The role of stress management in reducing stress and enhancing corporate performance
A case of the Nairobi securities exchange

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Full Length Research

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Accepted 29th January, 2013

Stress at work is an ever increasing problem in contemporary societies resulting in enormous cost both for the corporate organizations involved and the individual employees. These realities have led to Kenyan employers looking into stress management techniques that can help reduce stress levels among employees and in turn enhance corporate performance. Data was collected from 32 corporations listed at the NSE and was analyzed using multivariate techniques. The empirical results found that use of certain stress management techniques stress had a positive influence on corporate performance. These finding can provide Human Resource Managers with the necessary strategies that will help implement the most effective stress management techniques in their organizations.

Key words: Stress, stress manifestation, stress management and corporate performance.

INTRODUCTION

Background of the study
The experience of work and stress is certainly not new in Kenya. Kenyans continue to experience stress as a result of hardships such as the recession, drought and inflation among other factors Ngeno (2007) concurs and further points out that employees in Kenya have to contend with low salaries, lack of involvement in decision making, heavy workload, and few opportunities for promotion. Research conducted by Munali (2005) reveals that employees are reporting increased levels of stress which has led to poor health and consequently performance. Insecurity in Kenya contributed by availability of small arm and light weapons, political violence and resource conflict has also led to increased levels of stress especially among employees living in the affected regions (Kenya National Bureau of Statistics, 2010).

Recent trends have made it increasingly difficult for employees to adequately balance the responsibility of their jobs and their families, as employees are working longer hours and bringing more work home at night. This has resulted to more pressure being placed on the work family relationship such that coordination of work, vacation schedules and child care options have become very stressful (Aryee, Luk and Stone, 1998). More and more voices warn about the possible risks that could emerge if the human resource management ignores the effects of demotivated and unproductive workforce as a result of increase in stress levels (Earnshaw and Morrison, 2001). Organizations therefore need to respond to stress experienced by employees in order to enhance their legitimacy and obtain the resources necessary for their survival.

Previous studies by Sharma and Sharma (2008) have revealed that stress management skills work best when they are regularly conducted. Further studies show that employees will use different stress management techniques to mitigate the adverse effects of stress and improve the performance at work, which in turn has beneficial effects on corporate performance (Lee, Tsai, Tsai and Lee 2011.) Stress management is an important concept in understanding how stress affects corporate performance (Perry-Smith and Blum, 2000). The goal of the study was an attempt to establish the influence of stress management on the stress and corporate performance relationship in the Kenyan context.

Stress
Stress is an adaptive response mediated by individual
differences and psychological processes; that is a consequence of any external action, situation or event that places excessive physiological, psychological and behavioral demands on a person (Ivancevich et al., 2006). Deshpandeand Chopra (2007) posit that stress is an inherent characteristic of human life. It indicates the pressure people feel. As a result, people develop symptoms of stress that affect their performance. It is therefore important to understand situations that may lead to work stress and non-work stress and how they lead to physiological, psychological and behavioral consequences which have been generalized as stress manifestation. Work stress and non-work stress are both a result of stressors caused by factors within the organization and outside the organization. These factors may lead to stress manifestation, which may negatively or positively affect performance. The reaction of the individual will depend upon how they interpret or appraise the situation and determine whether it is harmful, threatening, or challenging. The list of stressors that lead to work stress is long and range from high levels of organizational politics, inadequate career development opportunities, work overload and pressure to complete tasks within limited time. Non work stressors are challenges and problems that people encounter during the non-working hours and can spill over to the work place hence affecting performance (McShane, Von Glinow and Sharma, 2008). National surveys consistently show that marital difficulties, childcare challenges and economic problems created by individuals’ overextending their financial resources or hard economic times can create personal problems that may manifest themselves as poor performance at the workplace (Robbins, 2003).

Therefore, the first step in understanding stress, is examining how work stress and non-work stress lead to various stress manifestation, as they are very important in developing strategies to manage stress.

**Stress manifestation**

Stress manifestations are typically grouped into three general categories. These include physiological, psychological and behavioral manifestation. Physiological manifestation include immune system problems, where there is lessened ability to fight off illness and infection, high blood pressure, heart disease and musculoskeletal system problems such as tension headaches and backaches. According to Basson (2000), profound physiological and endocrine changes that accompany fatigue and stress contribute to a loss of sexual desire in both men and women.

Stress also produces various psychological experiences including, lack of motivation, depression and lower organizational commitment. Job dissatisfaction in fact is the simplest most obvious effect of stress. Job burnout and trauma are also extreme products of stress (Newstroom, 2007). In behavioral manifestation, stress has been identified as the fastest growing reason for unscheduled work absence and employee turnover. Other behavioral aspects include changes in productivity, eating disorders, increased smoking or consumption of alcohol, violence, fidgeting and sleep disorders. Both organizations and individuals are concerned about stress and its effects and have devised different strategies to manage stress as discussed in the next section.

**Stress management**

Ivancevich et al., (2006) contend that much of the stress experienced by people in industrialized nations originates in organizations and stress that originates elsewhere affects our behavior and performance in the same organizations. Stress management involves developing programs that improve the overall wellbeing of employees in the long run; theses in turn have a positive impact on corporate performance. In an effort to improve financial and operational performance, organizations are now including stress management component as one of their strategic choices. This strategy will depend upon the size and resources of the organization. The organization may focus on primary prevention level which intends to reduce or eliminate the demand causing stress. It may also take the secondary prevention level which intends to modify the individuals or organizations’ response to stress. The tertiary prevention level is intended to heal the individual or organizational symptoms of distress and strain (Nelson and Quick, 2009). Ivancevich et al., (2006) have identified a variety of approaches for preventing and managing stress. These include social support, individual and corporate approach.

Social support can be defined as the comfort, assistance or information one receives through formal or informal contacts with individuals or groups. Seeking social support is referred to as “tend and befriend” response to stress rather than the alternative “fight or flight option”. According to Overholser, Norman and Miller (1990) social support is a contributing factor to the development of an individual’s well-being and lack of it can lead to psychological and physical illness. Social support operates by providing some kind of buffer between people and the stress caused by work and non-work stress. Both the quantity and the quality of social relationship that individuals have with others appear to have a potentially important effect on the amount of stress they experience as well as the likelihood that stress will have negative effects on employees’ performance as a result of poor mental and physical health (Ivancevich et al., 2006).

Social support sources include family members (immediate and extended). Families try to work at promoting positive relationships among members and attempts with varying degrees of success to arrange itself into a functional group so that it enables each member to meet their goals and objectives. More specifically families
develop their own special styles or strategies for coping with stress imposed from outside or from within the family (Bloona, 2007). People are faced with perpetual uncertainty about their world and the issues within them. Social support is consistently cited as an effective stress coping strategy and reduces the health complaints experienced during periods of high stress. Billings and Moos (1982) examined the possible buffering effects of work and family resources in a sample of 294 families in the San Francisco Bay Area. They found that work and family resources moderated the relationship between stressors and outcomes including depression, anxiety and physical symptoms. Other extra organizational support systems include the neighborhood we live in, the spiritual support groups we belong to, health professionals we consult and self-help groups. Both teams and groups in organizations provide a structure for the work and interaction of their members. A team’s work and performance is said to be synergistic or greater than the work and the performance of an individual but its effectiveness relies on the satisfaction and wellbeing of its members. It therefore must be able to maintain the commitment of its members particularly during stressful times (Robbins, 2003). Supervisor support is the degree to which employees perceive that the supervisor offers employees support, encouragement and concern. Supportive supervisors will ensure that their staff has access to the resources they need at work. It is also important that supervisors allow time for employees to develop and nature their social support networks as they are effective at reducing work stress (McShane et al., 2008).

Individual approach to stress management includes escaping stress by requesting for transfers, finding alternative employment or even taking early retirement. According to Robbins (2003), noncompetitive physical exercise such as aerobics, walking, jogging, swimming and riding a bicycle have long been recommended by physicians as way of dealing with excessive stress levels. Employees can also adopt stress reduction techniques such as meditation, hypnosis, biofeedback and positive thinking. An understanding and utilization of basic time management principles can help individuals cope better with tension created by job demand such as constant rushing, missed deadlines, work overload and the sense of being overwhelmed, insufficient time to rest and indecision. Kreitner and Kinicki (2007) have noted that these techniques only relieve the symptoms rather than eliminate the stressor. The recommendation is for employers to use broader approaches to manage stress. Corporate approach to managing stress is characterized by organizations provision of personal leave, flexible work time, telecommuting, child care support services and redesigning jobs to help employees experience a better balance between their work and personal life. Sabbatical leaves are programs created to encourage stress relief and personal education. Newstroom (2007) points out that sabbatical leave adds to corporate flexibility and raises employee competence and esteem. According to Ivancevich et al., (2006), wellness programs also known as health promotion programs focus on the employees overall physical and mental health. They typically provide workshops for people to quit smoking, control alcohol consumption, improve nutrition and diet control. Simply offering wellness programs does not guarantee positive results for either employers or the sponsoring organizations. Successful programmes need top management and union support which involves philosophical and material support. Empirical research conducted Spell and Blum (2005) contend the EAPs give the organization a caring nature and knowing these programs exist can actually reduce the stress experienced by employees and enhance organizational performance. The next section focuses on corporate performance.

Corporate performance
Corporate performance is the outcome of the activities of the company. Whatever management decision is made within a corporation is expected to have a relationship with performance, hence its effectiveness. However measuring corporate performance has been a major challenge for scholars and practitioners as well. Staw (1986) proposes that performance be staged at the level of the individual, group or organization. Dyer and Reeves (1995) proposes four possible outcomes, which include human outcomes such as employee turnover and productivity; organizational outcomes such as: productivity and service quality; financial accounting outcomes such as: return on assets and profitability and finally use of capital market outcomes such as stock price and market growth resource.

Similarly, the Kaplan and Norton (1996) balanced scorecard indicates that corporate performance not only include financial measures but also customer criteria's such as: customer satisfaction and retention; internal business processes such as best practices and innovativeness. They also argue that employee criteria's such as learning and growth be included as corporate performance measures. Therefore, organizations need to regularly scan their operating business environment and design relevant strategies to optimize their profitability, achieve shareholder value and responsible corporate citizens. Empirical studies advanced in these area show that stress may directly affect corporate performance. The studies further report, that stress is a major contributing factor to corporate inefficiency, high staff turnover, absenteeism, decreased quality and quantity output and increased health care cost (Kemery, Mossholder and Bedian, 1987; Salami, Ojokuku and Ilesnami, 2010). Robbins (2003) concurs and reports that stress cost USA employers $200 billion annually in
absenteeism, reduced productivity, employee turnover, accidents, worker’s compensation and direct medical, legal and insurance fees.

**Stress, stress management and corporate performance**

Both organizations and individuals are highly concerned about stress management and its impact on the stress, corporate performance relationship. Corporations continually seek to improve managerial communication skills, empower employees through participation, and redesign jobs to be more fulfilling in order to enhance performance. Research studies conducted by Saundlund and Norlander (2004) revealed that senior adults who had undergone tai chi, a form of yoga and exercise noted that there was improvement in their overall psychological wellbeing which is associated with positive effects on performance. Empirical research conducted by Konrad and Mangel (2000) examined the impact of work life programmes on firm productivity in a national sample of 658 USA organizations. They measured work life programmes as a composite work life index, which included onsite day care, extended maternity leave and sick child care programmes. Productivity was measured in terms of logarithms of sales per employees. They found that organizations that had extensive work – life programs reported higher productivity levels.

Studies conducted by Wang and Walumbwa (2007) found that flexible work schedules were positively related to organizational commitment, reduced turnover and increased productivity. The impact of substance abuse on the workforce plus a heightened recognition that employees’ general mental health affects productivity has stimulated the development of wellness programs and work life programs. According to Cole (2005), stress management programs are important strategies for coping with stress, and are likely to be found in any well managed organization that sees its employees as its biggest single investment as well as one of its principal stakeholders.

Studies by Day and Bedian (1991) reveal that supportive work environments are associated with improved workplace performance and higher corporate performance. Empirical studies conducted in Turkey by Babinand Boles (1996) found that increased perception of a supportive management team reduces role stress and increases job satisfaction. Studies conducted in the USA by Philips et al., (2000) also reveal that male employees who got more spousal support on their careers performed better. Research conducted by Marcinkus et al., (2007) also found that work based social support was positively associated with job satisfaction and organizational commitment.

**Conceptual framework**

The schematic diagram presented in figure 1 shows the relationship between four variables under study, stress, stress manifestation, stress management and corporate performance.
performance. Stress is the independent variable, while corporate performance is the dependent variable. Stress manifestation is the intervening variable, while stress management is a moderating variable.

The study proposed the following four hypotheses as depicted in figure 1:

H₁: There is a relationship between stress and stress manifestation.

H₂: There is a relationship between stress manifestation and corporate performance.

H₃: The strength of the relationship between stress manifestation and corporate performance depends on stress management.

H₃a: The strength of the relationship between stress manifestation and corporate performance depends on social support.

H₃b: The strength of the relationship between stress manifestation and corporate performance depends on corporate approach to stress management.

H₃c: The strength of the relationship between stress manifestation and corporate performance depends on individual approach to stress management.

METHODOLOGY

The study adopted a cross-sectional survey design. Zikmund (2003) notes that surveys provide quick and accurate means of assessing information if properly conducted. Since a cross-sectional survey ensured unbiased representation of the population of interest, consequently the researcher had no control of the variables in the sense of being able to manipulate them and reported only the results of the research. This was also census study of all publicly quoted companies in the Nairobi Securities Exchange (NSE) and included both foreign and local organizations operating in Kenya. As at December, 2010 there were fifty two (52) companies listed at the NSE. These organizations were specifically targeted for the survey as they represented the various sectors of the Kenyan economy which include agriculture, commercial and services, finance and investment, and industrial and allied sector. The researcher used a questionnaire for collecting data. It contained both structured and unstructured questions. Stratified random sampling technique was also used to categories employees in every organization into a meaningful strata; the stratification chosen was based on the position held in the organization (top management, middle level managers and non-managers). Simple random sampling method was used to select the top managers, middle level managers and non-managers within their respective strata. Such a method of identifying respondents for study has been used in the previous researches with little bias reported (Sekeran, 2003). Internal consistency of the research instrument was measured through the coefficient alpha. The results of the test of reliability test are show on table 1.

Despite having a cronbach alpha of less than 0.7, physiological stress manifestations was used since when the three stress manifestation scales were combined they yielded an alpha of 0.871.

RESULTS

Test of Hypotheses

The results of the regression analyses in table 2 also indicate positive and significant relationships between stress and physical stress manifestation. The bivariate statistics indicate R = .39 and R² = .14. The bivariate correlation accounted for 14% of the variance in physiological manifestation. The model was significant with an F ratio of 47.75 at p < .001. Work stress had β = .17 at p < .001, while non-work stress had β=.28 at p<.001, which is an indication that both were statistically significant. The significance of the bivariate relationship between stress and physiological stress manifestation was assessed and the results were as follows R was equal to .45 indicating that the relationship was positive.

Table 1: Test of reliability of questionnaire

<table>
<thead>
<tr>
<th>Factor</th>
<th>No. of items</th>
<th>Cronbach Alpha(a)</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work stress</td>
<td>10</td>
<td>0.898</td>
<td>Reliable</td>
</tr>
<tr>
<td>Non work stress</td>
<td>8</td>
<td>0.788</td>
<td>Reliable</td>
</tr>
<tr>
<td>Stress manifestation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physiological</td>
<td>6</td>
<td>0.522</td>
<td>Not reliable</td>
</tr>
<tr>
<td>Psychological</td>
<td>7</td>
<td>0.782</td>
<td>Reliable</td>
</tr>
<tr>
<td>Behavioral</td>
<td>11</td>
<td>0.879</td>
<td>Reliable</td>
</tr>
<tr>
<td>Stress management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate Approach</td>
<td>10</td>
<td>0.796</td>
<td>Reliable</td>
</tr>
<tr>
<td>Individual Approach</td>
<td>10</td>
<td>0.887</td>
<td>Reliable</td>
</tr>
<tr>
<td>Social Support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>5</td>
<td>0.750</td>
<td>Reliable</td>
</tr>
<tr>
<td>Friends and colleague</td>
<td>5</td>
<td>0.750</td>
<td>Reliable</td>
</tr>
<tr>
<td>Authority, supervisors, church leaders, elders etc.</td>
<td>5</td>
<td>0.750</td>
<td>Reliable</td>
</tr>
<tr>
<td>Corporate Performance (Qualitative)</td>
<td>14</td>
<td>0.940</td>
<td>Reliable</td>
</tr>
</tbody>
</table>
and statistically significant. $R^2$ was equal to .20 meaning that stress can account for 20% of the psychological stress manifestation. The F ratio was 71.04 at $p < .001$ showing a significant level of predicting the results using the model. Work stress had $\beta = .18$ at $p < .001$, while non-work stress had $\beta = .36$ at $p < .001$ indicating that both were statistically significant. Similarly, the bivariate relationship between stress and behavioral manifestation was assessed and led to $R$ that was equal .38 indicating that the relationship was positive and statistically significant. The $R^2$ was equal .14 accounting for 14% of behavioral stress manifestation. The F ratio was 44.98 at $p < .001$, which is an indication, that the model was significant at predicting the results. Work stress had $\beta = .16$ at $p < .001$, while non-work stress had $\beta = .29$ at $p < .001$ meaning they were both statistically significant.

The results of the linear regression analyses presented in the table 3 show that $R$ value was equal to .150 indicating there is a positive relationship between stress manifestation and corporate performance. The $R$ squared ($R^2$) value was equal to .022 meaning the factors making up stress manifestation can explain 2.2% of corporate performance. The regression analysis also generated the following coefficients. Psychological stress manifestation had a significant positive effect on corporate performance with $\beta = .125$ at $p < .05$. Behavioral stress manifestation had negative effect on corporate performance with $\beta = -.154$ at $p < .05$, while physiological manifestation had no significant effect on corporate performance.

The results of the interactions between behavioral stress manifestation and social support where $\beta = 1.0$ at $p < .05$ show a moderated effect (table 4). The results of the bivariate correlation when analyzed showed that F change = 7.988 with $p = .001$, $R^2 = .08$ and $\Delta R^2 = .04$. The significant change in F showed that including the interaction between, behavioral stress manifestation and social support improved our ability to predict corporate performance.

The results on table 5 show that when the interactions are entered in the regression model, there is a significant
improvement in the model with $\Delta R^2$ improving by 2%. The results of the interaction between physiological stress manifestation and corporate approach to stress management are significant with $\beta = -.56$ at $p < .05$, while psychological stress manifestation and corporate approach to stress management were also significant with $\beta = .49$ at $p < .05$. The results of the bivariate correlation are also significant with $F$ change = 3.595 with $p = .014$, $R_2 = .06$ and $\Delta R^2 = .02$. The results indicate that corporate approach to stress management had a moderating effect on the relationship between stress manifestation and corporate performance.

The coefficients of the interactions were not significant (Table 6). The results of the bivariate correlation when analyzed showed that $F$ change = 1.399 with $p = .248$, $R^2 = .03$ and $\Delta R^2 = .01$, this too were not significant. Even though all interactions had positive betas none was significant.

**DISCUSSION**

The findings on hypothesis 1 revealed that stress experiences such as work overload, lack of career advancement, difficult coworkers, job insecurity, difficult customers, concern about general health and financial constraints among others had a significant impact on stress manifestation, especially psychologically manifestation with anger and anxiety being reported by most respondents. Individuals also reported experiencing physiological consequences of stress such as headaches and high blood pressure. Behavioral stress manifestation such as poor sleeping patterns and poor time management were also some of the effects that participants in the study reported. These findings appear to support previous studies by Everly and Benson (1982).

According to their stress model, overstimulation of the human body leads to wear and tear and eventual breakdown of target organs and systems.

The results on the test of hypothesis 2 indicate that no excesses of headaches, high blood pressure, heart disease, constipation, nausea, heartburn or ulcers were reported among the respondent. This explains why physiological stress manifestation was not significant. The study findings appear to be in line with the research conducted by Deschamps, Dargner, Badinier, Machud and Merle (2003). It is important to note that studies have revealed that organizational commitment is a function of several variables. These include emotional intelligence, participative decision making and job satisfaction (Salami and Omole, 2005). Highly committed employees demonstrate a willingness to share and make sacrifices required for the organization to achieve its performance goals. This was confirmed by the results of the regression showing that psychological manifestation had a positive effect on corporate performance. Behavioral manifestation had a negative effect on corporate performance. These may be explained by the respondent aggressive, forceful and competitive nature. This may lead to employees becoming frustrated by the work situation, getting irritated with the work efforts of others and being misunderstood by their supervisors or manager (Luthans, 2008).

The results of hypothesis 3 confirm that corporate approach to stress management, level of education, and personality play an important role in the relationship between stress manifestation and performance of companies within the NSE. Specifically the study revealed that social support was recognized as an effective moderator on the stress manifestation and performance relationship (Park, Wilson and Lee 2004).
Even though, individual approach to stress management focuses on aspects, such as diet and nutrition and physical exercise among others. These concepts have only gained popularity in Kenya in the last few years as experts’ advice people to use these strategies to manage diseases such diabetes, high blood pressure, cancer, HIV/AIDS among other diseases. Unfortunately, few places offer the diets recommended by medical experts and many of the NSE workers have to make do with the many fast food joints spread all over the city.

CONCLUSION
The general objective of the study was to determine the influence of stress management on the relationship between stress and corporate performance. The results have supported and extended stress and performance studies by Park, Wilson and Lee (2004). Corporate approach to stress management was also established as an effective moderator for the relationship between stress manifestation and corporate performance. Thus according to studies conducted by Konrad and Mangel (2000) on corporate approach to stress management, as a moderator, have been supported. With respect to other moderators, which include individual stress to corporate performance, the results of the research did not reveal it as an effective moderator for the relationship between stress manifestation and corporate performance in the Kenyan context.

The government of Kenya is responsible for all workers through the ministry of labor. It has the duty to set regulations on minimum pay, health and safety of workers among others. It is therefore the duty of the government in consultation with FKE and COTU to come up regulations that will prevent or manage stress. The introduction of the Health and Safety Work regulations (1999) in the USA by the government has not only taken care of the physical health, but places a statutory duty on the employer to conduct risk assessments at the workplace, which includes assessing the psychological risks at the workplace and putting preventive measures in place. Introduction of policies such as flexible work schedules designed to give workers greater flexibility to report on duty when it is necessary so that they may avoid daily stressors such as traffic jams, which have worsened over the years and work life programmes, which include child care support, extended maternity and paternity leave will help prevent stress and in turn improve corporate performance.

The success of tackling stress is undertaking practical solutions. This may include discussing with employees about what is stressing them, by providing them with a forum where they are able express their honest opinion. It is also important to record employees’ opinions and set out how one will tackle issues that are stressing them. Human resource managers who work in these corporations must be able to handle traumatic incidents,mediate conflict situations at work, and organize for drug alcohol abuse programmes for staff. Getting in touch with employees brings the important aspect of social support which helps employees improve their perception and realize that they are valued, and in turn enhances their self-esteem and confidence at the work place. This translates to higher job performance among employees and is reflected by improvement of the measures of corporate performance such as customer satisfaction, employee creativity, productivity, higher market share and profitability. Critical to an organization’s supportive culture is sensitizing supervisors to be sympathetic to employees desire to seek balance between work and family needs. Finally, managers should organize seminars for employees to educate them on time management, financial management, team work enhancing programmes, and healthy living seminars in order to manage their own stress.

REFERENCES


