Effects of Transformational Leadership on Work Stress among Top Managers in State Owned Enterprises (SOEs) in Kenya

Solomon Muthamia^{1*} Peter Lewa² Michael Ndwiga³

- 1. Chandaria School of Business, United States International University, P.O Box 14634 00800, Nairobi.
- 2. Chandaria School of Business, United States International University, P.O Box 14634 00800, Nairobi.
 - 3. Utafiti International Limited, P.O Box 13506- 00800, Nairobi.

Abstract

Effective managerial leadership at all levels of society is essential for coping with the growing social and economic problems confronting a country. Currently most of the state owned enterprises (SOEs) are making losses or operating below their full potential. This poor performance could be influenced by the inability of top management to perform under stress. Work stress may reduce the productivity of the top management ultimately leading to poor performance. There are various factors that influence work stress among them is leadership styles. Nonetheless, there is a dearth of literature focusing on the effect of leadership styles on work stress in SOEs. This study sought to investigate the role of transformational leadership style on work stress in commercial SOEs in Kenya. Specifically, the study examines the effect of modeling the way, inspiring a shared vision, challenging the process, enabling others to act and encouraging the heart on work stress among the top managers of Kenya SOEs. To achieve these objectives the study targeted 175 top managers of commercial SOEs but collected data from 162 managers representing a response rate of 93 percent. The study used factor analysis to create indices for modeling the way, inspiring a shared vision, challenging the process, enabling others to act, encouraging the heart and work stress. Correlation analysis was used to test the strength of the relationship between work stress and each dimension of transformational leadership. Multiple regression analysis was used to estimate the magnitude and direction of each dimension of transformational leadership on work stress. The study found that model the way positively influence work stress and inspire a shared vision negatively influence work stress while other dimensions of transformational leadership have no significant effect on work stress among top managers of commercial SOEs in Kenya. The study recommends that managers should be trained and retrained in order to incorporate good leadership practices that will reduce work stress and increase productivity of the SOEs in Kenya.

Keywords: Work Stress, Transformational Leadership, State Owned Enterprises

1. Introduction

Stress occurs in every aspect in the practice of leadership and management in every organization. Stress is a reaction to a situation in which you perceive you will not be able to cope with a situation successfully and which results in unwanted physical, mental or emotional deterioration (Safaria et al., 2011; Armstrong, 2009). This may lead to low productivity of an individual and ultimately affect performance of an organization. For instance, changes occurring in the public sector as a result of the New Public Management (NPM) paradigm have brought about fundamental changes in the way managers manage public entities. The changes may cause work stress among all categories of staff (Wainwright and Calnan, 2002).

The Kenyan government in its policy papers and Vision 2030 has promoted transformational leadership. Senior public servants have been trained in this form of leadership for quite some time now. They are therefore expected to practice the ideals of transformational leadership and work differently under the reform of state corporations. They are expected be transformational leaders who meet high performance criteria through performance contracting and high service levels to the citizens. Such changes have engendered high levels of managerial work stress in working for the public service (Wainwright and Calnan, 2002). Kouzes and Posner (1987) note that transformational leadership is filled with stress. Thus the question of interest in this particular study is whether the potentially high-performing transformational leader can still be able to transform an organization if he or she is burdened by high levels of managerial stress.

Stressors facing the manager can be environmental – levels of noise, temperature, amount of work, lack of privacy among others or can arise from life events such as bereavement, unemployment, separation, divorce or from the occupation one is engaged in – issues relating to the job and leadership (Dollard et al., 2015). Issues relating to the job present what we popularly call occupational or work stress. This arises when there is a mismatch between a person's skills and abilities and the demand from the job or mismatch of a person's needs supplied by the job environment (Dollard et al., 2015). The physical work environment and the leadership styles such as transformational leadership can also cause work stress which can lead to poor performance in the job or even cause serious health problems.

Transformational leaders try to influence their followers through inspiring their visions, modelling their way, enabling the subordinates to challenge the way and to act, and to encourage the heart. In practicing transformational leadership managers usually meet stressful situations (Bass, 2014; Bennis and Nanus, 2015; Karina et al., 2008). Work-related stress remains a significant problem in many countries. For example, in Great Britain, it accounts for around a third of all new cases of work-related ill health. In total, an estimated 10.5 million working days were lost in Great Britain to work-related stress, depression and anxiety in the financial year 2005/06 (HSE, 2006). During that period, an estimated 420,000 reported that they were suffering from work-related stress to an extent that they became very ill. There is a general untested expression that stress levels among senior workers in the civil services of many developing/emerging economies are very high. But the fact remains that stress has ill effects on the individual, businesses, productivity and performance levels, and organizational image and reputation. However, in developing countries the causes of work stress has not been document.

In Kenya, information on illnesses arising from stress and how this is assessed is not available to the best knowledge of the researcher. The assessment of stress in the workplace offers employers and others the opportunity to assess the degree of excessive demand as indicated by emotional, behavioral, cognitive and physical symptoms. Further, the assessment could also provide relevant information on the correlates of work stress such as transformational leadership. There exists a limited knowledge on how transformational leadership affects work stress and employees well-being (Karina et al., 2008). Bono and Ilies (2006) found that charismatic leaders significant relationship between transformational leadership and work stress. However, the context in which these studies were conducted is quite different from that of developing countries such as Kenya where appointment of top managers of SOEs is highly influenced by politics of the day.

Thus there is an urgent need to empirically investigate how transformational leadership influences work stress in order to provide relevant information necessary for policy formulation. This paper aims to bridge this gap by examining the effect of transformational leadership on work stress among top managers of Kenya SOEs. Specifically the study seeks to examine the effect of model the way, inspire a shared vision, challenge the process, enable others to act and encourage the heart on work stress.

2. Literature Review

Both leadership theories and theories of stress provide the basis for this research. Leadership behavior has been described in three broad categories as "task behaviors", "relationship behaviors", and "transformational and change behaviors". Lately the emphasis has shifted to transformational leadership in which the leaders seek to raise the consciousness of followers by appealing to higher ideals and moral values as well as empowering them (Bass, 1996).

Transformational leadership has five key dimensions namely; model the way, inspire a shared vision, challenge the process, enable others to act and encourage the heart. Thus transformational leaders inspire others with their vision, promote this vision over opposition, demonstrate confidence in themselves and their mission, and inspire others to support their mission (Bass, 2014; Bennis and Nanus, 2015). They are characterized as charismatic in their personal, active approach toward influencing others and tend not to direct specific activities as much as to alter moods, to evoke symbolic images and expectations, and to inspire desires and objectives. They develop fresh approaches to long-standing problems and open issues to new opinions. Working from high-risk positions, they seek out risks, especially where opportunity and rewards appear high (Bass, 2014).

Work stress theories can be broadly categorized into two: interactional theories, which focus on the structural features of the person's interaction with their work environment and transactional theories of stress which focus on the cognitive processes and emotional reactions associated with the person's interaction with their environment (Cox et al., 2000). Other theories explaining work stress are: demand control support (DCS) model

that argues that work stress arises primarily from the structural and organizational aspects of the work environment but it assumes that a person's personal attributes or the demographics of the situation do not cause work stress, Burnout theory argues that burnout results from prolonged exposure to chronic interpersonal stressors on the job from working with troubled people (Dollard, 2003), effort –reward imbalance (ERI) model focuses more on the interaction between environmental constraints or threats and a person's or individual's coping resources and finally the cognitive phenomenological theory that argues that stress is a relationship between the person and the environment that is appraised as taxing or exceeding resources, and endangers a person's or worker's well-being (Dollard, 2003).

Empirical evidence supports the relationship between leadership practices and work stress. Kouzes and Posner (1995) compared scores on leadership practices for government managers and a comparable group of business managers, and found that overall there were no statistically significant differences between the two groups of managers. Thus, managers in both the public sector and private sector faced work related stress. Mchugh (1997) examined the linkages between organizational change and the psychological well-being of employees and found that the process of organization change is stressful. Issues associated with the process of change were linked to employee anxiety and symptoms of being "worn out". Gill et al. (2010) and Dhaliwal (2008) found that transformational leadership negatively affects work stress in service industry.

3. Research Methodology

This study is based on interpretivism research philosophy since the approach 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). Additionally, the study employed descriptive and explanatory research design. The target population for the study comprises of all top management team (TMT) working in commercial SOEs in Kenya. The total number of TMT in 52 commercial SOEs is 312. Out of this target population, the study estimated a sample based on Yamane (1967) sample size formula shown below.

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

Where n is the sample size, N is the target population and e is the precision error. Given a population of 312 and precision error of 0.05, the sample size is given by;

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

(2)

Based on this approach, the study aimed at interviewing 175 top managers of the commercial SOEs. Simple random sampling was used to select the top management team members to be interviewed while purposive sampling was used to select a particular manager in the chosen SOE. A structured questionnaire was used to collect data but before data collection for the main survey, the research instrument was pilot tested. The purpose of the pilot study was to field-test the appropriateness of the instruments and the validity of the data collection procedures. The study chose 18 managers to be interviewed for pilot study. Chronbach alpha was used to evaluate the reliability of the questionnaire while for external validity the questionnaire was administered to experts and professors in the area of leadership and work stress.

To examine the relationship between transformational leadership and work stress, factor analysis, correlation and multiple regression analyses were used. Factor analysis was used to reduce data for work stress, model the way, inspire a shared vision, challenge the process, enable others to act and encourage the heart and thereafter the scores for each construct were used to generate indices. The indices were later used in multiple linear regression model and correlational analysis. The multiple linear regression model used in analyzing the effect of transformational leadership practices on work stress was specified as follows;

$$WS_{i} = \beta_{0} + \beta_{1}MW_{i} + \beta_{2}ISV_{i} + \beta_{3}PC_{i} + \beta_{4}EOA_{i} + \beta_{5}HE_{i} + \varepsilon_{i}$$
(3)

Where; WS denotes work stress, MW denotes model the way, ISV denotes inspire a shared vision, PC denotes challenge the process, EOA denotes enable others to act and HE denotes encourage the heart. β and ε denote the parameters to be estimated and the error term respectively.

4. Findings

4.1 Descriptive Statistics

The study collected data from 162 managers of SOEs representing a response rate of 93 percent. 38 percent of managers who responded to the questionnaire were aged between 40 to 49 years, 14.2 percent were aged between 21 to 29 years and 20 percent were aged between 50 to 59 years representing a fair distribution of the top management team across all the age brackets. Male respondents dominated females at 69 percent and 31 percent respectively reflecting a good gender representation. The study found that 75 percent of the respondents were married, 21 percent were single, 3 percent were widowed and 1 percent were divorced. This finding suggests that most of the respondents have responsibility at home thereby they are prone to different sources of stress at home and at work. Majority of the respondents had a bachelor's degree and a quarter of the respondents had an experience of between 16 to 20 years, 22 percent had over 21 years of experience, 20 percent had between 6 to 10 years of working experience, 18 percent had between 0 to 5 years of working experience and only 15 percent had between 11 to 15 years of work experience. This finding suggests that a relatively high number of respondents had moderate experience working with the current organization. They could therefore be relied upon to provide good responses to the questions during the interview process.

4.2 Factor Analysis Results

The results in Table 1 show that all the items of work stress have factor loadings that are greater than 0.5 indicating that all the items are strongly correlated with either component one, two or three. Item WS1, WS2, WS3, WS4, WS5, WS6, WS7, WS8, WS9 and WS10 had factor loading of 0.708, 0.673, 0.731, 0.769, 0.748, 0.519, 0.817, 0.718, and 0.717 respectively. This finding suggests that there was a dimension to the work stress and that these items could be used to create an index of work stress.

The component matrix for model the way in Table 2 shows that all the five items had factor loadings at least equal to 0.5. Item MW1 had 0.75, MW2 had 0.739, MW3 had 0.720, MW4 had 0.679 and MW5 had 0.678. This suggests that all these items are highly correlated with component one and could be used to create an index for model the way. Further, the finding suggests that there is a dimension of model the way.

The component matrix for inspiring the shared vision in Table 3 shows that four items had factor loadings equal to 0.5 or greater while one item had a factor loading that is less than 0.5. Item ISV1, ISV3, ISV4 and ISV5 had factor loadings of 0.756, 0.836, 0.863, and 0.572 respectively indicating that they are highly correlated with component one and they could be used to create an index of inspiring a shared vision. The finding suggests that there is a dimension of inspire a shared vision. Item ISV2 had factor loading of 0.385 that is less than 0.5 suggesting that it is not highly correlated with component one.

Table 4 presents the component matrix for challenge the process that shows that items PC1, PC2, PC3, and PC5 had factor loadings greater than 0.5 specifically 0.733, 0.770, 0.733 and 0.716 respectively. This finding indicates that these four items are highly correlated with component one and they could be used to create an index. Only one item, PC4, had a factor loading less than 0.5 specifically 0.298, suggesting that it is not highly correlated with component one. This finding suggests that there was a dimension to the challenge the process construct.

The results in table 5 shows that all the items of enabling others to act have factor loadings that are greater than 0.5 indicating that all the items are strongly correlated with either component one or component two. Item EOA1, EOA3 and EOA5 were found to be highly correlated with component one since they had factor loadings of 0.808, 0.645 and 0.691 respectively while item EOA2 and EOA4 were highly correlated with component two and had factor loading of 0.872 and 0460 respectively. This finding suggests that there was a dimension to the enabling others to act.

The results in Table 6 shows that all the items of encourage the heart had factor loadings that are greater than 0.5 for either component one or two indicating strong correlation with the component. Items HE1, HE2, and HE3 had factor loading of 0.881, 0.885, and 0.877 respectively indicating strong correlation with component one. Items HE4 and HE5 had factor loadings of 0.810 and 0.812 suggesting strong correlation with component two. This finding suggests that there was a dimension to encourage the heart construct. These items could then be used to generate an index of encouraging the heart.

4.3 Correlation Analysis Results

The results on Table 7 show the Pearson correlation coefficients for each dimension of transformational leadership and work stress. The results shows that among the five dimensions of transformational leadership

style, only the correlation coefficient of inspire a shared vision is significant at 10 percent significance level. This finding suggests that inspire a shared vision is negatively related with work stress.

4.4 Multiple Linear Regression Results

The study regressed various dimensions of transformational leadership on work stress. However, diagnostic tests were conducted to ensure that assumptions of classical linear regression model were not violated. The study tested for multicollinearity and found that the correlation coefficients for all independent variables ranged between 0.2 and 0.7 indicating that there was no severe multicollinearity (Gujarati, 2008). This finding implies that the independent variables, indices of transformational leadership can be used for regression analysis.

The results for multiple linear regression model shows an R square of 0.253 implying that 25.3 percent of the variations in work stress are explained by variations in transformational leadership style (Table 8). Further, Analysis of Variance (ANOVA) shows that the F statistic had a value of 2.312 with a p value of 0.005 that is less than 0.05 (P<0.05) implying that the F statistic was significant at one percent level (Table 9). This finding suggests that jointly the dimensions of transformational leadership influence work stress.

The coefficient of each independent variable is presented in Table 10. The study used the unstandardized coefficients to interpret the findings and significance level for hypothesis testing. The results show that model the way, inspire a shared vision are key influencers of work stress among managers of commercial SOEs in Kenya. On the other hand, challenge the process, enable others to act and encourage the heart do not significantly influence work stress among managers of commercial SOEs in Kenya.

The study found that the coefficient for model the way is statistically significant with a value of 1.086 and a p value of 0.005 (Table 10). This finding implies rejection of the null hypothesis that model the way does not influence work stress. The finding suggests that an improvement in modeling the way of a manager increases work stress of his/her subordinates. This suggests that managers who pay more attention to the steps that are necessary for actualizing business plans tend to be more stressed. This may be explained by the fact that they are very keen to details and this may imply that the managers were micro managing which may result to work overload thereby increasing work stress.

As shown in Table 10 the coefficient for inspire a shared vision is -1.683 with a p value of 0.022 implying that it is significant at 5 percent level (P<0.05). This finding implies rejection of the null hypothesis that states that inspire a shared vision dos not influence work stress. This finding suggests that managers who inspire a shared vision had less chances of experiencing work stress. This could be explained by the fact that managers who translate their vision to action steps have a clear outline of what need to be achieved both in the short run and long run thereby reducing uncertainty in implementation of the vision and ultimately reducing work stress.

As shown in Table 10, the study found that the coefficient of challenge the process was 0.576 with a p value of 0.489 that is greater than 0.05 (P>0.05). This implies that challenging the process does not significantly influence work stress. The study found that the coefficient of enabling others to act was 0.391 with a p value of 0.345 that is greater than 0.05 (P>0.05). This implies that enabling others to act does not significantly influence work stress. The coefficient for encourage the heart is 0.398 with a p value of 0.452 that is greater than 0.05 suggesting that encourage the heart does not significantly influence work stress.

5. Conclusion

The study sought to examine how work stress may be impacted by transformational leadership in commercial SOEs in Kenya. To achieve this, the study examined the effect of modeling the way, inspiring a shared vision, challenging the process, enabling others to act and encouraging the heart on work stress. Primary data was collected using questionnaires administered to 175 senior managers of SOEs in Kenya. The study collected data from 162 managers representing a response rate of 93 percent.

The study used factor analysis to reduce constructs of transformational leadership and work stress, correlation analysis to estimate the strength of the relationship between variables and multiple linear regression model to estimate the magnitude of effect of each dimension of transformational leadership on work stress.

Based on multiple linear regression model the results indicate that model the way and inspire a shared vision were key determinants of work stress while challenge the process, enable others to act and encourage the heart did not influence work stress. Model the way had a positive effect on work stress and inspire a shared vision negatively influenced work stress among top managers of commercial SOEs in Kenya. This result corroborates Gill et al. (2010) and Dhaliwal (2008) findings that transformational leadership affects work stress.

The study recommends top management in commercial SOEs should avoid micro managing the managers/ employees under the pretense of modeling the way. State corporations advisory committee (SCAC) should also spearhead the training and retraining of the top managers of commercial SOEs in order to reduce their stress ultimately improving their performance. SCAC should also emphasize the need for all managers of commercial SOEs to inculcate the long term vision of their enterprises to the employees. In addition, the top management should explain the reasons behind their arguments and align their vision with practical implementation strategies.

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Appendices

Work Stress **Component One Component Two Component Three** WS1 0.708 0.068 0.089 WS2 0.673 0.155 0.194 WS3 0.731 0.084 0.367 WS4 0.078 0.769 0.025 WS5 0.187 0.748 0.309 WS6 0.519 0.014 0.384 WS7 0.041 0.556 0.493 WS8 0.047 0.817 0.102 WS9 0.718 0.085 0.296 WS10 0.717 0.119 0.145

Table 1: Rotated Component Matrix for Work Stress

Table 2: Component Matrix for Model the Way

Model the Way	Component One
MW1	0.750
MW2	0.739
MW3	0.720
MW4	0.679
MW5	0.678

Table 3: Component Matrix for Inspiring a Shared Vision

Inspire a Shared Vision	Component One
ISV1	0.756
ISV2	0.385
ISV3	0.836
ISV4	0.863
ISV5	0.572

Table 4: Component Matrix for Challenge the Process

Challenge the Process	Component One
PC1	0.733
PC2	0.770
PC3	0.733
PC4	0.298
PC5	0.716

Table 5: Rotated Component Matrix for Enabling Others to Act

Enabling Others to Act	Component One	Component Two
EOA1	0.808	0.101
EOA2	0.122	0.872
EOA3	0.645	0.286
EOA4	0.324	0.460
EOA5	0.691	0.145

Table 6: Rotated Component Matrix for Encourage the Heart

Heart Encouraging	Component One	Component Two
HE1	0.881	0.015
HE2	0.885	0.003
HE3	0.877	0.020
HE4	0.032	0.810
HE5	0.027	0.812

Table 7: Correlation between Dimensions of Transformational Leadership and Work Stress

Dimension	Pearson Correlation Coefficient	Significance Level
Modeling the way	0.028	0.728
Inspiring a Shared Vision	-0.139	0.090
Challenging the process	0.042	0.608
Enabling others to act	-0.011	0.898
Encouraging the heart	-0.018	0.834

Table 8: Results for Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.503	0.253	0.144	4.20401



Table 9: Results for ANOVA

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

Table 10: Regression Results for Parameter Estimates

Variable	В	Standard Error	Standardized Coefficients	t	Significance
Constant	7.976	12.257		0.651	0.517
Model the Way	1.086	0.384	0.720	2.829	0.005
Inspire Shared a Vision	-1.683	0.726	-0.973	-2.318	0.022
Challenge the Process	0.576	0.829	0.312	0.695	0.489
Enable Others to Act	0.391	0.413	0.600	0.948	0.345
Encourage the heart	0.398	0.527	0.257	0.754	0.452