



# Motivation on Employee Performance through Top Leadership Commitment

**Morgan Kaunda**

*University of Zambia, Lusaka, Zambia*  
*kaundamorgan93@gmail.com*

**Tryson Yangailo**

*University of Zambia, Lusaka, Zambia*  
*ytryson@yahoo.com*

**Purpose:** This research study examined the fit of top leadership commitment in mediating the relationship between employee motivation and employee performance in the railway sector. The study attempted to fill the gap in the literature by providing more insight into the nature of the relationship between employee motivation and performance.

**Study design/methodology/approach:** The study adopted a quantitative research approach with sample data collected from 337 TAZARA employees. Validity, reliability and model fit were tested using factor analysis, principal component analysis and regression analysis in Jamovi software.

**Findings:** The results show a significant positive relationship between employee motivation and employee performance and between top leadership commitment and employee performance. Top leadership commitment was found to fully mediate the relationship between employee motivation and employee performance.

**Originality/value:** This was the first study to empirically test the mediating effect of top leadership commitment on employee motivation and performance in the railway sector. The research findings may help decision-makers in the railway industry to be committed to motivating employees to promote high performance in their organisations. Researchers are also strongly encouraged to replicate this research in other sectors and are advised to include other contingency variables as moderating variables.

## Introduction

In general, motivation acts as a conduit for the employee's intrinsic or extrinsic job satisfaction, which significantly impacts the employee's performance and benefit to the organisation. Although motivation and performance are intertwined, the concepts have sometimes been used interchangeably. Nevertheless, it is understandable that satisfied and high-performing employees in the organisation will rarely change jobs in the sector if the factors influencing motivation continue to improve and do not deteriorate below the expectation of employee morale.

However, despite the rapid emergence of cultural diversity in the 21st century, psychologist researchers have revealed the concept of motivation and employee performance with empirical evidence that helps business managers to run organisations with exceptional management skills that fit in with employee behaviour. According to Heckhausen's (1977) assertion, Lewin's cognitive process model assumes, among other factors such as value, valance and expectancy, as fundamental drivers to achieve motivation which evaluates the level of performance.

The phenomena of employee motivation are of paramount importance in determining the level of employee performance in an organisation. However, there is no one best-fit approach of theories to be applied in all organisations. Conversely, motivation research authors have argued on numerous theories and models raising red flags that it is not a guarantee that an organisation can adopt any model contrary to its strategic plan. However, there should be a paradigm shift

for organisations to try several different or hybrid motivational models that will eventually be acceptable to achieve employee performance (Kanfer, 1990).

The concept of motivation and performance has remained a critical aspect of business management since the late 90s until now. According to Benabou and Tirole (2006), the term motivation derives from the Latin word *motus*, which means to influence, move and affect individual psychological processes in achieving expected results. The concept of employee motivation continues to be explored by various researchers in pursuit of sustaining organisations with an understanding of employee behaviour as positive enforcement.

Achieving the desired goals remains a challenge for many organisations due to employees' dynamic and unpredictable behaviour. In any case, the empirical theories of employee motivation and performance originate from behaviourists and psychologists, such as the Hawthorn Effect study at the Western Electricity Company in Chicago, United States, to which Elton Mayo was the figure of studies influencing management at the plant to investigate factors affecting productivity (Wickström & Bendix, 2000). More often than motivation, employee performance is analysed in the research, according to Motowidlo et al. (1997), who define performance as the total expected value resulting from employee behaviour over time.

### ***Purpose of the Study***

The phenomenon of managing an organisation's workforce by human resource practitioners to achieve the company's corporate vision and objectives is receiving increasing attention globally with a rationale to stimulate employee wellbeing that enhances the organisation's performance and individual goal achievement. Ideally, motivation plays a pivotal role in employees. As such, there is more to understanding the psychological behaviour of employees in organisations such as TAZARA to ascertain what stimulates them to go the extra mile when assigned tasks or duties. In addition, motivation affects employees differently in the organisation despite the cultural aspects of employee behaviour, many of which can be linked to material and non-material benefits.

Indeed, an organisation such as TAZARA, which is owned by two states, Tanzania and Zambia, and which manages two ethnic groups of employees with different cultural behaviours, requires integrated efforts that go beyond a motivated workforce in the railway sector, because what is perceived as a motivating factor in Tanzania may be the demotivating factor for Zambian employees, which subsequently affects employee performance. Hence, the need to conduct a study to investigate the impact of motivation on employee performance in TAZARA as the organisation has existed for 47 years and is still operating as a unitary company. On the other hand, the railway sector has received little research attention (Yangailo & Kaunda, 2021; Yangailo et al., 2023; Yangailo & Mkandawire, 2023; Yangailo, 2022), particularly in Africa, hence the relevance of this study.

### ***General Objective***

The principal objective of this study is to establish the impact of motivation on employee performance in the railway sector.

### ***Significance of the study***

This study is relevant to human resource practitioners and the organisation's management team because employee performance is of fundamental value to the organisation's stability in the world of commerce regardless of the market, whether monopolistic or homogeneous. However, the strategic plans and policies of human resources should be explicit on the task/duties of employees with a sound performance management system (PMS) that can instil trust and influence a workable relationship between supervisors and subordinates. In addition, the

environment where the employee operates matters the most, irrespective of the concern enshrined in the labour laws.

Conversely, due to rapid dynamic changes in technology, HR should be proactive in psychologically motivating employees in the section or units whose jobs are becoming obsolete due to technology by ensuring that alternative tasks are created through training techniques such as on-the-job training.

### ***Specific Objective***

Based on the general objective, the specific objectives of this study were as follows:

1. To determine whether employee motivation has a positive significant effect on employee performance in TAZARA.
2. To determine whether top leadership commitment has a mediating effect on the relationship between employee motivation and employee performance.

## **Literature Review**

### ***Motivation and Employee Performance***

In the 21st century, companies constantly strive to retain and attract the best talent due to increased competition in emerging markets, both in regional and international trade, as well as rapid technological advances in production. However, the question that needs to be answered is how employees are satisfied to improve performance, which leads to high organisational productivity.

Atkinson (1964) asserted that motivation is the drive that led stimulus on the direction, force and persistence of action. However, the relationship between the employer and the employee should be reciprocal to enable the employees to realise their full potential, eventually turning them into the organisation's royalty because unsatisfied employees tend to move to new jobs with rival competitors in the industry (Rajhans, 2012).

Of course, it is assumed here that motivated and royal employees will strive to appreciate the mission and goals of the company, including the job and willingly perform beyond the expectation. It is understandable that as the employees' morale decreases, so performs with high errors or defects, leading to higher levels of waste materials and accidents (Rajhans, 2012).

### ***Intrinsic and Extrinsic Motivation***

The two concepts of motivation (intrinsic and extrinsic) are intertwined because both types of motivation result in stimuli such as autonomy, a sense of accomplishment, job security, benefits and vacations (Casey et al., 2012).

Intrinsic motivation refers to any activity for itself, with the pleasure and satisfaction derived from the individual's participation (Deci, 1975). Ideally, intrinsic motivation plays a key role in achievement, competence and academic learning in universities and other learning institutions because intrinsic motivation stems from the innate psychological need for competence and self-determination (Deci & Ryan, 1985).

However, numerous pieces of literature advocating intrinsic motivation reveal the presence of three categories of intrinsic motivation, namely, to know, to experience stimulation, and to achieve possessions, although worth knowing is that intrinsic motivation imparts several hypotheses such as exploration, curiosity, intellectuality achievement of knowledge, and inspiration of learning (Gottfried, 1985). Conversely, researchers in the field of psychology as well as in educational research development, have universally denoted the achievement of intrinsic motivation and suggested that individual interaction with the environment creates a

unique influence to accomplish desired goals of an individual employee (Deci & Ryan, 1985; Deci, 1975).

Extrinsic motivation, as the term suggests, implies external reward and has been defined as influencing a wide range of human behaviours as a means to an end rather than for their own sake (Deci, 1975). While extrinsic motivation is generally used to entice employees, in modern business management, looking at the current status of their employees, managers are fully aware of the significant magnitude of intrinsic and extrinsic motivation because the two types of motivation affect the success of the company if the company's goals are not appropriately aligned. However, companies can control extrinsic motivation by offering benefits and perks as the best method of instilling employees to perform (Ayub, 2010).

Employers need to ensure that employees are aware of the factors that need to be met in order to obtain these extrinsic motivations, and in reality, this will help in the accurate use of an employee's skills in the workplace, even if it is stated with a guideline that an individual initiates internalisation with the reasons for his or her actions (Turner, 2017). Likewise, the extent to which the behaviour is evaluated and judged is of essential value to the individual, especially since the choice is perceived as one's own, with the extrinsic motives regulated as a complete identification goal (Ayub, 2010).

### ***Performance Management System***

Performance Management System (PMS) is a comprehensive key functional Human Resources (HR) activity in the company, given that employees play a critical role in achieving the company's mission and objectives. Undeniably, evaluating employee performance keeps track of the employee's behaviour and identifies appropriate mechanism approaches to enhance performance. Therefore, managers must understand PMS to accurately measure employee motivation (Kleingeld, 2009). A valid and reliable performance appraisal system is expected to provide employees and managers with data about their strengths and development needs. Suppose this data is used to reinforce employees' strengths and to plan and provide developmental assignments in areas of need. In that case, one might also expect improvements in morale, motivation and productivity (Mani, 2002). Most interesting is the fact that numerous researchers and scholars in the field of business management have provided significant vital literature reviews on motivation and employee performance. Presumably, understanding the conceptual approach of motivation and performance had immensely improved managers and supervisors to better understand the behaviour of employees in the world of work.

### ***Leadership Commitment and Motivation***

In practical terms, managers are important in creating a conducive work environment with ambitious top management commitment. Since then, psychologists have agonised over the theories of motivation that drive employees to be productive in organisations. Undoubtedly, McGregor's theory Y and X, established in the 1960s, even though it has been criticised, is largely related to employee motivation and management commitment to the organisation's workforce. The common assumption is that theory X employees avoid work and dislike responsibility, and in turn, management enforces rules and punishments, while theory Y employees work happily hard with autonomy (Zeiger, 2019).

### ***Empirical Review***

#### ***Employee motivation and performance***

Paais and Pattiruhu (2020) investigated the impact of motivation, culture and leadership on job satisfaction and employee performance in Indonesia. The study's results showed a positive significant correlation between motivation and performance.

A study conducted by Abdi Mohamud et al. (2017) in Somalia investigated the effect of motivation on employee performance in a telecommunication company. The results of the study showed that there was a good positive relationship between motivation and employee performance.

In Pakistan, Shahzadi et al. (2014) conducted a study to determine the effect of employee motivation on employee performance using data from teachers in public and private schools in Pakistan. The study found, among other things, a positive significant relationship between employee motivation and employee performance.

Recent literature shows that employee motivation is positively related to employee performance. Therefore, the following hypothesis was adopted for this particular study:

*Hypothesis 1: Employee motivation has a positive significant impact on employee performance in TAZARA.*

#### *Leadership and Motivation*

Robescu and Iancu (2016) argue that the language and style leaders use determine how positive or negative employee motivation is.

Sougui et al. (2016) conducted a study in Malaysia in the telecommunication sector to determine the impact of leadership on employee motivation using a literature review. The study found that leadership style determines whether employees can be motivated negatively or positively.

From the literature, it is clear that the type of leadership style determines whether leadership is positively or negatively related to employee motivation; therefore, the following hypothesis was adopted for this research:

*Hypothesis 2: There is a positive significant relationship between employee motivation and top leadership commitment.*

#### *Leadership and Performance*

Pancasila et al. (2020) conducted a study to determine the effect of leadership and motivation on job satisfaction and its impact on employee performance in Indonesia. The study shows that both leadership and motivation significantly impact employee performance, although the impact of leadership is more significant than motivation. A study by Top et al. (2020) investigated the impact of leadership on employee performance in the Iraq Kurdistan region. The study found that leadership is positively related to performance. Maina and Awuor (2020) investigated the impact of leadership commitment on performance in concrete products manufacturing companies in Kenya. The results revealed a positive relationship between leadership commitment and performance. A study conducted by Wang et al. (2019) on the effect of spiritual leadership on employee effectiveness in New Zealand found that spiritual leadership was positively related to employee performance, innovative behaviour and knowledge-sharing behaviour.

Some recent literature presents that leadership commitment is positively related to employee performance; therefore, for this particular study, the following hypothesis was adopted:

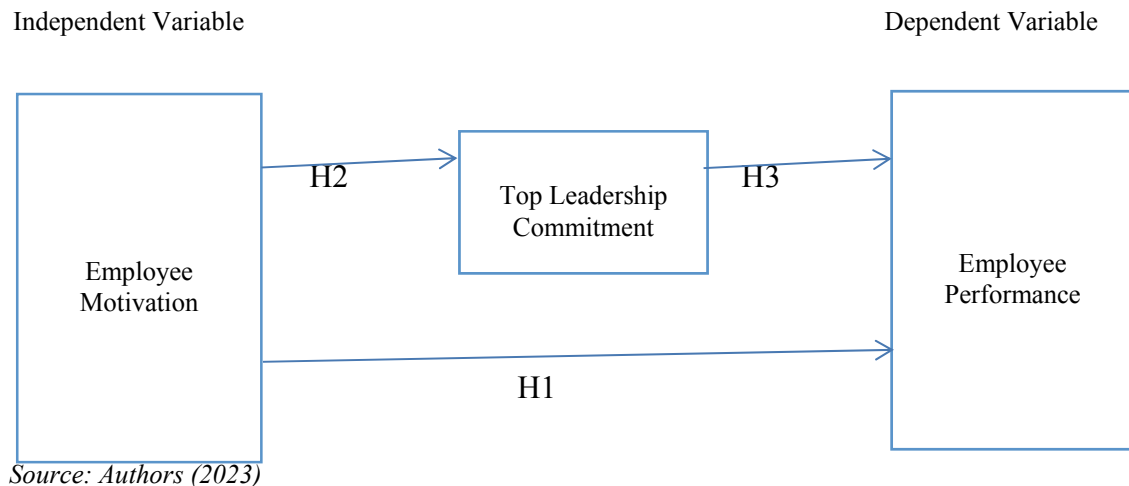
*Hypothesis 3: There is a positive significant relationship between top leadership commitment and employee performance.*

#### *Motivation, Leadership and Performance*

Based on the above literature, it is evident that there is a relationship between employee motivation, top leadership commitment and employee performance. However, no study has

empirically tested how top leadership commitment mediates (influences) the relationship between employee motivation and employee performance. Therefore, in order to conduct this test, the following hypothesis was proposed in this study:

Hypothesis 4: *There is a mediating effect of top leadership commitment on the relationship between employee motivation and employee performance.*



**Fig: Hypothesised Model**

## Methodology

The study used a quantitative method to investigate employee motivation for performance. Data was analysed using Jamovi software for quantitative analysis. The target population for this research study consists of TAZARA employees in the United Republic of Tanzania and the Republic of Zambia, including the Lusaka Area Office in the Zambia Region and the Dodoma Liaison Office in the Tanzania Region.

The organisation currently employs 2,364 staff, of which 1,200 are Tanzanians and 1,164 are Zambians. The population was 2,364 employees of TAZARA, with 50.8% representing Tanzanians and 49.2% representing Zambians and sampled 337 employees using random sampling with corresponding 50.8% and 49% appropriation, respectively, for the questionnaire survey. The sample of 337 against the population of 2,364, according to Krejcie and Morgan (1970), met the recommended minimum sample size for scientific research for quantitative analysis (see Krejcie & Morgan's formula below):

Using the famous Krejcie and Morgan (1970) formula, this study required only a sample size of 331 out of the population of 2,364, as shown below:

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

$\chi^2$  is the chi-square for 1 degree of freedom at a 95% confidence level at 3.841

N is the population size

e is the degree of accuracy which is expressed as (0.05)

P is the population proportion that is assumed to be 0.5

$$n = 3.841 \times 2,364 \times 0.5 \times (1-0.5) / (0.05 \times 0.05 \times (2,364-1) + 3.841 \times 0.5 \times (1-0.5)) = 330.5349$$

## Data Presentation and Analysis

The analysis of this study was based on statistical methods using Jamovi software. The results are presented as descriptive statistics, figures, tables and hypothesis tests.

### *Response Rate*

Of the 500 questionnaires distributed to the target population of 2,364, 337 participants (respondents) completed the questionnaire, representing 67.4%.

### *Demographic Characteristics*

The demographic profile of the 337 respondents who completed and submitted the questionnaire for this study in terms of gender, age, education and experience is presented in Table 1.

**Table 1 Demographic Profile**

Description	Frequency	Percentage
<b>Gender</b>		
Female	118	35
Male	219	65
<b>Total</b>	<b>337</b>	<b>100</b>
<b>Age</b>		
21-25	47	13.9
26-35	86	25.5
36-45	95	28.2
Above 45	109	32.3
<b>Total</b>	<b>337</b>	<b>100</b>
<b>Education</b>		
Certificate	79	23.4
Diploma	121	35.9
Undergraduate	111	32.9
Postgraduate	26	7.7
<b>Total</b>	<b>337</b>	<b>100</b>

*Source: Author(2023)*

Of the 337 respondents, 118(35%) were female and 219(65%) were male. In terms of age, out of the 337 respondents, 109(32.3%) were over 45 years old, 95(28.2%) were between 36 and 45 years old, 86(25.5%) were between 26 and 35 years old, and 47(13.9%) were between 21 and 25 years old. In terms of education, out of 337 respondents, 121(35.9%) had a diploma, 111(32.9%) had a bachelor's degree, 79(23.4%) had a certificate and 26(7.7%) had a postgraduate degree.

### *Descriptive Statistics*

Three constructs' mean, kurtosis, skewness, and standard deviation are presented in Table 2.

**Table 2 Constructs of Mean, Kurtosis and Skewness (N = 337)**

	<b>Employee Performance</b>	<b>Employee Motivation</b>	<b>Top-Leadership Commitment</b>
Mean	3.14	3.31	2.69
Median	3.14	3.30	2.60
Standard deviation	0.647	0.566	0.812
IQR	0.857	0.700	1.10
Range	3.29	3.70	3.80
Minimum	1.43	1.30	1.00
Maximum	4.71	5.00	4.80
Skewness	0.160	-0.453	0.289
Std. error skewness	0.133	0.133	0.133
Kurtosis	-0.219	0.720	-0.199
Std. error kurtosis	0.265	0.265	0.266
Shapiro-Wilk W	0.989	0.982	0.984
Shapiro-Wilk p	0.014	< .001	< .001

Source: Authors (2023)

The mean values for the constructs show that the participants responded favourably, with kurtosis and skewness within the recommended threshold of -2 to +2, showing no serious deviation from normality for all three constructs (employee performance, employee motivation and top management commitment).

### ***Reliability and Validity***

The sample size of 337 met the recommended minimum of 150 cases required to conduct principal component analysis (Fan et al., 2008) and was, therefore, adequate. The instrument factorability of 20 items was assessed and evaluated, and it was found that all items correlated at least three points (0.3) with another item, indicating good factorability. The measure of sampling adequacy was 0.716 above the value of 0.6. Bartlett's sphericity test was significant ( $\chi^2(231) = 3.359, p < .001$ ). Principal components analysis was appropriate for the 22 items, as shown in Table 3.

**Table 3 Test results Barlett and Kaiser-Meyer-Olkin**

Kaiser-Meyer-Olkin and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.716
Bartlett's Test of Sphericity	Approx. Chi-Square	3359
	Degrees of freedom	231
	Significance	.000

Computation by Jamovi

In order to obtain reliable measures to determine a good internal fit and consistency, Cronbach alpha was calculated for the three-construct scale. The instrument alpha coefficients were between .630 and .728. The alpha coefficient for employee motivation scales was .695, the alpha coefficient for employee performance scales was .630, and the alpha coefficient for top



leadership commitment scales was .728. The Cronbach alpha coefficients for the three constructs were within the acceptable recommended range of above 0.6 (Gallais et al., 2017; Straub et al., 2004; Taherdoost, 2016), as shown in Table 4.

**Table 4: Test Results of Cronbach Alpha**

Items	Cronbach's Alpha	Number of Items	Comment
Overall	.783	22	Accepted
Employee Motivation	.695	10	Accepted
Employee Performance	.630	7	Accepted
Top Leadership Commitment	.728	5	Accepted

*Jamovi computation*

### **Linearity Assumption**

The linearity assumption was verified by calculating Pearson correlation coefficients, as shown in Table 5.

The results have shown significant positive correlations between employee performance, employee motivation and top leadership commitment. Employee performance and top leadership commitment have a positive significant Pearson coefficient of .606, and employee motivation and top leadership commitment have a positive significant Pearson correlation coefficient of .280. Employee performance and employee motivation have a positive significant Pearson correlation coefficient of .209. The correlations have also shown no multicollinearity problems, as the correlations are all below the acceptable required cut-off of .85 (Hair et al., 2010).

**Table 5: Correlation Matrix**

		Top-Leadership Commitment	Employee Performance	Employee Motivation
Top Leadership Commitment	Pearson's r	—		
	p-value	—		
	95% CI Upper	—		
	95% CI Lower	—		
Employee Performance	Pearson's r	0.606	***	—
	p-value	< .001	—	—
	95% CI Upper	0.670	—	—
	95% CI Lower	0.533	—	—
Employee Motivation	Pearson's r	0.280	***	0.209
	p-value	< .001		< .001
	95% CI Upper	0.376		0.309

**Table 5: Correlation Matrix**

		Top-Leadership Commitment	Employee Performance	Employee Motivation
95% Lower	CI	0.178	0.105	—

Note. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

*Jamovi computation*

### ***Fitness of the Model***

A regression model test was carried out before estimating this study's proposed model.

#### *Overall Regression Model Test*

Regression models were tested on the following hypotheses:

$H_0 : \beta_1 = \beta_2 = \beta_3 \dots \dots \dots \beta_i = 0$

$H_a$ : At least one coefficient is not equal to zero

As shown in Table 6, significant solid relationships existed between the constructs based on the regression analyses conducted. The first model proposing the effect of employee motivation on employee performance presented a fit with significant values of  $R(0.209)$ ,  $R^2(0.0438)$  and a significant F-value of 15.3. This shows that employee motivation explains 4% of the variation in employee performance. The second model that proposed the effect of top leadership commitment on employee performance shows good fit significant with values of  $R(0.606)$ ,  $R^2(0.367)$  and a significant F-value of 193. This indicates that top leadership commitment explains 37% of the variation in employee performance. The third model that suggests the effect of top leadership commitment on employee performance shows a good fit with significant values of  $R(0.280)$ ,  $R^2(0.0783)$  and a significant F-value of 28.3. This indicates that top leadership commitment explains 8% of the variation in employee motivation.

**Table 6: Summary of Regression Model Fit Measure**

Model		R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Overall Model Test	
					F	P
1	EM predicting EP	0.209	0.0438	0.0410	15.3	< .001
2	TLC predicting EP	0.606	0.367	0.365	193	< .001
3	TLC predicting EM	0.280	0.0783	0.0755	28.3	< .001

EM= Employee Motivation  
TLC = Top Leadership Commitment  
EP= Employee Performance

*Jamovi computation*

### ***Hypotheses Tests***

In this study, the four hypotheses regarding the direct and mediation effects were tested. Tables 7 and 8 present the results of the tests carried out.

**Table 7 Model Path and Mediation Estimates**

Mediation Estimates

Effect	Label	Estimate	SE	95% Confidence Interval		Z	P	% Mediation
				Lower	Upper			
Indirect	$a \times b$	0.1992	0.0388	0.1232	0.275	5.136	< .001	91.91
Direct	C	0.0175	0.0516	-0.0835	0.119	0.340	0.734	8.09
Total	$c + a \times b$	0.2167	0.0609	0.0973	0.336	3.558	< .001	100.00

Path Estimates

	Label	Estimate	SE	95% Confidence Interval		Z	p
				Lower	Upper		
Employee Motivation → Top Leadership Commitment	a	0.4216	0.0757	0.2733	0.570	5.572	< .001
Top Leadership Commitment → Employee Performance	b	0.4724	0.0357	0.4025	0.542	13.244	< .001
Employee Motivation → Employee Performance	c	0.0175	0.0516	-0.0835	0.119	0.340	0.734

*Jamovi computation*

**Table 8: Hypotheses**

No	Hypothesis	Results
1.	<b>Hypothesis 1:</b> Employee motivation has a positive significant impact on employee performance in TAZARA	Supported

2.	<b>Hypothesis 2:</b> There is a positive significant relationship between employee motivation and top leadership commitment	Supported
3.	<b>Hypothesis 3:</b> There is a positive significant relationship between top leadership commitment and employee performance	Supported
4.	<b>Hypothesis 4:</b> There is a mediating effect of top leadership commitment on the relationship between employee motivation and employee performance	Supported

Source: Authors (2023)

The first hypothesis (H1), which is the overall effect that proposes that employee motivation has a positive significant effect on employee performance in TAZARA, is statistically positively significant at ( $\gamma = .2167$ ,  $p < .001$ ); therefore, hypothesis 1 is supported. However, it is noteworthy that when the mediation of top leadership commitment occurs, the relationship between employee motivation and employee performance becomes statistically insignificant as a direct effect ( $\gamma = .0175$ ,  $p > .05$ ).

The second hypothesis proposed that top leadership commitment and employee motivation have a significant positive effect on quality outcomes is statistically significant ( $\gamma = .4216$ ,  $p < .001$ ); therefore, hypothesis 2 is supported. The third hypothesis that top leadership commitment has a significant positive effect on employee performance is statistically significant ( $\gamma = .4724$ ,  $p < .001$ ); therefore, hypothesis 3 is supported.

### ***Mediating effect Analysis***

The indirect effect of employee motivation on employee performance through top leadership commitment is statistically significant ( $p < .001$ ,  $\gamma = 0.1992$ ; ratio effect = 0.91.91). This is a full mediation effect of top leadership commitment as the direct effect after mediation is statistically insignificant ( $\gamma = .0175$ ,  $p > .05$ ); therefore, hypothesis 4 is supported.

Overall, the model of this study has shown that top leadership commitment fully mediates the relationship between employee motivation and employee performance in TAZARA.

### **Discussion**

The results have shown that among the three practices that are variables of this study, employee motivation is the most implemented in TAZARA, followed by employee performance and then top management commitment. The results have also shown that most employees are males compared to females. The results also showed that most employees are over the age of 45, followed by those between the ages of 36 and 45. Then those between 26 and 35 years, and those between 21 and 25 years. The results also showed that most employees have a diploma, followed by those with a bachelor's degree, then those with a certificate and then those with a postgraduate degree. Conversely, the employees with skills and experience are between 36 and 45 years old and have been with the company for longer period of time.

Regarding determining whether employee motivation has a positive significant effect on employee performance in TAZARA, this study confirms and supports that employee motivation has a positive significant effect on performance. This is very consistent with some previous studies that revealed that employee motivation has a positive impact on performance (see Kuswati, 2020; Paais & Pattiruhu, 2020; Pancasila et al., 2020; van der Kolk et al., 2019; Abdi Mohamud et al., 2017; Robescu & Iancu, 2016; Shahzadi et al., 2014).

This study has also shown a positive, significant relationship between employee motivation and top leadership commitment. This is consistent with several studies that have linked employee motivation to leadership commitment (see Sougui et al., 2016).

In determining whether there is a positive significant relationship between top leadership commitment and employee performance, this study presents that top leadership commitment significantly impacts employee performance. This is consistent with studies that have also presented that leadership commitment has a significant impact on performance (see Pancasila et al., 2020; Maina & Awuor, 2020; Top et al., 2020; Wang et al., 2019; Nasomboon, 2014).

The study also investigated whether top leadership commitment mediates the relationship between employee motivation and employee performance. The results showed that top leadership commitment fully mediated the relationship between employee motivation and employee performance. This is the first study to examine this relationship in the railway sector in the African context. This major theoretical contribution to the literature needs to be replicated in other industrial sectors.

### ***Theoretical Managerial Implications***

The findings of this research study are relevant to management practice. The results show the complete (full) mediation effect of top leadership commitment on the relationship between employee motivation and employee performance. This means that leadership commitment is an important element in employee motivation that promotes higher employee performance. The results showed that employee performance would be low in the absence of leadership commitment. Employee morale would be boosted to enable them to perform well, provided leadership commitment exists.

Leadership commitment can significantly impact performance because it sets the tone for the organisation and can inspire employees to work harder and more effectively to achieve goals. A leader who is committed to the success of his or her team is more likely to inspire high performance because he or she sets a positive example for the team and helps to create a culture of excellence.

### **Conclusions**

This study is the first to examine the relationship between employee motivation, top leadership commitment and employee performance in the railway sector. The study found that top leadership commitment fully mediates the relationship between employee motivation and employee performance in TAZARA.

Top leadership commitment plays a full (complete) mediating role in the association between employee motivation and employee performance in TAZARA. The study provides empirical evidence on the nature of the relationship between employee motivation and employee performance. This research has empirically demonstrated that top leadership commitment is a relevant element in employee motivation as it helps an organisation improve employee performance, especially in this dynamic competitive environment.

### ***Future Research***

It is recommended that similar studies are carried out in other companies and sectors.

### **References**

- Abdi Mohamud, S., Ibrahim, A. A., & Hussein, J. M. (2017). The effect of motivation on employee performance: Case study in Hormuud company in Mogadishu Somalia. *International Journal of Development Research*, 9(11), 17009-17016.
- Atkinson, J. W. (1964). *An Introduction to Motivation*. New York: American Book-Van Nostrand-Reinhold.
- Ayub, N. (2010). *Effect of intrinsic and extrinsic motivation on academic performance*. Pakistan business review, 8(1), 363-372.

- Benabou, R., & Tirole, J. (2006). *Incentives and prosocial behavior*. The American economic review, 96(5), 1652-1678.
- Casey, R. J., Hilton, R., & Robbins, J. (2012). *A comparison of motivation of workers in the United States versus Nicaragua and Guatemala utilising the Hackman and Oldham job characteristics model*. International Journal of Business & Public Administration, 9, 39–59.
- Deci, E. L. (1975). *Intrinsic motivation*. New York: Plenum Press.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Fan, K., O’Sullivan, C., Brabazon, A., & O’Neill, M. (2008), “Non-linear principal component analysis of the implied volatility smile using a quantum-inspired evolutionary algorithm” In *Natural computing in computational finance*, Vol.100, pp. 89-107, Springer, Berlin, Heidelberg. DOI: 10.1007/978-3-540-77477-8\_6
- Gallais, B., Gagnon, C., Forgues, G., Côté, I., & Laberge, L. (2017). Further evidence for the reliability and validity of the Fatigue and Daytime Sleepiness Scale. *Journal of the neurological sciences*, 375, 23-26.
- Gottfried, A. W. (1985). *Measures of socioeconomic status in child development research: Data and recommendations*. Merrill Palmer Quarterly, 31, 85–92.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Canonical correlation: A supplement to multivariate data analysis. *Multivariate Data Analysis: A Global Perspective, 7th ed.; Pearson Prentice Hall Publishing: Upper Saddle River, NJ, USA*.
- Heckhausen, H. (1977). *Achievement motivation and its constructs: A cognitive model*. Motivation and emotion, 1(4), 283-329.
- Kanfer, R. (1990). *Motivation theory and industrial and organisational psychology*. Handbook of industrial and organisational psychology, 1(2), 75-130.
- Kleingeld, P. A. M. (2009). *Performance Management Systems: A global perspective*. European Journal of Work and Organizational Psychology, 18, 503-506.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- Kuswati, Y. (2020). The effect of motivation on employee performance. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 3(2), 995-1002.
- Maina, K. C., & Awuor, E. (2020). Leadership commitment and performance of QMS in concrete products manufacturing companies in Kenya. *International Academic Journal of Innovation, Leadership and Entrepreneurship*, 2(3), 80-92.
- Mani, B. G. (2002). *Performance appraisal systems, productivity, and motivation: A case study*. Public Personnel Management, 31(2), 141-159.
- McGregor, D. (1960). Theory X and theory Y. *Organization theory*, 358(374), 5.
- Motowidlo, S., Borman, W., & Schmidt, N. (1997). A theory of individual differences in task and contextual performance. *Human Performance*, 10, 71-83
- Nasomboon, B. (2014). The relationship among leadership commitment, organisational performance, and employee engagement. *International Business Research*, 7(9), 77.
- Paais, M., & Pattiruhu, J. R. (2020). Effect of motivation, leadership, and organisational culture on satisfaction and employee performance. *The Journal of Asian Finance, Economics and Business*, 7(8), 577-588.
- Pancasila, I., Haryono, S., & Sulistyono, B. A. (2020). Effects of work motivation and leadership toward work satisfaction and employee performance: Evidence from Indonesia. *The Journal of Asian Finance, Economics and Business*, 7(6), 387-397.
- Rajhans, K. (2012). *Effective organisational communication: A key to employee motivation and performance*. Interscience Management Review, 2(2), 81-85.
- Robescu, O., & Iancu, A. G. (2016). The effects of motivation on employees performance in organisations. *Valahian Journal of Economic Studies*, 7(2), 49-56.
- Shahzadi, I., Javed, A., Pirzada, S. S., Nasreen, S., & Khanam, F. (2014). Impact of employee motivation on employee performance. *European Journal of Business and Management*, 6(23), 159-166.
- Sougui, A. O., Bon, A. T., Mahamat, M. A., & Hassan, H. M. H. (2016). The impact of leadership on employee motivation in Malaysian telecommunication sector. *Galore International Journal of Applied Sciences and Humanities*, 1(1), 59-68.
- Straub, D., Boudreau, M. C., & Gefen, D. (2004). Validation guidelines for IS positivist research. *Communications of the Association for Information Systems*, 13(1), 24.
- Taherdoost, H. (2016). Validity and reliability of the research instrument; how to test the validation of a questionnaire/survey in a research. *How to test the validation of a questionnaire/survey in a research (August 10, 2016)*.
- Top, C., Abdullah, B. M. S., & Faraj, A. H. M. (2020). Transformational leadership impact on employees performance. *Eurasian Journal of Management & Social Sciences*, 1(1), 49-59.

- Turner, A. (2017). *How does intrinsic and extrinsic motivation drive performance culture in organisations?* Cogent Education, 4(1), 1337543.
- van der Kolk, B., van Veen-Dirks, P. M., & ter Bogt, H. J. (2019). The impact of management control on employee motivation and performance in the public sector. *European Accounting Review*, 28(5), 901-928.
- Wang, M., Guo, T., Ni, Y., Shang, S., & Tang, Z. (2019). The effect of spiritual leadership on employee effectiveness: An intrinsic motivation perspective. *Frontiers in Psychology*, 9, 2627.
- Wickström, G., & Bendix, T. (2000). *The "Hawthorne effect"—what did the original Hawthorne studies actually show?* Scandinavian journal of work, environment & health, 363-367.
- Yangailo, T. (2022). Globalisation on The Railway Transport Sector. *International Research Journal of Business Studies*, 15(3).
- Yangailo, T., & Kaunda, M. (2021). Total quality management a modern key to managerial effectiveness. *LBS Journal of Management & Research*, 19(2), 91-102.
- Yangailo, T., & Mkandawire, R. (2023). Assessing the influence of education and training on important innovations through quality results: the case of railway sector. *International Journal of Knowledge Management in Tourism and Hospitality*, 3(1), 31-49.
- Yangailo, T., Kabela, J., & Turyatunga, H. (2023). The Impact of Total Quality Management Practices on Productivity in the Railway Sector in African Context. *Proceedings on Engineering*, 5(1), 177-188.
- Zeiger, S. (2019, January 31). *Theories on motivation in organisations and management*. Small Business - Chron.com. Retrieved from <https://smallbusiness.chron.com/theories-motivation-organizations-management-25221.html>

## Appendix A. Confirmatory Factor Analysis

### Principal Component Analysis

	Component Loadings			Uniqueness
	Component			
	1	2	3	
IM1				0.911
IM2		0.646		0.540
IM3		0.505		0.662
IM4		0.548		0.695
IM5		0.479		0.712
EM1		0.495		0.743
EM2		0.618		0.613
EM3		0.492		0.586
EM4		0.558		0.677
EM5	0.431	0.305		0.716
EP1			0.620	0.601
EP2			0.441	0.760
EP3			0.323	0.839
EP4			0.641	0.588
EP5	0.337		0.454	0.680
EP6	0.832			0.286
EP7	0.778		0.360	0.263
TLC1	0.551			0.684
TLC2	0.506			0.655
TLC3	0.667			0.514
TLC4	0.813			0.311
TLC5	0.765		0.370	0.273

## Component Loadings

Component			
1	2	3	Uniqueness

Note. 'varimax' rotation was used

## Component Statistics

## Summary

Component	SS Loadings	% of Variance	Cumulative %
1	4.07	18.48	18.5
2	2.71	12.33	30.8
3	1.91	8.69	39.5

## Assumption Checks

## Bartlett's Test of Sphericity

$\chi^2$	Df	P
3359	231	< .001

## KMO Measure of Sampling Adequacy

	MSA
Overall	0.716
IM1	0.623
IM2	0.669
IM3	0.692
IM4	0.731
IM5	0.751
EM1	0.563
EM2	0.692
EM3	0.749
EM4	0.716
EM5	0.852
EP1	0.657
EP2	0.641
EP3	0.729
EP4	0.580
EP5	0.749
EP6	0.693



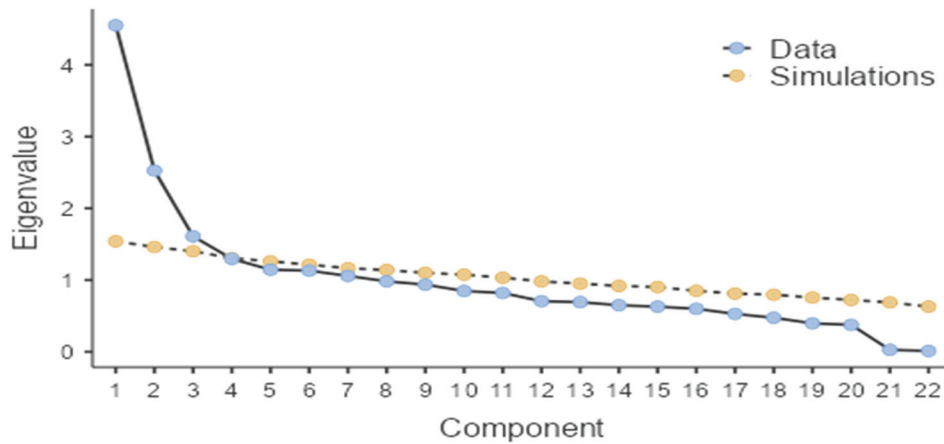
**KMO Measure of Sampling Adequacy**

	<b>MSA</b>
EP7	0.697
TLC1	0.771
TLC2	0.861
TLC3	0.891
TLC4	0.680
TLC5	0.692

**Eigenvalues**

Initial Eigenvalues			
<b>Component</b>	<b>Eigenvalue</b>	<b>% of Variance</b>	<b>Cumulative %</b>
1	4.5519	20.6906	20.7
2	2.5270	11.4866	32.2
3	1.6100	7.3181	39.5
4	1.2962	5.8917	45.4
5	1.1446	5.2025	50.6
6	1.1315	5.1431	55.7
7	1.0581	4.8094	60.5
8	0.9826	4.4664	65.0
9	0.9369	4.2585	69.3
10	0.8480	3.8544	73.1
11	0.8202	3.7283	76.8
12	0.7055	3.2070	80.1
13	0.6928	3.1489	83.2
14	0.6495	2.9521	86.2
15	0.6297	2.8621	89.0
16	0.5996	2.7253	91.7
17	0.5283	2.4014	94.1
18	0.4749	2.1588	96.3
19	0.3970	1.8044	98.1
20	0.3760	1.7091	99.8
21	0.0274	0.1244	99.9
22	0.0125	0.0567	100.0

**Appendix E. Plots****Scree Plot**



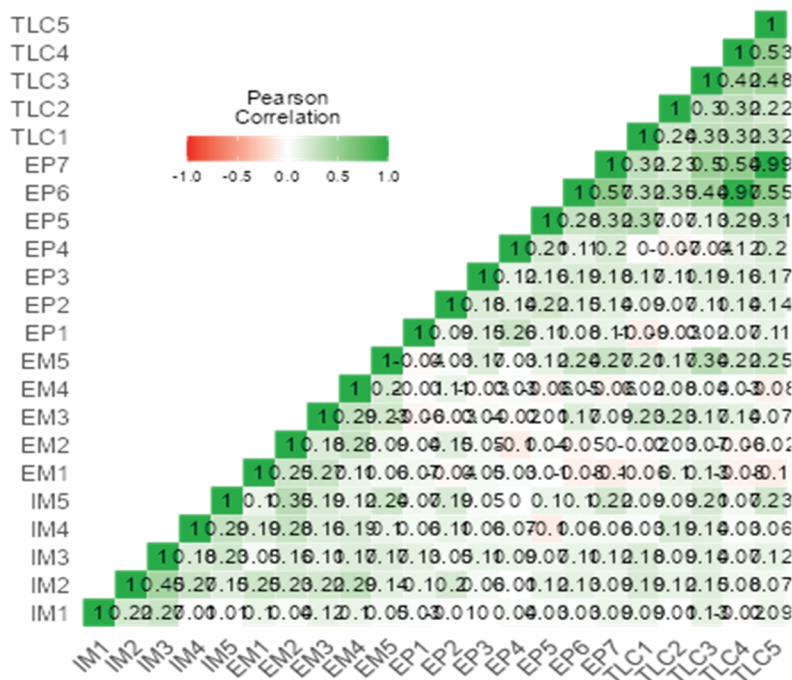
**Appendix F. Reliability and Validity Analysis**

**Overall Reliability Analysis**

Scale Reliability Statistics

	Mean	SD	Cronbach's $\alpha$
scale	3.11	0.480	0.783

**Correlation Heatmap**

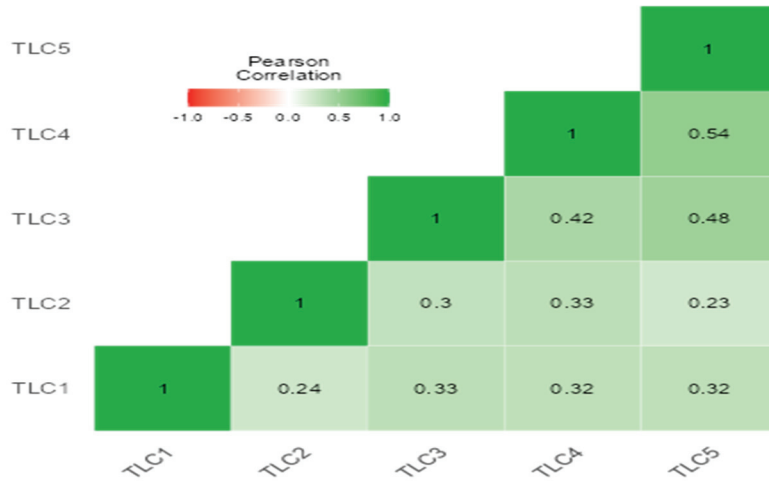


**Reliability Analysis of Top Leadership Commitment**

Scale Reliability Statistics

	Mean	SD	Cronbach's $\alpha$
scale	2.69	0.812	0.728

Correlation Heatmap

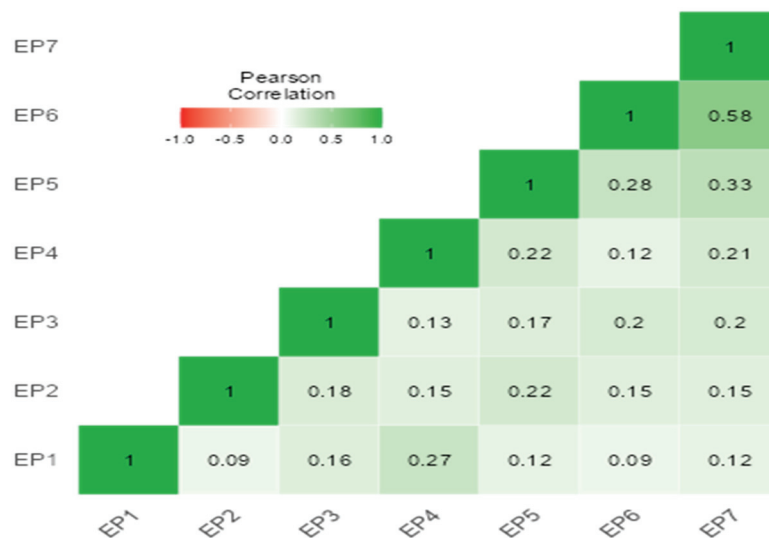


Reliability Analysis of Employee Performance

Scale Reliability Statistics

	Mean	SD	Cronbach's $\alpha$
scale	3.14	0.647	0.630

Correlation Heatmap



Reliability Analysis of Employee Motivation

