# Individual and Organizational Consequences of Occupational Stress: Implications for Policy and Practice

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## Abstract

One important part of our life which causes a great deal of stress is work. Indeed, stress has dire consequences on the individual worker and the organisation as it undermines the achievement of targeted goals or productivity of both individuals and the organisation. This paper presents a synthesis of empirical evidence on sources, individual and organizational consequences, and intervention strategies for occupational stress. We conducted an extensive literature review through Web of Science, PsycInfo, ERIC, MEDLINE, PubMed, Scopus, and Google scholar databases, focusing on workplace stress in diverse work environments. The review indicated that occupational stress poses enormous psychological, physical and economic challenges to the worker as well as the economic and reputational consequences to the organisation, with ripple effects on family members of stress victims and society at large. Implications of the findings for university administrative staff and management are proffered. It is, therefore, hoped that the paper would add to the existing knowledge and sensitize administrators and other personnel to take steps to reduce stress and implement appropriate intervention strategies to enhance the well-being and productivity of workers.

Keywords: Stress, Occupational Stress, Individual, Organisation

## Introduction

Stress has become an emerging issue in organisations in recent times resulting in both positive and negative effects. Minor illnesses such as headaches, anxiety and fatigue as well as major illnesses such as heart attacks, ulcers and high blood pressure are more frequent in people who experience high levels of stress than in those who do not. For organizations like universities, the consequences of stress range from absenteeism to low

output rates on the job (Salleh, 2008). Unhappy, anxious or over-stressed staff are not only going to be unable to achieve high performance in their jobs, but they may also take more time off work on sick leave and may even decide to change their jobs. To this end, the cost to the institution could be substantial. The ability to reduce and deal appropriately with stress would enhance the well-being, individual self-development, and productivity of the worker, and also have an enormous positive economic and reputational impact on the organisation.

Stress encompasses a wide collection of physical and psychological symptoms that result from difficulties experienced while attempting to adapt to an environment. Gazzaniga and Heatherton (2006) define stress as a pattern of behavioural and physiological responses to events that match or exceed the ability of an individual. Similarly, the Health and Safety Executive (HSE, 2001) indicated that stress happens when people realize the pressures on them or that the requirements of a situation are wider than they can handle. Prolonged exposure and continuous encounter with these requirements that are beyond or perceived to be beyond the ability of the individual could lead to mental, physical, or behavioural problems (HSE, 2001). The changes in the physical or psychological state of individuals in response to situational demands (stressors) that cause a challenge or threat constitute stress (Zimbardo et al., 2003).

There are demands constantly being placed on individuals in various situations and environments. At certain times, the individual can handle the demands effectively, while in other circumstances, the demands may exceed the capability and personal resources of the individual. Koolhas et al. (2011) proposed that the term 'stress' should be restricted to conditions where environmental demand exceeds the natural regulatory capacity of a person resulting in an adverse response and consequence, which may be physical or psychological. When this phenomenon occurs in a work setting, it then becomes occupational or workplace stress to the worker. Occupational stress, therefore, represents changes in the physical or mental state of individuals in reaction to workplace demands and appraised challenges or threats (Colligan et al., 2006). In general, occupational stress emanates from a discrepancy between perceived effort or ability and perceived reward on one hand, and a sense of the level of control over job demands. Thus, when the perceived or actual demands of a job are beyond a worker's self-appraised or actual capability to complete the tasks, he or she may respond unfavourably to the demands on him or her. The nature of the response could be physiological, physical, or psychological which may be detrimental to the health and wellbeing of the individual.

The role expansion of university staff, occasioned by an upsurge in enrolments without a proportional increase in human resources, and stiff competition among universities, are bringing about immense stress among administrative staff (Bakah, & Atiako, 2020; Sun, Wu, & Wang, 2011). Bakah and Atiako (2020) described the hectic nature of the workload of the administrative staff of universities. They work as secretaries

to various committees, rapporteurs, administrators and secretaries in their various offices. It is observed that in a semester, an administrative staff attends more than twenty meetings for committees and boards to serve as a recorder (sometimes under an assistant registrar). After the meeting, they are supposed to put together chronologically the agenda that was discussed in the meeting and report them as stated by the various authors of the statements during the meeting. In many cases, right after attending the meeting, it is also expected that he or she attends to enquiries and requests from students and academic staff. Sometimes the administrative staff is unable to complete the day's work and would have to stay after the close of work to complete the tasks before going home, else it would pile up. They may have to travel with their heads of department for meetings and other conferences or seminars outside the university campus. The higher roles of university administrators as managers, secretaries, and advisors imply that their stress-related problems will be greater.

Given that workplace stress has an enormous consequence (sometimes, irreparable, including death) on individuals and the organisation as a whole, management, employees and their supervisors must appraise themselves of the potential sources of stress and how to manage it effectively to ensure the wellbeing of the staff is not compromised. There is, however, limited knowledge and information among university administrative staff regarding workplace stress. Most university administrators in Ghana did not receive training in how to cope with, plan and implement intervention programmes to reduce and/or manage occupational stress. This paper, therefore, provides a critical review of the sources, effects and intervention/management strategies to minimise the adverse effects on individuals and organisations. The paper would provide administrative staff with basic knowledge and serve as reference material to enable them to initiate interventions to deal effectively with stress in the work environment. In addition, management practitioners, psychologists, counsellors and other professionals would find the paper useful. The Job-Demand-Resource model provided a theoretical framework for the paper, focusing on discussing the following:

- What are the common psychological and organisational sources of occupational stress?

- What are the effects of occupational stress on the individual worker and the organi-sation?

- How can occupational stress be reduced and effectively managed?

### Theoretical Background

Several theories regarding stress have been propounded and they include Selye's theory, behavioural theory, and cognitive theory. Selye's theory (1982) states that there are three stages of a physiological stress response. Initially, resistance is reduced as the body

prepares to fight or flee (alarm stage). However, the body eventually adapts and resistance increases (resistance stage). Ultimately, the system becomes exhausted and resistance plummets (exhaustion stage) (Gazzaniga & Heatherton, 2006). Behavioural theory focuses on ways in which individuals learn to associate stress responses with certain situations. People may react to specific situations with fear and anxiety because those situations caused them harm or were stressful in the past (Nolen-Hoeksema et al., 2009). The cognitive theory states that an attitude of optimism and hope help people respond better psychologically to stress, while those who are pessimistic fare badly (Nolen-Hoeksema et al., 2009). Thus, pessimistic people tend to appraise events as more stressful (Lowe & Bennett, 2003) in Nolen-Hoeksema et al., (2009).  The main theoretical framework for this paper is the Job-Demand-Resource model (Bakker & Demerouti, 2007).

## Job Demands–Resources (JD–R) Model

The Job Demands-Resource (JD-R) model is a theoretical framework that attempts to integrate two distinct research traditions: stress research and motivation research. Job demands, according to the JD-R model, initiate a health impairment process, whereas job resources initiate a motivational process. Furthermore, the model specifies how demands and resources interact and forecasts critical organisational outcomes (Bakker & Demerouti, 2007).

Job Demand-Resource (JD-R) model's main assumption is that each occupation has its unique risk factors for job-related stress (Bakker & Demerouti, 2007; Bakker et al. 2003a; Bakker et al. 2003b; Demerouti et al.  2001). These factors can be classified into two broad categories (job demands and job resources), resulting in an overarching model that can be applied to a variety of occupational settings, regardless of the specific demands and resources involved.

Job demands are those physical, psychological, social, or organisational aspects of the job that necessitate sustained physical and/or psychological (cognitive and emotional) effort or skills and are thus associated with certain physiological and/or psychological costs. High work pressure, an unfavourable physical environment, and irregular working hours are some examples. Although job demands are not always negative, they can become job stressors when meeting those demands requires a significant amount of work from which the employee does not recover adequately (Meijman & Mulder, 1998). Job resources are physical, psychological, social, or organisational aspects of a job that are either: 1. functional in achieving work goals or 2. reduce job demands and the physiological and psychological costs that come with them 3. promote personal development, learning, and growth.

The JD-R model assumes that two distinct underlying psychological processes contribute to the development of job-related strain and motivation.

The first is a process of health impairment, which suggests that demanding jobs or

jobs with chronic job demands (e.g., work overload, emotional demands) exhaust employees' mental and physical resources, which can lead to energy depletion (i.e., exhaustion) and health problems (e.g., general health and repetitive strain injury) (Bakker et al., 2003; Demerouti et al., 2000, 2001; Leiter, 1993). Individuals use performance-protection strategies in response to environmental demands, according to Hockey (1993). Such strategies include increased subjective effort and sympathetic activation (autonomic and endocrine) (use of active control in information processing). Although the use of these strategies may prevent decrements in primary task performance, Hockey's theory suggests that indirect degradation may occur. Degradation can manifest as strategy adjustments (narrowing of attention, increased selectivity, redefinition of task requirements), as well as fatigue after effects (risky choices, high levels of subjective fatigue). The long-term effect of such compensatory strategies may be the draining of an individual's energy, leading to a breakdown.

The second process proposed by the JD-R model is motivational, with the assumption that job resources have motivational potential and lead to high levels of work engagement, low levels of cynicism, and excellent performance. Job resources can be intrinsically motivating because they foster employees' growth, learning, and development, or they can be extrinsically motivating because they help them achieve work goals.

Job resources may also play an extrinsic motivational role because the effort-recovery model (Meijman & Mulder, 1998) states that work environments with abundant resources foster the willingness to devote one's efforts and abilities to the work task. In such a case, the task is likely to be completed successfully and the work goal will be met. For example, supportive colleagues and appropriate feedback from one's superior increase the likelihood of achieving one's work goals. In either case, the presence of job resources leads to engagement, whether through the satisfaction of basic needs or the achievement of work goals, whereas their absence leads to a cynical attitude toward work (Demerouti et al., 2001; Lewig et al., 2007; Schaufeli et al., 2009).

## Sources of Occupational Stress

The sources of workplace stress could be categorised into psychological, physical; individual and organizational. Identification of sources of stress at the workplace is the first step in learning to manage it effectively.

### Physical Sources

### Working Conditions

Individual differences cannot be overlooked; scientific evidence suggests that certain working conditions are stressful to the majority of people. Such evidence supports a greater focus on working conditions as the primary source of job stress, and job redesign as a primary prevention strategy (Colligan et al., 2006). In 1990, 1995, and 2000, large surveys of working conditions, including conditions identified as risk factors for job stress, were conducted in European Union member countries. The results revealed a time trend indicating an increase in work intensity. In 1990, 48% of workers reported working at high speeds for at least one-quarter of their working time, increasing to 54% in 1995 and 56% in 2000. Similarly, in 1990, 50% of workers reported working under tight deadlines for at least one-fourth of their working time, rising to 56% in 1995 and 60% in 2000 (Mustafa et al., 2015).

### Workload

Dealing with the workload in the workplace can be stressful and serve as a stressor for employees. The workload is classified into three types: quantitative workload, qualitative workload, and underload workload. A quantitative workload or overload occurs when there is more work to be done than can be comfortably completed. A task is too difficult to complete in a qualitative workload. Workers' skills and abilities, however, are underutilised in an underload workload. (Bowling & Kirkendall, 2012).

### Extended Working Hours

According to one estimate, a sizeable proportion of Americans work extremely long hours; in 2000, more than 26% of men and 11% of women worked 50 hours or more per week. These figures represent a significant increase, particularly for women, over the previous three decades. Per information from the United States Department of Labor, there has been an increase in the number of hours worked in the workplace by employed women, an increase in an extended work week (>40 hours) by men, and a significant increase in combined working hours among working couples, especially couples with young children. (Beru et al., 2015; Gerson & Jacobs, 2004).

### Position in the Workplace

Stress levels can also be influenced by a person's position or status at work. Workplace stress has the potential to affect employees of all levels, from those with little influence to those who make major company decisions. Less powerful employees (those

with less control over their jobs) are more likely to experience stress than powerful workers. Managers, like all other types of workers, are susceptible to work overload. (Demerouti et al., 2001).

### Financial Factors

Employees' stress levels have been linked to inadequate salaries and remunerations in the twenty-first century. According to researchers and social commentators, the computer and communications revolutions have made businesses more efficient and productive than ever before. This increase in productivity, however, has resulted in higher expectations and greater completion, putting additional strain on the employee. Financial factors that may contribute to workplace stress include (a) pressure from investors who can quickly withdraw their money from company stocks, (b) a lack of trade and professional unions in the workplace, and (c) intercompany rivalries caused by companies' efforts to compete globally, and (d) companies' willingness to quickly lay off workers to cope with changing business environments (Primm, 2005).

### Psychological Sources

Psychological stressors are a significant source of occupational stress (Roberts et al., 2012). While some people thrive under pressure and produce their best work when a deadline is approaching, others find these types of challenges extremely stressful.

### Workplace Conflict and Bullying

One of the most frequently mentioned stressors for employees is interpersonal conflict at work (Ayoko et al., 2003). The dispute has been identified as an indicator of the broader concept of workplace harassment (Bowling & Beehr, 2006). Workplace bullying can also contribute to stress. This can be divided into five categories: a threat to professional status, a threat to personal status, isolation, excess work, and destabilization, such as a lack of credit for work, meaningless tasks, and so on (Colligan et al. 2006). This effect can make the workplace hostile for employees, affecting their work ethic and contribution to the organization (Rhodes et al. 2010).

### Sexual Harassment

Women are more likely than men to face sexual harassment, particularly in traditionally masculine occupations. Furthermore, a study found that sexual harassment hurts workers' psychological well-being (Rozina, 1998). Another study discovered that workplace harassment causes differences in the performance of work-related tasks. High

levels of harassment were associated with the most negative outcomes, while no harassment was associated with the least negative outcomes. In other words, women who had experienced more workplace harassment were more likely to perform poorly (Gyllensten, & Palmer, 2005).

## Other Causes

Bashir (2010) identified eleven forces as the causes of stress after reviewing various types of research (work overload, role ambiguity, role conflict, responsibility for people, participation, lack of feedback, keeping up with technological innovation, being in an advanced role, career development, organizational structure and recent episodic events). Work overload: work that exceeds one's ability (Nirel et al., 2008; Bashir, 2010) Role Ambiguity: a role is assigned with little or no information about the role's authorities and responsibilities (Lin & Ling, 2018; Irving & Coleman, 2003; Bashir, 2010), Role conflict occurs when supervisors or subordinates make contradictory demands on a worker (Peterson et al., 1995; Glazer & Beehr, 2005; Beehr et al., 2006; Bashir, 2010). Accountability for people: accountability for people, workers' wellbeing, job security, and professional advancement (Blustein, 2008; Michie, 2002; Bashir, 2010). Participation: the degree to which one is involved in decision-making processes related to one's job (Robert, 2002; Bashir, 2010). Inadequate feedback: insufficient information about job performance (Bashir, 2010) Keeping up with modern technological trends: keeping up with rapid technological advancement (Ginzburg, 1967; Bashir, 2010). Being in an innovative role entails bringing about change within the organization (Haque & Yamoah, 2021; Bashir, 2010). Impact of status disparity, lack of job security, and unfulfilled ambition on career development (Bashir, 2010).

## Effects of Occupational Stress

Workplace stress is a growing concern because it has been demonstrated to have significant individual and economic consequences for organizations, as well as negative publicity (Akanji, 2013). Workplace stress can result in three types of strains (Jex, 1998; Muthukrishnan et al., 2011): (a) Behavioral (e.g., absenteeism or poor performance), (b) physical symptoms of occupational stress include fatigue, headache, upset stomach, muscular aches and pains, weight gain or loss, chronic illness, and sleep disturbances, and (c) psychological and behavioural problems that may develop include anxiety, irritability, alcohol and drug use, feeling powerless, and low morale.

Occupational stress harms employees' health (physical, mental, and social illness: Mosadeghrad, 2014) and performance (Bashir & Ramay, 2010; Irawanto et al., 2015). Chronic fatigue (Van der Ploeg & Kleber, 2003), disordered eating (King et al., 2009), headaches (Schaubroeck & Fink, 1998), increased blood pressure (Melamed et al., 2001),

increased risk of cardiovascular diseases (Byrne & Espnes, 2008), and musculoskeletal pains are all associated with occupational stress (Eriksen et al., 2003). Emotional exhaustion (Coffey & Coleman, 2001; & Imai et al., 2004), mood disturbance (Healy & McKay, 2000), sleeping problems (Piko, 1999), lack concentration (Shapiro et al., 2005), depression (Cho et al., 2008), anxiety (Bussing & Hoge, 2004), and suicidal ideation (O'connor et al., 2008). Occupational stress can lead to increased burnout as well as physical, mental, and emotional exhaustion (Spickard et al., 2002).

Occupational stress has also been linked to organizational employee performance (Abu Al Rub, 2004). Employee performance suffers as their occupational stress level rises. Stress impairs attention, concentration, decision-making, and judgment abilities (Shapiro et al., 2005). It has a strong inverse relationship with employees' quality of work-life (Machin et al., 2004; Mosadeghrad et al., 2011), morale (Machin et al., 2004), motivation (de Jonge et al., 2001), job satisfaction (Flanagan & Flanagan, 2002; Grunfeld et al., 2000; Redfern et al., 2002), organisational commitment (Khatibi et al., 2009; Eriksen et al., 2003; Machin et al., 2004).

Organisations and employers suffer from occupational stress. Approximately 40% of turnover and 50% of workplace absences are caused by occupational stress. In the United States, the annual cost of occupational stress and its consequences is estimated to be more than $60 billion for employers and $250 to $300 billion for the economy (Roberts et al., 2012).

## Management of Occupational Stress

Stress management interventions (SMIs) entail any purposeful action that members of an organization take to minimise the stress experienced in the execution of their work functions (Akanji, 2013; Le Fevre et al., 2006). DeFrank and Cooper (1987) conceptualized most stress interventions to focus separately on the individual, the organization, and then both individual/organizational interfaces. Stress management interventions are also conceptualized as primary, secondary, and tertiary SMIs. Primary interventions are organizational best practices that aim to reduce, modify, or eliminate stressful work demands that impair health and performance. Job redesign that eliminates stress factors, labour flexibility practices, and organizational culture that prioritizes employee wellness are examples of these actions (Lamontagne et al., 2007). Primary workplace health initiatives can help reduce sick leave absenteeism by 27% and healthcare costs for companies by 26% (W.H.O., 2017).

The key to minimizing the stress that comes from role conflict, ambiguity and overload are to get clarification about your job duties. Thus, although individuals are given a job description upon hire, roles must be clarified to ensure that the worker knows just what is expected from him/her. It is wise to discuss the particulars of the job description

before hiring so that you are clear about work expectations. If you are assigned a project, you do not fully understand or feel you cannot complete, let your employer know. Further, if possible, suggest that you be allowed to participate in training so that can you complete the project. Finally, it is sometimes beneficial if your boss explains your job responsibilities to other staff. This explanation should reduce any misunderstanding about your role in the organization (Aamodt, 2004).

Secondary interventions are designed to help employees cope with work stress (Lamontagne et al., 2007). These include wellness programmes, planned social events, and the provision of recreational facilities, as well as stress management training and development. Simple exercises like walking, swimming, running, playing sports, or climbing stairs do not only keep your heart strong and resistant to the effects of stress but can also reduce your stress levels during particularly stressful moments. Organizations realize how important exercise is to manage the effects of stress, as evidenced by the increase in worksite fitness and health programs over the last 15 years. With exercise, absenteeism and turnover are reduced, and morale and job performance improve (Daley & Parfitt, 1996; Gebhardt & Crump, 1990; Aamodt, 2004).

Studies show that people who have someone to talk to are better able to manage their stress. Sometimes talking to someone we trust helps put things in perspective. So, there is a need for a good support system which may mean joining certain campus groups or attending public lectures where you can meet people. For extreme situations, familiarize yourself with the type of professional help that is available on or off-campus that can provide the needed support during stressful times (Aamodt, 2004).

The tertiary level of interventions is therapeutic and aimed at assisting employees who have already developed signs and symptoms of illness and other adverse outcomes from work stress. This category includes corrective actions such as counselling, employee assistance programmes, rehabilitation sessions, and payments on injury claims. These are the least effective, and the individual might not recover from the damaging effects of the stress.

## Other Stress Management Techniques

Aamodt (2004) prescribes engagement in some of the following activities.

Laughter has been shown to buffer stress in several ways. First, it helps stress victims to put a new perspective on a stressful situation. Second, when someone is upset and in what seems to be a difficult situation, going to a funny movie, listening to a comedian, or watching a funny television show can help distance the person from the situation until he/she has calmed down enough to begin thinking rationally again. Drinking water helps keep the body hydrated and able to cope with daily stressors. Self-empowerment - since employees cannot control what organizations do, employees need to

find ways to reduce stress. Also, instead of complaining about how they are not involved in organizational decision-making, employees need to take the initiative to volunteer to participate in committees or group projects; this is one way to take back some control they perceive they have lost. Coping skills – improving coping skills often means learning how to deal with conflict and it also means learning how to accept what you cannot change. Relaxation techniques – another stress-reducing technique is relaxation which includes abdominal breathing, progressive muscle relaxation and meditation. Diets that have been shown to counteract the effects of stress include fresh fruits and vegetables, whole grains, and nonfat yoghurt, which contains vitamin B considered to be lost during high-stress periods. Time management techniques – Time management also has stress-reduction benefits (Jex & Elacqua, 1999).

### Policy Implications for The Administrative Staff of Universities

There are several practical implications to the review. The findings emphasize the importance of university administrators learning more about occupational stress, including risk factors, mechanisms, and effects. Since occupational stress is a significant determinant of employee retention, it is critical to reducing it through the implementation of appropriate human resource policies regarding inadequate pay, workplace inequality, excessive workload, staff shortages, poor promotion prospects, time constraints, job insecurity, and poor management support.

To prevent and reduce occupational stressors, the Directorates of Human Resources of tertiary educational institutions need to implement appropriate stress management policies and strategies. Employees' occupational stress can be reduced by increasing their satisfaction with policies, work conditions, compensation, and advancement. Furthermore, there are numerous strategies for coping with occupational stress that employees should use to deal with stress easily and effectively. Employees can cope with occupational stress by engaging in physical activity, meditation, leading a healthy lifestyle, and managing their time.

As a result, a variety of managerial actions aimed at mitigating job stressors have become critical for increasing employee psychological capital and well-being. These proactive interventions must be integrated into both the structural context of work (e.g., job control, work schedules, staffing levels, physical work environment, and organizational structure) and the psychological frames of employees (e.g., job commitment, psychological support, employee engagement, and affective wellbeing initiatives).

Furthermore, primary strategies for improved organisational outcomes include managerial stress awareness training, workload adjustments, hazard identification, the creation of social structures that mitigate stress effects, and role clarification. It also has practical implications in the sense that working conditions are tailored to individual

differences in physical, mental, and contextual circumstances.

As a result, organizations should prioritize their employees' work-life balance (WLB) by attempting to implement a variety of WLB practices and policies such as flexi-time, job sharing, part-time work, home telecommuting, subsidized recreational and leisure activities, and other family-friendly policies.

As a result, a more strategic approach to WLB can improve employee performance, mental and physical health, job satisfaction, and turnover (Kossek et al., 2012). Finally, Kellow et al. (2008) emphasized the importance of some countervailing interventions in mitigating the causes of occupational stress. Countervailing interventions, according to the authors (Kellow et al., 2008), are practices that aim to "increase the positive aspects of work rather than decrease the negative aspects." "The authors also proposed that positive development of employees' psychological capital in the areas of self-efficacy, hope, trust, optimism, and resiliency is critical for health and positive organisational behaviour, which is required to validate competitive performances in today's workplace."

## Conclusion

Stress has dire consequences on the individual worker and the organisation as it undermines the achievement of targeted goals or productivity of both individuals and the organisation. However, it can be prevented and even managed if it occurs. The paper has given an overview of the causes and effects of occupational stress. The primary, secondary, and tertiary measures that should be adopted to manage stress in the workplace were also discussed. It is hoped that university administrators, psychologists, counsellors and other professionals would find the paper useful.

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