Occupational stress and intention to quit of general practitioners; Propositions drawn
from a Literature Review

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ABSTRACT

General practitioners (GPs) are exposed to severe levels of stress during their working experience. Such stress has been shown to be physically and mentally damaging to GPs and can increase intentions to quit the profession. Literature suggests that resilience can reduce the impact of stress. Through an extensive literature review, this paper will propose a model to understand the influence of resilience on GPs, their levels of burnout, and ultimately their intentions to quit the profession.

STREAM

01. The Future of Work and Organisation

05. Human Resource Management and Development

10. Organisational Behaviour
INTRODUCTION

Research shows that general practitioners (GPs) are exposed to extreme stress levels from both work and family domains (Bakker, Demerouti, & Schaufeli 2002; Leigh 2000; Bond, Ferrario, Vidotto & Zotti 2010). Demands on the GP can affect their physical (Buddeberg, Buddeberg-Fischer, Klaghofer, Stamm & Siegrist 2008) and mental health (Firth-Cozens 2001) and can generate an intention to quit the profession (Scott, Sibbald & Simoens 2002). Stress can also reduce the quality of patient care (Habermann et al. 2006). It has been theorised that resilience can mediate the impact of stressors, and therefore against the outcomes of those stressors (Dyrbye et al. 2010).

Based on this understanding, this paper proposes a model that extends the job stress model (Akhtar & Lee 2010) to incorporate the constructs of resilience, burnout and intention to quit (see Figure 1). This model can help to determine the influence of resilience on GP-stress and the intent to quit the profession. This provides opportunity to create and/or tailor programs that promote GP resilience and reduce their intention to quit.

[Insert Figure 1]

Background

Due to the highly challenging nature of their role, GPs are often confronted with high levels of job demands (Bakker et al. 2002) which impose varying psychological and physical implications upon GPs (Buddeberg et al. 2008). Resilience has been shown to mediate the effect of job demands, thus minimising the stress that the individual is subject to.

Resilience is ‘the ability to bounce back from negative emotional experiences; it is demonstrated by flexible adaption to the changing demands of stressful experiences’ (Feldman Barrett, Fredrickson & Tugade 2004, p. 320). Due to the lack of effect that stressors impose upon resilient individuals (Feldman Barrett et al. 2004) individuals with higher levels of resilience experience better psychological and physical outcomes when faced with the stress of clinical practice (Charney et al. 2009; Ekeberg et al. 2006). It is anticipated that as resilience limits the psychological and physical impacts of stress, it will also reduce GP intention to quit.

Various models have been proposed to understand the stress-producing interactions between individuals and their work environment. These include the Job Demand-Control Model (Karasek
1979), the Job Demand-Control Support model (Hall & Johnson 1988), the Job Demands-Resources Model (Bakker, Demerouti, Nachreiner & Schaufeli 2001), and the Conservation of Resources model (Hobfoll 1988). These understandings have considerable theoretical shortfalls (Bakker & Demerouti 2007; Akhtar & Lee 2010); to address these, the integrated model of job stress was developed (Akhtar & Lee 2010).

Defining stress

Most definitions of stress are conceptually similar. For instance, Folkman and Lazarus (1984) defined stress as a mental state that arises when stressors tax or exceed one’s ability to cope. According to this perspective, an individual will experience stress when subject to environmental stressors that either impact on or outstrip their ability to cope. Ertel and Kortum (2003) adopt a more work-related interpretation, stating that stress is a ‘pattern of emotional, cognitive, behavioural and physiological reactions to adverse and noxious aspects of work content, work organization and work environment’ (p. 35). Despite slight variation, both definitions suggest that stress arises through an interaction between the stressor(s) and one’s capacity to cope. As such, stress is here defined as the ‘realization by individuals that they are unable to cope with the demands placed upon them by their environment’ (Dua 1996, p. 118).

General practitioner stress

General practitioners are said to experience high levels of stress (Nielsen & Tulinius 2009). Although prevalent in the wider community (Ahola et al. 2006), high stress levels are particularly prevalent among GPs (Firth-Cozens & Moss 1988; Dolatowski et al. 2007). For instance, in their sample of 296 metropolitan Australian GPs, Coman and Schattner (1998) found that 92% felt stressed, with 11% experiencing severe stress. The authors also found that this experience did not abate over a 12-month period – furthermore, 53% of respondents indicated they considered abandoning their profession because of stress.

The key factor that exacerbates GP-stress appears to be workload – that is, the amount, the pace, as well as the psychological and physical costs of work (Appleton, Dowell & House 1998; Ahmad, Bergman & Stewart 2003). Although GP-stress has been studied in different contexts (e.g., May & Revicki 1983; Dua 1996; Coman & Schattner 1998), the findings appear to be similar. For instance, by
surveying approximately 300 family physicians, May and Revicki (1983) found three key factors contributed to stress – (1) internal professional stress (e.g., dissatisfaction with professional development and life); (2) perceived work productivity (e.g., meeting professional and work expectations); and (3) external professional stress (e.g., perception of social and formal support from others).

In Australia, a study involving 296 metropolitan GPs found that 92% experienced the ill-effects of stress (Coman & Schattner 1998). Furthermore, 81% labelled their stress as ‘mild’ or ‘moderate’, and 11% labelled it as severe. The study also found that the stress experienced by over 80% of respondents had either increased or remained consistent over the previous 12 months. Occupational stress had become severe, with 53% of GPs revealing they had consequently considered abandoning general practice. Based on this study, the authors outlined five aspects of the working environment that contributed to GP-stress – (1) workload, that is, the amount, pace as well as the psychological and physical costs of work; (2) economic factors; (3) medico-political factors; (4) clinical factors; and (5) the physical working environment.

Despite contextual differences, these studies collectively suggest that GP-stress is exacerbated by patient caseload, administration and the work-life balance (Butler & Skattebo 2004; Bartley et al. 2004; Akkermans et al. 2009). Each is briefly addressed in turn.

As the first port of call, GPs consult a high volume of patients who present with an array of clinical conditions (Nielsen & Tulinius 2009). Patients can be emotionally and psychologically challenging to the GP (Schaufeli, Sixma & Van Dierendonck 1994; Akkermans et al. 2009) – this can increase GP workload. In a Dutch study, Bakker and colleagues (2009) found that GPs who were able to devote more time per patient not only provided a greater level of care but also had better wellbeing. The ability to allocate more time to each patient can be seen as an indicator of a non-excessive workload.

Government bureaucracy can be a major source of stress for GPs, restraining their working environment (Baker et al. 2007). In a qualitative study involving Australian rural GPs, government interference was deemed a major source of stress. Many respondents perceived governments as too willing to ‘impose restrictions but not provide alternatives or adequate [GP] support’ (Baker et al. 2007).
2007, p. 17). Many government initiatives have been viewed as interference and have had the opposite effect to which they were intended.

**Impact of general practitioner stress**

The stress experienced by GPs can have wide flow-on effects, including physical and psychological ailments. Stress has also been linked to lower quality healthcare and increased intentions to quit; these consequences have considerable implications for the healthcare system. These consequences are addressed in turn.

Due to the demanding nature of their role (Nielsen & Tulinius 2009), the physical and psychological wellbeing of GPs is often compromised (Firth-Cozens 2001). Studies have illustrated links between GP-stress and physical ailments, ranging from headaches (Burke 1988) to cardiovascular disease (Peter & Siegrist 2000). A recent study on Swiss GPs found a substantial proportion experienced anxiety and clinical depression (Buddeberg et al. 2008). These findings are congruent with literature relating to the mental health of doctors and medical trainees (Dahlin, Joneberg & Runeson 2005; Dyrbye, Shanafelt, & Thomas 2006). These issues are of particular concern because people with mental health issues are less likely to access appropriate support services, relative to those with physical complaints (Biddle, Donovan, Gunnell & Sharp 2004); therefore they are less likely to receive support, exacerbating their poor wellbeing. Furthermore, GPs who experience poor wellbeing are 70% more likely to die as a direct result of suicide or self-harm, relative to the general population (Biola, Bunrett & Frank 2000).

Stress can affect the quality of patient care (Dyrbye et al. 2010; Durning et al. 2010). When GPs experience stress, there is the potential for depersonalisation (Caplan 1994) where individuals seeking help are perceived as objects, rather than people. This is supported by the Halbesleben and Rathert (2008) who found a significant relationship between physician depersonalisation and a diminished quality of patient care.

Continuous exposure to work stress can lead to burnout. Burnout is a form of psychological strain caused by persistent exposure to work stress (Ashill, Carruthers, Rod & Thirkell 2009; Demerouti & Halbesleben 2005b). The concept of burnout consists of three factors – emotional exhaustion, depersonalisation, and reduced personal accomplishment (Maslach 1976). Typically, individuals cease
employment when they feel overwhelmed, experience extreme amounts of job stress, have low job satisfaction, or feel undervalued (Firth, Loquet, Mellor & Moore 2004; Beutell & Greenhaus 1985). As GPs are continually exposed to stress, the levels of intent to quit are considerably high – this was confirmed in a study involving Scottish GPs (Scott, Sibbald & Simoens 2002). This process, coupled with the problems of recruiting GPs (Farrell, Ferguson, Lane, Martlew, Patterson & Wells 2000, Leigh 2000), may exacerbate GP-shortages and diminish workforce capacity (Bojke, Gravelle & Sibbald 2003). Given the increasing importance of community-based healthcare (Honey & North 2009), and the ageing population in many Western nations (Lutz, Sanderson & Scherbov 2008), this constitutes a significant problem.

Resilience

Resilience is the ‘ability to bounce back from negative emotional experiences and by flexible adaption to the changing demands of stressful experiences’ (Frederickson & Tugade 2004, p. 320). Resilience is seen as a ‘personal characteristic that enhances individual adaption’ (Ahern, Byers, Kiehl & Sole 2006, p. 110) to stressful situations, therefore lessening psychological and/or physical ramifications imposed by the job stressors. This feature occurs primarily through the increased adaptability that resilient individuals possess (Wagnild & Young 1990; Wagnild & Young 1993).

As a result of the adaptability that resilience individuals possess, resilient individuals are more likely to possess greater levels of job resources, and lower levels of job demands. By reducing the impact of stress and enhancing resilience, the potential impacts of stress can be diminished. Studies show that individuals with higher levels of resilience experience better psychological and physical outcomes when faced with the stress of clinical practice or clinical training (Charney et al. 2009; Feldman Barrett et al. 2004).

Resilient individuals are said to possess various psychological characteristics that enable ‘the dynamic capacity ... to modify his/her modal level of ego-control, in either direction, as a function of the demand characteristics of the environmental context' (Block & Block 1980, p. 48). Based upon this understanding individual levels of resilience mediate the impact of job demands and resources upon the individual.
MODEL

There are several job stress models that aim to understand the interactions between the individual and their working environment. Each appears to address the theoretical shortcomings of its predecessor. For instance, the Job Demand-Control Model (Karasek 1979) proposes that job demands are offset by increased job control. This model suffered great criticism for its simplicity. Johnson (1986) argued that job control was one of many psychosocial resources (like social support) that can buffer the negative effects of job demands. To address this, the Job Demand-Control Support model (Hall & Johnson 1988) was developed. Literature suggests that social support can mitigate the impact of job strain (Haly 2009; Fisher, Sanchez & Viswesvaran 1999). Despite the expansion, the Job Demands-Control Support model only encompasses one additional psychosocial resource, and was therefore still not fully embraced.

The aforesaid shortfalls led to the Job Demands-Resources Model (Bakker et al. 2001). According to the model, job resources mediate the effects of job demands – if demands overshadow available resources, feeling overwhelmed and reduced job satisfaction are likely to occur. There are a few criticisms of this model – for instance, it is said to lack structure and not account for the concepts of resource investment, resource protection, and the primacy of resource loss (Akhtar & Lee 2010). The generalisability of the model, although one of its main strengths, also leaves it open for criticisms of being too generic. The main oversight in this model is its neglect of the primacy of loss – that is, it fails to recognise that people are not always willing to risk losing what they have for the chance to acquire additional resources.

A competing school of thought devised an alternate job stress theory – the Conservation of Resources theory (Hobfoll 1988). It suggests that ‘people strive to retain, protect, and build resources and that what is threatening to them is the potential or actual loss of these valued resources’ (p. 516). It draws this understanding from psychological theories on human nature, including the instinctive principles of self-protection and enhancement (Lieberman, Menaghan, Mullan & Pearlin 1981). As such, the theory conceives stress as a ‘reaction to the environment in which there is a threat of a net loss of resources, the net loss of resources or a lack of resource gain following the investment of resources’ (Hobfoll 1989, p. 516).
To overcome the shortcomings of both the Job Demands-Resources Model and the Conservation Of Resources theory, Akhtar and Lee (2010) merged the two to form the integrated job stress model. Their model shares some of the underlying assumptions of its parent models – for instance, like the Job Demands-Resources Model, it assumes a ‘positive path between job demands and emotional exhaustion, and a negative path from job resources to depersonalisation’ (p. 197); and, like the Conservation Of Resources theory, it suggests that high job demands can threaten resources and give rise to emotional exhaustion and depersonalisation. However, the authors advise, ‘resource investment is implicated in directly influencing recovery from resource losses, as exemplified by an individual’s experience of reduced emotional exhaustion and depersonalization’ (p. 198).

Drawing on the strengths of both the Job Demands-Resources Model and the Conservation of Resources theory has proven beneficial in three ways. First, it recognises the role of resource investment, resource protection, and the primitive instincts regarding resource loss. Second, it provides the flexibility required to be used in different contexts. Third, it draws from literature on burnout, proposing links between job demands, job resources, and two core dimensions of burnout – namely, emotional exhaustion and depersonalisation (Bakker & Schaufeli 2004). According to Akhtar and Lee (2010), job demands include the psychological demands associated with work and work conflict, both of which are linked to exhaustion and depersonalisation (Ashforth & Lee 1996). Job resources on the other hand refer to job control and supervisory support.

**Aim of and support for the model**

According to the integrated job stress model (Ahktar & Lee 2010), as inherited from the Job Demands-Resources Model (Bakker et al. 2001), the work environment can categorised as job demands and job resources. Job demands ‘require sustained physical and/or psychological (cognitive and emotional) effort or skills’ (Bakker & Demerouti 2007, p. 312) and are therefore associated with physical and/or psychological costs. Job resources are ‘functional in achieving work goals; reduce job demands and the associated physiological and psychological costs; and stimulate personal growth, learning and development’ (p. 312). Persistent exposure to work stress has been shown to lead to increased levels of Burnout among the individuals involved. From the above definitions it is clear that
an increase in the reported levels of job resources will lead to a decrease in the reported occurrence and significance of job demands.

Proposition 1: An increase in job resources will lead to a decrease in job demands. 

As identified earlier, burnout is a form of psychological strain caused by exposure to persistent work demands (Ashill et al. 2009; Demerouti & Halbesleben 2005b). Based upon the belief that burnout occurs as a result of persistent job stress (Austin, Egan & Saklofske 2005), an increase in job demands will result to a corresponding increase in the reported levels of burnout experienced.

According to Bakker and Demerouti job resources reduce job demands and their associated ‘physiological and psychological costs and stimulate personal growth’ (2007, p. 312). As burnout is created as a result of these physical and psychological demands (Ashill et al. 2009) an increase in job resources will lead to a decrease in the levels of burnout.

Proposition 2: Increased job demands will lead to increased levels of burnout.

Proposition 3: Increased job resources will lead to decreased levels of burnout.

Through the toll that continued exposure to extreme levels of job demands imposes upon the physical and psychological wellbeing of an individual (Bakker & Demerouti 2007), it is also anticipated that the exposure would weather down various psychological qualities that contribute to the individuals overall resilience levels (Wagnild & Young 1993; Caplan 1990; Rutter 1987). According to Wagnild and Young (1993, p. 166) resilience is an ‘emotional stamina’ that enables an individual to adapt to the ever changing situations they are exposed to. Based upon this, it is hypothesised that an increase in job demands will decrease the level of emotional stamina present within an individual, thus resulting in diminished level of resilience.

Proposition 4: Increased levels of job demands will lead to lower levels of resilience.

Previous theorists (Bakker & Demerouti 2007; Demerouti et al. 2001; Akhtar & Lee 2010) have articulated that job resources reduce the physical and psychological costs of work and stimulate personal development. Over time various theorists have linked such resources to increased levels of resilience (Carver & Scheier 1992; Bakker et al. 2007). This is due to the fact that resilience encompasses various personal attributes such as equanimity, perseverance and self-reliance (Beardslee
1989; Caplan 1990; Wagnild & Young 1993), which will increase with the added influence of job resources.

Proposition 5: Increased levels of job resources will result in increased levels of resilience.

Continual exposure to work stress results in burnout (Ashill et al. 2009) – ‘a syndrome of emotional exhaustion, depersonalisation and reduced personal accomplishment that can occur among individuals who do people work of some kind’ (Maslach 1982, p. 3). Emotional exhaustion, arguably the most noticeable symptom of burnout, is ‘an extreme form of fatigue as a consequence of prolonged and intense physical, affective, and cognitive strain caused by prolonged exposure to specific working conditions’ (Bakker, Demerouti & Verbeke 2004, p. 84). Depersonalisation was originally defined as ‘an attempt to put distance between oneself and service recipients by developing an indifference or cynical attitude when they are exhausted and discouraged’ (Leiter, Maslach & Schaufeli 2001 p. 403), while reduced personal accomplishment is a ‘decline in feelings of competence or productivity at work’ (Demerouti & Halberleben 2005a, p. 209). Ekstedt and Fagerberg (2004) conclude that the psychological state of burnout is often generated through prolonged exposure to work stressors with ineffective coping strategies.

Resilient individuals ‘cultivate positive emotions’ (Feldman Barrett et al. 2005, p. 1167) which mediate the psychological and physical damage imposed as a result of the stressful situations the individual is exposed to. Individuals with higher levels of resilience experience fewer psychological and physical effects from the stresses often associated with medical training or practice (Charney et al. 2009; Ekeberg et al. 2006; Feldman Barrett et al. 2004). As outlined above, a primary component of burnout is emotional exhaustion (Maslach 1982; Bakker et al. 2004) which in itself is an extreme form of fatigue caused by the ‘physical, affective, and cognitive strain’ (Bakker et al. 2004, p. 84) of working in extremely stressful situations. Resilience can influence burnout by reducing the significance of the work strains imposed upon the individual. As burnout is a psychological state (Ekstedt & Fagerberg 2004), it is likely that resilience will decrease its effects.

Proposition 6: An increase in resilience will lead to a decrease of GP burnout

As articulated in Feldman Barrett et al. (2005) the positive emotions that resilient individuals cultivate have the potential to influence the physiological and physical impacts of the work related demands
imposed upon individuals and through doing so mediate the relationship that exists between job demands and burnout. Through the use of positive emotions (Feldman Barrett et al. 2005; Frederickson & Tugade 2004) resilience mediates the detrimental impact that job demands can impose upon the individual, thus reducing the components that contribute to create burnout. According to Baron and Kenny, mediation refers to ‘the generative mechanism through which the focal independent variable is able to influence the dependable variable of interest’ (1986, p. 1173). In this case the independent variable, job demands, is able to influence the levels of burnout as mediated by the individuals level of resilience.

Proposition 7: Resilience mediates the relationship between job demands and burnout.

Burnout has typically been associated with various forms of job withdrawal, including ‘absenteeism, intention to leave the job and actual turnover’ (Leiter et al. 2001, p. 406). Burnout can influence intention to quit through two of its three components – emotional exhaustion and personal accomplishment (Borritz, Christensen, Kristensen, Rugulies & Villadsen 2006); both can deplete the emotional capacity to cope with many of the stresses associated with general practice. For instance, Leiter and colleagues (2001) suggest that individuals will find it difficult to gain a sense of personal accomplishment if they are emotionally exhausted. Similarly, Durning and colleagues (2010) found a strong relationship between burnout and intention to quit. Burnout will result in higher occurrences of intentions to quit through a reduced feeling of self accomplishment and an intensification of emotional exhaustion:

Proposition 8: Increased levels of burnout will lead to increased intention to quit
Implications, limitations and future research opportunities

Provided that resilience has the desired influence on job demands and burnout, a test of the aforesaid propositions will form a firm foundation on which to develop more adequate support for GPs. This in turn can reduce stress, optimise wellbeing, and prolong a desire to continue practicing.

This area of research would benefit from a longitudinal approach. After testing the aforesaid propositions, programs could be trialled to determine their impact on resilience, stress and intentions to quit. However, before this, it is vital that the aforesaid propositions are tested to ensure the content and face validity of the proposed model. Given the significance of GP stress – for GPs and the wider community – this constitutes a significant and worthy research opportunity.
REFERENCES


FIGURES

Figure 1: Proposed Model

P7 refers to the mediating effect that Resilience imposes upon the relationship between Job Demands and Burnout.