

Role of Organizational and Personal Factors on Work Stress Among the Managers of State Owned Enterprises in Kenya

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Abstract

The current stagnation of both the public and private enterprise sectors in Kenya's economy, suggests among other things that, Kenyan managers/leaders may not be performing to their full managerial and leadership potential. This observation engenders the need for further investigations. Managerial work stress is a major organizational problem that has not been adequately addressed neither by organizations nor researchers despite concerted attempts. This paper sought to examine how work stress may be impacted by organizational and personal factors in Kenya commercial State Owned Enterprises (SOEs). To achieve this, the paper examined how the organizational and personal factors affect work stress among top managers of commercial SOEs in Kenya. Primary data was collected using questionnaires administered to 175 senior managers of SOEs in Kenya. Using random sampling, the paper collected data from 162 managers representing a response rate of 93 percent. The paper found out that organizational factors significantly influenced work stress while organizational structure and climate were major sources of stress. The paper recommended that organization structures and work environment should be streamlined so as to reduce work stress among top managers of commercial SOEs in Kenya.

Keywords: State-owned enterprises, work stress, personal factors, organizational factors.

1. Introduction

Globally work stress has been recognised as a key determinant of human productivity. Work stress may lead to a breakdown especially when it exceeds the stress-handling capacity of the individual (WorkStress.Net, 2013). The human cost of work-related stress is great in terms of wrecked lives and relationships, debilitating mental and physical illness and sometimes, even death. Chandola (2010) noted that there is consistent evidence that work stress has severe implications for employee health. Apart from leading to approximately 50 percent increase in the risk of heart disease, stress also increases anxiety and depression among workers in an organization. Stress also has significant economic consequences, partly arising from the costs to employers of employees' sickness. Employees in both private and public sectors may experience work stress. For instance, job insecurity among public sector workers has doubled in Britain since 2009 and workers in the public sector report a greater increase in work intensity, interpersonal work conflict, and longer work hours compared to private sector workers since 2009 (Chandola, 2010).

Though work stress has serious consequences on employee productivity, there is limited theoretical grounding and there exists inconsistency in the measurement of work-related stress and causes of work stress (Houdmont et al., 2010). Musyoka et al. (2013) established that experiences of stress such as work over load, lack of career advancement, difficult co-workers, job insecurity, difficult clients, concern about general health and financial constraints etc. had a significant impact on stress manifestation, especially psychologically manifestation with anger and anxiety being reported by most employees of companies listed in the Kenya's Nairobi Securities Exchange (NSE). The staff also experienced physiological effects of work stress such as headaches and high blood pressure.

Bitmiş and Ergeneli (2012) found that loyalty and professional respect dimensions of leader-member exchange are positively related to the job satisfaction. The paper however, also found positive association between contribution and job satisfaction. Moreover, although affect and professional respect dimensions are strongly related to the job satisfaction, the work stress does not play a moderation role on these relationships. On the other hand, results also reveal that work stress moderates the relationships between the loyalty and contribution dimensions of leader-member exchange and job. Specifically, the relationships between loyalty and contribution dimensions of leader-member exchange and job satisfaction are become stronger when work stress level of subordinates increase. In other words, under high levels of work-related stress conditions, the relationships between job satisfaction of subordinates and their belief about supervisors' support to attain their goals and perceptions about the amount and quality of work oriented activity they receive from their supervisors will be stronger (Bitmiş and Ergeneli, 2012).

From the last recession of between 2008 and 2009, there has been a further steady increase in work stressors such as job insecurity, work intensity and interpersonal conflict at work, particularly among workers in the public sector and SOEs (Chandola, 2010). Musyoka et al. (2013) indicate that the experience of work and stress is certainly not new in Kenya with Kenyans continuing to experience stress arising from hardships such as

the recession, drought and inflation among other factors.

Having observed that Kenyan enterprises' current level of growth and development is less than satisfactory, it is predicted that stress emanating from different sources will affect performance of top managers of commercial SOEs. The noted current stagnation of both the public and private enterprise sectors in Kenya's economy, suggests among other things that, Kenyan managers/leaders may not be performing to their full managerial and leadership potential. This observation engenders the need for further investigations. Managerial work stress is a major organizational problem that has not been adequately addressed neither by organizations nor researchers despite concerted attempts. Public sector managers in Kenya are under increasing pressure from government to reform and change to live up to new and higher standards of public service delivery as per the Vision 2030. This paper therefore sought to examine the role of organizational and personal factors on work stress among top managers of commercial SOEs in Kenya.

This paper aimed at contributing towards the subject of managerial work stress and its causes in Kenya by providing insights on how the organizational and personal factors affect work stress among top managers of commercial SOEs in Kenya. In order to achieve this the paper addressed the following specific objectives: to examine the effect of organizational and personal factors on work stress among top managers of commercial SOEs in Kenya and to identify major sources of stress among top managers of commercial SOEs in Kenya. In examining the effect of organizational and personal factors, the findings of this paper provides relevant information that benefits several parties such as managers of SOEs, academics, and government and contributes to new knowledge on the discourse of work stress. The findings of this paper also benefits individual managers in both public and private sectors.

2. Literature Review

Giltinane (2013) argues that it is a useful practice for professionals to be able to identify the leadership styles and theories relevant to their practice. Proficiency in recognizing these styles enables managers to develop their skills to become better leaders, as well as improving relationships with colleagues and other leaders, who might have been challenging to work with previously.

Productive workplaces are often described in terms of high complexity, rapid change, and risk-taking innovation, conditions that can be perceived as debilitatingly stressful due to high workloads, pressure, uncertainty, and inadequate control (Houdmont et al., 2010).

The behavioural theory argues that rational decision makers continue to evaluate alternative solutions to attempt to rectify an organization's deviance from multiple goals until a satisfying solution is found (Kuusela, 2013). Behavioral leadership theories do not explicitly discuss stress, but one may carefully assume that relationship-oriented managers, by virtue of their interest in and emphasis on good relations with employees and coworkers, will have greater awareness of how stress negatively affects interpersonal relations.

Contingency theory reminds us that it is the appropriate combinations of strategy, organizational structure, and the environment which are most relevant for success. The following contingent relationships may provide the best perceived profit performance: (i) a high degree of market orientation combined with more aggressive market growth, (ii) a high degree of market orientation combined with more aggressive service/product growth, and (iii) a high degree of market orientation combined with a differentiation strategy. This suggests that the executives of firms with higher levels of market orientation tend to perceive their firms as more profitable than the competition. (Heiens & Pleshko, 2011).

Gill et al. (2010) in their study to examine the impact of transformational leadership and employee empowerment on employee job stress suggested that employees are required to satisfy frequently variegated needs and expectations of multiple parties which therefore lead to the higher level of job stress. The effects of job stress lead to serious health problems and other issues such as high employee turnover. Since transformational leadership and empowerment reduce employee job stress, it is highly advocated transformational leadership and empowerment should be implemented as the managerial methods of choice.

The transactional leader works through creating clear structures whereby it is clear what is required of their subordinates, and the rewards that they get for following orders. Punishments are not always mentioned, but they are also well-understood and formal systems of discipline are usually in place. The transactional approach is task-orientated and can be effective when meeting deadlines, or in emergencies such as when dealing with an accident. (Bach and Ellis, 2011).

Schoel et al. (2011) found that leaders who tend to be more liked might be perceived as ineffective, while leaders who are disliked might be perceived as effective. Bassett and Westmore (2012) assert that when leadership is weak, poor performance is not addressed, resulting in poor quality outcomes and unacceptable behaviour being allowed to flourish.

Akbar and Akhter (2011) conducted a study to identify the causes of faculty stress at Higher Education in Pakistan and both the public and private business schools of Punjab were selected for the study. Their results from a sample of 300 faculty members showed that the employment burden, issues related to student and role

infringes were the major causes of stress. The study also showed that private sector faculty members were more immune to word stress as compared to public sector Business Schools. In case of females, younger ages, low qualification, lower designation and less qualification faculty members showed more stress as compared to males with higher designation, older ages, and high qualification.

Reports from the performance contracting office in Kenya seem to imply that stress levels have increased among Top Managers in SOEs. This is understandable given that the managers are now required to be much more accountable to multiple stakeholders who expect to see good results and improved service delivery (GoK, 2013).

Bano and Jha (2012) concluded that employees in both the public and private sectors face moderate levels of stress, of which they are subject to role erosion the most and resource inadequacy. They also argued that there is no significant difference in total work stress among public and private sector employees.

3. Research Methodology

This paper uses the research philosophy of interpretivism since it explores the subjective meanings motivating peoples' actions in order to make sense of and understand people's motives, actions, and intentions (Saunders et al., 2007). This paper employed the two approaches or forms of survey namely: the descriptive survey research and the analytic survey/ explanatory research. Descriptive survey research aims at describing phenomena or narrating how various behaviours and events occur. The approach is also useful in narrating the sources of work stress among top managers of commercial SOEs in Kenya. On the other hand, the analytic survey research seeks to establish relationships among phenomena or variables by asking "what" and "why" certain behaviours occur and "how" these behaviours relate to other types of behaviours and other variables. The approach was used in this paper to explain among others, the relationship between stress and organizational and personal factors.

This paper target population comprised of all top managers working in commercial SOEs in Kenya. The total number of top managers in 52 commercial SOEs in Kenya was 312. This formed our target population. Given time and financial constraints, the papers used Yamane (1967) to calculate the sample size. Yamane (1967) sample size formula is shown in equation 1.

$$n = N / \{1 + N(e^2)\} \dots \dots \dots (1)$$

Where; n is the sample size, N is the target population and e is the precision error. Given that the target population was 312 top managers and following Yamane (1967) sample size formula the paper estimated the sample size as shown in equation 2. The paper used a precision error of 0.05. Therefore, the paper collected data from 175 top managers from commercial SOEs in Kenya.

$$n = 312 / (1 + 312(0.05^2)) \cong 175 \dots \dots \dots (2)$$

The paper used both probability and non-probability sampling techniques to select managers to be included in the sample. Simple random sampling was used to select the top managers to be interviewed while purposive sampling was used to select a particular manager in the chosen SOE. Combining these two sampling techniques ensured that the selected managers were a good representative of all other managers in commercial SOEs and the methods accounted for the managers who were missing due to their nature of work (Saunders et al., 2007; Kombo and Tromp, 2009; Cooper and Schindler, 2005).

Data was collected using a structured questionnaire. Primary data on work stress and sources of stress was collected using three standardized self-completion questionnaires. These classical instruments were already developed and in existence. They were modified in order to make them relevant to the Kenya situation. They include the Leadership Practices Inventory-Self (LPI-Self) (Kouzes and Posner, 1993), the Perceived Stress Scale (PSS) (Cohen et al., 1983), and the Pressure Management Indicator (PMI) (Williams and Cooper, 1998). Before the main data collection, the questionnaire was pilot tested to ensure it was reliable and valid. This paper used Cronbach's alpha to test for reliability of the questionnaire. Sullivan (2011) argues that Cronbach's Alpha is a popular method for estimating the reliability of an instrument and that a high reliability estimate on Cronbach Alpha should be as close to 1 as possible. The threshold for a reliable research instrument is Cronbach's alpha value of 0.7 (Field, 2000).

The reliability results for each measurement construct shows that constructs for work stress had Cronbach's alpha of 0.756 with 10 items while Cronbach's alpha for organizational and personal factors were 0.937 and 0.877 respectively (Table 1). These values indicated that the questionnaire was reliable. Regarding validity of the questionnaire, the paper tested for construct validity in order to establish how well a concept, idea or behaviour is translated or transformed into a functioning and operating reality (Trochim, 2006). Construct validity was tested through in-depth interviews with key informants. The draft questionnaire was administered to experts and professors in the area of work stress so as to seek valid concepts. The information from the in-depth interview was used to modify the questionnaire in order to use constructs that were valid. After pilot testing, all the identified commercial SOEs in Kenya were visited and questionnaires dropped randomly to individual top



managers after permission was obtained from the authorities.

To estimate the effect of organizational and personal factors on work stress, the paper used factor analysis to reduce the number of items that explains a construct into factors that are highly correlated with the construct. It reduces high dimensional data, such as constructs measures of organizational factors and personal factors to a few representative variables and to describe the relationship between many variables by a few underlying but unobservable variables (Field, 2000). Additionally, correlation analysis was used to measure the strength of the linear relationship between organizational and personal factors and work stress (Wang, 2009). Finally, the paper used multiple linear regression to estimate the effect organizational and personal factors on work stress. Multiple linear regression can be used to predict values of the dependent variable, or for suggestions about which independent variables have a major effect on the dependent variable (McDonald, 2009). This paper used the following multiple linear regression model.

$$WS_i = \beta_0 + \beta_1 OF_i + \beta_2 PS_i + \epsilon_i \dots \dots \dots 3$$

Where; WS denotes work stress, OF denotes organizational factors, PF denotes personal factors, β_0 is a constant and $\beta's$ are the parameter to be estimated, ϵ is the random error term and i is the individual manager. To ensure that the model estimate are unbiased, the paper tested and accounted for violation of classical linear regression model assumptions.

4. Data Analysis and Presentation

4.1 Descriptive Statistics

The paper collected data from 162 managers representing a response rate of 93 percent. The paper found that male dominated females at 69 percent. 38 percent of the respondents were aged between 40 and 49 years and 14.2 percent were aged between 21 and 29 years. Further, the paper found that 75 percent of the respondents were married, 22 percent were single, 3 percent were widowed and 0.6 percent were divorced. Regarding education, 33 percent of the respondents had master's degree, 43 percent had bachelor's degree and 24 percent had diploma and below (Table 2).

4.2 Factor Analysis Results

The paper conducted factor analysis for various constructs in order to reduce them to only components that are highly correlated with the construct. The paper used principal component analysis and Varimax rotation to reduce the constructs such as work stress, organizational and personal factors. The Kaiser-Meyer-Olkin (KMO) and Bartlett's test of sphericity were conducted to assess the appropriateness of factor analysis. KMO for work stress, organizational and personal factors were 0.708, 0.787 and 0.617 respectively indicating that the KMO values were greater than the threshold of 0.5. Additionally, the chi-square statistic of Bartlett's test of sphericity for work stress, organizational and personal factors were all significant at 1 percent (Table 3). These finding suggests that factor analysis can be carried out.

Factor analysis results for work stress revealed that three components had factor loadings that were greater than 0.5 indicating that all the items are strongly correlated with either component one, two or three (Table 4). This finding suggested that there was a dimension to the work stress and that these items could be used to create an index of work stress. Results for construct organizational factors shows that all the items had factor loadings that were greater than 0.5 indicating that all the items were strongly correlated with either component one. Construct personal factors had three items that had factor loadings greater than 0.5 suggesting that these factors could be used to create an index for personal factors (Table 5).

4.3 Correlation Analysis

Correlation analysis is used to measure direction and strength of the relationship between variables. The values of correlation coefficient ranges between -1 and +1 with values of +1 or -1 indicating that two variables under investigation are perfectly related in a positive and negative sense respectively. A correlation coefficient of 0 indicates that two variables under investigation are not linearly related with each other (Greene, 2012).

The correlation analysis results show that work stress and organizational factors had a correlation coefficient of 0.148 with a p value of 0.066 that is greater than 0.05 ($P > 0.05$). This indicates that there is no significant relationship between work stress and organizational factors. Work stress and personal factors had a correlation coefficient of 0.147 with a p value of 0.071 that is greater than 0.05 ($P > 0.05$). This indicates that there is no significant relationship between work stress and personal factors (Table 6).

4.4 Ordinary Least Squares Regression Results

The paper sought to test the influence of organizational and personal factors on work stress. Results for multiple linear regression reported the R² Statistic of 0.253 implying that 25.3% of variations in the work stress are

explained by organizational and personal factors (Table 7). The paper carried out analysis of variance and found F statistic of 2.312 with a p-value of 0.005 that was less than the p-critical suggesting that organizational and personal factors jointly explains work stress (Table 8).

The results of the multiple linear regression model shows that organizational factors had a coefficient of 2.862 with a p-value of 0.000 therefore the paper rejected the null hypothesis, since the p-value is less than the p critical (Table 9). This suggests that the organizational factor have a positive and significant effect on work stress. However, personal factors have no significant effect on work stress among top managers of commercial SOEs in Kenya.

Table 9: Regression results for organizational and personal factors on work stress

Variables	Un standardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
Constant	70.976	12.257		0.651	0.517
Organizational Factors	2.862	0.776	3.007	3.686	0.000
Personal Factors	-1.615	1.241	-1.057	-1.302	0.196

The significant relationship between organizational and personal factors was supported by the descriptive results that indicated that 53% of the top managers of commercial SOEs in Kenya agree to strongly agree that organizational structure and climate is a major source of work stress.

5. Conclusions

The paper sought to examine how work stress may be impacted by organizational and personal factors in commercial SOEs in Kenya. Primary data was collected using questionnaires administered to 175 top managers of commercial SOEs in Kenya. The paper collected data from 162 managers representing a response rate of 93 percent.

The paper found that organizational factors significantly influenced work stress while organizational structure and climate were major sources of stress. However, personal factors do not significantly influence work stress among top managers of commercial SOEs in Kenya. This suggests that organizational factors play a critical role in work stress as opposed to personal factors. Thus organization structures and work climate should be streamlined so as to reduce work stress among top managers of commercial SOEs in Kenya.

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Appendices

Table 1: Reliability results for work stress, organizational and personal factors

Construct	Cronbach's Alpha	Number of Items
Work Stress	0.756	10
Organizational Factors	0.937	4
Personal Factors	0.877	4

Table 2: Descriptive statistics

Gender	Frequency	Percent
Male	109	69.0
Female	49	31.0
Years		
21-29	23	14.2
30-39	46	28.4
40-49	61	37.7
50-59	32	19.8
Marital Status		
Single	35	21.6
Married	121	74.7
Divorced	1	0.6
Widowed	5	3.1
Level of Education		
Diploma and below	38	23.9
Bachelor Degree	68	42.8
Master Degree	53	33.3

Table 3: KMO and Bartlett's tests

Construct	KMO	Bartlett's Test of Sphericity		
		Approx. Chi-Square	d.f	Sig.
Work Stress	0.708	322.417	45	0.000
Organizational Factors	0.787	305.823	6	0.000
Personal Factors	0.617	81.923	6	0.000

Table 4: Rotated component matrix for work stress

Work Stress	Component One	Component Two	Component Three
WS 1	0.708	0.068	0.089
WS 2	0.673	0.155	0.194
WS 3	0.731	0.084	0.367
WS 4	0.078	0.025	0.769
WS 5	0.187	0.748	0.309
WS 6	0.519	0.014	0.384
WS 7	0.041	0.556	0.493
WS 8	0.047	0.817	0.102
WS 9	0.718	0.085	0.296
WS 10	0.717	0.119	0.145

Table 5: Component matrix for organizational and personal factors

Organizational factors	Component One
OF1	0.890
OF2	0.738
OF3	0.885
OF4	0.828
Personal Factors	
PF1	0.803
PF2	0.844
PF3	0.674
PF4	0.146

Table 6: Correlation Results

		ORGANIZATIONAL FACTORS
WORK STRESS	Pearson Correlation	0.148
	Sig. (2-tailed)	0.066
	N	155
		Personal Factors
Work Stress	Pearson Correlation	0.147
	Sig. (2-tailed)	0.071
	N	152

Table 7: Model Summary

R	R SQUARE	ADJUSTED R SQUARE	STD. ERROR OF THE ESTIMATE
0.503	0.253	0.144	4.20401

Table 8: ANOVA

Model	Sum of Squares	d.f	Mean Square	F	Sig.
Regression	694.664	17	40.863	2.312	0.005
Residual	2050.149	116	17.674		
Total	2744.813	133			