

ORIGINAL RESEARCH ARTICLE

Unpacking the influence of organizational stress management strategies on employee performance in Kenya Agricultural Livestock Research Organization**Yusuf Wanjala Musi¹, Elegwa Mukulu², Margaret Oloko²**¹*Arid and Range Lands Research Institute - Kiboko, Makindu, Kenya*²*Business Administration Department, Jomo Kenyatta University of Science and Technology, Kenya*Corresponding email: musiwanjala@yahoo.com**ABSTRACT**

Stress is a factor that influences employee performance. Work-related stress is the product of an imbalance between environmental demands and individual capabilities. There has been a persistent increase in stress-related problems among employees worldwide, leading to a decline in work performance, reduced commitment, and growing impatience. Some stress is essential as it promotes individual growth, but an excessive level is inappropriate, hence the need to institute stress management strategies to mitigate burnout. Work stress is manifested through feelings of mistrust among co-workers, poor performance, and the strain on individual relationships. The organisation under study was the Kenya Agricultural and Livestock Research Organization (KALRO). The general objective of the study was to assess how strategic working conditions influence employee performance at KALRO. The study employed a descriptive survey design. While the target population was 220, a total of 142 questionnaires were completed and returned. A semi-structured questionnaire was developed for the collection of data. The data was analysed using descriptive statistics with the help of SPSS Version 21. According to the findings, stress management at a zero unit change in strategic working conditions resulted in a 0.876 change in employee performance at KALRO. Based on a 5% level of significance, working conditions had a t-value of (6.123 > 1.96), a.002 level of significance, while strategic team building had an overall mean of 2.78. The study concluded that strategic working conditions and strategic team building rejuvenated employees at KALRO. The study recommends that employers improve working conditions and enhance team building to improve employee performance.

Key Words: Stress, management, strategies, employee, performance, KALRO**1.0 Introduction**

While some workplace stress is normal, excessive stress interferes with employee productivity and affects physical and emotional health. The ability to deal with stress could mean the difference between success and failure (Segal, Smith, & Robinson, 2016). Stress is defined as a psychological and physical reaction to prolonged internal and/or environmental conditions in which an individual's adaptive capabilities are stretched. It is an adaptive response to conscious or unconscious threats and could affect an individual's emotional, physical, and

social well-being, as well as pose a threat to health if not dealt with or managed well (Zaidi, 2015). A study by Soltani, Hajatpour, Khorram, & Nejati (2013) on the effect of role ambiguity on employees' job stress found that role ambiguity on work-family conflict had a statistical significance of (p-value = 62.40). Additionally, the effect of role ambiguity on job stress had a significance of 1.83. On the flipside, the effect of role conflict on work-family conflict was not high, since the significant value was negative. Hence, it was observed that job stress was influenced by role conflict (p-value = 2.35). Finally, the effect of work-family conflict on job stress was discovered with a p-value of .93, indicating that it was significant.

Creating a healthy work environment with a workable agenda, creative activities, positive strategies, and shared values contributes to performance (Fohunda, 2013). Teamwork is necessary to enable employee creativity toward common aims and goals. The work performance of teams is higher than that of individuals when the assignment in question requires a broader scope of knowledge, judgment, and opinion. The advantage of a teamwork strategy is significant growth in spheres that require creative solving of different tasks, a high degree of adaptability, and operational management (Fohunda, 2013). Zaidi (2015) found that there was a significant relationship ($r = 0.879$), p , between team-building and academic performance. Moreover, there was observed significant difference between male and female students on self-esteem and academic performance scores, which indicated that team building undergone by female students had high scores on academic performance compared to male students who had not undergone similar encounter. It also showed that there was a strong positive correlation between self-esteem and academic performance among university students.

Research carried out by the Society for Human Resource Professionals (SHRM, 2012) in the USA found that the top contributors to job satisfaction were job security and communication between employees and senior management. Work environment is defined as the field in which people work, and which includes physical setting, job profile, culture and market conditions (Tripathi, 2014). Each aspect was interlinked and influenced employees' overall performance and productivity. It was the quality of the employees' workplace environment that affected most their level of motivation and, subsequently, performance.

Bewell, Yakubu, Owotunse, & Ojih's (2014) studied work-induced stress and its relationship to organizational effectiveness and productivity amongst Nigerian employees. Using employees of the Nigerian Television Authority and Nigerian Immigration Services as the sample, it was established that the concepts of work-induced stress, and workers' effectiveness and productivity were relatively inseparable.

2.0 Methodology

This section discusses the procedures that were followed in the research process, including the research design, target population, study location, data collection, sample and sampling techniques, data collection instruments, data collection procedures, data processing, and analysis. Social scientists had the fundamental belief that the material world of tangible objects

did not exist unperceived. In view of that, the entire staff at KALRO Headquarter in Nairobi made up the sampling frame for the study. The study adopted stratified random sampling, also known as probability sampling. In June 2020, there were 220 workers in the institution, of whom 142 were randomly selected. To gather data, a descriptive research design was used (Aggarwal & Ranganathan, 2019; Mugenda & Mugenda, 2012). The sample size of the study was calculated using the Yamane (1967) formula given as follows:

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

Where N = Population, e = Expected Error

$$\text{Sample size} = \frac{220}{1 + 220(0.5)^2} = 141.93$$

This rounds up to 142 employees.

The questionnaire format had responses given on a five-point Likert scale (where 1 = very great extent; 2 = great extent; 3 = moderate extent; 4 = low extent, 5 = not at all).

Table 1: Sample Size Distribution

Section	Population	Sample
Accounts	25	22
Administration	45	25
Audit	17	15
Supply chain	15	12
Corporate communication	14	8
Pension	15	10
Catering	30	15
Transport	59	35

Source: KALRO HRM Manual 2016

2.1 Data collection, analysis and presentation

Primary data was collected using questionnaires (Kuckartz, 2014; Lewis, 2015). Ethical approval for the study was issued by the National Commission for Science and Technology (NACOSTI), and permission to collect data from employees was granted by KALRO.

The data collected was analysed using SPSS Version 21. Data processing was carried out by editing, coding, and classification. The study further adopted a multiple regression analysis to establish the strength and relationship between the independent variables (strategic working conditions and strategic team building programs) and the dependent variable (employee performance) at a 95% level of significance. The regression model was calculated using the following formula:

$$Y = a + \beta_0 + \beta_1X_1 + \beta_2X_2 + \varepsilon$$

Where:

Y = Dependent variable

β_0 = Constant Term

β_1 = Strategic Working Conditions

β_2 = Strategic Team building

ε = Error term

The response rate was 51.4%, which is acceptable according to Amin (2005), which recommends a minimum allowable rate of 50%. The results were summarised in table 2.

Table 2: Response rate of respondents

Response	Frequency	Percentage
Actual Response	73	51.4%
Non-Response	69	48.6%

The response rate was above 50%, hence the conclusions drawn from the study were representative of the population. Table 2 indicates the target population, which similarly backs up the concurrence that the response was sufficient. This was aimed at ensuring that there was no bias in the manner in which the respondents were selected to participate in the study.

3.0 Results

This section presents results from questionnaires that were used to collect primary data. Seventy-three questionnaires (from one hundred and forty-two questionnaires) were successfully filled out and returned, giving a 51.4% response rate.

3.1 How working conditions influence employee performance at KALRO

On the influence of the working environment on employee performance in KALRO, the total number of items under consideration was six (6), all of which were deemed significant for the study. Table 3 presents the findings in the area of working conditions.

Table 3: Extent of strategic working conditions on employee performance at KALRO

	Mean	Std. Dev
Threshold [Customer Satisfied = 0]		
Location [Ergonomics on Working Conditions=1]	1.04	1.266
[Extent of Working Condition=3]	3.06	1.128
[Reducing Hazards on Working Conditions=3]	3.13	1.815
[Goal Setting Interventions on Working Conditions=4]	3.06	1.720
[Counseling Psychotherapy on Working Conditions=3]	2.90	1.440
[Reducing Role Conflict Working Conditions=3]	3.26	1.674
Average mean	2.741	

From the table, counselling and psychotherapy had parameter estimates for their respective working environments as indicated. Ergonomics [mean = 1.04; standard deviation = 1.26], working conditions [mean = 3.06; standard deviation = 1.28], reducing hazards [mean = 3.06; standard deviation = 1.570], goal-setting interventions [mean = 3.13; standard deviation = 1.815], counselling and psychotherapy [mean = 2.90; standard deviation = 1.440], and reducing role conflict [mean = 3.26; standard deviation = 1.674], respectively. These results indicate the existence of a significant relationship between the working environment and employee performance at KALRO (the overall mean was 2.741).

3.2 Strategic Team Building

The study also sought to assess the influence of strategic team building on employee performance in KALRO, with the results shown in Table 4.

Table 4: Extent of Strategic Team Building influence on employee performance

		Mean	Std. Dev
Threshold	[Reduced Operational Costs = 0]		
Location	[Ergonomics Working Conditions=1]	3.20	1.878
	[Extent Working Condition=3]	1.14	1.352
	[Reducing Hazards Working Conditions=3]	3.09	1.370
	[Goal Setting Interventions Working Conditions=4]	2.61	1.844
	[Counseling and Psychotherapy Working Conditions=3]	3.51	1.531
	[Reducing Role Conflict Working Conditions=3]	3.13	1.410
	Average Mean	2.78	

Ergonomics reflected a mean of 3.20 and a standard deviation of 1.878. The study thus established that sitting positions (chairs) contributed to employee comfort at work. Working conditions, on the other hand, showed a mean of 1.14 and a standard deviation of 1.362, implying that working conditions contributed to a large extent to an employee's work. Hazard reduction had a mean of 3.09 and a standard deviation of 1.370. The outcome demonstrates that employee exposure to safety was key to performance to a large extent. Goal-setting intervention findings had a mean of 2.61 and a standard deviation of 1.864, showing that smart and non-ambiguous goals played a key role in employee performance and accountability, whereas the opposite was not true. Counseling and psychotherapy had results of a mean of 3.51 and a standard deviation of 1.531, which implied that the employee help process and guidance contributed to a large extent to improved performance with reduced stress. The outcome of reducing role conflict had a mean of 3.13 and a standard deviation of 1.410, indicating that employee job-specific fiction and synergy reduced stress and improved performance significantly. According to the findings, the overall mean of the significant relationship between team building factors and employee performance at KALRO was 2.78. The study results generally implied that working conditions affected employee performance.

3.3 Results for Regression Analysis

The summary of the study findings presented herein follows the research objectives formulated in the study, as indicated in the model summary in Table 5.

Table 5: Model Summary

Model	R	R ²	Adjusted R ² ^M	Std. Error of the Estimate
1	.825	.680	.674	2.95 .021

3.3.1 Relationship between variables

Multiple regression analysis was used to establish relationships among the variables, and, as per the model summary in Table 5, the coefficient of determination (R²) was used to measure how far the regression model's ability to explain the variation of the independent variable went. The correlation coefficient (R) was 0.825. This indicates a very strong positive relationship between the independent variable and the dependent variable. The data demonstrated that the high R square is (R²) which is 0.680, which is a coefficient of determination. It shows that the independent variables in the study were able to explain 68.00% of the variation in employee performance, while the remaining 32.00% was explained by the variables or other factors that the study recommends for further study. This implied that the set of independent variables was very significant and that they, therefore, needed to be considered to enhance employee performance at KALRO.

Table 6: ANOVA

Model	Sum of Squares	d.f	Mean Square	F	Sig.
Regression	39.398	4	9.840	44.324	.000
Residual	18.483	85	.222		
Total	57.881	72			

NB: F-critical Value = 17.987;

3.3.2 ANOVA

From the ANOVA statistics in Table 6, the study established the regression model had a *p*-value of $0.000 < 0.05$, which was an indication that the data was ideal for concluding the population parameters as having a significant value. The calculated value was greater than the critical value ($4.234 > 17.987$), an indication that strategic working conditions and strategic team building influence employee performance at KALRO. The degrees of freedom were calculated as 73 (sample size) $- 1 = 72$.

Table 7: Coefficient Results

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	A	Std. Error			
(Constant)	7.890	2.952		2.673	.000
X ₁ _ Working conditions	.876	.143	.522	6.123	.002
X ₂ _ Team Building	.832	.187	.458	4.449	.005

Table 7 shows the regression coefficients, t values, and significance levels obtained from the multiple regression analysis. The study conducted a multiple regression analysis to determine the relationship between the dependent variable and independent variables. The general form of the equation was to predict organisational effectiveness at KALRO, from working conditions to team building, place conflict, role ambiguity, and job security. $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \epsilon$ becomes $Y = 7.890 + 0.876 X_1 + 0.832 X_2$.

From the study findings and the regression equation established, and taking all factors into account (independent variables) and keeping them constant at zero, organisational effectiveness at KALRO was 7.890. The data findings analysed also show that, taking all other independent variables at zero, a unit change in workload would lead to a 0.876 change in employee performance. Based on a 5% level of significance, the workload had a t-value of (6.123 > 1.96), with a 0.002 level of significance. Further, a unit change in workplace conflict would lead to a 0.832 unit change in employee performance. Based on a 5% level of significance, workplace conflict had a t-value of (4.449 > 1.96) with a 0.005 level of significance. Additionally, a unit change in role ambiguity would lead to a 0.768-unit change in employee performance. Based on a 5% level of significance, role ambiguity had a t-value of (3.879 > 1.96) with a 0.007 level of significance. A unit change in job security would lead to 0.654 unit changes in employee performance. Job security had a t-value of 3.014 > 1.96 with a 0.013 level of significance.

4.0 Discussion

According to the study, conflict is an unavoidable phenomenon in organisational life that can detract from performance depending on the conflict resolution methods used in the workplace. This is in agreement with a study by Lengo (2015), who investigated the impact of workplace conflict management on organisational performance in a Nigerian manufacturing firm and concluded that conflict was an unavoidable phenomenon in organisational life and could contribute to or detract from organisational performance depending on the conflict management strategies adopted in the workplace. The current study was in agreement with Kariuki (a phenomenon in organisational life that could detract from performance depending on the conflict management methods adopted in the workplace). This is in agreement with a study by Lengo (2015), who investigated the impact of workplace conflict management on organisational performance in a Nigerian manufacturing firm and concluded that conflict was

an unavoidable phenomenon in organisational life and could contribute to or detract from organisational performance depending on the conflict management strategies adopted in the workplace. The current study was in agreement with Kariuki (2021), who established that management's careful fine-tuning of liquidity enabled firms to survive in extreme stress and optimised assets without undue strain in less stressed conditions.

The study found that role ambiguity and interpersonal tensions were major triggers of stress. This is in line with the findings of Soltani, Hajatpour, Khorram, and Nejati (2013), who found that work-induced stress and workers' effectiveness and productivity were relatively inseparable and determined organisational output. It was also in agreement with Bewell, Yakubu, Owotunse, and Ojih (2014), whose study established a strong relationship between work stress, work effectiveness, and work productivity.

The study also found that workplace conditions had a significant effect on employee performance. This meant that changes in strategic working conditions had an impact on either negative or positive performance. The regression coefficients of the study demonstrated that strategic team building had a significant influence on employee performance, implying that a change in the continuous use of the activity would increase employee performance. The study results implied that respondents agreed that working conditions influenced employee performance at KALRO. This was in agreement with Zaidi (2015), who asserted that an adaptive response to conscious or unconscious threats affects an individual's emotional, physical, and social well-being if not dealt with well. This study found employees' ergonomics to be a significant factor in high performance. From the findings of the study, employees could manage multiple services required by clients in the shortest time possible. Employees in this study also reported interruptions at work, which resulted in lost man-hours. This was in line with a study that found that safety sensitization, training, and health promotion management were safe work practises worth adopting (Buyela, 2022).

Employee help processes and guidance contributed to a large extent to improved performance with reduced stress. The results were: role conflict [mean = 3.13; standard deviation = 1.410]. This implied that employee job-specific friction and synergy reduced stress to a great extent and improved performance, unlike the opposite. According to the findings, the overall mean of the significant relationship between team-building factors and employee performance in KALRO was 2.78, implying that respondents agreed that working conditions affect employee performance.

From the descriptive statistics, the study established that respondents agreed with the statement about the influence of team building on employee performance. Teamwork was found to be a powerful element leading to employee performance. The study established that employees were involved in decision-making on matters concerning their work. This finding is in agreement with an earlier study by Fohunda (2013), who found that team-building led to group cohesion and higher output due to synergy. The study results imply that enhanced strategic team building could increase productivity at KALRO.

5.0 Recommendations

The study recommends that organisations invest in the enhancement of strategic team building among employees. This will lead to team cohesion, synergy, and employee motivation, which in turn will result in increased productivity and an enhanced brand image. It also recommends the effectiveness of dispute resolution mechanisms in organizations to ensure motivated staff and greater productivity.

6.0 Acknowledgment

6.1 Presentation of the study, findings, and a portion of the work

The findings were reported in a paper presented at the 14th edition of the JKUAT conference in Kenya, held from November 14th to 15th, 2019, under the sub-theme Leveraging research, innovation, and entrepreneurship for sustainable development (<https://www.jkuat.ac.ke/conf2014/>). The abstract for this paper is found in the JKUAT book of abstracts for November 2019.

6.2 General acknowledgement

The research was permitted and made possible by KALRO ARLRI Kiboko, Kenya, for which the authors are grateful. Additionally, appreciation is also directed towards the 142 research participants in this study.

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