

# The Negative Impact of Work Stress on Employees' Performance in the Workplace

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The purpose of this theoretical study is to investigate the negative impact of work stress on employees' job performance in the workplace, in an attempt to suggest ways to effectively manage stress in the work environment. The study discusses the concept of stress, including its types and how to measure it, and the concept of job performance including its definition and indicator. Finally, it emphasises the relationship between them and a positive approach to manage the impact of stress in the workplace. This study is of great importance as stress has been increasing in daily life. Job stress is increasingly threatening all workplaces. It affects individuals as well as whole organisations. Reducing stress in the workplace is important for increased performance as well as employee satisfaction.

**Keywords:** *Work stress, job performance, employee satisfaction, burnout, work-family balance.*

## Defining Stress

There is no unified definition of stress, but it is generally understood as the body's reaction to any demands made upon it, or as people's emotional and physical reaction to pressure (Kranmer et. al., 2010, p. 656). These demands are considered as stressors that individuals react to and have to deal with. Individuals are considered stressed when they are faced with a situation that can drain or is beyond their capabilities and resources. Life-changing and sudden events such as career shifts, marriage, having children, disease, or the death of a friend or family member represent stressing factors that individuals have to manage (Ritchlin, 2012, p. 9). Frequent stress can lead to health problems and might even lead to death (Larson, 2004, p. 1120, Lee and Kleiner, 2005, p. 179). There are two types of stress: positive or 'eustress' that results from pleasant conditions, and usually generates excitement and motivation (such as getting a job promotion or going out on a date (Larson, 2004, p.

1120); and negative stress or ‘distress’ that results from experiencing calamities such as job loss or seeing a family member suffer from a terminal disease.

### ***Eustress***

Eustress is a positive short-term kind of stress that results from activities that people like doing, such as playing sport. Athletes experience eustress before competitions as they are motivated to win. This kind of stress increases their enthusiasm, eagerness and strength to perform better and win. Athletes are willing to endure extra physical effort without being stressed in order to achieve their goals and overcome competition (Kofoworola & Alayode, 2012, p. 163). Eustress is viewed as a moderate type of stress that does not have negative implications on people’s health (Fevre & Kolt, 2003, p.729). Therefore, organisations try to convert the stress experienced by employees in the workplace into positive stress that can increase employee motivation, effectiveness and efficiency (Larson, 2004, p. 1120).

### ***Distress***

Living in a constantly stressful environment leads to distress - the negative type of stress, which is usually caused by repeated changes in routine, which makes individuals uncomfortable and confused. For example, someone who is constantly changing jobs may experience distress (Kofoworola & Alayode, 2012, p. 163). When people are distressed, their bodies produce large amounts of adrenalin, which can lead to aggression and anxiety and can cause serious illness (Kofoworola & Alayode, 2012, p. 163). If stress lasts for a long time it becomes chronic; however, if it appears and disappears quickly, then it is called acute stress.

### ***Job-Related Stress***

Stress faced regularly by people in their personal life through stressors such as illness, a break-up or divorce, exams or a death in the family is called individual stress (Allam, 2011, p. 382). The way different people deal with this kind of stress depends on their sensitivity to the incident or event.

Another type of stress is job-related. This kind of stress is what workers face in the workplace. It is a key factor in the success or failure of an organisation, as job-related stress can lead to a decrease in productivity, thus a decrease in profits (Yeh & Chao, 2011, p. 721). There are many causes for work stress but generally, on the one hand it is due to a discrepancy between the capabilities, resources and needs of workers and on the other the job requirements. Other causes include role conflict, overwork or burnout. Employees suffering from work stress are likely to show mental health issues such as low self-confidence, high anxiety, impatience and dissatisfaction (Firth et. al., 2004, p. 185).

### ***Stressors in the Workplace***

Several stressors in the workplace can stimulate stress and cause different reactions and degrees of response (Nasurdin et. al., 2005, p. 64). Workplace stressors include organisational change, quantitative overload, an unfriendly work environment, difficult people at work, feelings of insecurity, conflicts between work and family and much more.

### ***Organisational Change***

Technological and telecommunication advances have made it possible for companies to develop, expand and change. Reduced trade barriers have enabled companies to expand globally and reach out to international markets. Hence, the level of competition for those companies has grown, which has called for immediate and sometimes radical change in their environment and culture. Adaption to such change represents an increased feeling of stress for employees, especially with the feeling of uncertainty about future results experienced by the company (Ussahawanitchakit & Sumritsakun, 2008, p. 1). As the company goes through a transitional period, employees feel apprehensive and insecure. They feel stressed when they have to face any kind of change, such as a change in position, rank or organisational structure (Dahl, 2011, p. 240-243).

### ***Role Ambiguity***

Role ambiguity causes stress to employees in the workplace, as they do not have enough or accurate information about the role they are expected to play or the duties they have to perform. Employees lacking experience, information or clear instructions on how to behave in certain situations are also prone to role ambiguity (Rizzo et. al., 1970, p. 151). According to classical theory, any structured Organisation should inform employees in all positions of their tasks, responsibilities and requirements (Nabavi & Shahryari, 2012, p. 115). Employees in organisations that are undergoing rapid change in their environment experience a high level of stress due to high level of uncertainty and conflict, as they are unclear about what to expect in the future. They usually suffer from continuous stress, which lowers job performance; hence, they get criticised for their low job performance in spite of the lack of clear standards (Ussahawanitchakit & Sumritsakun, 2008, p. 1).

### ***Role Conflict***

Role conflict can be another stressor in the workplace. It can occur when different people, with whom employees have to deal with, have different views on what employees should

do. Consequently, employees feel confused and unsure about how to fulfil their tasks. Role conflict leads to job stress, however, it is not one of the highest sources of stress (Larson, 2004, p. 1127).

### ***Work Overload***

Work overload is one of the most significant stressors in the workplace. Overload is usually connected with jobs that require dealing with customers, as employees have to cater for and keep up with the needs of customers (Jaramillo et. al., 2011, p. 339). Work overload can be both qualitative and quantitative. Qualitative overload is related to the quality of work that is expected from employees. When a job requires employees to be highly skilled and when the Manager sets unattainable and unrealistic goals that are based on high expectations, qualitative overload sets in. In this case, employees do not perform as expected, the Manager feels dissatisfied, and in turn, employees feel frustrated and stressed. On the other hand, quantitative overload is related to the quantity the Manager assigns to employees. When the quantity of work is too much to be performed within a tight deadline or by a small number of employees, quantitative overload occurs as employees cannot perform the work and become frustrated and stressed (Larson, 2004, pp. 1127-1128).

### ***Work-Family Conflict***

Work-family conflict is a further stressor felt by employees in the workplace. It occurs when employees cannot make a trade-off between job and family demands. Employees who spend long hours at work do not spend enough time taking care of their family and their responsibilities. This type of work-family conflict is called time-based conflict. Other types include strain-based conflict, where a trained skill in one role gets in the way of involvement in another role; and behaviour-based conflict, which occurs when a certain behaviour is essential to one role, whereas it is unacceptable in another. Role conflict leads to distress and creates dissatisfied employees who find it hard to commit to the job and the Organisation. Work-family conflict increases absenteeism, tardiness and organisational turnover (Nabavi & Shahryari, 2012, pp. 112-115).

### ***Burnout***

Burnout is another job-related stressor. It results from being constantly exposed to job-related stress, to the extent that employees cannot endure any further, and their health can be affected. The state of being burned out can be clearly seen in public health institutions, with nurses and doctors suffering from constant exhaustion. Burned out employees tend to perform badly and have a high rate of absenteeism (Ayala & Carnero, 2013, p. 1).



### ***Time Pressure***

Stress at work can be caused by working under time pressure, due to unrealistic goals set by managers to be achieved in a very short time. When employees do not have enough time to finish their tasks, they feel stressed and are unable to think clearly. Hence, more pressure builds up in addition to their fear of losing their job (Larson, 2004, p. 1124). Being under time pressure makes employees lose the will to do their job well, as they get demotivated which leads to bad job performance and higher work pressure (Manzoor et. al., 2011, p. 21).

### ***Uncomfortable Work Environment***

Employees get stressed in an uncomfortable work environment because they do not feel comfortable or relaxed. These feelings of discomfort have a negative effect on their job performance as they lose focus and accuracy. Heat, cold, unsuitable lighting and noise are some factors that make the work environment uncomfortable and create stress (Rojas & Kleiner, 2000, p. 105).

### ***Difficult People at Work***

Having to deal with difficult people at work is also a stress factor. Difficult people include those who do not like working in a group or with other co-workers. They may be lazy and not contribute to the team, or too competitive, creating a tense atmosphere within the team. These attitudes lead to job stress and apprehensive employees (Spector, 2002, p. 133; Davies, 2008, p. 24). Difficult people also bully and frighten others. This bullying behaviour increases stress and thereby increases turnover rates (Davies, 2008, p. 24).

### ***Insecurity***

Insecurity is another workplace stressor (Karim, 2009, p. 291). Employees feel insecure when they live in fear of losing their jobs due to downsizing or deteriorating economic conditions. They fear not being able to provide for their families and finding a new job. This kind of stress can negatively impact employees performance (Rojas & Kleiner, 2000, p. 105).

### ***Competition***

If competition exists amongst employees in the same organisation, they will become stressed, as they have to work harder, put in more working hours, take their work home or skip breaks or holidays to finish their tasks before their co-workers (Rojas & Kleiner, 2000, p. 105).

## ***Reward***

Reward is a stressor when employees are not rewarded enough, or at all, for the job they do and their efforts. Employees who put great effort into their job to perform at top level feel frustrated and stressed when they are not rewarded appropriately (Larson, 2004).

## **Job Performance**

Employees' work performance is essential to the success and progress of any organisation (Dyne et. al., 2002, p. 58). Job performance consists of the actions and behaviours that are important to achieve the goals of the Organisation. These behaviours can be positive/productive or negative/unproductive (Hunt, 1996, p. 52). Job performance is also considered as all the activities undertaken by employees to complete the job assigned to them effectively, while putting available resources into use (Jamal, 2011, p. 20). Employees have positive job performance when they are satisfied at work. Hence, job satisfaction and job performance are positively correlated (Sarmiento et. al., 2007, p. 922).

## ***Current Methods for Measuring Job Performance***

Job performance directly affects the ability of an Organisation to achieve its goals, it can make the Organisation succeed, or fall behind its competition and fail (Dhammika et. al., 2012, p. 9). Therefore, Organisations find it vital to reduce or eliminate any factors that negatively affect employees' job performance. In order to achieve this, there must be some methods to measure job performance. Some commonly used methods are ranking methods, behavioural checklists, forced distribution, management by objectives and behavioural anchored rating scales (Schweiger & Sumners, 1994, p. 4). In this section, three methods are discussed for measuring job appraisal: BARS, Solution-Focused Rating (SFR) and self-assessment methods.

## ***Behaviourally Anchored Rating Scales (BARS) Method***

Behaviourally Anchored Rating Scales (BARS) are one of the most recent methods used in measuring job performance. The scales of this technique are classified by points of ineffective or effective attitudes. The evaluator must mark on a scale which statement best describes an employee's performance. BARS is a rating technique that rates defined and specific behaviours. An employee's actual job performance is measured against behaviours by comparing them to BARS (Rarick & Baxter, 2001, pp. 36-38). Using BARS has some benefits, as it has clear standards, so both the employee and evaluator agree on what represents good job performance. It is also beneficial because the people involved are the ones who created the tool and hence are familiar with it. On the other hand, BARS is a costly

and time-consuming method which requires a lot of effort. Furthermore, the evaluator may fail in matching the monitored attitudes with the written anchors (Schweiger & Summers, 1994, p. 5).

### ***Solution-Focused Rating (SFR)***

Solution-Focused Rating (SFR) is an appraisal method that came into use in European countries such as Germany and Austria in 2002. It is currently one of the most up-to-date methods. The technique was introduced by Professors Steve de Shazer and Insoo Kim Berg. By using SFR, the employer is asked to give each employee a score for each job performance, after discussing the method with the employee. This score should be out of 100% or 100 points, and range from poor to very good (Maher, 2011, p. 395).

### ***Self – Assessment***

The Self -Assessment method, also known as the self-evaluation method - as the name suggests - requires employees to assess or evaluate their own performance at work. The employee has to fill in a form that includes essays as well as multiple choice questions. This method is beneficial as it shows where the evaluation of the manager or supervisor differs from the employee. This leads to increased communication between supervisors and their employees. Self-evaluations also help supervisors to notice if employees have a common view of productivity and work performance (Sargeant et. al., 2011, p. 637).

### **Indicators of Job Performance**

Indicators of job performance show if employees and the Organisation are on the right track to achieve the Organisation's goals. Such indicators are related to the type of Organisation; for example, if the Organisation produces products, then performance indicators will consist of the quality and the quantity produced in a given period (Globerson & Riggs, 1989, p. 190). The quantity of output includes customers served per hour or number of products sold in a working day. The more items sold, the better the performance. The input of resources also has to be measured; subsequently, efficiency has to be calculated. Efficiency is determined by comparing the output relative to input used. Resources have to be used effectively and efficiently for maximum job performance (Konsta & Plomaritou, 2012, p. 144).

On the other hand, if the Organisation provides its customers with services, then the quality and accuracy of timing should be measured to examine job performance. Late deliveries are considered to be bad job performance. In addition, customer complaints have to be calculated to evaluate Company performance; the fewer the complaints, the better the performance.

Lastly, and in combination with previous calculations, employee behaviours have to be examined. A high percentage of turnover and absenteeism indicate bad job performance (Globerson & Riggs, 1989, p. 190).

### **The Negative Effect of Stress on Job Performance**

The majority of people face stress in their daily lives. . Different people react to stress in different ways, but what is constant is that stress affects both individuals, and those who are close to them such as family, friends and co-workers. Stress in the workplace negatively affects employee performance (Jehangir et. al., 2011, p. 456). Stressed employees are not in their normal state of mind, as stress affects them physically as well as mentally. Stressed people find it hard to sleep, relax or calm down, which consequently affects their health and job performance. Stress leads to a decrease in productivity and an increase in absenteeism and turnover, which decreases an employee's overall job performance. Stressed employees are dissatisfied and often leave work, which causes an increase in the turnover rate. Moreover, stressed employees are more prone to diseases and are therefore frequently absent (Subbulaxmi, 2002, p. 26). In Great Britain, stress is the second major factor that worsens employee job performance (Jehangir et. al., 2011, p. 458). In the United States, stress in the workplace costs employers around 200 billion dollars annually. These costs represent medical insurance, low productivity, employee absenteeism, high turnover rate, workers' compensation and other stress-related costs (Kofoworola & Alayode, 2012, p. 162).

The following are some of the consequences of job-related stress:

#### ***Apathy***

Apathy results from employee demotivation when faced with high levels of stress in the workplace (Jamadar, 2012, p. 3). When employees are under constant tension and stress, they become apathetic; they do not focus, are unable to make logical decisions and lack the energy to be motivated and creative (Leka et. al., 2004, p. 8). Lack of motivation reduces performance and productivity at work. Demotivated employees find it intolerable to perform routine jobs, and hard to produce good-quality work and meet deadlines (Gana & Bababe, 2011, p. 9). This leads to the second effect of stress on job performance, which is low quality of work.

#### ***Poor Work Quality***

Stressed employees complain of feeling tired all the time as they suffer from fatigue syndrome. Feeling tired all the time has a negative impact on work performance, as employees often make mistakes and fail to meet deadlines. They also fail to come to

meetings or perform tasks on time, and are often absent (Yeh & Chao, 2011, p. 727). In such cases, stressed employees need a lot of supervision to avoid producing low-quality work.

### ***Aggression***

Co-workers as well as the Organisation are affected by stressed employees, who can become aggressive. Stressed employees can suffer from conditions such as nervous tension, high blood pressure and constant headaches, all of which can affect their behaviour and make them more aggressive than usual. Stressed employees can become aggressive with their co-workers, verbally or even physically attacking them. This aggression rapidly intensifies and is very hard to stop. When the aggression increases, it also automatically increases the level of stress, and the cycle continues (Chen, 2009, p. 1344). The increase in aggression of stressed workers affects other workers, who feel under threat of being bullied at any time. Hence, these other workers become unable to concentrate and perform their job well. Consequently, job performance decreases (Jehangir et. al., 2011, p. 458).

### **Reducing the Effects of Employee Stress on Job Performance**

It has been shown that stress has a detrimental effect on employees and their job performance, which directly affects the success of the Organisation they work for. Therefore, it is of utmost importance to reduce stress in the workplace to a minimum and to maintain productive employees with a high level of job performance (Kofoworola & Alayode, 2012, p. 166). Eliminating stress altogether is an unattainable goal, and it is always good to have positive stress that stimulates and motivates employees (Hargrove et. al., 2011, p. 188). There are several ways to decrease job-related stress and thus increase employee work performance, including creating a motivational work environment, offering a flexible work environment and counselling.

#### ***Motivational Work Environment***

The Organisation can ensure that its employees work in a friendly, motivational work environment. This can be reached by offering employees job rotation, rewards and empowerment.

#### ***Job Rotation***

Job rotation is a technique that some Organisations use to lower employees' stress level. The Organisation rotates the employees across different departments in the Organisation, and assigns them different tasks that require varied physical and psychological skills. Employees take different positions for a time and then get redeployed to another department. This kind of

rotation allows the employees to experience different tasks and gain more skills and knowledge, and is considered training (Kaymaz, 2010, p. 71). Job rotation can be the cure to burned out employees who suffer from fatigue and boredom, since they get motivated by doing different, new tasks, which decreases their stress level (Tharmmaphornphillas & Norman, 2004, p. 251). At times, job rotation helps employees find a suitable working position in the Organisation. All of these aspects lead to an increased rate of motivation, and hence an increase in job performance (Kaymaz, 2010, p. 72).

### ***Incentives and Rewards***

Incentives can motivate employees and help reduce the effect of stress on their performance. There is a positive correlation between rewarding employees and their job performance. Incentive programs can motivate employees, especially in difficult economic circumstances. Rewards can be extrinsic, such as bonuses, which increase employees' job satisfaction and motivation, or intrinsic, which are rewards that come from within the employee. Satisfied employees are less stressed than unsatisfied employees (Pouliakas, 2010, p. 599).

### ***Employees Empowerment***

Empowering employees by giving them some authority to make decisions helps to reduce the employees' fear of being fired and increases the feeling of belonging to the Organisation, as they feel that they are part of the Organisation's success. This method of stress reduction is based on handing over some decision-making power down the hierarchy (Savaneviciene & Stankeviciute, 2011, p. 924).

### ***Flexible Work Environment / Remote Employment***

Remote employment is now possible due to advances in technology. It offers employees the chance to work from anywhere they feel comfortable including their office, home or somewhere else. This possibility of working from anywhere has been adopted by many Organisations to give employees a chance to spend more time with their families, and save both transportation expenses and time, in an attempt to eliminate stress. This kind of freedom provides employees the feeling of being responsible for doing their work well and on time. Moreover, they feel that they are trusted which helps increase their productivity (Baker, 2009, p. 18).

### ***Compressed Work Week***

Another way to make work flexible is to allow employees to have a four-day work week instead of five. Thus, employees will have more days off, which decreases their stress level.

On the other hand, they will have a squeezed schedule and a longer working day, which they may be willing to endure for the sake of an extra day off. Having the chance to choose their working days and have more days off decreases the amount of stress encountered by employees and improves job performance (Bird, 2010, p. 1063).

### ***Counseling***

Counselling and providing guidance to stressed employees by a professional counsellor reduces work stress (Kofoworola & Alayode, 2012, p. 167). The Organisation should have a professional counsellor on the premises for employees to confide in. An employee who is being bullied or harassed will feel safer and under less stress if their manager knows about it and helps to deal with the situation. The counsellor can provide empathy and understanding, as well as a helping hand to give insecure, stressed employees a feeling of security and relief (Hargrove et. al., 2011, p. 188).

### ***Training***

Employees should be trained to deal with stressful situations. Currently, companies create specialised training programs to prepare employees in the Organisation on how to face stressful situations according to their type of work. The training could cost the Organisation a great deal of money, but providing employees with guidelines on how to deal with stressful situations also has the potential to save a lot of money (Rojas & Kleiner, 2000, p. 104).

### **Discussion and Analysis**

Stress has a negative effect on job performance, which will cumulatively be reflected in productivity and hence the overall economy. This pressing problem of stress necessitates special attention from Organisations, to help employees cope with stress. Stress is unavoidable and cannot be totally eradicated from an Organisation. However, there are ample ways to reduce it. Firstly, employers can create an environment that is friendly and accommodating to ensure that employees are satisfied; satisfied employees are less prone to stress. Secondly, employers should examine the kinds of stressors prevailing in the Organisation and try to eliminate them, while also training employees on how to manage them. To this end, employers should have an ‘open door policy,’ so that employees can talk about what stresses them. Organisations should grant their employees a feeling of security and stability, by allowing them to discuss their problems and stress factors at work through open communication channels, and suggesting possible remedies for these work stressors (Rojas & Kleiner, 2000, p. 104). The presence of a professional HR-Counselling unit helps employees to deal with stress and make it known to top management. Managers should assess employee stress levels through stress surveys, to recognise the various causes of stress



affecting their employees' performance. Managers should also be aware that job performance is not only affected by lack of training or skills, but by different types of stress that can be explicit or implicit. They should help employees maintain a balance between work and private life and motivate them through different means, in order to help elevate employee performance and Organisational productivity.

## **Conclusion**

This study discusses the negative effect of work stress on employee job performance in the workplace, in an effort to find various remedies to deal with work stressors and hence create a healthy and productive work environment. The study tackles the concept of stress and the difference between positive and negative stress. It also addresses job performance and different methods for measuring it. In addition, it discusses the negative effect of job stress on employee work performance and various methods for managing and controlling its negative effect in the work environment through motivational tools, job rotation, rewards, training, counselling and a flexible work environment. The study recommends that Organisations should create open channels for employees to discuss their work stress, and manage work stressors effectively and efficiently for the benefit of both employees and the Organisation as a whole.



## REFERENCES

- Allam, Z. (2011). Stressful life events, vulnerable to stress and depression among Eritrean high school students. *Ife Psychologia*, 19(2), 380-393.
- Ayala, E., & Carnero, A. (2013). Determinants of burnout in acute and critical care military nursing personnel: A cross-sectional study from Peru. *Military Critical Care Nurse Burnout in Peru Plos one*, 8(1), 1-7.
- Baker, T. (2009). Practical tips for remote employees. *American Agent & Broker*, 51, 18-20.
- Bird, R. (2010). The four-day work week: Old lessons, new questions. *Connecticut Law Review*, 42(4), 1059-1080.
- Dahl, M. (2011). Organisational change and employee stress. *Management Science*, 57(2), 240–256.
- Davies, J. (2008). Dealing with difficult people and tricky situations at work. *Human Resources*, 2, 24-25.
- Dhammika, K., Ahmad, F. B., & Sam, T. L. (2012). Job satisfaction, commitment and performance: Testing the goodness of measures of three employee outcomes. *South Asian Journal of Management*, 19(2), 7-2.
- Dyne, L. V., Jehn, K., & Cummings, A. (2002). Differential effects of strain on two forms of work performance: Individual employee sales and creativity. *Journal of Organisational Behaviour*, 23(1), 57-74.
- Fevre, M. L., Matheny, J., & Kolt, G. (2003). Eustress, distress, and interpretation in occupational stress. *Journal of Managerial Psychology*, 18(7), 726-744.
- Firth, L., Mellor, D.J., Moore, K.A. & Loquet, C. (2004). How can managers reduce employee intention to quit? *Journal of Managerial Psychology*, 19(2), 170-187.
- Gana, A., & Bababe, F. (2011). The effects of motivation on workers performance. *Continental Journal of Social Sciences*, 4(2), 8-13.
- Globerson, S., & Riggs, J. (1989). Multi-performance measures for better operational control. *International Journal of Production Research*, 27(1), 187- 194.
- Hargrove, M. B., Quick, J. C., Nelson, D., & Quick, J. (2011). The theory of preventive stress management: A 33-year review and evaluation. *Stress and Health*, 27(3), 182-193.
- Hunt, S. (1996). Generic work behaviour: An investigation into the dimensions of entry-level, hourly job performance. *Personnel Psychology*, 49(1), 51-83.



- Jamadar, C. (2012). Occupational stress and work motivation among telecom employees. *Golden Research Thoughts*, 1(6), 8-4.
- Jamal, M. (2011). Job stress, job performance and Organisational commitment in a multinational company: An empirical study in two countries. *International Journal of Business and Social Science*, 2(20), 20-29.
- Jaramillo, F. J., Mulki, J., & Boles, J. (2011). Workplace stressors, job attitude, and job behaviours: Is interpersonal conflict the missing link? *Journal of Personal Selling & Sales Management*, 31(3), 339-356.
- Jehangir, M., Kareem, N., Khan, A., Jan, M. T., & Soherwardi, S. (2011). Effects of job stress on job performance & job satisfaction. *Interdisciplinary Journal of Contemporary Research in Business*, 3(7), 453-465.
- Karim, N. (2009). Stress in Organisations: Management strategies. *The Dialogue*. 4(2), 286-300.
- Kaymaz, K. (2010). The effects of job rotation practices on motivation: A research on managers in the automotive Organisations. *Business and Economics Research Journal*, 1(3), 69-85.
- Kofoworola, O. H., & Alayode, A. M. (2012). Strategies for managing stress for optimal job performance. *International Journal of Psychological Studies*, 4(3), 162-168.
- Konsta, K., & Plomaritou, E. (2012). Key performance indicators (KPIs) and shipping companies' performance evaluation: The case of Greek tanker shipping companies. *International Journal of Business and Management*, 7(10), 142-155.
- Kranner, I., Minibayeva, F., Beckett, R., & Seal, C. (2010). What is stress? Concepts, definitions and applications in seed science. *New Physiologist*, 188(3), 655-73.
- Larson, L. (2004). Internal auditors and job stress. *Managerial Auditing Journal*, 19(9), 1119-1130.
- Lee, Y., & Kleiner, B. (2005). How to use humour for stress management. *Management Research News*, 28(11/12), 179-86.
- Leka, S., Griffiths, A., & Cox, T. (2004). Work Organisation & stress. *Protecting Worker's Health*, 3(1), 1-27.
- Maher, A. (2011). Reforming government employees' performance appraisal system in New Egypt (After the 25th January revolution). *Journal of Emerging Trends in Economics and Management Sciences*, 2(5), 394-401.



- Manzoor, A., Awan, H., & Mariam, S. (2011). Investigating the impact of work stress on job performance: A study on textile sector of Faisalabad. *Asian Journal of Business and Management Sciences*, 2(1), 20-28.
- Nabavi, A., & Shahryari, M. (2012). Linkage between worksite support with work role expectation, role ambiguity and its effects on work-family conflict. *Canadian Social Science*, 8(4), 112-119.
- Nasurdin, A., Ramayah, T. R., & Kumaresan, S. K. (2005). Organisational stressors and job stress among managers: The moderating role of neuroticism. *Singapore Management Review*, 27(2), 63-77.
- Pouliakas, K. (2010). Enough don't pay too much or don't pay at all? The impact of bonus intensity on job satisfaction. *Kyklos*, 63(4), 597-626.
- Rarick, C., & Baxter, G. (2001). Behaviourally anchored rating scale (Bars): An effective performance appraisal approach. *SAM Advanced Management Journal*, A, 36-39.
- Ritchlin, L. (2012). Stress? What stress? *Journal of Financial Planning*, 20, 9. 132-136.
- Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex Organisations. *Administrative Science Quarterly*, 15(2): 150-163.
- Rojas, V., & Kleiner, B. (2000). The art and science of effective stress management. *Management Research News*, 23(7), 103-106.
- Sargeant, J., Eva, K. W., Armson, H., Chesluk, B., Dornan, T., Holmboe, E., Lockyer, J. M., Loney, E., Mann, K. V., & van der Vleuten C. P. (2011). Features of assessment learners use to make informed self-assessments of clinical performance. *Medical Education*, 45(6), 636-647.
- Savaneviciene, A., & Stankeviciute, Z. (2011). Human resource management practices linkage with Organisational commitment and job satisfaction. *Economics and Management Journal*, 16, 921-929.
- Schweiger, I., & Sumners, G. (1994). Optimising the value of performance appraisals. *Managerial Auditing Journal*, 9(8), 3-7.
- Spector, P. E. (2002). Employee control and occupational stress. *Current Directions in Psychological Science*, 11(4), 133-136.
- Subbulaxmi, S. (2002). Productivity and stress. *Management*, 2(3), 26-28.
- Tharmmaphornphilas, W., & Norman, B. (2004). A quantitative method for determining proper job rotation intervals. *Annals of Operations Research*, 128(1), 251-266.



- Ussahawanitchakit, P., & Sumritsakun, C. (2008). Effects of Organisational change on psychological stress and job performance of accountants in Thailand. *Journal of International Business and Economics*, 8(2), 1-9.
- Yeh, S., & Chao, P. (2011). The moderating effects of job stress on leisure participation and job performance among journalists. *Pakistan Journal of Statistics*, 27(5), 721-731.