

Stress and well-being in the workplace

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There have been dramatic changes to the working environment due to the increasing trend for international trade, technology breakthroughs and competitive pressures (Raya & Panneerselvam, 2013). Also, now is an era of workforce diversity with mature workers remaining in employment, women returning to work and with millennials making up half of the workforce (Born & Drori, 2015). These factors have intensified the pressures at work which carries the risk of high levels of stress (Abraham et al., 2008). Legislation obliges companies to manage the health and safety of the workforce, with the quest for making the working environment a safer place (ACT, 2012). However, although many organisations have well established safety procedures, the 'health' aspect of health and safety is lacking (Feilder & Podro, 2012). This review of the literature will critically consider stress and wellbeing in the working environment. Role theory, the demand control model, and leadership theory will be utilised in an attempt to understand how stress can occur in the workplace with leadership style being suggested as an active contributor to the reduction of stress with a view to improving the wellbeing of the employee.

The quest for wellbeing is a theoretically valid issue in a person's decision-making processes as they apply themselves to work (Guest et al., 2016). Wellbeing has been defined as an individual's balance point that can be affected by various challenges or life events (Dodge et al., 2012). Stable wellbeing is when an individual has the necessary resources that are needed to meet psychological, social and physical challenges. However, if these challenges outweigh the resources then wellbeing may deteriorate (Dodge et al, 2012). Stress can be a major influencing factor on a person's sense of wellbeing (Schneiderman et al., 2005). Work related stress is defined as a harmful reaction individuals may have to undue demands and pressures placed on them at work (Health and Safety Executive, 2016). Assessing stress can be complex due to the negative inferences that can be attributed to the term, as small levels of stress could be considered positive (Mcvicar, 2004). Eustress is considered to be beneficial, productive

stress while distress implies that it is harmful (Graham, 2017). Therefore, stress should be viewed as a continuum, from feelings of eustress to mild/moderate then severe distress (Clancy & McVicar, 2009).

Prolonged and severe distress culminates in symptoms of burnout and serious physiological disturbance (Clancy & McVicar, 2009). The transition to severe distress that is most damaging to workers, however, stress is more likely in some individuals than others and in some situations than others (Cooper, 2004). At the level of the individual, acute responses to stress may be seen in individual's emotions, behaviours, cognitions, and/or physical symptoms. Prolonged stress can raise the risk of coronary heart disease, hypertension, cancer and diabetes (Bickford, 2005). Constant levels of high stress can result in burnout, which is a physical, mental and emotional reaction that produces feelings of hopelessness powerlessness, resentment, cynicism, and failure (Bickford, 2005). At the level of the workplace, the problem of stress can result in an increase in absenteeism and turnover, a reduction in quantity and quality of work and a reduction in morale (Parvaiz et al., 2015). Therefore, stress poses a significant threat not only to the employee's health and wellbeing, but at a potential cost to the organisation.

Selye (1946) devised the General Adaption Syndrome, which describes stress within a biological framework, which identifies the physical symptoms the body goes through in response to a stressor. Initially, during the alarm stage, the body prepares for potential emergency (Selye, 1946). Hormones are produced which lead to the fight or flight response. During the resistance stage, the body is adapting to the demands of the environment but at the same time the body's adaptive energies are deteriorating (Selye, 1946). During the exhaustion stage the initial alarm reactions reappear and the result may be seen as stress related illness such as ulcers, high blood pressure and cardiovascular problems (Selye, 1946).

Although Selye's (1946) flight and fight model was influential in early stress research, it did not take into consideration individual variability or psychological factors (Suzuki and Ito, 2013). To account for this, Lazarus and Folkman (1984) proposed that stress involves a transaction between the individual and the environment, with a stress response being elicited if the stressful event was appraised by the individual as stressful (Lazarus & Folkman, 1984). According to Lazarus and Folkman (1984) there are two forms of appraisal: primary and secondary. Primary appraisal is the initial stage where the individual initially decides if the event poses a threat; secondary appraisal occurs when individuals choose a response in the context of their different coping strategies. These appraisals determine whether individuals display a response to a threat or a challenge (Lazarus & Folkman, 1984).

There are multiple factors involved in stress in the organisation that can have a negative effect on psychological and behavioural processes (Yesiltas, 2014). One of these factors is role stress. In the context of the working environment role behaviours are patterns of reoccurring actions that are deemed important for effective functioning in a specific role in a specific organisation (Biddle, 1986). Organisational role theory (Khan et al., 1964) maintains that role senders communicate information to a receiver who can sometimes perceive this information as challenging, ambiguous or too demanding (Kahn et al., 1964). These unclear messages can have the consequence of the employee experiencing job related stress. Three types of role stressors have been identified in role theory: role ambiguity, role conflict and role overload (Idris, 2011). Khan et al. (1964) define role ambiguity as single or multiple roles within an organisation that may be unclearly verbalised in terms of expectations, work objectives and levels of performance. Role conflict occurs when an individual is faced with incompatible job demands and when job requirements are not consistent with what the individual believes is part of the job (Rizzo et al., 1970). Role overload exists when employees perceive role expectations to be too demanding with the individual feeling under pressure with limited time to complete tasks (Conley & Woosley, 2000). These stressors can affect employee attitudes,

wellbeing and behaviour and in turn can have negative implications for the workplace in terms of higher staff turnover and reduced productivity (Bickford, 2005).

Higher education institutions are often labelled as stressful environments (Kinman, 1998). The responsibilities and workload of academics employed within the institutions have increased with faculty members expected to encompass many other roles alongside the role of teaching and research (Kinman, 1998). Research conducted by Fisher (1994) across two different universities indicated that stress is a feature of the working life for the teaching staff. More and more academics in such institutions have to perform multiple roles simultaneously, involving teaching, administration, dealing with student's problems, running tutorials and attending conferences. Fisher's (1994) findings demonstrated that the potential for role overload and role conflict was high under these conditions. Abbas et al. (2012) reported comparable findings. Eighty university faculty members were examined using structured questionnaires that measure organizational role stressors and burnout. The findings demonstrated that role ambiguity, role conflict, and role overload had a significant impact on employee's health and wellbeing often resulting in symptoms of burnout (Abbas et al., 2012).

While the research described appears to show that role stressors are associated with high levels of stress which can result in burnout, a key limitation to consider is that the self-report methods used may lead to response distortions such as social desirability bias (Jex & Britt, 2008). Organisational research is especially susceptible to deliberate fabrications as participants may feel that their response patterns will have an influence on prospects of promotion, job security or salary (Razavi, 2001). For example, a participant may give answers in order to produce a desirable outcome, such as a reduction in workload (Anastasi & Urbina, 1997). Yet this type of responding may not be deliberate; it may be an unconscious effort to create a positive impression on oneself and avoid criticism (Crowne & Marlow, 1964). Furthermore, the physiological symptoms of stress are not accounted for in the research using the method of self-report. Yet in research where physiological data such as blood pressure and heart rate had been

collected, it was demonstrated that the role stressors may have physiological consequences (Caplan & Jones, 1975; Ivancevich et al., 1982). The measurement used in organisational research should be dictated by the variables that are being measured (Jex & Britt, 2008). As stress concerns both the participants' perception of the stressor that often results in physiological responses, then multiple measurement methods would increase the predictive power of the research (Jex & Britt, 2008).

Furthermore, both Fisher (1994) and Abbas et al. (2012) investigations did not take into account specific types of climates which can influence an employee's understanding of the work environment. One work climate that is known to aggravate stress and reduce feelings of positive wellbeing is a competitive climate (Jex et al., 2014). This climate refers to the ways in which workers perceive the degree to which rewards in the organization are reliant on comparisons of their performance to that of their colleagues (Jex et al., 2014). A competitive climate could therefore be considered stressful as the workers are then competing against one another for a set of limited rewards (Arnold et al., 2009). Therefore, it could be suggested that the financial challenges faced by the universities coupled with the resulting increased expectations on the staff potentially created a competitive environment which may have blocked resource replenishment or further depleted resources that are already weakened due to role stressors (Jex et al., 2014). The practical implications of the fact that organizational climate can impact on employee stress levels and subjective wellbeing suggests that organizations should care about their climate, more specifically they should take steps to influence climate in a more positive direction (Jex et al., 2014).

The physical environment has a significant role to play in occupational stress (Cassidy, 1997). For example, an uncomfortable physical environment, one where workers are exposed to noise, extremities of temperature, poor lighting, and crowding is one in which workers are more likely to experience the negative effects of stress (Briner, 2000). The demand control framework (Karasek, 1979) can be applied to the investigation of the physical working environment, both in terms of the environmental demands placed

on individuals and the perceived lack of control that they have concerning their space (Vischer, 2007). Open plan office layouts are characterised by modular furniture and portable dividers that form a screen between colleagues (Charles & Veitch, 2002). These cost saving designs are intended to provide a flexible working environment that are proposed to increase teamwork, productivity, and promote communication between employees (Charles & Veitch 2002). However, the open plan design can lead to many unwanted distractions and interruptions (Maxwell, 2000). Acoustic issues are of interest since noise, which is defined as undesirable sound, is considered an environmental factor that is difficult to control which can impact on employee health and wellbeing (Maxwell, 2000).

Evans and Johnson (2000) examined the connection between stress and open plan office noise in a laboratory setting. Forty female office workers were examined in one of two situations: an open office noise condition, where noise consisted of pre-recorded conversations, typing sounds, and ringing phones and a quiet office condition. Participants stress hormones were measured, and their self-reported levels of stress were recorded. Elevated levels of the stress hormone epinephrine, which are released as part of the fight or flight stress response, were evident in the urine samples of workers who were exposed to the noise condition. However, these participants did not report subjective feelings of increased stress at the end of the experiment. This finding suggests that greater levels of stress and increases in the stress hormone may occur unconsciously without the participants being aware of feelings of stress. Indeed, Cassidy (1997) maintains that there is the potential for individuals to habituate ambient stressors making them unaware of their existence. As many medical conditions can worsen due to an increase in stress hormones, the implications of this finding are that habituation does not appear to remove the harmful medical effect of stress which may have a negative impact on employee health and wellbeing.

Evans and Johnson's (2000) laboratory research adds value to the organisational psychology paradigm by incorporating physiological data with questionnaire data

permitting more in-depth analysis so causal inferences can be drawn. However, it could be argued that findings from a university laboratory are limited when generalising to real organizational settings, as a laboratory setting lacks mundane realism (Jex & Britt, 2008). Laboratories are special purpose settings designed to ensure that the independent variable can be manipulated effectively (Jex & Britt, 2008). Therefore, they have fewer elements that are found in a real organisation. Nevertheless, the ultimate purpose of experimental research is to understand the psychological processes that are fundamental to organisational phenomena. Indeed, Berkowitz and Donnerstein (1982) have argued that it is the meaning and actions that the participants give to the laboratory setting that plays a greater role in defining the generalizability of an experiment's outcome more than the realism of the setting itself.

A further challenge to Evans and Johnson's (2000) research is that it does not account for how the data fits with individual differences. An individual's idiosyncratic characteristics can mediate the response to noise as a source of stress (Sutherland & Cooper, 2000). Maher and Von Hippel's (2002) research notes that some individuals can cope better than others with the excessive stimulation produced by noise. Maher and Von Hippel (2002) maintain that the capability of blocking the interference is a significant individual difference that can affect how workers react to the open plan office design. This ability to obstruct undesirable stimuli and concentrate on the given working tasks is central to selective attention which necessitates two complementary processes: attention and inhibition (Maher & Von Hippel, 2002). Individuals with a poor inhibitory ability are less able to suppress distraction and have the greater chance of feeling the negative effects of stress as a result (Maher and von Hippel, 2002). From the point of view of the organisation, the negative impact of the open plan office design on stress and subsequent wellbeing of employees is a concern. It would be interesting to see if the perceived financial advantages of an open plan office design are actually outweighed by disadvantages such as increased levels of stress and a decline in employee wellbeing and productivity (NHS, 2013).

Many jobs involve regular contact with various individuals at work. A poor unsupportive relationship with managers and those in charge has the potential to increase levels of stress (Cambridge University, 2014). The behaviour of leaders within organisations has been associated with employee stress (Offerman & Hellman, 1996). Leadership type concerns the extent to which the employees feel they can trust a person in charge (Dirks & Ferrin, 2002) Factors such as how open leaders are, communication with workers, whether they do what they have promised to do all contributes to the extent the leader is considered credible or trustworthy (Dirks & Ferrin, 2002). When the credibility of the leader is considered low, the chances of employee's suffering burnout increases (Leka & Jain, 2010). Bass (1998) theory of leadership describes two differing leadership styles: transformational and transactional. Transformational leadership is characterised by leaders who attempt to inspire and motive employees, who create opportunities for the workers development and have high expectations for performance (Bass, 1998). In contrast, transactional leaders believe that employees are motivated by rewards (Bass, 1998). The transaction is based on what the leader controls and what the follower wants in return for their services (Hartley & Benington, 2010).

Seltzer et al. (1989) investigated 277 students with full time jobs who were required to complete questionnaire data indicating various stress symptoms they may have experienced. The respondents also described their line managers by completing a leadership questionnaire. Although limited by the cross-sectional nature of the research, the findings revealed that 14% of the variance in symptoms of stress and 34% of the variance in burnout was attributed to the lack of transformational leadership (Seltzer et al., 1989). This finding suggest that transformational leaders can play a significant role in buffering stress at the level of the individual (Kelloway et al., 2005). Self-efficacy (Bandura, 1997) is the personal belief of how well the individual thinks they can carry out a course of action. Cognitive and affective processes that form self-efficacy can be shaped by the quality of leadership (Linley & Joseph, 2004). Jex & Blisse (1999) found that self-efficacy can buffer the negative impact work stress. The employees with a high degree of self-efficacy are more likely to challenge the stressor; those with a low degree

of self-efficacy are more likely to spend their time dwelling on them (Jex & Blisse, 1999). Those high in self-efficacy rely on problem focused coping and are more likely to do something about the stressor so are therefore more likely to maintain healthy levels of psychological wellbeing (Jex & Blisse, 1999). By maintaining positive behaviours that workers will want to follow and by providing a supportive climate, transformational leaders can impact on workers self-efficacy, thereby increasing the wellbeing of the worker (Tukey et al., 2012).

To conclude, occupational stress has become one of the most serious health issues of today's society. The working world has changed dramatically with employees working longer hours, with heavier workloads often in highly competitive environments, which as the above discussion has shown can lead to greater levels of stress adversely affecting the wellbeing of the workers (Raya & Panneerselvam, 2013). While methodological limitations of the self-report nature of much of the research may preclude generalising the results of the research, it is clear that the working environment can affect how employees perceive stress. Role theory (Khan et al., 1964) specified that stressors arising from role related ambiguity and overload are associated with high level of strains while the job demands control model (Karasek, 1979) showed how high job demands and lack of control over the physical environment can increase stress. Leadership theory (Bass, 1998) demonstrated the critical role a leader plays within the organisation and that the lack of support typified by transactional leader type has the potential to lead to higher levels of stress. The workers within an organisation should be considered to be its most valuable asset, with the productivity and success of the company being highly dependent on the existence of healthy employees. Organisations have legal and moral responsibility to protect the mental health of their workers, therefore theory and research from the above discussion could be utilised to assist organisations in developing policies together with designing interventions aimed at increasing the employee's health and wellbeing.

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