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Title: Burnout amongst Clinical and Counselling Psychologists: The Role of Early Maladaptive Schemas and Coping Modes as Vulnerability Factors.

Running head: Burnout schemas and modes in psychologists

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Key Words: Schemas, modes, coping, burnout, psychologists, emotional exhaustion

Abstract

Psychologists are subject to multiple competing emotional demands that increase the risk of burnout. Research has demonstrated that burnout arises from both organizational and personal factors, including psychologists' personal beliefs and coping. Preliminary research indicates that Early Maladaptive Schemas (EMS) are associated with high burnout, yet, to date, the role of EMS and associated coping responses (Maladaptive Coping Modes [MCM]) in predicting high burnout among psychologists has not been investigated. Four hundred and forty-three psychologists completed a self-report online questionnaire comprising the Maslach Burnout Inventory—Emotional Exhaustion Scale (EE), Young Schema Questionnaire (YSQ), and Schema Mode Inventory (SMI). The two most common EMS amongst psychologists were Unrelenting Standards and Self Sacrifice. There was substantial indication of burnout, with 18.3% in the high range and 29.6% in the moderate range of EE. The most common MCM were Detached Protector and Detached Self-Soother. Controlling for demographics and job demands, EMS accounted for an additional 18% variance in EE. MCM accounted for an additional 6% beyond the variance explained by demographics, job demands and EMS. Practical recommendations are suggested to reduce psychologist burnout.

Key Practitioner Messages

- Moderate to high levels of emotional exhaustion were endorsed by 47.9% of this sample of clinical and counselling psychologists.

- Psychologists indicated that the stressors that caused the most severe distress were the challenge of work-life balance, managing clients with chronic/complex issues, and managing very distressed clients.
- Early maladaptive schemas and maladaptive coping modes were significant predictors of emotional exhaustion over and above job demands amongst psychologists.
- Intra-personal factors appear to play an important role alongside organizational factors in increasing vulnerability to burnout.

Burnout amongst mental health professionals has become a global problem, with between 21-67% of mental health service providers reporting high levels (Morse, Salyers, Rollins, Monroe-DeVita, & Pfahler, 2012). Maslach (1993) described three distinct domains of burnout: Emotional Exhaustion [EE] or feeling physically and/or emotionally exhausted from one's work; Depersonalization [DP] or feeling disconnected from one's role, and reduced Personal Accomplishment [PA] in one's work successes. Several studies suggest that the EE component is most relevant to the role of the psychologist/psychotherapist (Di Benedetto & Swadling, 2014; Rupert & Kent, 2007; Rupert & Morgan, 2005). At an individual level, burnout can manifest in a range of psychological and physical health problems, (Andre-Petersson, Engstrom, Hedblad, Janzon, & Rosva, 2007; Bridger, Brasher, Dew, Sparshott, & Kilminster, 2010). At a wider organizational level, burnout is associated with presenteeism, increased staff turnover, reduced work engagement and work absenteeism (Batista-Taran & Reio, 2011; Cartwright & Cooper, 1997; Econtech, 2007; Halbesleben, 2010; Jex, 1998; Kalia, 2002; Kim, Ji, & Kao, 2011; Medibank, KPMG Econtech, 2011; Motowidlo, Manning & Packard, 1986; Shirom, Toker, Berliner, & Shapira, 2008; Yahaya, Yahaya, Tamyas, Ismail, & Jaalam, 2010).

Burnout in psychologists

Burnout and work-related stress are common among psychologists and psychotherapists, with prevalence rates reported between 44.1% (Rupert & Kent, 2007; Rupert & Morgan, 2005) and 59% (Cushway & Tyler, 1994). Burnout has been associated with reduced capacity to perform one's professional role, and to provide adequate care for clients (Baker, 2003; Barnett & Hillard, 2001; Maslach, 1982; Morse et al., 2012).

Psychologists are typically exposed to a range of emotionally intense experiences in their

daily working life including the cumulative effects of witnessing multiple narratives of suffering, trauma and loss (Rabu, Moltu, Binder, & McLeod, 2016). Additionally, there are organizational stressors associated with working for health services, including lack of funding and resources in public health services. Long waiting lists are common, and many clients have chronic problems which often do not respond to the short-term solution-focused therapies that are designed to move them through the system as expediently as possible (Knekt et al., 2016; Leichsenring & Rabung, 2011; Leichsenring et al., 2013). This can add to the burden of responsibility carried by mental health workers, and may reduce effectiveness of treatment outcomes (Adler, 1973; Friedman, 1969; Gunderson, 1984; Morgan & Priest, 1991).

Causes of burnout

Causal factors associated with the onset of burnout in mental health professionals have traditionally been pinned to persistently emotionally taxing work demands, including a range of organizational factors such as excessive workload, long hours, lack of control, and lack of clear expectations (Byrne, 1998; Hafen, Karren, Frandsen, & Smith, 1996; Maslach & Jackson, 1996; Maslach & Leiter, 1997; Rupert, Miller, & Dorociak, 2015). The job demands-control model (Karasek, 1979) is one of the most researched theories of work stress (de Lange, Taris, Kompier, Houtman, & Bongers, 2003; Karasek, 1979). The central tenet of this theory is that work strain is caused by the impact of job demands, with control as a potential buffer that has the capacity to enhance work engagement (Karasek, 1979). Other models of burnout have focused on the imbalance of job resources and job demands in generating work stress, including the job demands-resources model (JD-R; Bakker & Demerouti, 2007), and the areas of work life model (AW; Leiter & Maslach, 2004), which

propose that burnout arises as a result of an imbalance (JD-R) or mismatch (AW) of job demands and personal resources. Two models that specifically focus on the interaction between organizational and intra-individual factors are the effort-reward imbalance model (ERI; Siegrist, 1996), and conservation of resources model (COR; Hobfoll, & Freedy, 1993). However, organisational factors appear to only partially explain burnout and there has been a lack of recognition of the role of individual factors in work stress (de Lange et al., 2003; Van Der Deof & Maes, 1999). Furthermore, burnout interventions solely based on changing organisational (but not individual) factors have been relatively ineffective (Ruotsalainen, Verbeek, Mariné, & Serra, 2015).

Preliminary evidence suggests that intra-personal factors, such as psychologists' personal beliefs and coping mechanisms may also increase vulnerability to burnout (Bamber & McMahon, 2008; Rupert, Miller, & Dorociak, 2015; Simionato & Simpson, 2018). Despite having good conceptual knowledge of the signs of burnout, mental health workers have a propensity to minimize their own vulnerability whilst continuing to expose themselves to excessive work pressures (Ledingham, 2015). This vulnerability is characterized by: beliefs associated with a tendency to inhibit emotions which are seen as a sign of 'weakness'; self-blame for showing signs of stress or vulnerability; striving to reach higher standards whilst denying personal needs and emotions; and a reluctance to set boundaries and ask for support due to fears of letting others down. These factors appear to perpetuate the cycle of EE (Ledingham, 2015).

Findings to date highlight the importance of investigating the role of individual beliefs and cognitive biases in both the development of burnout, and subsequent capacity to take restitutive action. Further studies are needed with larger samples to identify whether it is possible to identify profession-specific themes, and to identify their relevance

across countries and cultures. To date, this research has been driven by a ‘bottom-up’ strategy of studying the habits of professional groups. We argue that further progress into understanding psychological factors that increase burnout vulnerability can be made by drawing on a broader theoretical framework of individual differences.

Early Maladaptive Schemas (EMS) and Coping

EMS are defined as self-defeating core beliefs, themes or patterns that we repeat throughout our lives, which result from unmet needs during childhood (Young, Klosko, & Weishaar, 2003). EMS represent the way in which we learn to relate to ourselves and in our relationships with others, and are based on the life ‘lessons’ we have internalized through both explicit and implicit messages internalized throughout childhood and adolescence. Childhood experiences such as neglect, abuse, and trauma have been linked to the development of EMS and subsequent psychological distress within clinical populations (Haugh, Miceli, & deLorme, 2017; Calvete, 2013; Calvete & Orue, 2012; Eberhart, Auerbach, Bigda-Peyton, & Abela, 2011; Kaya Tezel, Tutarel-Kışlak, & Boysan, 2015). However, EMS have also been identified within non-clinical populations (Camara & Calvete, 2012), including mental health professionals, albeit at a lower severity (Saddichha, Kumar, & Pradhan, 2012; Bamber & McMahon, 2008).

There is some suggestion that a significant proportion of mental health professionals may be drawn to the industry because of their own personal and systemic histories (Bamber & Price, 2006; Bamber, 2006). In addition, they may also be more likely to develop their own mental health problems because work-place pressures often provide optimal conditions for the activation of EMS (Bamber & McMahon, 2008; Galvin & Smith, 2015). Indeed, preliminary findings indicate that a significant proportion of psychologists (Barnett, Baker, Elman, & Schoener, 2007; Elliot & Guy, 1993; Pope & Feldman-Summers, 1992; Wise, Hersh,

& Gibson, 2012), psychiatrists (Paris & Frank, 1983; Firth-Cozens 1987; Rajagopal, Rehill, & Godfrey, 2004), and other mental health professionals (Galvin & Smith, 2015) report adverse childhood circumstances. Professionals who have experienced adverse childhood histories may have increased capacity for empathy with clients, but they may also be more at risk of developing maladaptive beliefs, coping mechanisms, and associated psychological distress (Barnett, Baker, Elman, & Schoener, 2007).

EMS have previously been associated with psychiatric symptomatology, absenteeism and burnout amongst mental health professionals (Bamber & McMahon, 2008). Previous studies indicate that the two most common EMS amongst mental health professionals are unrelenting standards (the belief that one must strive to meet excessively high internalized standards of performance, usually to avoid criticism) and self-sacrifice (the belief that one is responsible for taking care of others, whilst minimizing one's own needs, in order to avoid causing pain to others or feeling guilty for being 'selfish') (Saddichha et al., 2012; Wyman, 2011). Preliminary evidence suggests that there may be particular profiles of EMS linked to specific professions (Bamber & McMahon, 2008; Kaeding et al., 2017). Bamber and McMahon (2008) found higher ratings of emotional deprivation (the belief that one's emotional needs will never be met by others) predicted EE, while subjugation (the belief that one must submit to the control of others) and entitlement (the belief that one is special and does not need to adhere to the same rules as others) predicted depersonalization. Emotional inhibition (the belief that one must suppress emotions) predicted reduced personal accomplishment and enmeshment/undeveloped self predicted sickness absence (Bamber & McMahon, 2008).

According to the schema therapy model, consequences - like burnout - can be understood not only by which EMS are active, but by how individuals cope with their EMS

when they are triggered. The schema model proposes that individuals may develop a pattern of coping 'states of mind' which largely operate outside conscious awareness and have the effect of blocking painful schemas from awareness (Young et al., 2003). Coping 'modes' are moment-by-moment state-dependent manifestations of latent schema traits, in that they have become entrenched patterns that have emerged during childhood and become reinforced over the course of the person's life. Coping modes are characterized by the behavior the person repeatedly uses in an unconscious or automated way in order to minimize the activation of EMS. In effect, they tend to be quite rigidly used, allowing little scope for flexible healthy coping. Therefore, they prevent the person from getting their needs met (Young, et al., 2003). In the context of work settings, MCM would be likely to reduce opportunities for work-fulfilment and success. We might expect that detached coping, in conjunction with emotional exhaustion, encapsulates the well-documented depersonalization that is recognized as a component of burnout. Indeed, some view depersonalization as a type of behavioral avoidant coping response that moderates the development of EE (i.e., the emotional and physical component of burnout) (Diestel & Schmidt, 2010; Maslach, Schaufeli & Leiter, 2001; Taris, 2006). Detached coping in association with emotional exhaustion is likely to impact psychologists' capacity to be emotionally connected and empathic toward their clients. Self-aggrandizing and bully-and-attack coping are likely to create interpersonal problems with colleagues, which is likely to lead to loneliness, rejection and further triggering of EMS, as well as practical complications such as bullying complaints, and performance management. These are likely to breed further resentment, alienation and job misery. Compliant coping is expected to lead to progressive overload until exhaustion. Although such coping behaviors may bring short-term

relief, they ultimately reinforce the EMS that underlie them, thereby creating a negative feedback loop.

Current study

The current exploratory study recruited clinical and counselling psychologists with the aim of:

- 1) Examining the work setting, main sources of stress, and prevalence of burnout
- 2) Identifying the predominant EMS and MCMs
- 3) Investigating whether EMS and MCMs predict burnout above job demands

Method

Design

This study used an independent subjects cross-sectional design. Quantitative, self-report data was collected via an online questionnaire.

Participants

Inclusion criteria were being (1) a fully registered clinical or counselling psychologist from any country, and (2) a native English speaker, or having a good command of the English language. Originally, 593 psychologists filled in the online survey. One hundred and fifty cases were missing data for all questionnaires and were removed, leaving a final sample of 443 (see Table 1 for characteristics).

Procedures

The study was approved by the University of South Australia Human Research Ethics Committee. Participants were recruited via email, social media, professional websites, and via snowballing. Consenting participants completed all questionnaires online (via Qualtrix).

Measures

Demographics.

The demographic questionnaire collected information from participants regarding a range of factors including age, gender, country of residence, relationship status, ethnic background, work setting and work-related stress factors.

Job Demands.

The 5-item job demands subscale of the Job Content Questionnaire (JCQ, Karasek, 1985) asks participants to rate how true each statement is for them on a 4-point Likert scale (1 = 'strongly disagree' to 4 = 'strongly agree'). This subscale has shown good internal consistency previously (Cronbach's $\alpha = 0.88$, Xanthopoulou et al., 2007) and in this study: Cronbach's $\alpha = .82$.

Early Maladaptive Schemas (EMS).

EMS were measured using the Young Schema Questionnaire – Short Form (YSQ-SF2, Young & Brown, 2003). The YSQ-SF2 comprises 75 items, where 15 EMS are measured by five items each. The 15 EMS are listed in Table 2. Participants rate each statement on a Likert scale ranging from 1 = 'completely untrue of me' to 6 = 'describes me perfectly'. The mean score is calculated for each EMS. Mean scores equal to or above 2 are indicative of pathology at a clinically meaningful level for most of the EMS except unrelenting standards and self-sacrifice EMS, which have a cut-off of 3 (Saddichha et al., 2012; Rijkeboer, van den Bergh, & van den Bout, 2005; Rijkeboer, 2012). Norms for both clinical and non-clinical populations have been published (Lee, Taylor & Dunn, 1999; Rijkeboer & van den Bergh, 2006; Schmidt, Joiner, Young & Telch, 1995). In this study, the internal consistency of subscales ranged from $\alpha = .79$ (entitlement) to .94 (defectiveness/shame).

Schema Coping Modes.

The Schema Mode Inventory Version 1 (SMI-1; Young et al., 2007) is a 118-item questionnaire for assessing 14 schema modes that fall within the overarching categories of parent modes, child modes, coping modes and healthy modes. Individual coping strategies are subsumed within three main types of coping mode: avoidance (detached protector, detached self-soother), surrender (compliant surrenderer) and overcompensation (self-aggrandizer, bully and attack). For example, using either alcohol or overeating as a coping strategy would be an example of detached self-soother mode behavior (avoidant coping style). Giving in to the demands of others and prioritizing others' needs would be an example of compliant surrenderer (surrender coping style). Acting in an entitled and grandiose manner would be an example of self-aggrandizer (overcompensatory coping style). To reduce participant fatigue, only the 49 items measuring the following coping mode subscales were administered: compliant surrenderer (7 items), detached self-soother (4 items), detached protector (9 items), bully and attack (9 items), and self-aggrandizer (10 items). Items are rated in a 6-point Likert scale ranging from 1 'never or almost never' to 6 'all of the time'. Preliminary psychometric investigations suggest the SMI has adequate reliability and validity in a Dutch sample (Lobbestael et al., 2010) and German sample (Reiss et al., 2012), with the latter reporting a Cronbach's alpha of .85. For this study, the internal consistency of subscales ranged from acceptable ($\alpha = .71$ for bully and attack) to good ($\alpha = .89$ for detached protector).

Burnout.

The emotional exhaustion (EE) subscale of the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1996; Maslach, Jackson, & Leiter, 1996) was used to measure burnout. It focuses on the symptoms of exhaustion and the experience of being emotionally over-extended by job demands (Rupert & Morgan, 2005). The frequency of occurrence of each of

the 9 statements is rated on a Likert scale ranging from 0 'a few times a year or less' to 6 'everyday'. Scores on the EE subscale are classified as low, moderate, and high emotional exhaustion: 0-16 (low), 17-26 (moderate), and 27-54 (high) (Maslach et al., 1996). The EE subscale has demonstrated good internal consistency with a Cronbach's alpha of .90 (Maslach et al., 1996; Vredenburg, Carlozzi & Stein, 1999). In this study, the Cronbach's alpha of the EE subscale was .91.

Data input and analyses

All analyses were performed using IBM SPSS version 24.0. Univariate outliers were winsorized. Job demands was normally distributed. EE was positively skewed. All EMS were positively skewed - as expected - toward non-pathology. Compliant Surrenderer and Self-Aggrandizer modes were normally distributed and the other coping modes were positively skewed towards non-pathology. Clinical cut-off scores for EMS were calculated according to Rijkeboer's (2012) instructions. The contribution of study variables to predicting burnout was tested via hierarchical linear regression with four blocks: 1) demographics (age, gender, English speaking country yes/no), 2) job demands, 3) EMS, 4) MCM. Individual predictors within blocks were in order of forced entry.

Results

Missing data

After removing non-responders, missing data ranged from 0.5% to 5.4% with 68% variables missing less than 2%. Listwise deletion was used per analysis.

Demographics

The majority of the sample was middle-aged ($M = 42.93$, $SD = 11.53$), female (80.4%), Caucasian (93.9%), married (52.8%), had attained a Master's degree (45.64%), and resided in Australia (51.9%) (see Table 1). The majority worked in urban areas in full-time positions,

and 30.2% held two or more work positions (134 people in multiple paid roles). The most common work setting was community outpatient mental health centers (39.7%), followed by private practice (33%).

A substantial number of participants indicated that they worked with trauma: 39% indicating it comprised at least 75% of their client-work; 28% indicating that it constituted 50% of their client-work; and 28% indicating 25% of their client-work. Most participants indicated that at least half of their client-load would meet criteria for a 'Personality Disorder'. CBT was the preferred therapy model as indicated by 40% of participants, with 16% indicating schema therapy, 12% acceptance and commitment therapy, and 17% a mixed/client-led model. Systemic therapy was preferred by 5% and psychodynamic by 7%.

[Insert Table 1]

Work Setting: Main Sources of Stress

The main sources of stress are presented in Figure 1. The stressors that caused the most severe distress were the challenge of work-life balance, managing clients with chronic/complex issues, and managing very distressed clients. Seventy nine percent were currently experiencing work stressors which were impacting on optimal functioning in their role. Seven percent indicated that they often ruminated about clients' experiences/events, with 72% occasionally dwelling on this. Of the whole sample, 38% indicated they perceived their manager did not recognise the emotional impact of dealing with complex clinical presentations and 26% indicated that they did not have access to funding for regular professional development.

[Insert Figure 1]

Burnout Amongst Psychologists

Of the total sample, 18.3% were experiencing high levels of EE, with 29.6% in the moderate range, and 51% in the low range. Those in the low EE range were older ($M = 44.58$, $SD = 12.0$) than those in the moderate range ($M = 40.98$, $SD = 11.5$) and high range ($M = 41.72$, $SD = 9.7$), $F(2, 419) = 4.52$, $p = .011$).

Prevalence of EMS Amongst Psychologists

The two most common EMS amongst psychologists were unrelenting standards and self-sacrifice. Mean scores, Cronbach's alpha and the proportion of the sample scoring above clinical cut-off for each EMS are presented in Table 2.

[Insert Table 2 here]

Prevalence of Coping Modes Amongst Psychologists

Detached self-soother and detached protector were the two most common coping modes amongst psychologist participants: 22.6% of the sample scored more than a standard deviation above the mean of a non-clinical sample (Lobbestael et al., 2010) for detached self soother, 24.7% for detached protector, 16.4% for compliant surrenderer, 5.1% for self-aggrandizer, and 2.9% for bully and attack. Means and standard deviations are described in Table 2.

Association between EMS, MCM and Burnout amongst Psychologists

All EMS and MCM were significantly positively correlated with EE ($r = .14 - .49$, $p < .01$). EMS with the highest correlations with EE were predominantly from the 'Disconnection and Rejection' domain (abandonment ($r = .34$, $p < .001$), mistrust ($r = .36$, $p < .001$), emotional deprivation ($r = .26$, $p < .001$), social isolation ($r = .34$, $p < .001$), and

defectiveness/shame ($r = .38, p < .001$). Of the coping modes, detached protector was most highly correlated with EE ($r = .49, p < .001$).

[Insert Table 3 here]

Demographic differences in job demands, EMS and MCM

Gender differences were evident for 7 of the 15 EMS and 3 out of 5 MCM (see Table 2). There were no gender differences in job demands ($t(435) = 0.27, p = .79$) or EE ($t(434) = -0.05, p = .964$). Age was weakly but significantly negatively correlated with job demands ($r = -.16, p = .001$), EE ($r = -.15, p = .002$) and 6 of the EMS (range: defectiveness/shame $r = -.12, p = .012$ to failure $r = -.19, p < .001$) and all coping modes except bully and attack. Age was positively correlated with two EMS: emotional deprivation, $r = .10, p = .040$, and enmeshment, $r = .15, p = .002$. There were no differences between participants from countries that spoke primarily English and those from primarily non-English speaking countries in job demands, MCM, and most EMS scores, with the exception of emotional inhibition ($t(65.18) = -2.99, p = .004$) which was lower in English-speaking countries. EE was higher in English-speaking countries ($t(64.24) = 3.23, p = .002$).

Predicting Burnout from EMS and MCM

A hierarchical regression (see Table 3) showed that EE was significantly predicted by job demands, EMS and MCM, with the full model accounting for 38% variance in EE, $F(24, 331) = 10.31, p < .001$. The combination of age, gender and English-speaking country explained 4% variance in burnout. Job demands accounted for an additional 10% of the variance in EE. The addition of EMS accounted for a further 18% variance in EE beyond that explained by job demands and demographics, with defectiveness/shame, abandonment, and mistrust/abuse schemas significant individual predictors. Coping modes accounted for

additional 6% variance in EE beyond that explained by demographics, job demands and EMS. Detached protector mode was the only significant individual coping mode associated with EE.

Discussion

This study draws on a large sample of clinical and counselling psychologists to investigate Emotional Exhaustion (EE). It builds on a previous study (Bamber & McMahon, 2008) that investigated the link between EMS and burnout amongst mental health professionals. Further, we explored the additional role of coping modes in burnout. There was substantial indication of burnout, with 18.3% in the high range, 29.6% in the moderate range, and 51% in the low range of the Emotional Exhaustion subscale. The majority of participants indicated that they were currently experiencing work stressors that were impairing their work role functioning. This is consistent with previous studies reporting high levels of stress in this population (e.g., Cushway & Tyler 1994; Cushway & Tyler, 1996; Rupert & Morgan, 2005) and in other similar health-related professions (e.g., Sorenson, Bolick, Wright & Hamilton, 2016).

Our findings support the notion that organizational factors alone are not sufficient to explain EE and that intra-personal factors are likely to play an important role in increasing vulnerability to burnout. Both EMS and MCM accounted for additional variance in EE, over and above that predicted by job demands and demographics. Significant predictors of EE included being from a non-English speaking country, having higher job demands, higher defectiveness, abandonment and mistrust/abuse EMS, and detached protector scores. This is in contrast to Bamber & McMahon's (2008) study where emotional deprivation was the only significant predictor of EE. This variation may be explained by the fact that in comparison with our mono-professional sample, their study focused on a multidisciplinary

sample which found clear differences between specific mental health professions in terms of their endorsement of EMS.

In our sample, the highest-endorsed EMS were unrelenting standards and self-sacrifice. These EMS align with the tendency of psychologists to sacrifice their own needs, seek approval from supervisors and colleagues, and set high self-internalized expectations (Rafaeli et al., 2011). Although willingness to help others and maintaining high standards are adaptive and essential to being an effective psychologist, our findings indicate that a significant proportion of psychologists endorse these EMS at a level that suggests excessive and maladaptive attitudes and behaviours associated with helping. These findings are consistent with preliminary research on trainee psychologists that found relatively high levels of self-sacrifice and unrelenting standards EMS (Kaeding et al., 2015; Saddichha et al., 2012; Wyman, 2011) as well as broader theories about how psychologists become at risk of burnout. Much, Swanson and Jazazewski (2005) suggest that when personal needs are unmet and psychologists experience difficulty setting boundaries and limits with colleagues and patients, they may be more likely to experience symptoms of burnout.

However, although the unrelenting standards and self-sacrifice EMS were highly endorsed, the EMS most predictive of EE were abandonment, mistrust/abuse and emotional inhibition. Abandonment and mistrust/abuse, both EMS in the disconnection-rejection domain, involve the perceived instability and unreliability of those available for support and connection (abandonment) and the expectation that others will hurt, abuse, humiliate, manipulate or take advantage. EMS in this domain have been linked to a wide range of psychopathology and interpersonal avoidance (e.g. Bosmans, Braet & Vlierberghe, 2010; Frías et al., 2017). Exposure to distressing client narratives associated with abuse and abandonment may lead to repeated activation of therapists' own unhealed EMS, further

increasing the risk of EE. Furthermore, psychologists who perceive others (e.g., clients, colleagues, managers) to be unsupportive and potentially threatening will be more likely to experience the intense interpersonal nature of therapeutic sessions as anxiety-provoking, a factor that has been linked to the onset of burnout (e.g., Steel, Macdonald, Schroeder & Mellor-Clark, 2015). Anxiety is likely to be further exacerbated for those with an emotional inhibition schema, due to a tendency to suppress emotional expression and open communication due to fears of disapproval, rejection or loss of control. This schema is associated with difficulties associated with sharing problems and struggles with others, leading to reduced interpersonal connection and emotional isolation. Recent research has highlighted the reciprocal relationship between interpersonal disconnection, emotional isolation and EE, resulting in a growing problem of loneliness, which has increasingly been linked to a range of serious physical and emotional health problems (Cacioppo & Cacioppo, 2018; Cacioppo, Cacioppo, Capitanio & Cole, 2015; Holt-Lunstad & Smith, 2016; Layden et al., 2017; Miller, 2011; Murthy, 2017).

Detached protector was the most frequently endorsed coping mode and the mode most associated with EE, reflecting their shared phenomenology. The detached protector mode appears to overlap with the second component of burnout - 'depersonalization' - defined by Maslach (1993) as the development of a cynical or negative attitude alongside psychological withdrawal from relationships. The degree to which depersonalization represents a component of burnout - as opposed to an actual coping mechanism that is used to deal with EE - is a matter for debate (e.g. Györfy & Dweik, 2015; Winstanley & Whittington, 2002). Previous research suggests that EE and depersonalization may be mutually reinforcing, whereby EE predicts depersonalization and depersonalization then contributes to future EE, leading to a reduced sense of personal accomplishment over time

(Taris, Le Blanc, Schaufeli, & Schreurs, 2005; Winstanley & Whittington, 2002). In addition, the numbing associated with the detached protector mode may have implications for the quality of clinical work: in particular, clinicians' capacity to connect emotionally with their clients. Research has consistently demonstrated a strong relationship between burnout and reduced empathy amongst health professionals (for a review, see Wilkinson, Whittington, Perry & Eames, 2017). Future research is needed to identify the extent to which the detached protector coping mode (i.e., coping through numbing, detachment) is linked to reduced empathy and compassion.

Limitations and Strengths

This study was based on a large sample of clinical and counselling psychologists, encompassing a range of nationalities. To date, little research has focused specifically on psychologists and no known research has investigated the prevalence and types of dysfunctional coping modes/styles endorsed in this population. The cross-sectional design of this study prevents attributing causality in the relationships between job demands, EE, EMS, and coping modes/styles. Future studies may consider measuring EMS with a less pathology-focused measure for EMS and schema modes, in conjunction with non-self-report measures such as memory narratives (Theiler & Bates, 2007).

The SMI version used in this study measures only a subset of the coping modes that have since been identified by researchers. It is possible that unmeasured coping modes might be more related to burnout than those measured; for example, many professionals probably use an overcontroller coping mode (i.e., coping through perfectionism and excessive striving for achievement). In addition, it is difficult to differentiate the degree to which the relatively high endorsement of the detached protector mode in this sample is

indicative of avoidant coping as a precipitating factor for EE, or the actual manifestation of the depersonalization aspect of burnout, and/or the degree to which there is overlap between these factors. Future studies may consider measuring this aspect of burnout in addition to EE.

Implications

In comparison with the large body of research which has focused on the role of work characteristics in the job demands-burnout relationship, this study is one of the few that has examined intra-psychic factors as vulnerability factors. This study contributes to the literature by identifying EMS as factors that increase vulnerability to burnout in clinical and counselling psychologists. Burnout can result in distress and have long-term implications for health and wellbeing. Burnout has consistently been linked to reduced empathy in health professionals and is therefore likely to have significant implications for the quality of their clinical work and outcomes (Everall & Paulson, 2004; Wilkinson, Whittington, Perry & Eames, 2017). As there is a potential for EMS to impact on professional work, the clinical and counselling psychology professions have a responsibility to provide structures and processes to prevent, monitor, and assist when psychologists are at risk of compromised wellbeing (Bamber & McMahon, 2008; Kuyken, Peters, Power, & Lavender, 2003).

Importantly, at a systemic level, given the role of the emotional inhibition EMS and detached protector coping mode (i.e., numbing emotions and distancing others) as predictors of EE, measures should be taken to minimise isolation at work and encourage supportive professional relationships, supervision, peer consultation groups, opportunities for informal support, and mentoring relationships (Skovolt, 2001). In order to address the dominant work-culture that over-values detachment and intellectualisation at the expense

of emotional connection and support, it will be important in the future to strive to cultivate work cultures that value self-expression, openness, authenticity, vulnerability and interpersonal connectedness (Brown, 2012; Younie, 2016; Zijlstra, Cropley, & Rydstedt, 2014). In addition, promoting a culture of creativity, play, and spontaneity can provide a balance to the heaviness of work duties and responsibilities (Baker, 2003; Skovolt, 2001).

The relevance of EMS and MCM in this sample suggest that it is worth testing schema-based intervention programs implemented from early stages of training of applied psychologists (Kaeding et al., 2017). Psychologists are likely to benefit from an increased awareness of their own EMS, which should in turn, facilitate a greater self-awareness and understanding of their own feelings and reactions (Farrell & Shaw, 2018). Psychologists with relatively high levels of EMS and coping modes should be particularly careful to avoid burnout. In particular, those with abandonment and mistrust/abuse EMS may be most at risk of experiencing strong sympathetic/empathic responses to distressing client presentations, due to activation of, or over-identification with their own experiences, thereby increasing vulnerability to EE. There is a need for professional development opportunities and access to therapy for therapists throughout their careers, in order to heighten awareness of their potential susceptibility to personal issues and professional concerns, and thereby to highlight the need for mindful self-awareness and self-care (Barnett et al., 2007; Barnett & Cooper, 2009; Darongkamas, Burton & Cushway, 1994; Di Benedetto & Swadling, 2014; Smith & Moss, 2009). Specialist supervision and personal therapy could also facilitate identification of psychologists' own EMS and coping modes/styles to identify and cope more effectively with triggers, with a view to developing healthier methods of coping. This may then lessen the likelihood that EMS will lead to

errors of judgement in clinical work (Farrell & Shaw, 2018; Rafaeli et al., 2011; Young et al., 2003).

In summary, this study has increased our knowledge regarding the prevalence of EMS and coping modes amongst psychologists, and their role in predicting EE. We hope this will provide valuable information that will contribute to the development of self-awareness and self-care strategies for psychologists, thereby enhancing their mental well-being, and those of their clients. Future studies are needed to investigate whether increased awareness of personal factors, including EMS and coping modes, alongside schema-based training and education, will be effective in promoting a healthy and productive future psychologist population.

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Figure 1: Percentage of psychologists reporting work stressor.

Tables

Table 1.

Participant demographic information

		<i>n (%)</i>
Gender	Female	356 (80.4%)
	Male	87 (19.6%)
Relationship status	Single	65 (14.7%)
	Married	234 (52.8%)
	Defacto	99 (22.3%)
	Divorced	23 (5.2%)
	Widowed	5 (1.1%)
	Other	17 (3.8%)
Highest qualification	PhD	40 (20.51%)
	Clinical Doctorate	53 (27.18%)
	Masters degree	89 (45.64%)
	Honours degree	8 (4.10%)
	Other/ Unspecified	5 (2.56%)
Ethnicity	Caucasian	416 (93.9%)
	Asian	12 (2.7%)
	Latino/ Hispanic	4 (0.9%)
	African-American	2 (0.5%)
	Other/ Unspecified	9 (2.0%)
Country of residence	Australia	230 (51.9%)
	New Zealand	51 (11.5%)
	Scotland	50 (11.3%)
	The Netherlands	29 (6.5%)
	England	27 (6.1%)
	United States	24 (5.4%)
	Canada	6 (1.5%)
	Other	26 (5.9%)
*Work setting	Urban	319 (72.0%)

	Rural	62 (14.0%)
	Both Urban and Rural	62 (14.0%)
	Private Practice: Outpatient	202 (45.7%)
	Public Health: Outpatient	176 (39.7%)
	Inpatient	85 (19.2%)
	Academia	75 (17%)
	School Settings	5 (1.1%)
	Other	62 (14%)
Work hours	Full-time	283 (63.9%)
	Part-time	143 (32.3%)
	Other/did not specify	15 (3.4%)

The most commonly reported demographic variables are highlighted in grey.

*N.B. Many participants worked in more than one setting.

Table 2

Gender differences in Mean Scores on Burnout and its Predictors and Proportion with Clinically Significant EMS

	<u>Internal</u> <u>consistency</u>	<u>M (SD)</u>		<u>Above clinical cut-off (%)</u>	
		<u>Males</u>	<u>Females</u>	<u>Males</u>	<u>Females</u>
	α				
Job Demands	.82	13.87 (2.6)	13.96 (2.8)	-	-
Burnout	.91	17.81 (10.5)	17.76 (9.9)	-	-
Early Maladaptive Schemas					
Emotional Deprivation	.91	2.15 (1.08)	2.12 (1.10)	28.7	28.6
Abandonment	.88	1.50 (0.62)	1.56 (0.60)	10.3	10.8
Mistrust/Abuse	.89	1.79 (0.68)	1.64 (0.62)	17.4	10.5
Social Isolation	.92	2.20 (0.93)**	1.90 (0.85)	34.9	19.9
Defectiveness/Shame	.94	1.37 (0.44)	1.36 (0.49)	13.8	19.9
Failure	.93	1.56 (0.61)**	1.76 (0.76)	9.2	18.2
Dependence/Incompetence	.80	1.34 (0.39)	1.32 (0.41)	0	0
Vulnerability to Harm	.81	1.47 (0.54)*	1.60 (0.66)	7.0	11.7
Enmeshment	.89	1.13 (0.30)**	1.29 (0.62)	1.1	4.8
Subjugation	.86	1.75 (0.62)	1.78 (0.73)	11.5	17.4
Self-Sacrifice	.86	2.91 (1.07)	3.05 (1.05)	47.1	51.6
Emotional Inhibition	.87	1.90 (0.77)**	1.65 (0.68)	21.8	13.3
Unrelenting Standards	.87	3.06 (1.27)*	3.37 (1.15)	59.8	61.3
Entitlement	.79	2.09 (0.84)**	1.83 (0.70)	27.9	16.3
Insufficient Self Control/Self-Discipline	.87	2.07 (0.77)	1.96 (0.78)	22.1	21.4
Maladaptive Coping Modes					
Compliant Surrenderer	.81	2.68 (0.68)*	2.46 (0.68)	-	-
Detached Protector	.89	2.02 (0.73)*	1.80 (0.66)	-	-
Detached Self-Soother	.78	2.17 (0.75)	2.23 (0.83)	-	-
Bully and Attack	.71	1.79 (0.48)**	1.60 (0.39)	-	-
Self-Aggrandizer	.78	2.32 (0.60)	2.24 (0.53)	-	-

- Not applicable (no clinical cut-offs).

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 3: Prediction of burnout from demographics, job demands, early maladaptive schemas and maladaptive coping modes

Predictor	Adjusted R^2	F change	B (SE)	β	p
Step 1	.04	$F(3, 352) = 6.03$, $p = .001$			
Constant			29.07 (3.07)	-	***
Age			-0.15 (0.05)	-.17	**
English-speaking country (1=yes; 2=no)			-5.06 (1.7)	-.15	**
Step 2	.14	$F(1, 351) = 43.15$, $p < .001$			
Age			-0.10 (0.05)	-.11	*
English-speaking country (1=yes; 2=no)			-4.90 (1.62)	-.15	**
Job Demands			1.20 (0.18)	.33	***
Step 3	.32	$F(15, 336) = 7.10$, $p < .001$			
English-speaking country (1=yes; 2=no)			-4.87 (1.49)	-.15	**
Job Demands			1.11 (0.18)	.30	***
Abandonment			2.39 (1.09)	.14	*
Mistrust/Abuse			2.37 (0.97)	.14	*
Defectiveness/Shame			3.77 (1.38)	.17	**
Step 4	.38	$F(5, 331) = 7.65$, $p < .001$			
English-speaking country (1=yes; 2=no)			-4.30 (1.46)	-.13	**
Job Demands			1.06 (0.17)	.29	***
Abandonment			2.67 (1.05)	.15	*
Mistrust/Abuse			2.08 (0.95)	.13	*
Emotional Inhibition			-1.73 (0.83)	-.12	*
Detached Protector			5.48 (1.04)	.36	***
Final model					
		$F(24, 331) = 10.13$, $p < .001$			

* $p < .05$, ** $p < .01$, *** $p < .001$