‘unpacking’ socially-prescribed perfectionism to allow interventions drawn from Schema Therapy. Childs and Stoeber (2012) also identify a research opportunity to explore different types of socially-prescribed perfectionism in relation to stress and Burnout, e.g. from colleagues, clients, or pupils and parents (in the case of schoolteachers). A Schema interpretation would add a developmental perspective to this, in particular to attempt to understand how an external notion of perfectionism becomes internalised.

5.2.3.2 Diathesis-stress

The current study has explored main effects between EMS and Burnout, using a cross-sectional design. In discussion with the Schema Therapists the idea was generated that EMS (diathesis) interact with environmental triggers (stress), leading to Burnout. Although the author was unable to find any published research exploring this idea with schemas and Burnout, a 2011 study by Eberhart, Auerbach, Bigda-Peyton and Abela tested both diathesis-stress and stress-generation models using schemas and depression. This study’s methodology could readily be applied to Burnout, and provides interesting insights into how these mechanisms might work with Burnout. The study involved 118 female university students in the USA with a mean age of just over 21 years. Participants were monitored over a six-week period using measures for depressive symptoms, stress and EMS (YSQ-short form).

With depression, diathesis-stress models (e.g. Abela, Aydin & Auerbach, 2006) suggest that individuals have underlying vulnerabilities which only lead to depressive symptoms/diagnosis in stressful situations. Stress-generation models, in contrast, suggest that such vulnerabilities lead individuals to contribute to stressful situations in their own lives (Auerbach, Eberhart & Abela, 2010). Furthermore, individuals with a history of

depression need not currently be in a depressive state to engage in these stress-creating behaviours (Daley, Hammen, Burge, Davila, Paley, Lindberg et al., 1997).

Prior research has highlighted links between numerous EMS and higher levels of depression (Glaser, Campbell, Calhoun, Bates & Petrocelli, 2002) but, as with the current study, has largely presented main effect models. Evidence has also been presented that EMS predict depression when activated by environmental stressors, but only at a global level and not with specific EMS (Eberhart et al., 2011). After using multilevel modelling, Eberhart et al. (2011) conclude their study provides support for a stress-generation model of EMS and depression, but only limited support for a diathesis-stress model. In particular, they identified that the EMS of Subjugation, Failure and Disconnection/Rejection lead individuals to create stressful interpersonal situations, predicting subsequent depression.

This adds an interesting perspective to the current study, suggesting that there is ‘more going on’ with EMS than just an innate vulnerability, which only becomes problematic when triggered environmentally. The presence of EMS appears to shape interpersonal behavioural patterns, contributing to stress and then, in this instance, depression, but potentially other pathology, including Burnout. This fits with Young’s schema model which states that individuals unconsciously seek situations and relationships that perpetuate their EMS (Young et al., 2003), and with Bamber and Price’s (2006) ‘schema model of occupational stress’ which states that individuals will unconsciously seek out workplace situations which enable them to re-enact their EMS in an unconscious attempt to achieve ‘schema healing’.

5.2.3.3 Demands and resources work

The Schema Therapists contributing to this study make the point that, in their clinical experience, there are both demand and supply factors which contribute to Burnout. Schaufeli & Bakker (2004) describe job demands as “those physical, psychological, social, or organisational aspects of the job that require sustained physical and/or psychological (i.e., cognitive or emotional) effort and are therefore associated with certain physiological and/or psychological costs” (p. 296). They refer to supply characteristics as ‘job resources’, and define them as “those physical, psychological, social, or organisational aspects of the job that either/or: (1) reduce job demands and the associated physiological and

psychological costs; (2) are functional in achieving work goals; (3) stimulate personal growth, learning and development". The authors operationalise job resources at a 'task level' (referring to performance-type feedback), an 'interpersonal-level' (colleague support) and an 'organisational level' (in the form of supervisory coaching).

This idea links to the Job Demand-Resources (JD-R) model presented by Demerouti, Bakker, Nachreiner and Schaufeli (2001), which states that job demands (i.e., work overload) are associated with exhaustion, whereas a lack of job resources (such as those set out above) are associated with disengagement. Schaufeli & Bakker (2004) also challenge the assertion behind the MBI that engagement can be measured along the same continuum as Burnout, maintaining that the two constructs are not polar opposites.

The authors outline Hockey's (1993, 1997) state regulation model of compensatory control. This model aims to explain human performance under stress in terms of cognitive and emotional response. It posits that, in the face of increased demands, an employee can either maintain performance (with additional personal costs) or accept a reduction in performance. Within this model, maintaining performance could be viewed as being analogous to an over-compensatory schema coping mode, whereas adopting a more passive stance seems more closely linked to an avoidance schema coping mode, and disengagement linked to a schema coping mode of surrender. Schaufeli & Bakker (2004) note that Hockey's model, though not designed to explain Burnout, includes references to energy depletion, disengagement and diminished performance, which arguably mirror the MBI dimensions of Emotional Exhaustion, Cynicism and reduced Professional Efficacy. The authors refer to this as "the energetic process" (p. 297).

They also move on to describe "the motivational process" (p.298), whereby job resources are linked via engagement to organisational outcomes (specifically turnover intention). Job resources may play an "intrinsic motivational role" (p.298) in which they promote actualisation outcomes in the employee (e.g. growth and development), or an "extrinsic motivational role" in which they facilitate the achievement of direct work goals.

The study sampled a total of 1698 employees across four contrasting occupational settings. Instruments used were the MBI-GS, the Utrecht Work Engagement Scale (UWES:

Schaufeli et al., 2002), plus measures of job demands (quantitative and qualitative), emotional demands, job resources and social support. Key findings were that Burnout and engagement scales were shown to be separate constructs (loading onto separate factors and with only moderate negative correlation), and that both psychological states have similar roles in differing processes. In the 'energetic process' Burnout mediates longer term health problems, whereas engagement mediates a motivational process fuelled by available resources and which can lead to organisational attachment (in the form of low employee turnover rates).

5.2.3.4 Australian schema paper/Bamber and Price model

As mentioned earlier in this study, very limited research has been published exploring the links between EMS and Burnout. In addition to the work of Bamber (2006), Bamber and Price (2006), and Bamber and McMahon (2008), one of the Schema Therapists interviewed as part of this study drew the author's attention to a presentation made at this year's ISST (International Society of Schema Therapy) annual conference in Istanbul by Susan Simpson of the University of South Australia, who has kindly given the author permission to cite her work in this study. Simpson, Reid, van Vreeswijk, Hayes and Stefanovic (2014, in press) carried out a study among 429 psychologists (mainly based in Australia) exploring the role of EMS, resilience and coping modes in mediating Burnout in psychologists. The study used 7 psychometric measures, including the Emotional Exhaustion subscale of the MBI, the YSQ-S2, the Schema Mode Inventory (SMI; Young et al.;2008;2009), the UWES, and measures of resilience, job demands and general wellbeing.

An interesting finding was that therapeutic work was only the main source of stress in 25% of participants. 'Work environment and relationship with colleagues' and 'non-work related stressors' were each the main source of stress for 37% of participants. The most common EMS among psychologists were Unrelenting Standards/Hypercriticalness and Self-Sacrifice. Using a relatively low clinical cut-off of 'greater than two', these two EMS were clinically relevant for 87.2% of the sample, followed by Insufficient Self-Control/Discipline (49.4%), Emotional Deprivation (49.0%) and Social Isolation (44.0%).

The most prevalent schema mode was Detached Self-Soother (61.5%), followed by Detached Protector (58.0%), and then Compliant Surrenderer (47.8%).

Following regression analysis, the study showed that EMS of Subjugation and Social Isolation were the strongest predictors of Emotional Exhaustion, followed by Mistrust/Abuse, Abandonment, Defectiveness and Unrelenting Standards /Hypercriticalness. The schema mode of Detached Protector was the strongest predictor of Emotional Exhaustion, followed by Detached Self Soother and Compliant Surrenderer. The authors note that EMS were marginally more predictive of Emotional Exhaustion than schema modes, but that both were more predictive than resilience (also a significant predictor).

In terms of interventions, Simpson et al. suggest the following: ²³multiple chair technique with Detached Protector mode; imagery re-scripting²⁴ in regard to schemas of Mistrust/Abuse and Social Isolation; role-play with regard to schemas of Mistrust/Abuse and Social Isolation; cognitive interventions to assess how realistic schema of Mistrust/Abuse is in every day circumstances; continuum work with Social Isolation²⁵; and, further exploration of work-needs relating to Mistrust/Abuse and Social Isolation. Additionally, they suggest implications for the work environment of psychologists, namely: the importance of working in a team; explicit connecting to and supporting each other in a team; promoting showing/sharing of vulnerability/emotions/needs within teams; and, focusing on teams with balanced power structures.

Although there are substantive differences between the current study and the research conducted by Bamber and McMahon (2008) and Simpson et al., (2014), notably in terms of samples, specific measures and regression-modelling techniques used, it seems worthwhile to attempt a summary of comparable findings.

²³ Where the client is encouraged to alternate between two chairs and to engage in a dialogue between two schema-related aspects of themselves, e.g., an EMS and the healthy side of the client or two different modes such as angry child and healthy adult (Arntz & Jacob, 2013).

²⁴ Where the client is encouraged to re-enter a painful (typically childhood) image and re-image the image in a more helpful way e.g., healthy adult enters the image and reassures the child.

²⁵ Work emphasising that beliefs exist on a continuum rather than being 'all or nothing' (Young, 1999).

Table 28 - EMS predictive of MBI Burnout dimensions

	Current study	Bamber and McMahon (2008)	Simpson et al. (2014)
Emotional Exhaustion	Unrelenting Standards/Hypercriticalness	Emotional Deprivation	Subjugation
	Vulnerability to Harm/Illness		Social Isolation
	Punitiveness		Mistrust/Abuse
	Insufficient Self-Control/Discipline		Abandonment
	Entitlement		Defectiveness
Cynicism/Depersonalisation			Unrelenting Standards
	Social Isolation/Alienation	Subjugation	n/a
	Insufficient Self-Control/Discipline	Entitlement	
	Punitiveness		
Professional Efficacy/Personal Accomplishment	Emotional Inhibition		
	Failure	Emotional Inhibition	n/a
	Insufficient Self-Control/Discipline		
	Abandonment/Instability		
	Self-Sacrifice		
	Emotional Deprivation		

Overall, there appears to be little consensus across the three studies, but this is not entirely surprising due to the highlighted differences between the studies. However, in comparing the findings for Emotional Exhaustion, it can be seen that the EMS of Unrelenting Standards/(Hypercriticalness) appears in the predictive models from the current study and that of Simpson et al. Additionally, for Professional Efficacy/Personal Achievement it might be that the EMS of Emotional Deprivation and Emotional Inhibition

show a common link between the current study and that of Bamber and McMahon, in that the first EMS involves an expectation that emotional needs will not be met by others whereas the second EMS involves non expression of emotion. It is therefore possible that the first might predict the second.

5.2.4 Evaluation of the research

The current study has presented a number of key findings investigating the relationships between Burnout, Psychological Inflexibility and Early Maladaptive Schemas, and subsequently exploring these relationships in the context of appropriate interventions. It has added to the existing body of Burnout literature, building on the minimal published research linking Burnout with these two psychological constructs, and the related therapeutic models of ACT and Schema Therapy.

The adoption of a mixed methods design has enabled the study to benefit from a large quantitative sample which, with some caveats to be explored below, has produced robust and statistically validated findings which can be generalised to a broader working population, alongside a qualitative sample of expert practitioners who were able to further validate and critique these findings, relating them to their respective therapeutic modalities. In more specific terms, the statistical models have provided a unique set of tools for explaining levels of Burnout within individuals, whereas the qualitative analysis has provided insights into how ACT and Schema Therapy might be targeted towards the challenge of Burnout, either in treating existing Burnout, or boosting resilience to prevent Burnout reaching critical and damaging levels. The statistical models offer insights into potential underlying vulnerability to Burnout, and therefore suggest the possibility of targeting 'Burnout inoculation' to those individuals most at risk.

The final regression models arrived at were able to explain 42% of the variance in Emotional Exhaustion, 39% of the variance in Cynicism and 26% of the variance in Professional Efficacy among the sample. Having used principal components analysis (factor analysis) to justify the creation of a single Burnout factor, a regression model was then generated which explained 47% of the variance in this factor. Arguments

were presented for and against the adoption of a single factor of Burnout, but this approach allows for parsimony and simplicity. The strength of these models compares favourably with other published models for Burnout, as reported.

The author has aimed to demonstrate the validity and quality of the overall study as set out in the Methodology chapter. The above predictive model findings are supported by the use of pre-existing and well-validated psychometric tools, which further demonstrated reliability among this sample. Data collection and analysis followed established quantitative procedures (e.g., Pallant, 2013; Field, 2013), and the sample size of 506 was large enough to deliver good statistical power (Stevens, 1996) as well as increasing heterogeneity of the sample across age, gender and a range of workplace-specific variables. For the qualitative component, the evaluative criteria established by Yardley (2000) were adopted. However, as with all research, limitations within this study have been identified which will inevitably have impacted findings, and should be taken into consideration when evaluating them. These are outlined below.

5.2.4.1 Study limitations

5.2.4.1.1 Quantitative component

The study's cross-sectional design provides a 'snapshot' of participants' reports of Burnout, Psychological Inflexibility and EMS. While it can be argued that the three measures used have demonstrated good test-retest reliability, this design is limited in its ability to establish causality between the variables studied. Additionally, the study relied on self-reporting, which may not provide an objective account of the constructs being measured, although this challenge is faced by any similarly conducted research.

Beyond the three recognised psychometric tools employed, the selection of other variables included in the survey was relatively arbitrary, although informed by comparable studies. Other variables not included might have contributed significantly to the regression models, for example 'years of service', 'marital/family status', 'level of education' or variables relating to loss of working days and/or productivity due to stress. The author was concerned about the overall length of the survey, which was finalised at 120 items. This was found through testing to take up to 20 minutes to

complete, and any increase in length would have inevitably reduced response rates (participant feedback received included several critical comments about time taken to complete). Even in its short form, the YSQ-S3 has 90 items, and this was taken into consideration in the survey design.

Some specific limitations exist in relation to the psychometric tools used. The YSQ-S3 is a relatively new instrument, and measures 18 early maladaptive schemas as opposed to 15 in some earlier variants, both factors making comparisons with previous studies more complex. In addition, no norms have been published for EMS prevalence, making the identification of 'clinical significance' relatively arbitrary. The MBI-GS, although developed for a broader working population, is still only used in a limited number of Burnout studies, with many researchers maintaining a preference for earlier versions of the MBI, again making direct comparison with such studies challenging. The AAQ-ii has demonstrated very strong relationships with a number of 'psychopathologies' but remains a unidimensional measure of Psychological Inflexibility, not allowing more nuanced understanding of the mechanisms of such inflexibility. The more recently developed WAAQ (Bond et al., 2013), although significantly less validated by subsequent research, may have provided a more appropriate measure of workplace-specific Psychological Inflexibility.

In addition to the limitations of psychometric measures used, it has also become apparent that other tools drawn from ACT and Schema Therapy might have added to a greater degree of Burnout prediction and explanation. These tools have been identified in the Discussion section, but include the FIT-60 ACT measure (Batink et al., 2012) and the Schema Mode Inventory (Young et al.; 2008, 2009). However, the issues identified above regarding overall survey length would make the adoption of additional tools challenging within this study design, and perhaps more suitable for one focusing on either ACT or Schema Therapy.

It is acknowledged that this sample was self-selecting, which in itself is likely to lead to a degree of bias. Participants could have been motivated by a specific interest in Burnout, or awareness that they were already suffering Burnout symptoms, or could have been 'serial survey responders'. As noted earlier, the use of sources such as

LinkedIn for recruitment may have biased the survey towards 'networking professionals'. Additionally, the online-only approach to the survey will have precluded those without internet access, potentially introducing a geographic, socio-economic and age-related bias. However, increasing global internet access and use of online media by older people makes this challenge less of an issue than for prior studies.

Finally, the choice of statistical techniques used has produced a specific output in terms of regression modelling. Although these have all been justified in terms of statistical conventions, different techniques would have inevitably resulted in different regression models (e.g., the use of hierarchical rather than stepwise regression). Additionally, it would have been possible to use more sophisticated statistical tools such as path analysis to explore the effects of potential mediating and moderating variables, therefore enhancing inferences of causality. Indeed, the author conducted a number of such analyses on an initial exploratory basis, but believes that, within a mixed methods design and word count limitation, to include and report this would have been beyond the scope of this study.

5.2.4.1.2 Qualitative component

As acknowledged, the sample of participants was purposive, and involved a combination of participants directly approached by the researcher alongside those that self-selected as a result of postings on relevant networking sites. Although this is consistent with qualitative sampling approaches based on their expertise in the phenomenon under investigation (Reid, Flowers & Larkin, 2005), it cannot be assumed that these participants are typical of all ACT and Schema therapists who have worked with clients experiencing Burnout.

Additionally, the small number of participants from either ACT or Schema Therapy suggests that caution should be used if transferring findings to a broader therapist population. However, there is also nothing to suggest that any of the participants involved were working with anything other than a broad cross-section of working adult clients, and across the sample provided a mix of both NHS and private practice experience, including clients from both clinical and non-clinical (i.e., organisational)

populations. Although no attempt was made to control the specific training background of participants, it should also be noted that five of the six participants were qualified Clinical Psychologists, which may have created a bias towards the expertise and philosophies of that particular professional group.

It is also acknowledged that both the data generated and study findings will have been influenced to an extent by the adopted methodology and interview questions, as well as the provision of significant stimulus material to participants ahead of interviews. Inevitably, different researchers will construct interviews differently, interact in different ways with their participants, and approach interpretation from different perspectives (Finlay, 2002). Through reflexivity, the researcher has presented his own context and preconceptions, within which the research should be evaluated. As a result, the findings should be considered tentative and emergent.

5.2.4.2 Further research

From a quantitative perspective, there appear to be a number of potential topics for future research based on this study. Given the limitations on overall survey length, it may make sense to focus future studies on either Schema Therapy or ACT. This would enable the inclusion of additional measures from either approach, such as those already identified.

Although statistical tests for differences indicated that the findings for Burnout relationships with Psychological Inflexibility and EMS were largely consistent across different subgroups, it may also be of interest to conduct similar research either within specific occupational sectors or within specific organisations. The option of working within specific organisations would allow the interesting option of adding 'internal HR data' into the study, for example appraisal performance over time, sickness absence or the nature of training and development input received. This latter point would be of specific interest if part of the workforce had received stress management-type training. Even if future research did not involve co-operation with specific organisations, greater detail could be applied to the variables involving 'organisational characteristics', in order to identify which participants work for organisations who invest more in employee wellbeing, either explicitly in the form of training, or more

indirectly in terms of organisational culture (e.g., providing fitness/leisure facilities, promoting work-life balance). Either scenario could be used to further evaluate the predictive regression models identified in the current study.

Drawing from the qualitative component's findings, the opportunity exists to develop 'Burnout prevention' and/or 'Burnout management' interventions, drawn either from ACT or Schema Therapy, or potentially with elements drawn from both. These interventions could then be applied and researched on an experimental or case study basis. Findings could be used to further develop and/or prioritise those interventions which appear to deliver the greatest benefit. There also appears to be an opportunity to conduct novel research incorporating more physiological measures alongside Burnout/ACT/Schema Therapy constructs.

It is hoped that such future research would be of particular interest to organisations such as the U.K.'s Health and Safety Executive (HSE), The International Stress Management Association (ISMA), various employee representation associations, and employers committed to investing in employee wellbeing.

5.2.4 Final conclusions

This study has purposefully aimed to be broad in scope, and as such has inevitably raised as many questions as it has provided 'answers'. However, it is hoped that these questions will help stimulate further debate and research into Burnout, particularly from the perspectives of ACT and Schema Therapy. Reverting to the original research question, this is not simply about how to apply these two approaches to Burnout, but rather how the identified relationships between Psychological Inflexibility and EMS can inform appropriate Burnout interventions. The possibility exists to create specific Burnout interventions informed by both approaches.

Clear statistical relationships have been established between Psychological Inflexibility, specific EMS and the three MBI-GS Burnout dimensions. Targeting Psychological Inflexibility and these EMS therefore offers the possibility of either 'inoculating' against Burnout or providing a targeted therapeutic intervention to address its symptoms. The predictive regression models identified also offer the potential to develop a

psychometrically valid assessment of employee vulnerability to Burnout, therefore helping organisations to invest in appropriate interventions.

The qualitative component of this study has synthesised a range of clinical perspectives towards Burnout, and how this phenomenon relates to the two therapeutic modalities under consideration. These perspectives have ranged from what might be described as 'diagnostic/clinical' through to an extremely individualised approach to formulation, and the author has endeavoured to present a balanced reflection of both extremes. Given the broader study objective of stimulating, and contributing to, a multidisciplinary dialogue around Burnout, it is hoped that the findings may offer more of an organisational psychology perspective to those readers who consider themselves 'clinicians', while bringing a more clinically therapeutic perspective to those approaching this topic from an Organisational or Coaching Psychology viewpoint. In other words, this study may enable clinicians and other mental health workers to think differently about clients presenting with work-related anxiety and depression, while also helping organisational colleagues to benefit from an understanding of relevant clinical aspects drawn from the two therapeutic approaches.

Whether this is framed in the current study's epistemology of pragmatism, or Counselling Psychology's pluralistic, humanistic and scientist-practitioner principles, it is hoped that a contribution has been made that will increase the understanding of Burnout as a phenomenon, and help to reduce the widespread distress and harm associated with it.

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7 Appendices

Appendix 1 – Example of survey invitation and link



Do you work in a **challenging or stressful** environment? Whether you feel stressed or not, please tell me more.....

I would be very grateful for a few minutes of your time to take part in an exciting, innovative **doctoral research study**, backed by **City University** (London, UK), which aims to increase our understanding of **stress and resilience factors** among individuals working across a range of organisational settings.

The survey consists of a series of questions and statements, and should take around 20 minutes in total to complete.

Taking part is completely **anonymous and confidential**, and the research is carried out under the guidelines of the British Psychological Society (www.bps.org.uk).

Many thanks in advance for your time and help with this project!

To **take part and make a difference**, please click the link below:

<https://edu.surveymoz.com/s3/1547956/Stress-and-resilience-survey>

Appendix 2 – online survey²⁶

1) I feel emotionally drained from my work.*

- ☐ never
- ☐ a few times a year or less
- ☐ once a month or less
- ☐ a few times a month
- ☐ once a week
- ☐ a few times a week
- ☐ every day

2) I feel used up at the end of the workday.*

- ☐ never
- ☐ a few times a year or less
- ☐ once a month or less
- ☐ a few times a month
- ☐ once a week
- ☐ a few times a week
- ☐ every day

3) I feel tired when I get up in the morning and have to face another day on the job.*

- ☐ never
- ☐ a few times a year or less
- ☐ once a month or less
- ☐ a few times a month
- ☐ once a week
- ☐ a few times a week
- ☐ every day

4) Working all day is really a strain for me.*

- ☐ never
- ☐ a few times a year or less
- ☐ once a month or less
- ☐ a few times a month
- ☐ once a week
- ☐ a few times a week
- ☐ every day

²⁶ Subject to copyright for the MBI-GS and YSW-S3 items, and will be removed from library submission.

5) I can effectively solve the problems that arise in my work.*

- ☐ never
- ☐ a few times a year or less
- ☐ once a month or less
- ☐ a few times a month
- ☐ once a week
- ☐ a few times a week
- ☐ every day

6) I feel burned out from my work.*

- ☐ never
- ☐ a few times a year or less
- ☐ once a month or less
- ☐ a few times a month
- ☐ once a week
- ☐ a few times a week
- ☐ every day

7) I feel I am making an effective contribution to what this organisation does.*

- ☐ never
- ☐ a few times a year or less
- ☐ once a month or less
- ☐ a few times a month
- ☐ once a week
- ☐ a few times a week
- ☐ every day

8) I've become less interested in my work since I started this job.*

- ☐ never
- ☐ a few times a year or less
- ☐ once a month or less
- ☐ a few times a month
- ☐ once a week
- ☐ a few times a week
- ☐ every day

9) I have become less enthusiastic about my work.*

- ☐ never
- ☐ a few times a year or less
- ☐ once a month or less
- ☐ a few times a month
- ☐ once a week
- ☐ a few times a week
- ☐ every day

10) In my opinion, I am good at my job.*

- ☐ never
- ☐ a few times a year or less
- ☐ once a month or less
- ☐ a few times a month
- ☐ once a week
- ☐ a few times a week
- ☐ every day

11) I feel exhilarated when I accomplish something at work.*

- ☐ never
- ☐ a few times a year or less
- ☐ once a month or less
- ☐ a few times a month
- ☐ once a week
- ☐ a few times a week
- ☐ every day

12) I have accomplished many worthwhile things in this job.*

- ☐ never
- ☐ a few times a year or less
- ☐ once a month or less
- ☐ a few times a month
- ☐ once a week
- ☐ a few times a week
- ☐ every day

13) I just want to do my job and not be bothered.*

- ☐ never
- ☐ a few times a year or less
- ☐ once a month or less
- ☐ a few times a month
- ☐ once a week
- ☐ a few times a week
- ☐ every day

14) I have become more cynical about whether my work contributes anything.*

- ☐ never
- ☐ a few times a year or less
- ☐ once a month or less
- ☐ a few times a month
- ☐ once a week
- ☐ a few times a week
- ☐ every day

15) I doubt the significance of my work.*

- ☐ never
- ☐ a few times a year or less
- ☐ once a month or less
- ☐ a few times a month
- ☐ once a week
- ☐ a few times a week
- ☐ every day

16) At my work, I feel confident that I am effective at getting things done.*

- ☐ never
- ☐ a few times a year or less
- ☐ once a month or less
- ☐ a few times a month
- ☐ once a week
- ☐ a few times a week
- ☐ every day

17) My painful experiences and memories make it difficult for me to live a life that I would value.*

- ☐ never true
- ☐ very seldom true
- ☐ seldom true
- ☐ sometimes true
- ☐ frequently true
- ☐ almost always true
- ☐ always true

18) I'm afraid of my feelings.*

- ☐ never true
- ☐ very seldom true
- ☐ seldom true
- ☐ sometimes true
- ☐ frequently true
- ☐ almost always true
- ☐ always true

19) I worry about not being able to control my worries and feelings.*

- ☐ never true
- ☐ very seldom true
- ☐ seldom true
- ☐ sometimes true
- ☐ frequently true
- ☐ almost always true
- ☐ always true

20) My painful memories prevent me from having a fulfilling life.*

- ☐ never true
- ☐ very seldom true
- ☐ seldom true
- ☐ sometimes true
- ☐ frequently true
- ☐ almost always true
- ☐ always true

21) Emotions cause problems in my life.*

- ☐ never true
- ☐ very seldom true
- ☐ seldom true
- ☐ sometimes true
- ☐ frequently true
- ☐ almost always true
- ☐ always true

22) It seems like most people are handling their lives better than I am.*

- ☐ never true
- ☐ very seldom true
- ☐ seldom true
- ☐ sometimes true
- ☐ frequently true
- ☐ almost always true
- ☐ always true

23) Worries get in the way of my success.*

- ☐ never true
- ☐ very seldom true
- ☐ seldom true
- ☐ sometimes true
- ☐ frequently true
- ☐ almost always true
- ☐ always true

24) I haven't had someone to nurture me, share him/herself with me, or care deeply about everything that happens to me.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

25) I find myself clinging to people I'm close to because I'm afraid they'll leave me.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

26) I feel that people will take advantage of me.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

27) I don't fit in.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

28) No man/woman I desire could love me once he or she saw my defects or flaws.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

29) Almost nothing I do at work is as good as other people can do.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

30) I do not feel capable of getting by on my own in everyday life*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

31) I can't seem to escape the feeling that something bad is about to happen.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

32) I have not been able to separate myself from my parent(s) the other people my age seem to.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

33) I think that if I do what I want, I'm only asking for trouble.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me

☐ Describes me perfectly

34) I'm the one who usually ends up taking care of the people I'm close to.*

☐ Completely untrue of me

☐ Mostly untrue of me

☐ Slightly more true than untrue

☐ Moderately true of me

☐ Mostly true of me

☐ Describes me perfectly

35) I am too self-conscious to show positive feelings to others (e.g. affection, showing I care).*

☐ Completely untrue of me

☐ Mostly untrue of me

☐ Slightly more true than untrue

☐ Moderately true of me

☐ Mostly true of me

☐ Describes me perfectly

36) I must be the best at most of what I do; I can't accept second best.*

☐ Completely untrue of me

☐ Mostly untrue of me

☐ Slightly more true than untrue

☐ Moderately true of me

☐ Mostly true of me

☐ Describes me perfectly

37) I have a lot of trouble accepting "no" for an answer when I want something from other people.*

☐ Completely untrue of me

☐ Mostly untrue of me

☐ Slightly more true than untrue

☐ Moderately true of me

☐ Mostly true of me

☐ Describes me perfectly

38) I can't seem to discipline myself to complete most routine or boring tasks.*

☐ Completely untrue of me

☐ Mostly untrue of me

☐ Slightly more true than untrue

☐ Moderately true of me

- ☐ Mostly true of me
- ☐ Describes me perfectly

39) Having money and knowing important people make me feel worthwhile.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

40) Even when things seem to be going well, I feel that it is only temporary.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

41) If I make a mistake I deserve to be punished.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

42) I don't have people to give me warmth, holding, and affection.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

43) I need other people so much that I worry about losing them.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue

- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

44) I feel that I cannot let my guard down in the presence of other people, or else they will intentionally hurt me.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

45) I'm fundamentally different from other people.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

46) No one I desire would want to stay close to me if he or she knew the real me.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

47) I'm incompetent when it comes to achievement.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

48) I think of myself as a dependent person when it comes to everyday functioning.*

- ☐ Completely untrue of me

- ☐ () Mostly untrue of me
- ☐ () Slightly more true than untrue
- ☐ () Moderately true of me
- ☐ () Mostly true of me
- ☐ () Describes me perfectly

49) I feel that a disaster (natural, criminal, financial, or medical) could strike at any moment.*

- ☐ () Completely untrue of me
- ☐ () Mostly untrue of me
- ☐ () Slightly more true than untrue
- ☐ () Moderately true of me
- ☐ () Mostly true of me
- ☐ () Describes me perfectly

50) My parent(s) and I tend to be over involved in each other's lives and problems.*

- ☐ () Completely untrue of me
- ☐ () Mostly untrue of me
- ☐ () Slightly more true than untrue
- ☐ () Moderately true of me
- ☐ () Mostly true of me
- ☐ () Describes me perfectly

51) I feel as if I have no choice but to give into other people's wishes, or else they will retaliate, get angry, or reject me in some way.*

- ☐ () Completely untrue of me
- ☐ () Mostly untrue of me
- ☐ () Slightly more true than untrue
- ☐ () Moderately true of me
- ☐ () Mostly true of me
- ☐ () Describes me perfectly

52) I am a good person because I think of others more than myself.*

- ☐ () Completely untrue of me
- ☐ () Mostly untrue of me
- ☐ () Slightly more true than untrue
- ☐ () Moderately true of me
- ☐ () Mostly true of me
- ☐ () Describes me perfectly

53) I find it embarrassing to express my feelings to others.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

54) I try to do my best; I can't settle for "good enough."*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

55) I'm special and shouldn't have to accept many of the restrictions or limitations placed on other people.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

56) If I can't reach a goal, I become easily frustrated and give up.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

57) Accomplishments are of most value to me if other people notice them.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

58) If something good happens, I worry that something bad is likely to follow.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

59) If I don't try my hardest, I should expect to lose out.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

60) I haven't felt that I'm special to someone.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

61) I worry that people I feel close to will leave me or abandon me.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

62) It is only a matter of time before someone betrays me.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me

☐ Describes me perfectly

63) I don't belong; I'm a loner.*

☐ Completely untrue of me

☐ Mostly untrue of me

☐ Slightly more true than untrue

☐ Moderately true of me

☐ Mostly true of me

☐ Describes me perfectly

64) I'm unworthy of the love, attention, and respect of others.*

☐ Completely untrue of me

☐ Mostly untrue of me

☐ Slightly more true than untrue

☐ Moderately true of me

☐ Mostly true of me

☐ Describes me perfectly

65) Most other people are more capable than I am in areas of work and achievement.*

☐ Completely untrue of me

☐ Mostly untrue of me

☐ Slightly more true than untrue

☐ Moderately true of me

☐ Mostly true of me

☐ Describes me perfectly

66) I lack common sense.*

☐ Completely untrue of me

☐ Mostly untrue of me

☐ Slightly more true than untrue

☐ Moderately true of me

☐ Mostly true of me

☐ Describes me perfectly

67) I worry about being physically attacked by people.*

☐ Completely untrue of me

☐ Mostly untrue of me

☐ Slightly more true than untrue

☐ Moderately true of me

- ☐ Mostly true of me
- ☐ Describes me perfectly

68) It is very difficult for my parent(s) and me to keep intimate details from each other without feeling betrayed or guilty.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

69) In relationships, I usually let the other person have the upper hand.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

70) I'm so busy doing things for the people I care about that I have little time for myself.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

71) I find it hard to be free-spirited and spontaneous around other people.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

72) I must meet all my responsibilities.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me

- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

73) I hate to be constrained or kept from doing what I want.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

74) I have a very difficult time sacrificing immediate gratification or pleasure to achieve a long-range goal.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

75) Unless I get a lot of attention from others, I feel less important.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

76) You can't be too careful; something will almost always go wrong.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

77) If I don't do the job right, I should suffer the consequences.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

78) I have not had someone who really listens to me, understands me, or is tuned into my true needs and feelings.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

79) When someone I care for seems to be pulling away or withdrawing from me, I feel desperate.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

80) I am quite suspicious of other people's motives.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

81) I feel alienated or cut off from other people.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

82) I feel that I'm not lovable.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

83) I'm not as talented as most people are at their work.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

84) My judgement cannot be counted on in everyday situations.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

85) I worry that I will lose all my money and become destitute or very poor.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

86) I often feel as if my parent(s) are living through me – that I don't have a life of my own.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me

☐ Describes me perfectly

87) I've always let others make choices for me, so I really don't know what I want for myself.*

☐ Completely untrue of me

☐ Mostly untrue of me

☐ Slightly more true than untrue

☐ Moderately true of me

☐ Mostly true of me

☐ Describes me perfectly

88) I've always been the one who listens to everyone else's problems.*

☐ Completely untrue of me

☐ Mostly untrue of me

☐ Slightly more true than untrue

☐ Moderately true of me

☐ Mostly true of me

☐ Describes me perfectly

89) I control myself so much that many people think I am unemotional or unfeeling.*

☐ Completely untrue of me

☐ Mostly untrue of me

☐ Slightly more true than untrue

☐ Moderately true of me

☐ Mostly true of me

☐ Describes me perfectly

90) I feel that there is constant pressure for me to achieve and get things done.*

☐ Completely untrue of me

☐ Mostly untrue of me

☐ Slightly more true than untrue

☐ Moderately true of me

☐ Mostly true of me

☐ Describes me perfectly

91) I feel that I shouldn't have to follow the normal rules or conventions that other people do.*

☐ Completely untrue of me

☐ Mostly untrue of me

☐ Slightly more true than untrue

☐ Moderately true of me

- ☐ Mostly true of me
- ☐ Describes me perfectly

92) I can't force myself to do things I don't enjoy, even when I know it's for my own good.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

93) If I make remarks at a meeting, or am introduced in a social situation, it's important for me to get recognition and admiration.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

94) No matter how hard I work, I worry that I could be wiped out financially and lose almost everything.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

95) It doesn't matter why I make a mistake. When I do something wrong, I should pay the consequences.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

96) I haven't had a strong or wise person to give me sound advice or direction when I'm not sure what to do.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

97) Sometimes I'm so worried about people leaving me that I drive them away.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

98) I'm usually on the lookout for people's ulterior or hidden motives.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

99) I always feel on the outside of groups.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

100) I am too unacceptable in very basic ways to reveal myself to other people or to let them get to know me well.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

101) I'm not as intelligent as most people when it comes to work.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

102) I don't feel confident about my ability to solve everyday problems that come up.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

103) I worry that I'm developing a serious illness, even though nothing serious has been diagnosed by a doctor.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

104) I often feel I do not have a separate identity from my parent(s) or partner.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

105) I have a lot of trouble demanding that my rights be respected and that my feelings be taken into account.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me

- ☐ Mostly true of me
- ☐ Describes me perfectly

106) Other people see me as doing too much for others and not enough for myself.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

107) People see me as uptight emotionally.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

108) I can't let myself off the hook easily or make excuses for my mistakes.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

109) I feel that what I have to offer is of greater value than the contributions of others.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

110) I have rarely been able to stick to my resolutions.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

111) Lots of praise and compliments make me feel like a worthwhile person.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

112) I worry that a wrong decision could lead to disaster.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

113) I'm a bad person who deserves to be punished.*

- ☐ Completely untrue of me
- ☐ Mostly untrue of me
- ☐ Slightly more true than untrue
- ☐ Moderately true of me
- ☐ Mostly true of me
- ☐ Describes me perfectly

114) Please indicate your age.*

- ☐ 18 to 25
- ☐ 26 to 34
- ☐ 35 to 44
- ☐ 45 to 54
- ☐ 55 to 64

☐ 65 or above

115) Gender*

☐ female

☐ male

116) Which of the following best describes your industry sector?*

☐ retail banking

☐ investment banking

☐ insurance

☐ media/broadcast/arts

☐ retailing

☐ communications & information technology

☐ leisure/hospitality

☐ aviation

☐ transport (not aviation)

☐ education

☐ business consultancy

☐ property & construction

☐ advertising & marketing

☐ healthcare

☐ local/national government

☐ 'third sector'/charity

☐ armed forces

☐ police

☐ manufacturing

☐ energy/utilities

☐ professional, scientific and technical

☐ pharmaceuticals

☐ law

☐ other

117) How many employees does your organisation have (approximately)?

☐ 0-9

☐ 10-49

☐ 50-99

☐ 100-249

☐ 250-499

☐ 500-2499

☐ 2500-9999

☐ 10,000+

118) Which of the following best describes your functional role?*

☐ finance

☐ marketing

☐ sales

☐ information technology

☐ human resources

☐ operations

☐ research and development

☐ planning and strategy

☐ consultant

☐ lecturer/teacher/academic

☐ health professional

☐ other

119) Which of these terms best describes the management level of your role?*

☐ non-management

☐ supervisory/junior management

☐ middle management

☐ senior management

☐ board level/CEO

☐ professional/consultant

☐ other

120) Where are you located?*

☐ United Kingdom

☐ Another European country

☐ USA

☐ Canada

☐ Central/South America

☐ Asia

☐ Africa

☐ Middle East

☐ Australasia

Appendix 3 – Participant briefing/debriefing text for online survey

Briefing text

Thank you for agreeing to take part in this survey, which is exploring aspects of stress and resilience among individuals in various settings. Your participation will help our understanding of stress, and ways of helping people deal with it. The survey consists of a series of questions and statements, and you are asked to respond as directed. The whole survey should take around 15 minutes to complete, and you are not advised to consider each question at length - usually your first instinct is most accurate.

Participation in this research is completely anonymous and confidential. You cannot be identified by the researchers in any way. In addition, all research is carried out under the guidelines of the British Psychological Society (www.bps.org.uk). You are able to withdraw at any stage of the research without needing to give a reason, and no responses will be used unless the final 'submit' option is chosen.

If, as a result of participating in this research, you experience any kind of emotional distress, you are encouraged to approach your Doctor/General Practitioner in the first instance, or seek support from local or national mental health support services, such as Mind (www.mind.org.uk) or from a qualified psychologist, therapist or counsellor, for example:

<http://www.itsgoodtotalk.org.uk/therapists>

<http://www.bps.org.uk/psychology-public/find-psychologist/find-psychologist>

If you have any follow up questions or concerns about the research, you can contact the lead researcher, **Tim Walker**, at: [REDACTED] or contact the research supervisor, **Dr Susan Strauss**, at: [REDACTED]

By continuing with this survey and selecting 'submit' you confirm that you have read the information above and consent to the use of your responses for the purposes of the study. Thanks again for your participation.

Debriefing text

Thank you for taking part in this research into stress and resilience. This study is concerned with the way in which individuals' beliefs and psychological processes affect their vulnerability to stress and potential burnout.

How was this tested?

The survey you have just completed included questions that indicate the level of burnout that you might be currently experiencing, across a number of symptoms. It also included questions that enable us to identify deeply held beliefs that are often formed in early life and can predict later patterns of behaviour and response to environmental factors. Finally, the survey included a measure of 'psychological flexibility' which determines how an individual is likely to cope with external stressors.

Confidentiality

As mentioned before you agreed to participate, the survey is completely anonymous and confidential. We are just looking for general statistical trends and not for individual results.

Distress

If you have found that taking part has alerted you to any physical or emotional symptoms that are causing you distress, you are encouraged to approach your Doctor/General Practitioner in the first instance, or seek support from local or national mental health support services, such as Mind (www.mind.org.uk) or from a qualified psychologist, therapist or counsellor (eg. <http://www.itsgoodtotalk.org.uk/therapists>, <http://www.bps.org.uk/psychology-public/find-psychologist/find-psychologist>).

Follow Up

If you have any follow up questions or concerns about the research, you can contact the lead researcher, **Tim Walker**, at: [REDACTED] or contact the research supervisor, **Dr Susan Strauss**, at: [REDACTED] Thanks again for your participation.

Ethics Release Form for Student Research Projects

All students planning to undertake any research activity in the School of Arts and Social Sciences are required to complete this Ethics Release Form and to submit it to their Research Supervisor, **together with their research proposal clearly stating aims and methodology**, prior to commencing their research work. If you are proposing multiple studies within your research project, you are required to submit a separate ethical release form for each study.

This form should be completed in the context of the following information:

- An understanding of ethical considerations is central to planning and conducting research.
- Approval to carry out research by the Department or the Schools does not exempt you from Ethics Committee approval from institutions within which you may be planning to conduct the research, e.g.: Hospitals, NHS Trusts, HM Prisons Service, etc.
- The published ethical guidelines of the British Psychological Society (2009) [Guidelines for minimum standards of ethical approval in psychological research](#) (BPS: Leicester) should be referred to when planning your research.
- **Students are not permitted to begin their research work until approval has been received and this form has been signed by Research Supervisor and the Department's Ethics Representative.**

Section A: To be completed by the student

Please indicate the degree that the proposed research project pertains to:

D.Psych Counselling Psychology

Please answer all of the following questions, circling yes or no where appropriate:

1. Title of project

Are Psychological Inflexibility and Early Maladaptive Schemas predictors of burnout within organisations, and what are the implications of this for therapeutic practice?

2. Name of student researcher (please include contact address and telephone number)

[REDACTED]

3. Name of research supervisor

Dr. Susan Strauss, City University.

4. Is a research proposal appended to this ethics release form? **Yes** No

5. Does the research involve the use of human subjects/participants? **Yes** No

If yes,

a. Approximately how many are planned to be involved?

Quant: 300-500
Qual: 6-12

b. How will you recruit them?

Quant: By approaching human resources departments within UK-based organisations and asking that they publicise the research within their organisation. Additionally, by using snowball technique among my own contacts.

Qual: Using snowball technique among my existing contacts. Using professional networking media such as LinkedIn. Use of psychology/psychotherapy/counselling forums.

c. What are your recruitment criteria?

(Please append your recruitment material/advertisement/flyer)

Quant: Adults in the workplace, private or public sector.

Qual: Therapists (Psychologists, psychotherapists, counsellors) with experience of working with clients presenting with burnout/workplace stress, and with working knowledge of schema therapy and/or ACT.

d. Will the research involve the participation of minors (under 18 years of age) or vulnerable adults or those unable to give informed consent? Yes **No**

d1. If yes, will signed parental/carer consent be obtained? Yes **No**

d2. If yes, has a CRB check been obtained? Yes **No**
(Please append a copy of your CRB check)

6. What will be required of each subject/participant (e.g. time commitment, task/activity)? *(If psychometric instruments are to be employed, please state who will be supervising their use and their relevant qualification).*

Quant: Online survey lasting approximately 20 minutes. As a Counselling Psychologist in training I will be administering the psychometric instruments involved, supervised by my research supervisor, Dr. Susan Strauss, PhD, CPsychol.

Qual: Participation in focus group lasting 90-120 minutes.

7. Is there any risk of physical or psychological harm to the subjects/participants?

Yes

No

If yes,

a. Please detail the possible harm?

Quant: It is possible that by completing the survey that respondents may become aware of their own level of burnout, which could cause psychological distress.

b. How can this be justified?

This is an unavoidable risk when administering any measure of psychological stress. The results of this research will inform Counselling Psychology and related disciplines of potential methods for prediction of burnout in the workplace, and potentially suitable early intervention approaches.

As part of the survey design, participants will be informed that if, as a result of participating, they experience distress, they should contact their General Practitioner or seek help from a qualified therapist and/or mental health charity such as Mind. Relevant contact details will be provided. In addition, I will be providing my own contact details and those of my research supervisor.

8. Will all subjects/participants and/or their parents/carers receive an information sheet describing the aims, procedure and possible risks of the research, as well as providing researcher and supervisor contact details?

Yes

(Please append the information sheet which should be written in terms which are accessible to your subjects/participants and/or their parents/carers)

9. Will any person's treatment/care be in any way be compromised if they choose not to participate in the research?

No

10. Will all subjects/participants be required to sign a consent form, stating that they fully understand the purpose, procedure and possible risks of the research?

No

If no, please justify

Consent will be built into the online survey – it will be made clear to participants that by continuing with the survey they are giving consent.

If yes please append the informed consent form which should be written in terms which are accessible to your subjects/participants and/or their parents/carers)

11. What records will you be keeping of your subjects/participants? (e.g. research notes, computer records, tape/video recordings)?

Quant: I will be using an online survey tool which will store all responses. However, all participation is anonymous, and IP address recording will be disabled.

Qual: I will be audio recording focus groups (with consent) and making contemporaneous notes. I will also be transcribing and analysing these recordings. This will all be done without identifying participants.

12. What provision will there be for the safe-keeping of these records?

The online survey will be password protected, with the password known only to myself.

All research materials and analysis will be kept on a password protected computer and/or in a locked cabinet.

13. What will happen to the records at the end of the project?

BPS guidelines state 'In relation to data retention: the Good Practice Guidelines for the conduct of psychological research within the NHS outlines within its Data Storage Section; If the research is to be published, most scientific journals require original data (including videos and transcripts) to be kept for 5 years.'

The Society's Generic Professional Practice Guidelines state that: 'Psychologists should make, keep and disclose information in records only in accordance with national policy and legislation, the policies and procedures of organisations they are employed by/working in collaboration with, and the Society's Code of Ethics and Conduct' (p. 12 Access to records and records keeping).

As I am not conducting this research within the NHS I propose to keep records for 7 years to allow for future publication possibilities.

14. How will you protect the anonymity of the subjects/participants?

Quant: My survey will be anonymised as above. Human resources departments who publicise the research within their organisations will be asked for assurance that they will not monitor their employees' participation.

Qual: My participants will be asked to maintain confidentiality within the focus group, and will not be identified by name in my analysis and thesis.

15. What provision for post research de-brief or psychological support will be available should subjects/participants require?

Quant: As noted above, both mine and my supervisor's contact details will be provided in case of additional queries or support requirements from participants. Additionally advice and contact information will be provided for psychological or mental health support services should participants feel they need this, eg BPS/BACP/Mind

Qual: I am not anticipating any need for debrief or psychological support among my therapist participants, but they will have mine and my supervisor's contact details should they require a follow-up discussion. I would anticipate some interest in my findings and would be happy to provide access to my thesis post qualification.

(Please append any de-brief information sheets or resource lists detailing possible support options)

If you have circled an item in **underlined bold** print or wish to provide additional details of the research please provide further explanation here:

Signature of student researcher

Date

30.1.14

CHECKLIST: the following forms should be appended unless justified otherwise

Research Proposal
Recruitment Material
Information Sheet
Consent Form
De-brief Information

Section B: Risks to the Researcher

1. Is there any risk of physical or psychological harm to yourself? Yes
If yes,

a. Please detail possible harm?

There is a possibility that I may become alerted to potential symptoms of burnout within myself, which could lead to psychological distress. I am currently undergoing a period of personal change with respect to this programme, with consequential workload and financial pressures.

b. How can this be justified?

It would not be possible to carry out the research without this risk, which I believe is very small and manageable.

c. What precautions are to be taken to address the risks posed?

I will be taking a reflexive approach to my research and will therefore be able to identify if I am feeling in any way psychologically vulnerable. If I do I will use the support and resources available to me, including my research supervisor, my personal tutor at City University and my personal therapist.

Section C: To be completed by the research supervisor

(Please pay particular attention to any suggested research activity involving minors or vulnerable adults. Approval requires a currently valid CRB check to be appended to this form. If in any doubt, please refer to the Research Committee.)

Please mark the appropriate box below:

Ethical approval granted ☒

Refer to the Department's Research and Ethics Committee

Refer to the School's Research and Ethics Committee

Signature

[Redacted Signature]

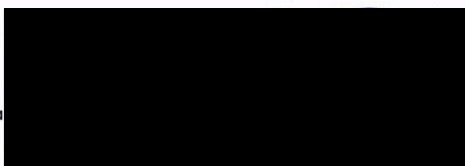
Date 2 Dec 13

Section D: To be completed by the 2nd Departmental staff member

(Please read this ethics release form fully and pay particular attention to any answers on the form where underlined bold items have been circled and any relevant appendices.)

I agree with the decision of the research supervisor as indicated above

Signa



Date

13/12/13

Appendix 5 – Interview stimulus: ACT Therapists

Private and Confidential to Research Participants,
June/July 2014



Are Early Maladaptive Schemas and Psychological Inflexibility related to burnout in individuals within organisations, and how can Schema Therapy and ACT inform appropriate interventions?

Tim Walker, City University

Burnout / Occupational Stress

Burnout defined

- "physical or mental collapse caused by overwork or stress: *high levels of professionalism which may result in burnout*" (Oxford English Dictionary)
- "*a psychological response to significant and persistent job-related stressors over a period of time*" (Maslach et al, 1996)
- The Maslach Burnout Inventory (MBI) identifies three specific dimensions of burnout
 - emotional exhaustion
 - cynicism and detachment within the work environment
 - a personal sense of ineffectiveness and under-achievement (Maslach, 2003)
 - MBI validated as a correlate of ICD-10 work-related neurasthenia (Shaufeli et al. (2001)

Burnout / Occupational Stress

- Cost of occupational stress to UK employers over £530m pa (HSE, 2007) – cost to society is much greater
- 10.4 million working days lost in 2011/12 (44% male, 56% female)
- Average of 24 working days lost per individual suffering from occupational stress
- 57% of total days lost were due to GP certified mental ill health
- The prevalence of stress in 2011/12 was **428 000** cases (40%) out of a total of **1 073 000** cases for all work-related illnesses
- On average each person suffering took **24.2 days** off work during 2011/12 (**44%** above the 16.8 days average for all illness and injury combined)

(Source: Health and Safety Executive 2013)

Burnout / Occupational Stress

UK statistics

Highest rates
in managerial
and
professional
occupations

Higher
rates for middle
aged
workers
(ages 35 to 54)

Highest rates
in the largest
workplaces
(>250
employees)

2011/12 statistics
new cases: 221 000
Pre-existing cases
207 000



(Source: Health and Safety Executive 2013)

Burnout / Occupational Stress

Interventions

Intervention Level	Objective	Approach
Primary	Identify and address sources of stress in workplace	Organisational design
Secondary	Train employees in 'coping techniques'	eg. relaxation, meditation, breathing, time management
Tertiary	Psychological coaching and/or therapy for those experiencing stress or who may be vulnerable to stress	Typically Employee Assistance Programmes

e.g. Bamber & McMahon, 2008

Burnout / Occupational Stress

Limitations of current interventions:

- Primary level interventions still result in a wide range of individual response to stress
- Secondary level interventions are typically focused on 'symptom management'
- Cognitive Behavioural Therapy (CBT) is generally considered the first choice treatment for emotional problems found in the workplace, such as depression and anxiety (NICE guidelines 2004, Dept of Health Guidelines 2001) and also informs many coaching methodologies
- However, there is a growing school of thought that CBT is also too focused on symptom reduction and is limited in its ability to address:
 - long term repeating patterns in an individual's life
 - thinking and emotional patterns which do not respond to a surface level 'rational' examination (e.g., Gaudiano & Liotti, 1983).

Burnout / Occupational Stress

Two interesting ways to think about individual response to stress:

1. Schema (Early Maladaptive Schema or 'EMS')
 - Deeply held patterns of viewing the self, others and the World
 - Established in childhood and early development when basic needs are not met
 - Lead to individuals repeating situations which lead to their own and others emotional distress
 - Often lead to maladaptive coping strategies
 - Can be identified through coaching/therapy or via use of psychometric tools
 - Examples include 'unrelenting standards', 'entitlement/grandiosity' and 'emotional inhibition'
 - Lead to cognitive distortions (negative interpretations/predictions of life events), self defeating behaviour and schema coping styles (maladaptive)
 - The coping styles are schema surrender, schema avoidance and schema overcompensation
 - Interventions include systematically confronting and challenging EMS through emotive, interpersonal, cognitive and behavioural techniques (e.g. Young et al, 2003)

Burnout / Occupational Stress

Two interesting ways to think about individual response to stress

2. Psychological Inflexibility
 - A core concept of Acceptance and Commitment Therapy/Training (ACT)
 - Can be directly measured by a validated psychometric tool (AAQ-2)
 - Characterised by 'cognitive fusion' and 'experiential avoidance'
 - Cognitive fusion is a literal belief in one's own thoughts without any understanding that these are thoughts that occur in specific contexts
 - This fusion or rigidity of thinking does not respond to behavioural experience or environmental influence
 - Experiential avoidance comes from a lack of willingness to experience both helpful and difficult emotions, often as a result of cognitive fusion
 - The fundamental cornerstones of ACT are the acceptance of difficult emotions in the service of achieving (committed to) goals that are in line with our long term values
 - Interventions focus on six key processes designed to increase psychological flexibility, and these combine addressing cognitive fusion and experiential avoidance (through experiential techniques including mindfulness) with identifying values and goal setting (e.g Hayes et al, 2012)

Burnout / Occupational Stress

Literature

- EMS and burnout appears to be an under researched area
 - Schema-focused model of occupational stress and work dysfunction (Bamber 2006)
 - Evidence that certain EMS linked to career choice and subsequent burnout in health workers
 - Specifically, emotional deprivation predictive of EE, the subjugation and entitlement EMS were predictive of DP, and the emotional inhibition EMS was predictive of reduced PA (Bamber & McMahon, 2008)
- No direct studies of AAQ/PI and burnout, but meta analysis shows predictive of depression, anxiety, general mental health, job satisfaction, future work absence and future job performance with average effect size $r = .42$ (Hayes et al, 2006)

Burnout / Occupational Stress

Hypothesis

- That EMS of emotional deprivation, subjugation & entitlement and emotional inhibition will be predictive of burnout in individuals in organisations
- In addition, from my qualitative understanding of burnout, the EMS of 'dependence/incompetence', 'failure', 'negativity/pessimism', 'unrelenting standards/hypercriticalness' and 'punitiveness' will also be predictive
- Additionally, that higher levels of psychological inflexibility will also be predictive of burnout

Burnout / Occupational Stress

Design

- Mixed design, consisting of:
 - A quantitative workforce survey, combining the MBI-GS (Maslach Burnout Inventory – General Survey), the YSQ-S3 (Young Schema Questionnaire, short form), the AAQ-2 (measuring psychological inflexibility) and including additional variables such as age, gender, industry type, job role and level of management.
 - Two focus groups, one drawn from therapists familiar with Schema Therapy and one from therapists familiar with ACT
 - Participants to have experience of working with clients presenting with symptoms of burnout
 - Purpose of focus groups is to validate and explore the findings of the quantitative study, and to understand how participants have utilised (or will now utilise) their knowledge of Schema/ACT in relation to clients presenting with burnout

AAQ-ii Items

Below you will find a list of statements. Please rate how true each statement is for you by circling a number next to it. Use the scale below to make your choice.

1	2	3	4	5	6	7
never true	very seldom true	seldom true	some times true	frequently true	almost always true	always true
1	2	3	4	5	6	7
1. My painful experiences and memories make it difficult for me to live a life that I would value.						
2. I'm afraid of my feelings.						
3. I worry about not being able to control my worries and feelings.						
4. My painful memories prevent me from having a fulfilling life.						
5. Emotions cause problems in my life.						
6. It seems like most people are handling their lives better than I am.						
7. Worries get in the way of my success.						

Survey responses

- 506 participants
- 67.8% female, 32.2% male

Age	%age
18-25	2.2
26-34	19.0
35-44	33.8
45-54	29.6
55-64	13.6
65 and above	1.8

Overall Burnout Pathology (using MBI cut offs)

MBI cut-off	Emotional Exhaustion	Cynicism	Professional Efficacy
High	38.6%	45.1%	45.8%
Moderate	21.3%	24.3%	29.1%
Low	40.1%	30.6%	25.1%

AAQ Correlations

Correlation between AAQii/Psychological Inflexibility and MBI dimensions

MBI Dimension	Pearson Correlation with Psychological Inflexibility
Emotional Exhaustion	0.585
Cynicism	0.524
Loss of Professional Efficacy	0.359

General Questions

- What is your reaction to the overall levels of burnout indicated by the study?
- How might psychological inflexibility contribute to each dimension of burnout?
- Is a unidimensional measure of psychological flexibility helpful given that it correlates highly with a broad range of psychopathology, including burnout?
- Does it make sense to look at the three dimensions independently?
- How might ACT interventions be targeted towards individuals vulnerable to burnout? What can ACT bring to the understanding of burnout?
- Is there any ethical issue in helping individuals to become more accepting of 'high pressure' organisational environments?
- Can you provide any relevant case examples (anonymously)?

Appendix 6 – Interview stimulus: Schema Therapists (slides included that varied from ACT stimulus material – slides common to both not repeated)

Emotional Exhaustion

The five highest EMS correlations

Early Maladaptive Schema	Pearson Correlation with Emotional Exhaustion
Negativity Pessimism	0.487
Vulnerability to Harm & Illness	0.478
Mistrust & Abuse	0.435
Insufficient Self Control/Discipline	0.419
Dependence/Incompetence	0.414

- As a group of EMS do these make sense in terms of EE?
- How do these relate to mode work
- Other thoughts in relation to interventions?

Emotional Exhaustion

Regression Analysis

- Initially run with 5 highest correlating EMS
- Strong bivariate correlation found between vulnerability to harm/illness and negativity/pessimism (0.829) so for statistical reasons vulnerability to h/i removed as lower of the two initial correlation values with emotional exhaustion
- Discussion – is there a qualitative distinction to be made between the two EMS?

Model Summary ^a						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.521 ^b	.282	.253	6.70804		
a. Predictors: (Constant), Negativity_pessimism, InsufficientSelfControl_Discipline, Dependence_Incompetence, Mistrust_Abuse						
b. Dependent Variable: Exhaustion						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics
	B	Std. Error	Beta			
1	(Constant)	6.399	.929		6.890	.000
	Mistrust_Abuse	.196	.079	.196	2.212	.012
	Dependence_Incompetence	.249	.102	.117	2.399	.020
	InsufficientSelfControl_Discipline	.249	.075	.199	3.299	.001
	Negativity_pessimism	.229	.079	.299	4.176	.000

Cynicism

The six* highest EMS correlations

Early Maladaptive Schema	Pearson Correlation with Cynicism
Social isolation/alienation	0.435
Insufficient Self Control/Discipline	0.411
Vulnerability to harm/illness	0.411
Defectiveness/shame	0.399
Negativity Pessimism	0.398
Subjugation	0.398

- As a group of EMS do these make sense in terms of cynicism?
- How do these relate to mode work
- Other thoughts in relation to interventions?

Cynicism

Regression Analysis

- Initially run with 6 highest correlating EMS
- Strong bivariate correlations found between vulnerability to harm/illness and negativity/pessimism (0.829) and defectiveness/shame and social isolation/alienation so for statistical reasons defectiveness/shame and negativity/pessimism removed as both lower of the two initial correlation values with cynicism

Model Summary ^a				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.522 ^b	.274	.265	7.12155
a. Predictors: (Constant), InsufficientSelfControl_Discipline, SocialIsolation_Alienation, Vulnerability_harm_illness, Subjugation				
b. Dependent Variable: Cynicism				

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.145	1.005		2.120	.030
	SocialIsolation_Alienation	.305	.057	.325	4.594	.000
	Vulnerability_harm_illness	.224	.051	.139	2.155	.036
	Subjugation	.155	.055	.094	1.530	.065
	InsufficientSelfControl_Discipline	.323	.077	.195	4.217	.000

Loss of Professional Efficacy

Regression Analysis

- Initially run with 5 highest correlating EMS
- No significant bivariate correlations
- However, subjugation and negativity/pessimism dropped from regression as both were not making a significant unique contribution to the model (both had sig > 0.05)

Model Summary ^a				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.425 ^b	.181	.176	6.03155
a. Predictors: (Constant), Emotional_Inhibition, InsufficientSelfControl_Discipline, Failure				
b. Dependent Variable: ProfSITRev				

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.433	.557		7.257	.000
	Failure	.322	.065	.237	4.755	.000
	InsufficientSelfControl_Discipline	.220	.064	.185	3.434	.001
	Emotional_Inhibition	.153	.057	.121	2.705	.007

Loss of Professional Efficacy

Regression Analysis

- Initially run with 5 highest correlating EMS
- No significant bivariate correlations
- However, subjugation and negativity/pessimism dropped from regression as both were not making a significant unique contribution to the model (both had sig > 0.05)

Model Summary ^a				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.425 ^b	.181	.176	6.03155
a. Predictors: (Constant), Emotional_Inhibition, InsufficientSelfControl_Discipline, Failure				
b. Dependent Variable: ProfSITRev				

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.433	.557		7.257	.000
	Failure	.322	.065	.237	4.755	.000
	InsufficientSelfControl_Discipline	.220	.064	.185	3.434	.001
	Emotional_Inhibition	.153	.057	.121	2.705	.007

Commonly Occurring EMS

Early Maladaptive Schema	Emotional Exhaustion	Cynicism	Loss of Professional Efficacy
Negativity Pessimism	Final	Initial	Initial
Insufficient Self Control/Discipline	Final	Final	Final
Dependence/Incompetence	Final		
Mistrust/Abuse	Final		
Vulnerability to Harm & Illness	Initial	Final	
Subjugation		Final	Initial
Social isolation/alienation		Final	
Defectiveness/shame		Initial	
Failure			Final
Emotional Inhibition			Final

Final = Significant in final regression model

Initial = High Pearson correlation but not significantly unique contribution to regression model

Appendix 7 – Participant briefing/debriefing text: Therapists

Therapist Participant Information Sheet 30.6.14

Thank you for agreeing to take part into my research project evaluating the relationship between Psychological Inflexibility (PI), Early Maladaptive Schemas (EMS) and burnout for individuals in organisational settings, and the implications of this for therapeutic practice.

This research is being carried out as part of my Professional Doctorate programme in Counselling Psychology at City University, London, and is supervised by Dr Susan Strauss.

This work in particular draws from the work of Christina Maslach (burnout research), Steven Hayes (Acceptance and Commitment Therapy, 'ACT'), Jeffrey Young (Schema Therapy) and Martin Bamber (Early Maladaptive Schemas and Burnout) (references available).

I have conducted a quantitative analysis using the AAQ-2 (Psychological Inflexibility), the YSQ-S3 (Early Maladaptive Schemas) and MBI (Maslach Burnout Inventory) instruments respectively.

You will be participating in the qualitative component of my research, looking into the implications of these relationships for therapeutic practice, with a focus on either ACT or Schema Therapy.

My commitment:

- To maintain complete confidentiality and only use anonymised examples and quotes in my research
- To try and represent the views expressed in the interview as accurately as possible in my thesis
- To intervene only as I think necessary to make best use of our time together and 'maintain agenda'

- To ask open questions as much as possible and not to impose any views or preconceptions I may have on the process

Consent Form – Therapists

1. I have read and understood the 'participant information' sheet dated 30.6.14 for this study. I have had the opportunity to consider the information and ask questions.

2. I understand that taking part is entirely voluntary and that I am free to change my mind and withdraw at any time, without giving any reason.

3. I agree to maintain confidentiality with regard to other participants and any clinical/case material discussed

3. I agree to being interviewed and the interview being audio recorded.

4. I agree that (anonymous) quotes from my interview may be used in the write up of the study and may be published.

5. I agree to take part in this study

Signed -----

Name -----

Date -----

Professional membership(s) -----

Debriefing form for therapists

Thank you for agreeing to participate in this research project. To confirm, it is evaluating the relationship between Psychological Inflexibility (PI), Early Maladaptive Schemas (EMS) and Burnout for individuals in organisational settings, and the implications of this for therapeutic practice.

It is being conducted as part of my Professional Doctorate programme in Counselling Psychology at City University, London, and is supervised by Dr Susan Strauss.

My hope for the research is that it will help identify those individuals most vulnerable to burnout in the workplace and, by using evaluative tools to do this that are directly linked to therapeutic approaches (ie ACT and Schema Therapy), that it will build insight into the most effective interventions.

If you have further questions please do not hesitate to contact myself, Tim Walker:

[REDACTED]

or contact my research supervisor, Dr. Susan Strauss, at:

[REDACTED]

Although you are a therapist, it is still possible that this research may have triggered some emotional distress. If that is the case I would encourage you to discuss this with an appropriate professional. For completeness I include the BACP/BPS links for therapeutic support:

<http://www.itsgoodtotalk.org.uk/therapists>

<http://www.bps.org.uk/psychology-public/find-psychologist/find-psychologist>

Many thanks again for your participation!

Appendix 8 – Examples of thematic analysis process for ACT Therapist interviews
(handwritten numbers indicate link to initial themes on following page)

Theme P3	Line
too much work and not enough resources	27 9
Personal experience of high burnout levels within public sector, exacerbated in big-city stressful environments - the need to remove oneself every few years	16/34 9
Not just senior jobs – clients who worked for a major supermarket felt under pressure at clocking in and out, even over 30 seconds	50 9
Contradiction over relatively high PE levels – part of the problem (quote) is that being hard-working conscientious and wanting to get it right could be a major contributing factor	66/73 279
'Not saying no is slightly pathological' – a form of psychological inflexibility	91 8
Overstepping our own healthy boundaries, consciously or unconsciously	95 ?
Example of bankers who make a conscious decision not to have the same family relations or look after themselves to be the best of their company make the most money	102/107 8
Question is 'how much does the individual know about what they're doing – is it a free choice?'	109 8
Noticing what's coming up for us making a decision based on that this in line with	125 27

Theme P2	Line
Focus on behavioural change	57/58 14
Important to make a bridge between clinical knowledge and organisational behaviour	62/63 11, 9
Don't need DSM to do good work inside organisations	69 11, 9
Important intervene before burnout really takes hold	86/88 11
Trajectory – emotional exhaustion – cynicism – loss of PE	130/134 279
EE is more fierce/on the surface – easy to spot	138/141 15
Use flexibility index test – FIT - measure six core processes of ACT	210/215 11, 9
EE – clients not mindful – in the past or future	217 6
Cognitive fusion – various examples – I cannot enjoy life/work, I cannot give	224/235

Theme P1	Line
Burnout is a quasi diagnosis – a diagnostic/syndromal way of describing human suffering – incompatible with ACT?	146/150 1
Definition – ceasing to function in way they would choose or managers think is okay	154/156 9
Anti-diagnosis – anti-psychiatry?	177/187 9, 1
MBI items consistent with clinical experience	206 9
Consistent with previous studies e.g. oncologists/ Ramirez	216 9
Correlates were workload and difficulty with complex communications	222/224 9
Robust PE? Act distinction between internal private behaviour and external behaviour	269/272 2
Professional competence = external behaviour	275 3
Case study of palliative care nurse – at breaking point that perhaps	306 9

1 Burnout is a
quasi diagnosis

9 Clinical experience

FEELING
18 better

Private practice vs
2 external behaviour

10 I is a need for
message - change
but need competence
and for motive

19 Looking
the same?
- gender.

3 EE = External

11 Interventions - timing
+ nature.

Triggers
20

4 function of behaviour

12 Agent of the
change not the
organisation
- this

work is
Kearse
21

5 EE function
leads
to burnout

13 doing output
with stress

not just genetic
managers
22

6 EE = Exhaustion
Problem

14 focus on
behavioural
change

Deal with
the devil.
23

7 Cynicism
work?

EE is the enemy
+ subtle thing

Burnout weaker
ability to see
context 24

8 Role - governed
behaviour.

16 Cynicism as
control strategy?

15 Burnout the
norm? 25

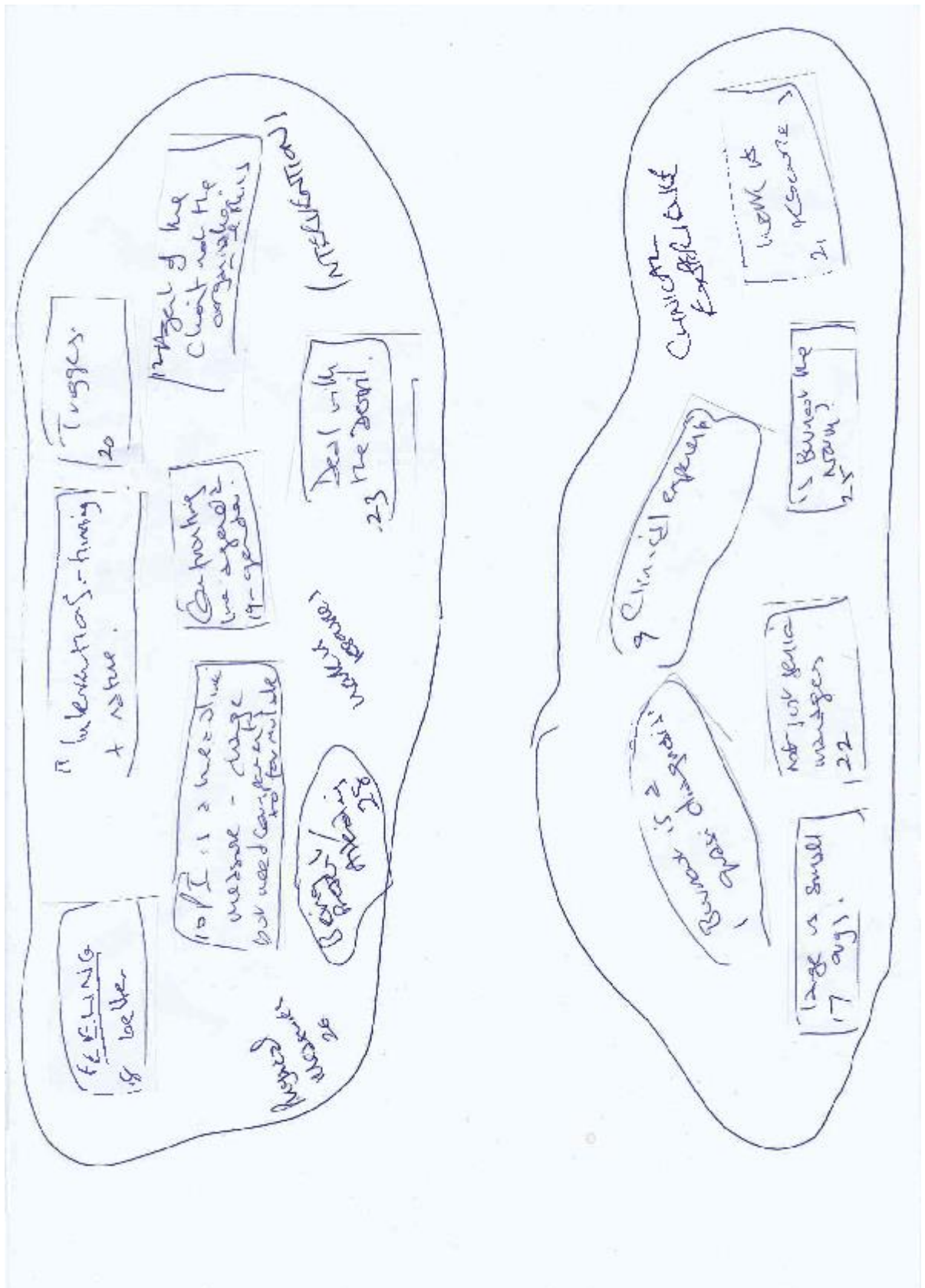
12 age vs small
17 age.

More physical
measures 26.

EE as a
mediator 27

Being present

Example of theme grouping - ACT



Example of transcript and initial analysis - ACT

250 *Physiology - Emotions - Cognition - Feedback*
 251 message back and it's looped to the brain and then we make a sense
 252 of the sensation so 'oh I feel very heavy, I feel detached' and then we
 253 create a story around that. It can go the other way too but I'm
 254 thinking specifically with emotional exhaustion about the physical
 255 bit because we keep doing our lives and it's really the physical bit
 256 that often gives us the first indication that we might be on this
 257 exhaustion road. It's not necessarily that we feel fit and strong and
 258 it's a mental type of exhaustion so I do think it starts with the body
 259 and the not sleeping well, being on the train and the train is really
 260 full, kind of getting ourselves to work and maybe you know - but yes
 261 maybe we're not eating all the right foods so I do feel that there's a
 262 lot about the body sending this back and I think that's how we then
 263 start to make sense of it. Then we might think 'oh I'm not well, I
 264 feel weak, I feel tired' then we might make that link and say 'actually
 265 yeah, I'm working more this time and the waiting list doesn't get any
 266 better' so I think that way around.

267 Interviewer: So if that's true, what's stopping us? What's stopping those people
 268 responding to their physical symptoms?

269 Interviewee: I think it's a number of things. I start on a very global level with
 270 economics. They're doing - they can't just not go to work and have
 271 a duvet day. I think a lot about that is it's taken for granted these
 272 days that we're all a bit tired and all a bit stressed out so at what
 273 stage does that become burnout and at what stage is it still the
 274 'norm'? And the 'norm' doesn't mean it's normal, it just means
 275 statistically the 'norm' and as your number suggested it is
 276 statistically the 'norm'. That's not normal. It's a bit like now with
 277 people who are overweight; it's kind of the 'norm' that everybody is
 278 a bit heavy but that doesn't make it okay. That's already a shift
 279 that's unhelpful for all of us because we think it's okay not to sleep
 280 and be tired and all of these things. Also in the individual I think the
 281 skills to actually maybe really maybe notice the finer qualities of
 282 when it goes from being a bit tired and being a bit stressed out, which
 283 is maybe still okay, to actually yes this goes overboard and it's not
 284 okay anymore. Then to notice that because it might be a very fine
 285 line and then to actually take appropriate action because what do you
 286 do unless you quit your job? Then actually going back to doing
 287 something quite physical and slowing your system down by
 288 breathing and taking time out and kind of being acutely aware of
 289 when you're in a presentation of those stress levels are up and to
 290 slow down and to be okay with that.

291 Interviewer: I think what might be really helpful is to try and think of that banker
 292 population we talked about. Just think about perhaps those stories
 293 and what they might be saying. I know you weren't working in that
 294 way there but I think that - if that's a kind of archetype to work with
 295 then it might be quite helpful to what we're doing.

296
 297
 298

299 Interviewee: So I would say that actually what I've just said in terms of all these
300 dimensions. Starting with the money, even though they have a lot of
301 money, I think the money has built pressure for them so for many of
302 them it's like I can't quite my job, I don't want to do this anymore
303 but I don't want to change my lifestyle because I have a maid and I
304 have this. It's kind of the same issue in the way although of course
305 it's a psychological trap because that's not entirely the case. I think
306 that in that environment there's no way of slowing down. I can give
307 you a very good example of that. I was recruited by a very large
308 bank who we don't want to name here, to do stress management for
309 their senior people and I had to provide my slides to them prior to
310 actually doing their workshop. Part of my slide was actually – of the
311 workshop – was actually that part of good stress management was to
312 have lunch! To go out, even if it's only for ten minutes, leave your
313 desk, eat something, drink something, maybe even have a cigarette
314 which is totally unhealthy! But do something that has a relaxing
315 effect on you to then return to work because actually productivity is
316 likely to be increased and that actually many companies don't allow
317 people to have lunch at their desk because of all the things it does to
318 your system. Basically they literally said to me 'you have to take
319 this out' and I said to them but you want me to teach them stress
320 management and they said 'yes but we don't really want them to
321 have a break' so that's basically the bottom line. Verbally they're
322 given like yes you need to have this and you need to do that but
323 actually they don't because when the banker isn't at their desk they
324 don't see what the market is doing and they might be losing some
325 money, so there's no interest from the company to actually help the
326 client along. So, we have the economical 'I don't want to give it up',
327 the office doesn't want them to slow down really, it's just a lip
328 service, and the individuals are all very clear and say 'I wish I could
329 but I don't feel I can' for mainly not wanting to give up the financial
330 reasons. That was the main thing which is not – so basically their
331 value system was financially placed and keeping their lifestyle were
332 higher values compared to actually whether I'm happy, whether my
333 life is good, whether I'm healthy.

299 Interviewer: Okay and is that a really – is that a very much fused idea do you
300 think? Is it a self-concept? Is it...?

301 Interviewee: I think it's a self-concept, I think yes totally fused. I think that's how
302 they are and they are very aware of it and they don't want to change
303 it because change would then imply that they would have to live with
304 less and you know what the pathologies beneath it; whether they
305 grew up poor and they had to work really hard or whether their
306 husbands would leave them – I don't know all of that but I think that
307 in their minds they – that's what they believe in. 'I need to do this
308 job, I need to keep this lifestyle otherwise I'm...' whatever that is.

309 Interviewer: There's no alternative.

inflexibility
fused to
ideas of lifestyle

Example
of
conflicts
values
- practicalities
- physical impact

Camplicity
between
individual +
employee
values -

fusion -
language -
behavioral
trap!

fused concept

Appendix 9 – Examples of thematic analysis process for Schema Therapist interviews
(handwritten numbers indicate link to initial themes on following page)

Theme P1	Line	Theme P2	Line	Theme P3	Line
Caring professions score highly on unrelenting standards and self-sacrifice (Oz study)	20/21 (1)	Professional sample - different to caring professions?	28 (1)	Clinical work spanning both schemas and modes - schemas at formulation level (2)	194 to 199
Detached protector mode linked to subjugation and social isolation predicts emotional exhaustion (Oz study)	32 (3)	Self-selecting sample, reflect on?	121 (1)	Demanding parent eliciting overactivity in emotional exhaustion (10)	218 to 333
Detached protector was the most problematic and intuitively that makes sense to me	35 (2, 9)	Difference between professional efficacy personal accomplishment and general MBI terms	180 (15)	'Stress equation' where perceived demands or threats exceed perceived resources (6)	221
Not paying attention to emotional distress	38 (16)	Is PE something more robust individuals more senior and experienced?	198 (15)	Unrelenting standards would typically appear (2)	233
Problem-solving, talking themselves up, being very proactive	41/42 (12, 15, 17)	Putting on the blinkers - good quote on PE	2 to 7 (1, 5)	Unconditional primary schemas (vulnerability to harm/mistrust abuse/dependence incompetence) with insufficient self control secondary	248
Tuning out body sensations	44 (16)	PE - maintaining a sense of your own integrity	232 (15)	Profile of people who fundamentally don't feel equipped to deal with demands - discipline issues possibly narcissistic entitlement issues - underpinned by self-doubt - the perfect storm - ticking timebomb?	254
Overcompensation strategy, may be demanding parents, try even harder	47/50 (9)	Clinical significance score of four	299 (2)	Mismatch of specific professional skills and broader life skills/commonsense - health issues	274
Depression leading to cynicism?	53/55 (14)	Understanding workaholism and burnout - workaholism as an over compensatory coping strategy - same as unrelenting standards??	321 (9, 3)	Negativity pessimism pointing to a schema surrender (14, 9)	298
Entitlement - being unable to impose will, triggering sense of	70/71 (12)	Schemas as coping strategies? E.g. schema of failure leading to coping	332 (9, 3)	Organisation as the demanding parent (5)	339

1 | The nature of the sample

2 | Clinical experience

3 | Linking schemes \rightarrow coping style to mode

11 | Not being attentive to distress

4 | Issues of 3 dimensions - complexity.

12 | Discussion.

5 | Organisation \rightarrow parent?

13 | Developed for DS.

6 | Resources vs. demands (real or perceived).

14 | Burnout = depression.

7 | Tipping points - notable setbacks

15 | PE = Loss of control.

8 | CHLW model

16 | Rigidity - PE?

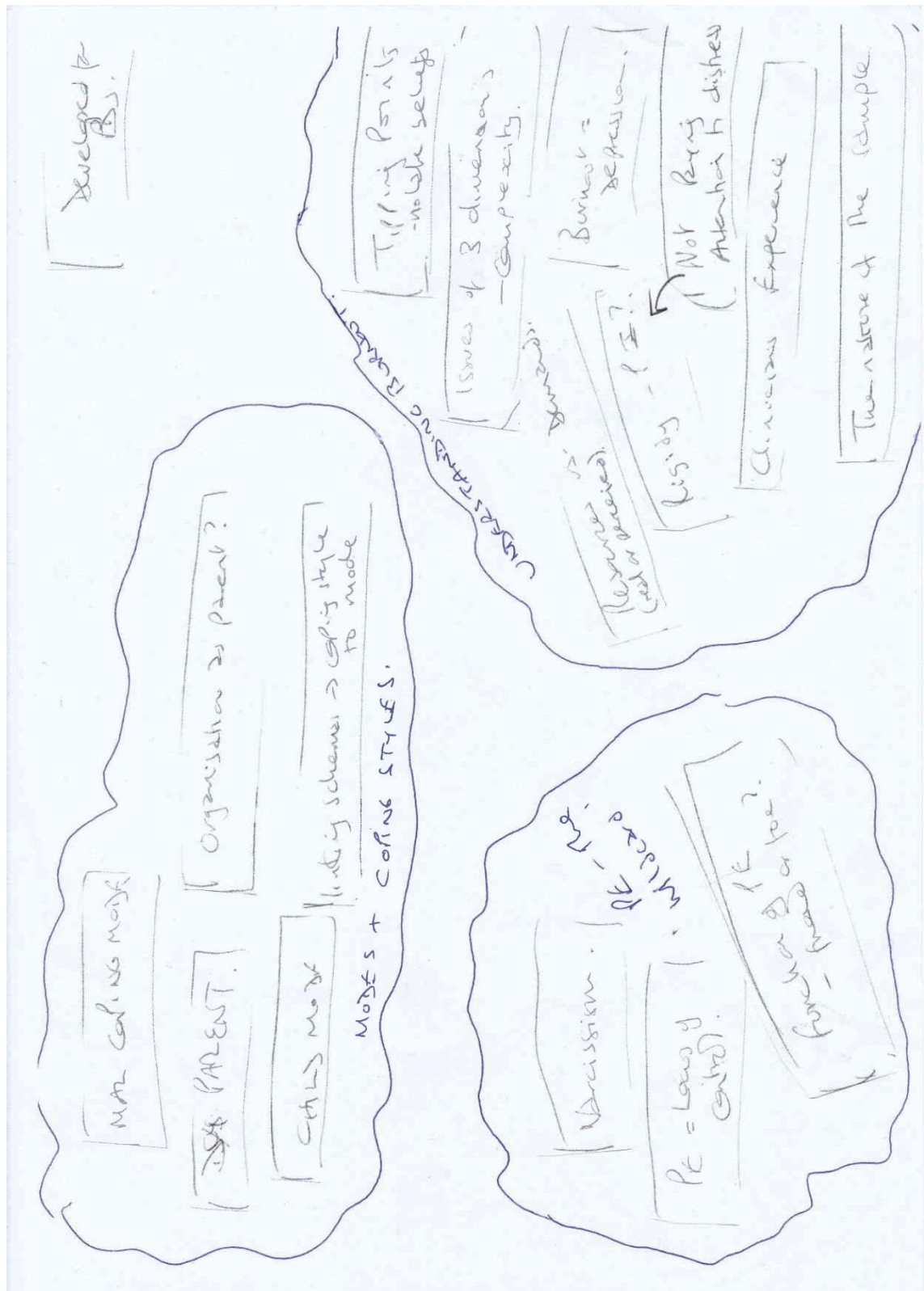
9 | MAR coping model

~~17 | Function of PE - parent & for?~~

10 | ~~PE~~ PARENT.

17 | Function of PE - parent & for?

Example of theme grouping – Schema Therapy



Example of transcript and initial analysis – Schema Therapy

200
201 Interviewer: I'd love to do both, obviously, but the number of items makes it
202 impractical, I think.
203
204 Respondent: Sure. You probably will hear me talking in mode terms at times, but
205 I'll try and link it back to the schemas.
206 *EMS / Mode relationship*
207 Interviewer: Don't do that though because I think that's a very important follow up
208 for where we're going to go with the research anyway.
209
210 Respondent: Sorry, did you have a question for me there?
211
212 Interviewer: It was just to get your reaction to those five EMS's that are coming
213 out the schemas that are there on the emotional exhaustion scale
214 really. Any surprises?
215
216 Respondent: I suppose what I would expect, you see this is thinking about the
217 mode model, is that there'd be quite a highly demanding parent mode
218 that would create the level of pressure that would be the internal
219 voice that would then illicit over activity. So, I suppose I kind of
220 think of it in relation to a stress. I call it the 'stress equation' where
221 perceived demands or threats exceed the person's perceived resources
222 to address or deal with demands meet demands. And with that kind
223 of model in mind, a demanding parent voice is one that is over
224 demanding, that pushes the person right to the limits and beyond of
225 what they actually have in the way of resources skill, emotion
226 resource time, whatever.
227
228 So, thinking through it that way, because that's one of the things I
229 would imagine leading to emotional exhaustion is a person who
230 responds to a demanding voice in a submission to a demanding voice
231 way and then becomes exhausted because they're trying to do more
232 than they possibly can. And in terms of schemas, that would
233 typically show through as... well unrelenting standards would be a
234 schema that you'd typically see in that pattern; not the only one.
235
236 So, in a way I'm surprised that unrelenting standards isn't there.
237
238 I mean the vulnerability to harm and illness? Again, if we're talking
239 about a work context, I suppose it suggests the sort of threat that
240 probably people are overworking to protect themselves from. But
241 again I'd have thought maybe failure would have been more in there.
242 It is in the professional efficiency part. I'm interested that the failure
243 isn't there; dependence incompetence is.
244
245 I suppose the way I look at these five schemas is I'm picking out
246 three that I would regard as unconditional primary schemas which is
247 the vulnerability to harm, and illness, mistrust/abuse, and the
248 dependence incompetence, and then... well, insufficient self-control
249 can be a bit secondary. That suggests that can go either way.

Can we map EMS to mode?
Internal resources v. External demands.
Submissive
in sample but not in the model
Economic threat?
Failure in PE model
Unconditional - we are to modify/develop?
Demanding Parent
Why?

250
251
252
253
254
255
256
257
258
259
260
261 Interviewer: Is that like almost like an imposter syndrome? So, I put on this very
262 narcissistic show but underneath all of this there's this nagging self
263 doubt that's there?
264
265 Respondent: Yes, that may be for people who've managed to get into higher
266 positions, that would be likely if underneath they feel all their
267 dependence/incompetence. Although dependence/incompetence
268 tends to be more in the realm of every day life.
269
270 I suppose what these two schemas together evoke for me is a sense of
271 somebody who might be very good in certain realms professionally,
272 in areas that they've got a strong interest in and they've got a well
273 developed skills set in, and in the meantime they neglect their
274 paperwork at home, their washing. They have trouble making
275 common sense decisions, they don't look after their health so well.
276 So, they still could be quite good in certain skills sets that have
277 attracted more status and reward for them where they feel competent.
278 But then of course every job has got the boring bits and so this
279 dependence/incompetence that suggests that there's something
280 potentially triggered by that. I don't know. It's interesting to me.
281
282 I wouldn't have predicted those two as primary to the emotional
283 exhaustion and the mistrust/abuse. I suppose what I'm observing is
284 again I'm surprised failure isn't in there. But the negativity
285 pessimism is the schema that in my mind points to a coping mode of
286 hopelessness and defeat; a sort of give up mode which is a bit
287 overlapping with cynicism in a way.
288
289 Overall it suggests the threat is, what I've read there, vulnerability to
290 harm and illness schema points to be there - it's destitution, natural
291 disaster or health issues. There's a mistrust/abuse; that's another
292 form of threat but from other people, and then the insufficient
293 resources to deal with it is the lack of self discipline and the
294 dependency incompetence, and the attempt to try and protect
295 themselves; if fails, they experience themselves as not having
296 sufficient resources to survive well, to do well, and so they end up in
297 the pessimistic hopeless mode or that schema being triggered
298 because they can't see a way out.
299

*vulnerability
training*

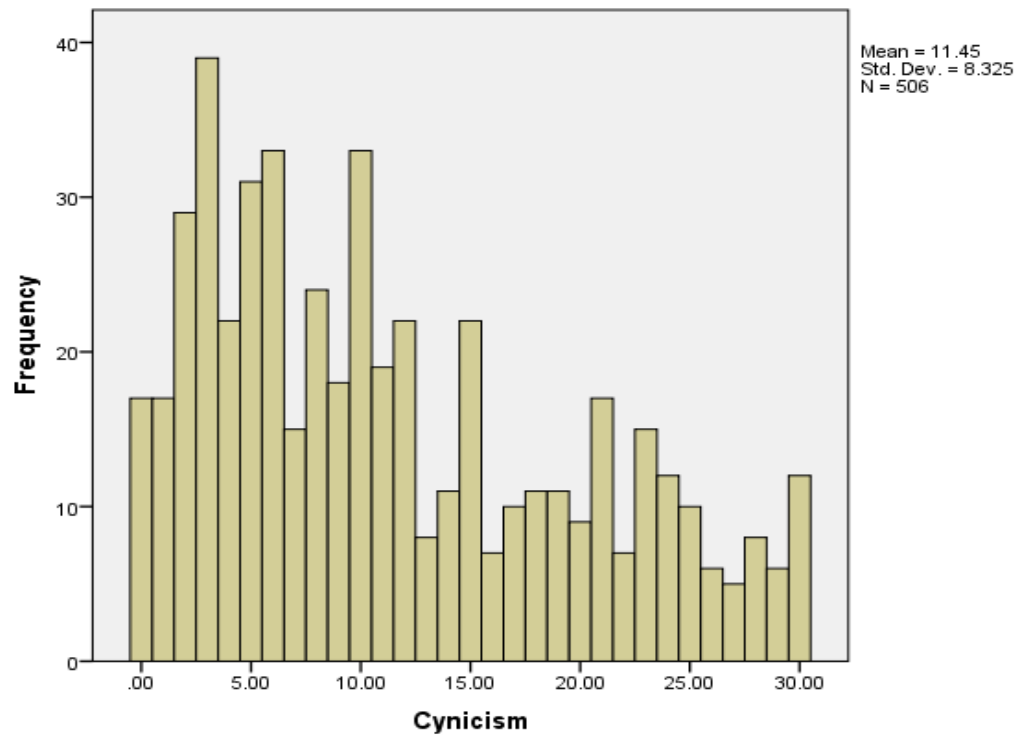
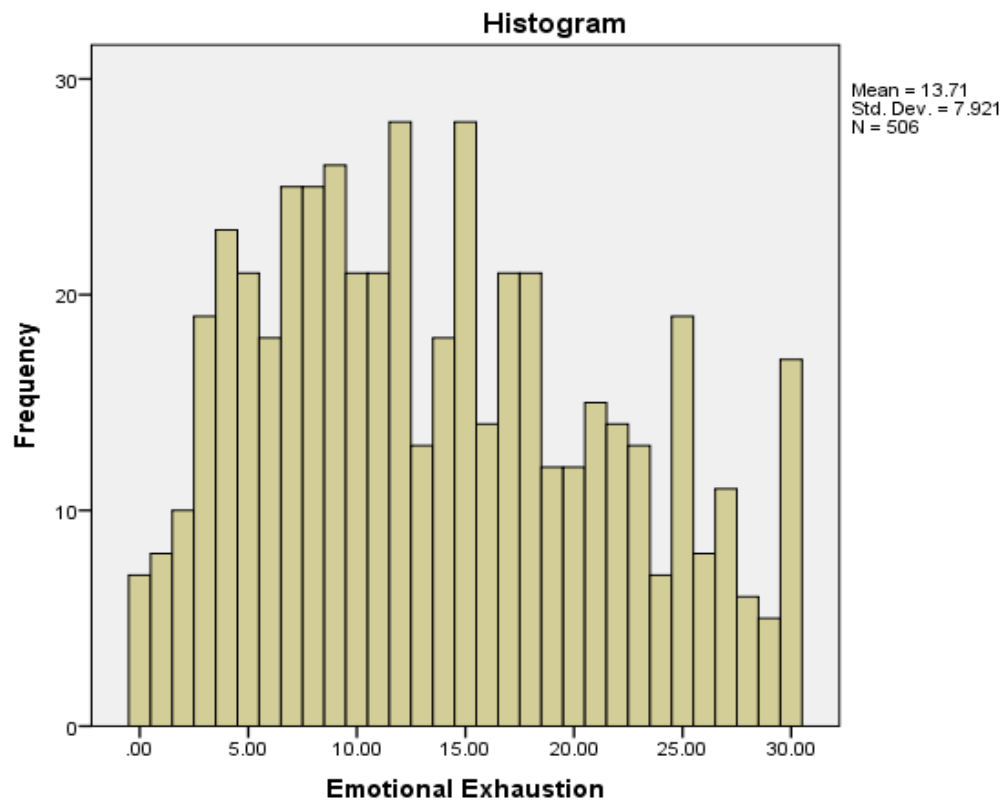
Contradiction

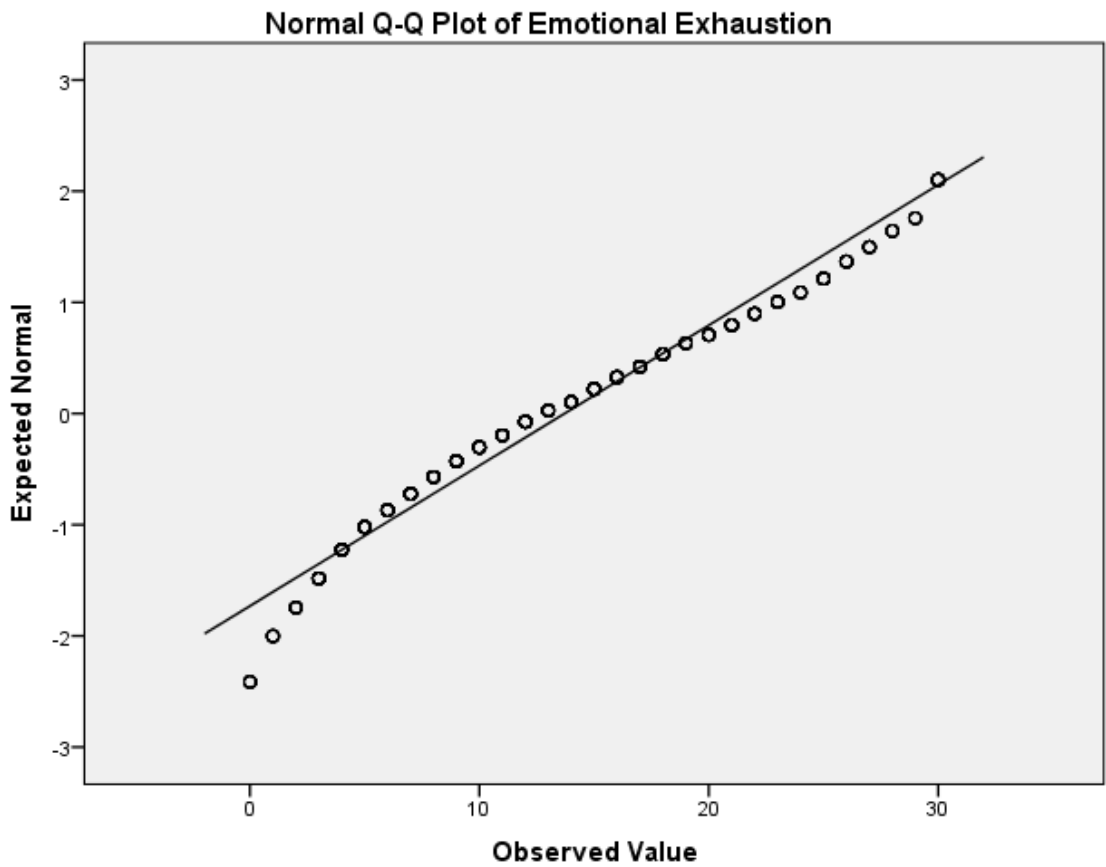
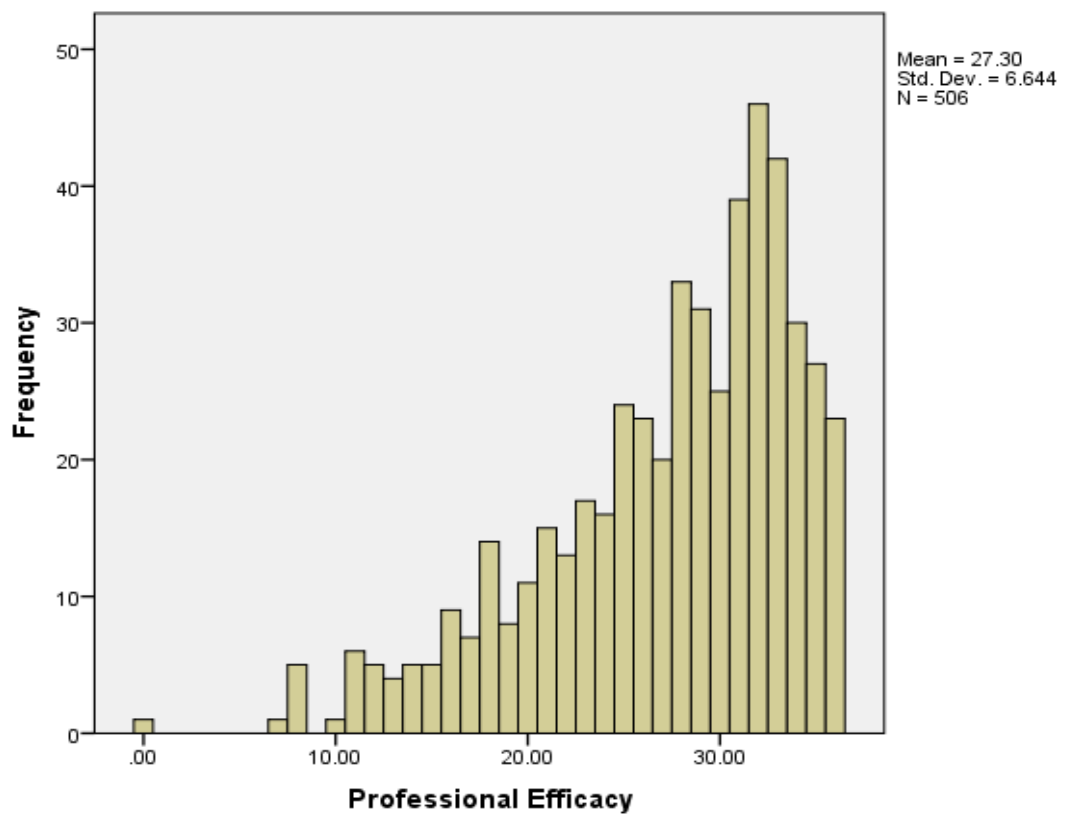
*Again
Contradiction
between
personality
& reality
putting on
a face*

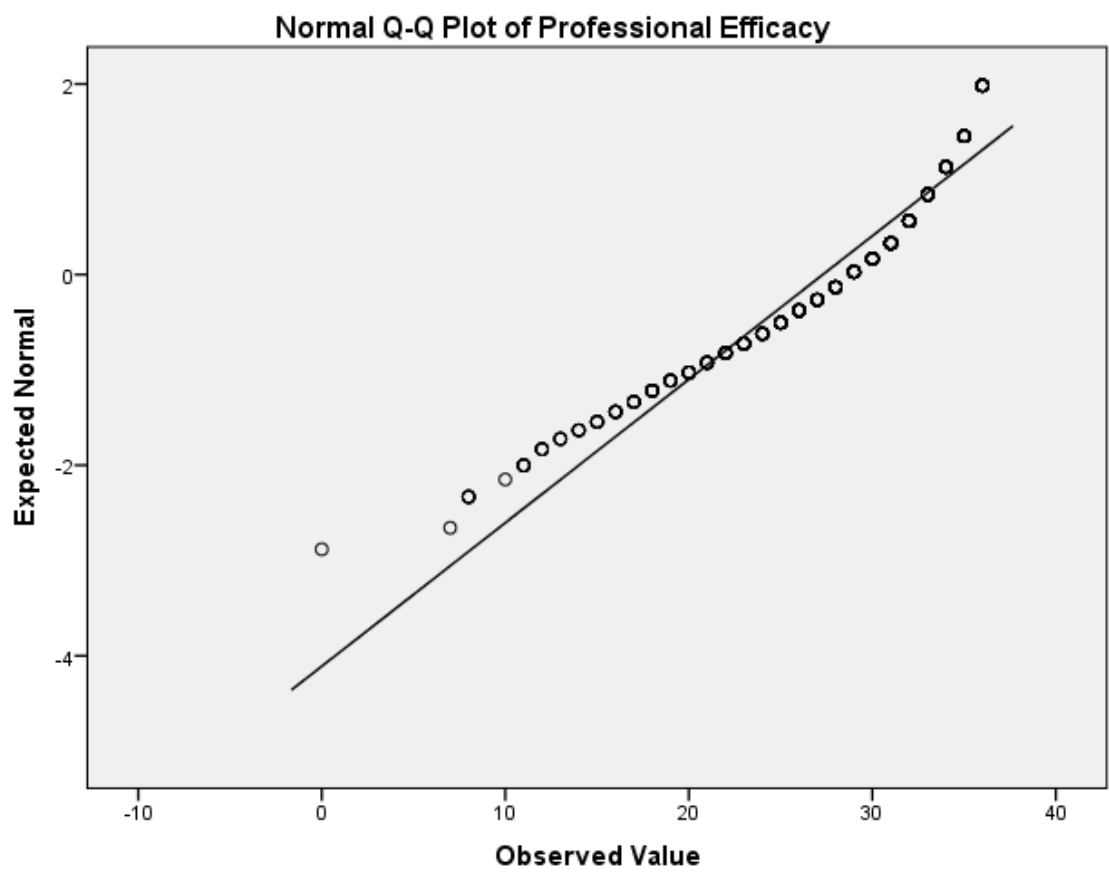
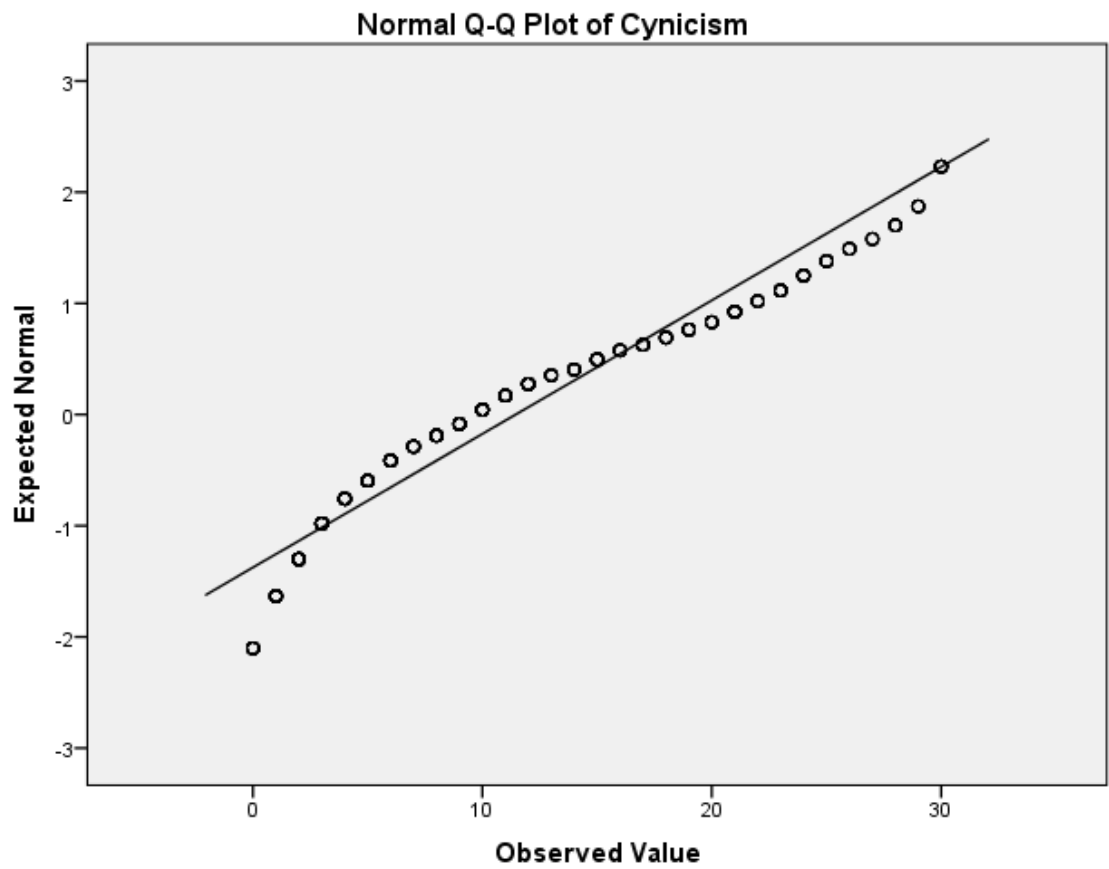
*Combination
of the
cynicism*

Intervention

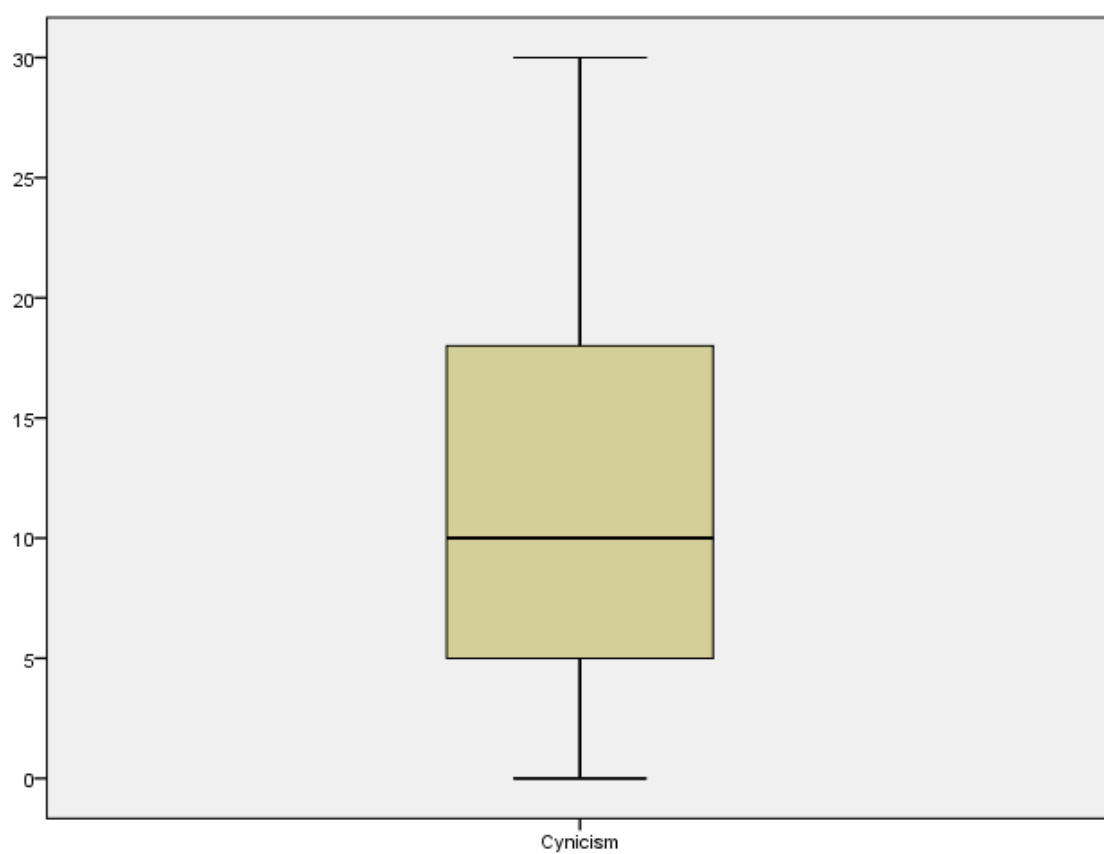
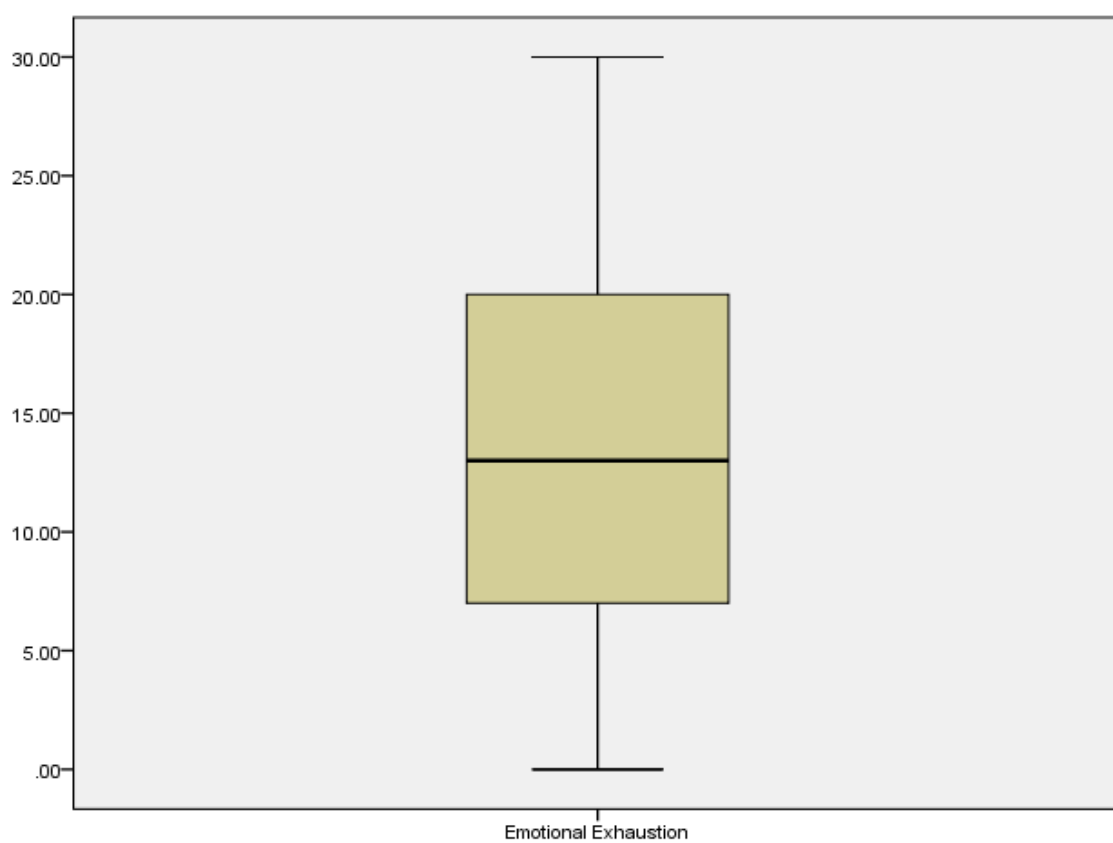
Appendix 10 – Descriptive statistics of Burnout dimensions: Output

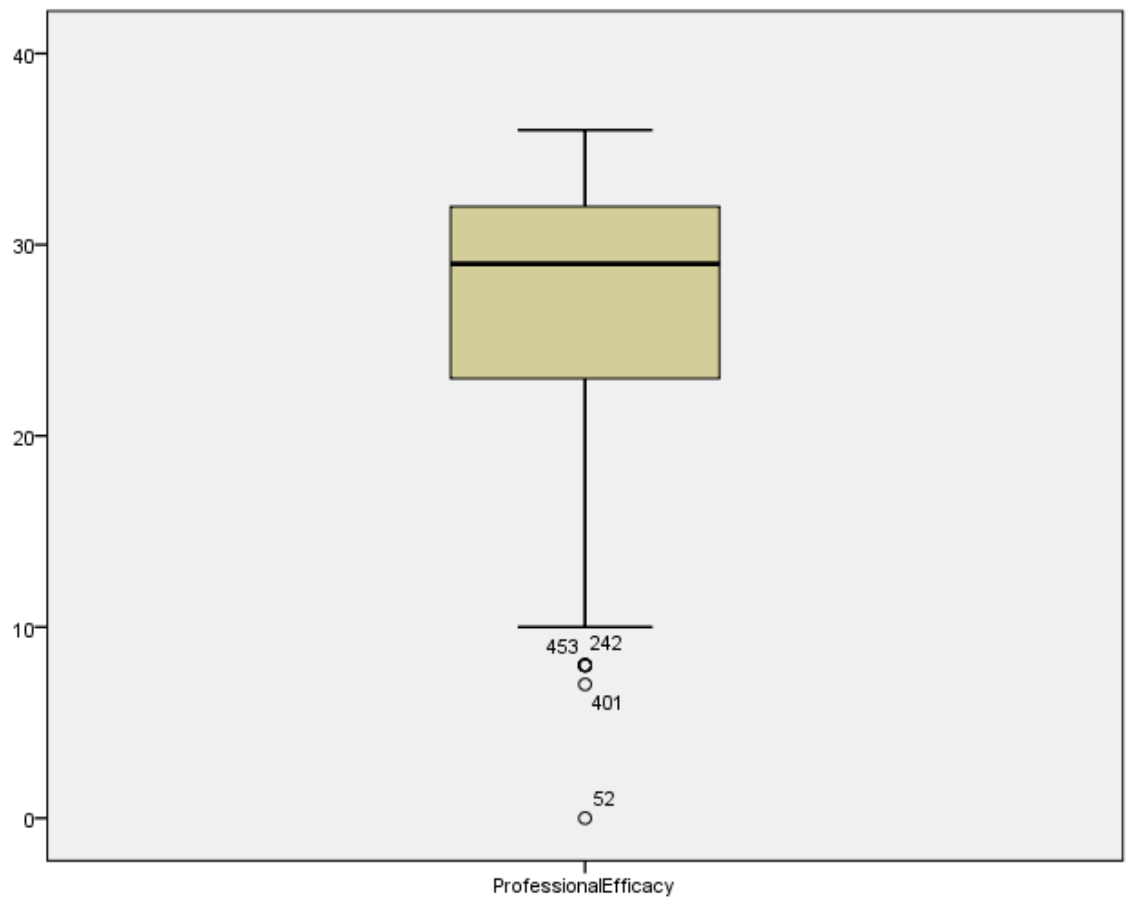




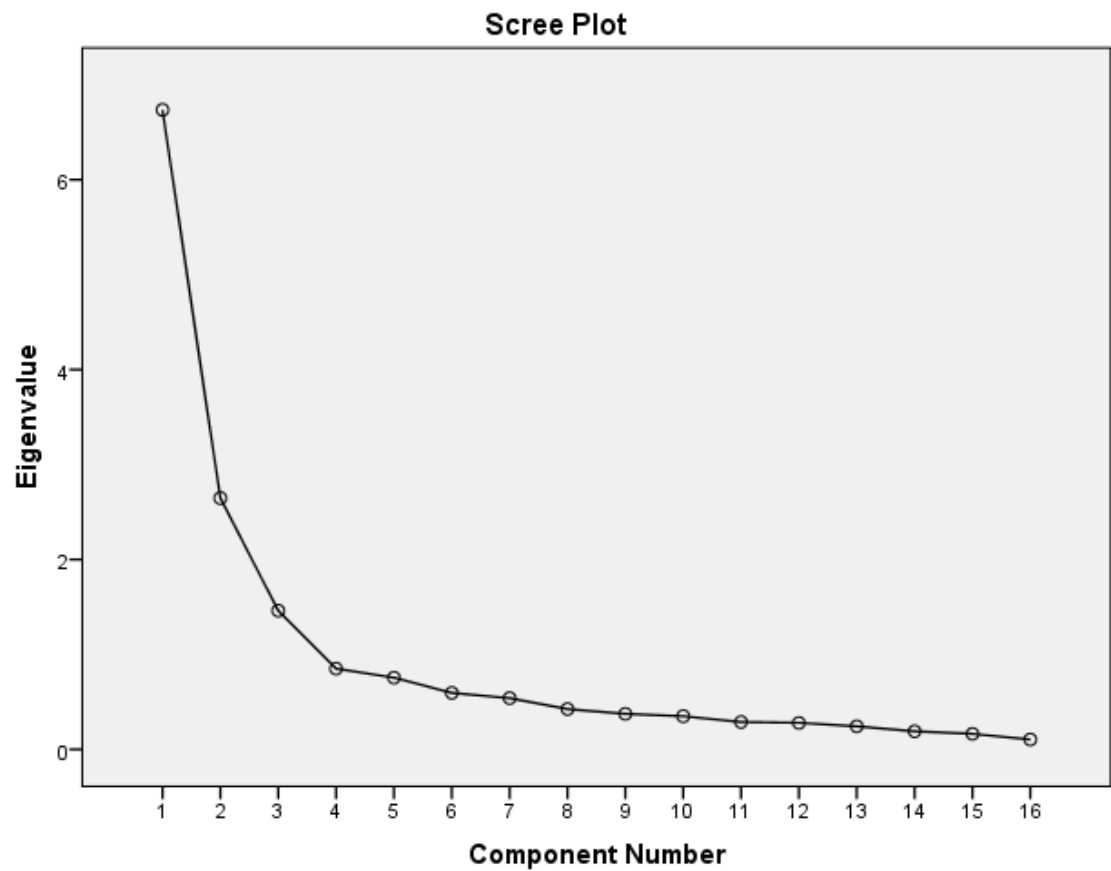


Boxplots (outliers)





Appendix 11 – SPSS output for Principle Components Analysis (Burnout)



Component Matrix^a

	Component	
	1	2
M9r	.790	
M14r	.790	
M15r	.771	
M3r	.750	.379
M8r	.745	
M6r	.739	.439
M4r	.725	.381
M1r	.682	.473
M2r	.640	.499
M7r	-.603	.559
M11r	-.545	.465
M16r	-.532	.526
M13r	.447	
M12r	-.572	.592
M10r	-.453	.551

M5r	-.389	.432
-----	-------	------

Extraction Method: Principal

Component Analysis.

a. 2 components extracted.

Pattern Matrix^a

	Component	
	1	2
M6r	.885	
M1r	.868	
M2r	.856	
M3r	.849	
M4r	.831	
M9r	.667	
M8r	.633	
M14r	.570	-.388
M15r	.502	-.449
M13r	.433	
M12r		.827
M7r		.810
M16r		.746
M10r		.734
M11r		.693
M5r		.591

Extraction Method: Principal

Component Analysis.

Rotation Method: Oblimin with

Kaiser Normalization.^a

a. Rotation converged in 5 iterations.

Structure Matrix

	Component	
	1	2
M6r	.856	
M3r	.840	
M1r	.818	
M4r	.818	
M2r	.792	
M9r	.756	-.489
M8r	.716	-.458

M14r	.701	-.580
M15r	.653	-.619
M13r	.459	
M12r		.823
M7r	-.308	.822
M16r		.748
M11r		.714
M10r		.710
M5r		.581

Extraction Method: Principal

Component Analysis.

Rotation Method: Oblimin with
Kaiser Normalization.

Component Correlation Matrix

Component	1	2
1	1.000	-.338
2	-.338	1.000

Extraction Method: Principal

Component Analysis.

Rotation Method: Oblimin with Kaiser
Normalization.

Part B – JOURNAL ARTICLE

**Running head: Early Maladaptive Schemas,
Psychological Inflexibility and Burnout**

Exploring the relationship between Early Maladaptive Schemas, Psychological Inflexibility and Burnout

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City University

Department of Psychology

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Table 29 - Symptoms of Burnout (adapted from Kahill, 1988)

Category	Common symptoms
Physical/somatic	physical exhaustion sleep disturbance gastrointestinal problems back pain headaches colds/influenza
Emotional	irritability/anger anxiety depression guilt helplessness
Behavioural	consumption (e.g., reliance on alcohol and/or prescription drugs) excessive rule following absenteeism/poor timekeeping turnover poor job performance (e.g., neglectful of job duties, making errors) theft personal injury at work
Interpersonal	reduced communication poor concentration worsening family/social relationships impersonal/hostile behaviour towards clients
Attitudinal	lack of personal effectiveness at work withdrawal from others (at work and at home) reduced commitment reduced satisfaction with self/life generally negative attitudes (e.g., Cynicism, callousness, pessimism)

Table 30 - Schema Domains and underlying EMS (adapted from Young et al., 2003, pp.14-17)

Disconnection and Rejection domain: <i>an expectation that needs for security, safety, stability, nurturance, empathy, sharing of feelings, acceptance, and respect will not be met appropriately. Typical family of origin likely to be detached, cold, rejecting, withholding, lonely, volatile, unpredictable and/or abusive.</i>	
Abandonment/Instability	Perception that significant others will be unable to provide necessary support and connection due to unavailability (e.g., death or departure) or inconsistency.
Mistrust/Abuse	Belief that others will hurt, abuse, humiliate or otherwise take advantage, either wilfully or through extreme neglect.
Emotional Deprivation	An expectation that needs for adequate emotional support will not be met by others, notably nurturance, empathy and protection.
Defectiveness/Shame	The feeling one is bad, unwanted, inferior, invalid or unlovable to significant others if exposed. May involve hypersensitivity to criticism, self-consciousness and shame.
Social isolation/Alienation	Feelings of difference and isolation from other people, and no sense of group/community membership.
Impaired Autonomy and Performance domain: <i>expectations about self/environment that affect perceived ability to separate, survive, and function/perform in an independent or successful manner. Typical family of origin is enmeshed, overprotective and undermining of child's confidence.</i>	
Dependence/Incompetence	Belief that one is fundamentally incapable of handling everyday responsibilities competently (e.g., self-care, daily problem-solving, showing good judgement).
Vulnerability to Harm/Illness	Excessive fear of imminent catastrophe and inability to avoid this. Can take the form of medical (e.g., terminal disease), emotional (e.g., going insane) or external (e.g., air crash) catastrophes.
Enmeshment/Undeveloped Self	Excessive emotional involvement/closeness with one or more significant others (often parents) inhibiting individuation and normal social development.

Failure	Belief of fundamental inadequacy and that failure has occurred, or will occur, in areas of expected achievement. Often involves beliefs of inferiority.
Impaired limits domain: <i>problems in respecting the rights of or co-operating with others, making commitments or working towards realistic personal goals. Typical family of origin is permissive, overindulgent, arrogant and lacking in discipline.</i>	
Entitlement/Grandiosity	Belief that one is superior to others and entitled to special rights/privileges.
Insufficient Self-control/Self-discipline	Inability or unwillingness to demonstrate self-control and frustration management in the achievement of personal goals.
Other-directedness domain: <i>excessive focus on the needs of others in order to gain love/approval, often suppressing one's own emotions. Typical family of origin is based on conditional acceptance and the prioritisation of parents' emotional needs.</i>	
Subjugation	Surrender of control to others due to feelings of coercion, relating to needs and emotions.
Self-Sacrifice	Excessive focus on helping behaviours at the expense of one's own needs.
Approval Seeking / Recognition Seeking	Self-esteem based primarily on the reactions of others rather than one's own assessment - can include overemphasis on status and financial values.
Overvigilance and Inhibition domain: <i>an emphasis on suppressing emotions/impulses or meeting high internal standards at the expense of happiness, health and relationships. Typical family of origin is demanding and can be punitive; priority is placed on duty and perfectionism over recreation, and the sense that any lack of vigilance will result in potential disaster.</i>	
Negativity/Pessimism	A pervasive, enduring focus on life's negative aspects, historically and in terms of future predictions, even when things are currently going well.
Emotional Inhibition	Non-expression of spontaneous behaviour, communication or emotion, to avoid disapproval by others, shame or loss of control.
Unrelenting Standards/Hypercriticalness	Constant drive to achieve very high internalised levels of behaviour and performance, to avoid failure or criticism. Significant negative impact on enjoyment, health, self-esteem and relationships; often associated with

	perfectionism.
Punitiveness	Belief that mistakes (by others or self) should be harshly punished, resulting in a lack of empathy and intolerance of imperfection.

Table 31 - Breakdown of participants by industry sector

Sector	Frequency	Percentage
education	88	17.4%
communications & information technology	45	8.9%
healthcare	43	8.5%
business consultancy	40	7.9%
other	37	7.3%
professional, scientific and technical	36	7.1%
media/broadcast/arts	26	5.1%
'third sector'/charity	26	5.1%
law	24	4.7%
investment banking	22	4.4%
local/national government	18	3.6%
manufacturing	16	3.2%
advertising & marketing	12	2.4%
energy/utilities	12	2.4%
pharmaceuticals	12	2.4%
property & construction	11	2.2%
retailing	10	2.0%
leisure/hospitality	7	1.4%
insurance	6	1.2%
transport (not aviation)	6	1.2%
aviation	4	0.8%
armed forces	2	0.4%
police	2	0.4%
retail banking	1	0.2%

Table 32 - Functional roles

Functional role	Frequency	Percentage
consultant	61	12.1%
lecturer/teacher/academic	54	10.7%
operations	54	10.7%
planning and strategy	31	6.1%
health professional	32	6.3%
human resources	30	5.9%
sales	29	5.7%
research and development	28	5.5%
finance	26	5.1%
marketing	26	5.1%
information technology	23	4.6%
other	112	22.1%

Table 33 - Management level

Management level	Frequency	Percentage
non-management	91	18.0%
supervisory/junior management	58	11.5%
middle management	104	20.6%
senior management	90	17.8%
board level/CEO	43	8.5%
professional/consultant	89	17.6%
other	31	6.1%

Table 34 - Distribution of Burnout data

	N	Min	Max	Mean	SD	Skewness	Kurtosis
Emotional Exhaustion	506	0.00	30.00	13.71	7.92	.33	-.85
Cynicism	506	0.00	30.00	11.45	8.33	.61	-.73
Professional Efficacy	506	0.00	36.00	27.30	6.64	-.97	.53

Table 35 - MBI-GS cut-off scores

MBI dimension	EE	CYN	PE
High	16 or above	11 or above	30 or above
Medium	11-15	6-10	24-29
Low	0-10	0-5	0-23

Table 36 - Burnout levels in the current sample

Level	EE	CYN	PE
High	195 (38.6%)	228 (45.1%)	232 (45.8%)
Medium	108 (21.3%)	123 (24.3%)	147 (29.1%)
Low	203 (40.1%)	155 (30.6%)	127 (25.1%)

Table 37 - Descriptive statistics – Psychological Inflexibility (PI)

	N	Min	Max	Mean	SD	Skewness	Kurtosis
PI	506	7.0	49.0	20.99	9.7	0.7	-0.1

Table 38 - Descriptive statistics - Early Maladaptive Schemas (EMS)

EMS	N	Min	Max	Mean	SD	Skewness	Kurtosis
Unrelenting Standards/ Hypercriticalness	506	6.00	30.0	19.5	4.9	-.1	-.4
Self-Sacrifice	506	5.00	30.0	17.0	5.3	.3	-.5
Approval/Recognition Seeking	506	5.00	30.0	15.0	5.1	.5	-.2
Entitlement	506	5.00	29.0	14.5	4.7	.6	.2
Insufficient Self Control/ Discipline	506	5.00	30.0	13.9	5.1	.7	.3
Punitiveness	506	5.00	30.0	13.5	5.1	.5	.1
Social Isolation/ Alienation	506	5.00	30.0	13.1	6.1	.9	.0
Negativity/Pessimism	506	5.00	30.0	13.0	5.8	.9	.2
Emotional Inhibition	506	5.00	28.0	12.7	5.3	.7	-.1
Mistrust/Abuse	506	5.00	30.0	12.5	5.4	.9	.4
Subjugation	506	5.00	30.0	11.5	5.0	.9	.5
Emotional Deprivation	506	5.00	30.0	11.2	6.4	1.1	.4
Abandonment /Instability	506	5.00	30.0	11.1	5.4	1.1	.7
Vulnerability to Harm/Illness	506	5.00	29.0	10.9	5.2	1.1	.5
Failure	506	5.00	30.0	10.1	4.9	1.5	2.6
Defectiveness/Shame	506	5.00	30.0	9.7	5.2	1.5	1.8
Dependence /Incompetence	506	5.00	26.0	9.0	3.8	1.2	1.5
Enmeshment /Undeveloped Self	505	5.00	28.0	8.2	4.3	2.2	5.7

Table 39 - Correlation matrix: EMS, Psychological Inflexibility and Burnout

EMS (all n=506)		EE	CYN	PE
Emotional Deprivation	Pearson Correlation	.344**	.388**	-.274**
	Sig. (2-tailed)	.000	.000	.000
Abandonment/Instability	Pearson Correlation	.379**	.299**	-.156**
	Sig. (2-tailed)	.000	.000	.000
Mistrust/Abuse	Pearson Correlation	.435**	.395**	-.212**
	Sig. (2-tailed)	.000	.000	.000
Social Isolation/Alienation	Pearson Correlation	.384**	.435**	-.244**
	Sig. (2-tailed)	.000	.000	.000
Defectiveness/Shame	Pearson Correlation	.382**	.399**	-.271**
	Sig. (2-tailed)	.000	.000	.000
Failure	Pearson Correlation	.364**	.325**	-.377**
	Sig. (2-tailed)	.000	.000	.000
Dependence/ Incompetence	Pearson Correlation	.414**	.366**	-.276**
	Sig. (2-tailed)	.000	.000	.000
Vulnerability to Harm/ Illness	Pearson Correlation	.478**	.411**	-.239**
	Sig. (2-tailed)	.000	.000	.000
Enmeshment/ Undeveloped Self	Pearson Correlation	.286**	.223**	-.123**
	Sig. (2-tailed)	.000	.000	.006
Entitlement	Pearson Correlation	.065	.130**	-.002
	Sig. (2-tailed)	.147	.003	.972
Insufficient Self-Control/ Discipline	Pearson Correlation	.419**	.411**	-.342**
	Sig. (2-tailed)	.000	.000	.000
Subjugation	Pearson Correlation	.396**	.398**	-.296**
	Sig. (2-tailed)	.000	.000	.000
Self-Sacrifice	Pearson Correlation	.249**	.125**	-.006
	Sig. (2-tailed)	.000	.005	.895
Approval/Recognition Seeking	Pearson Correlation	.277**	.222**	-.168**
	Sig. (2-tailed)	.000	.000	.000
Emotional Inhibition	Pearson Correlation	.354**	.389**	-.277**
	Sig. (2-tailed)	.000	.000	.000

EMS (n=506)		EE	CYN	PE
Unrelenting Standards/ Hypercriticalness	Pearson Correlation	.252**	.120**	-.015
	Sig. (2-tailed)	.000	.007	.733
Negativity/Pessimism	Pearson Correlation	.487**	.398**	-.284**
	Sig. (2-tailed)	.000	.000	.000
Punitiveness	Pearson Correlation	.253**	.200**	-.190**
	Sig. (2-tailed)	.000	.000	.000
Psychological Inflexibility	Pearson Correlation	.584**	.525**	-.359**
	Sig. (2-tailed)	.000	.000	.000

** Correlation is significant at the 0.01 level

Table 40 - Stepwise regression summary for Emotional Exhaustion

	B	SE	β	t	p	95% CI for B	
						Lower	Upper
PI	.34	.04	.41	8.53	.000	.26	.42
Unrelenting Standards/ Hypercriticalness	.32	.07	.20	4.59	.000	.18	.45
Vulnerability to Harm/Illness	.29	.07	.19	4.05	.000	.15	.43
Punitiveness	-.25	.07	-.16	-3.60	.000	-.39	-.12
Insufficient Self-Control/ Discipline	.23	.07	.15	3.14	.002	.09	.37
Entitlement	-.18	.07	-.11	-2.76	.006	-.32	-.05
Organisation Size	.26	.11	.08	2.43	.016	.05	.47
Age	-.58	.27	-.08	-2.18	.029	-1.11	-.06

Table 41 - Stepwise regression summary for Cynicism

	B	SE	β	t	p	95% CI for B	
						Lower	Upper
PI	.28	.04	.33	6.40	.000	.20	.37
Organisation Size	.65	.12	.20	5.60	.000	.42	.88
Social Isolation/Alienation	.21	.07	.15	3.07	.002	.08	.34
Insufficient Self-Control/ Discipline	.28	.07	.17	3.94	.000	.14	.42
Punitiveness	-.20	.07	-.12	-2.92	.004	-.34	-.07
Emotional Inhibition	.18	.07	.12	2.49	.013	.040	.33

Table 42 - Stepwise regression summary for Professional Efficacy

	B	SE	β	T	p	95% CI for B	
						Lower	Upper
Failure	-.30	.07	-.22	-4.28	.000	-.44	-.17
PI	-.13	.04	-.19	-3.07	.002	-.21	-.05
Insufficient Self-Control/ Discipline	-.22	.07	-.17	-3.42	.001	-.35	-.09
Abandonment/Instability	.19	.06	.16	3.06	.002	.07	.31
Self-Sacrifice	.17	.05	.14	3.28	.001	.07	.27
Organisation size	-.33	.11	-.13	-3.10	.002	-.54	-.12
Emotional Deprivation	-.12	.05	-.12	-2.46	.014	-.22	-.02
Management level	.32	.15	.09	2.17	.030	.03	.61

Table 43 - Sample means for MBI Dutch sample and current study

Sample	N	EE	CYN	EE
Dutch civil servants	956	1.57	1.54	4.14
Dutch rural workers	761	1.28	1.39	4.86
Current study	506	2.74	2.29	4.55

Table 44 - Sample means for MBI Canadian sample and current study

Sample	N	EE	CYN	PE
Canadian management	310	2.55	1.32	4.73
Current study	506	2.74	2.29	4.55

Table 45 - Comparison of EMS means between current study and the study of Hawke and Provencher (H & P, 2012)

EMS	Current study ³²	H & P non-clinical	H & P clinical
Unrelenting Standards/ Hypercriticalness	3.90	3.20	3.43
Self-Sacrifice	3.40	2.93	3.46
Approval/Recognition Seeking	3.00	2.49	2.83
Entitlement	2.90	2.47	2.50
Insufficient Self-Control/Discipline	2.78	2.04	2.50
Punitiveness	2.70	2.35	2.70
Social Isolation/Alienation	2.62	2.30	3.11
Negativity/Pessimism	2.60	1.99	2.93
Emotional Inhibition	2.54	2.32	2.71
Mistrust/Abuse	2.50	1.83	2.33
Subjugation	2.30	1.75	2.59
Emotional Deprivation	2.24	1.73	2.46
Abandonment/Instability	2.22	1.96	2.91
Vulnerability to Harm/Illness	2.18	1.68	2.44
Failure	2.02	1.65	2.50
Defectiveness/Shame	1.94	1.43	2.25
Dependence/Incompetence	1.80	1.55	2.23
Enmeshment/Undeveloped Self	1.64	1.47	2.09

³² Reported here as individual item means to enable direct comparison with the Hawke and Provencher study.

Table 46 - Comparison of MBI-GS and PI correlations between current study and the study of Ruiz & Odriozola-González (2014).

MBI-GS dimension	Correlations with Psychological Inflexibility	
	Ruiz & Odriozola-González	Current Study
Emotional Exhaustion	.43	.58
Cynicism	.36	.53
Professional Efficacy	-.17	-.36

Figure 14 - Sample age profile

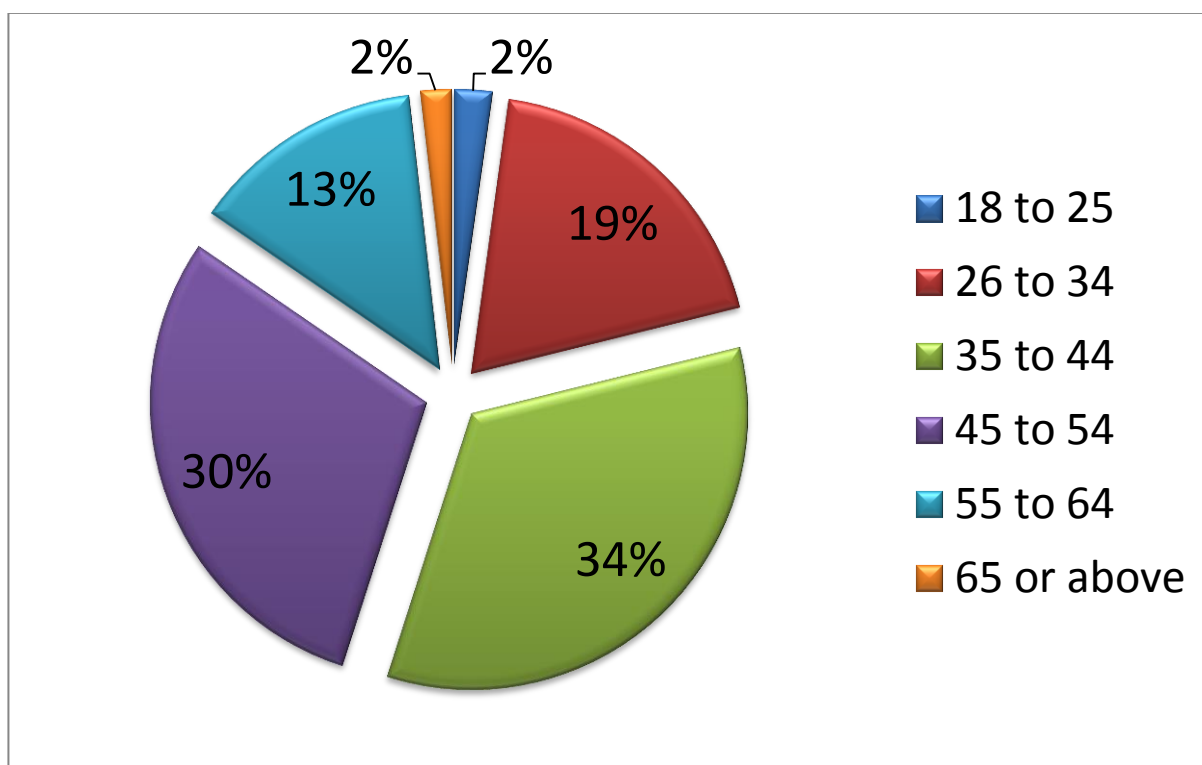


Figure 15 - Size of organisation by number of employees

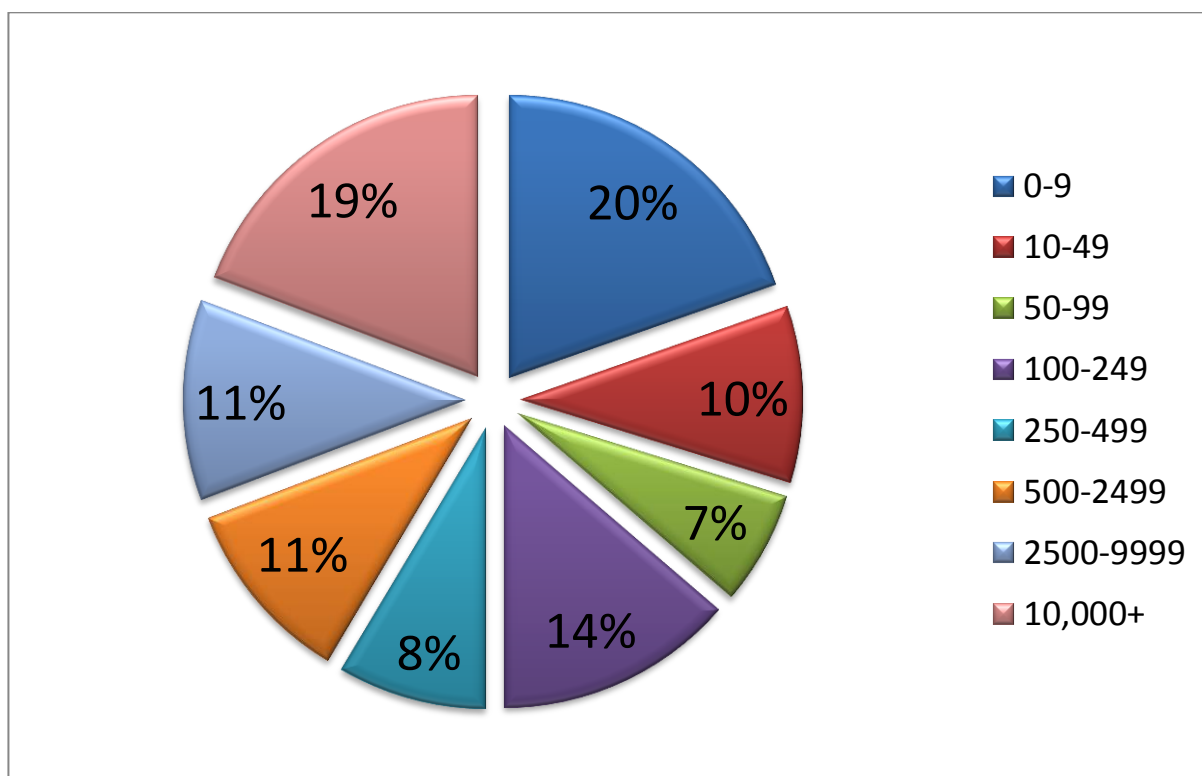


Figure 16 - Geographic location of participants

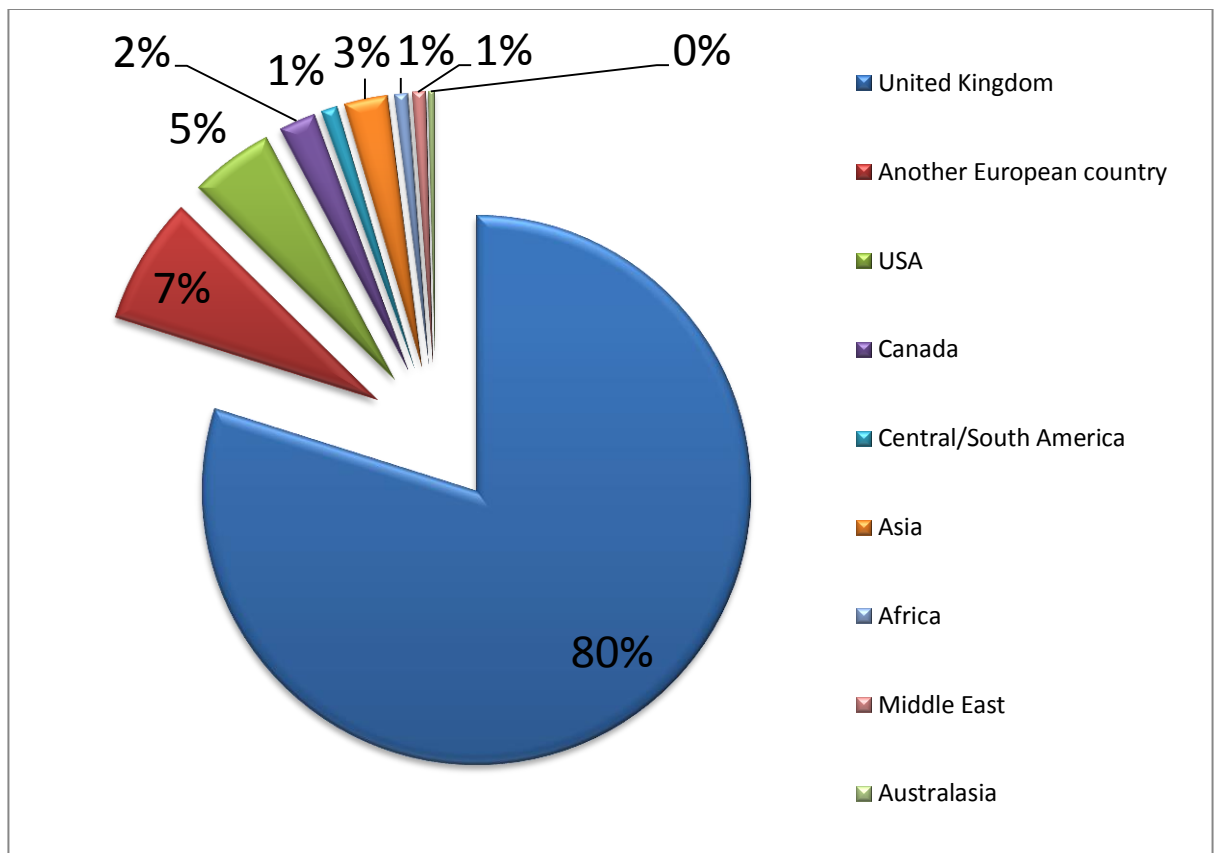
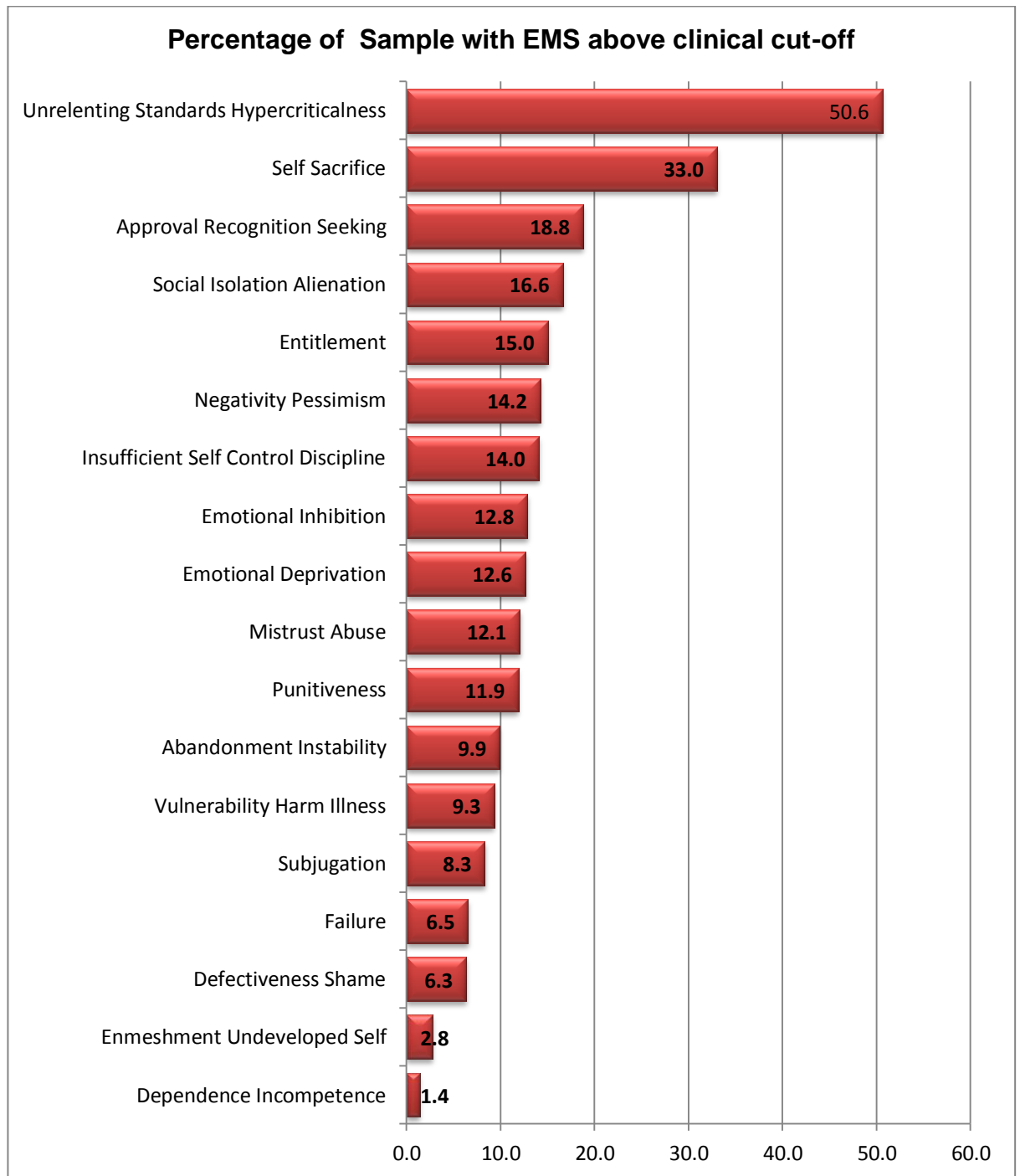


Figure 17 - Participants reporting clinically significant³³ levels of EMS



³³ Calculated using an individual average score of 4 or above for YSQ-S3 items relating to each EMS (Rafaeli, Bernstein, & Young, 2010).

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