

The Influence of Leadership Approaches on Employee Innovative Work Behaviour among Employees of Public Sectors in Tanzania

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ABSTRACT

The study aimed to assess the impact of leadership styles on innovative work behaviour in the public sector. The study was conducted at Dar es Salaam Water and Sewerage Headquarters, a study sample of 211 respondents was drawn randomly from a study population of 446 employees using the Yamane formula. The research employed a quantitative approach and a descriptive-explanatory cross-sectional design. The results showed that transformational leadership was strongly associated with innovative work behaviour, with a β value of 54.8% and a p-value of <0.05 . Transactional leadership style had a β value of 55.6%, a p-value of <0.05 , and a favourable relationship with innovative work behaviour. Leader-member exchange had a moderate impact on innovative work behaviour at DAWASA, with a β value of 15.7% and a p-value of <0.05 . The study suggests that leaders and supervisors should have a comprehensive understanding of their subordinates' needs and priorities and foster an environment that promotes innovative thinking, enabling them to navigate opportunities and challenges effectively.

Keywords: Innovative Work Behaviour, Leadership, Transformational leadership, Transactional leadership, Leader member exchange.

INTRODUCTION

Ensuring the survival and success of public organizations in dynamic and competitive environments requires both employees to be innovative and managers and leaders to search for new ways to approach their businesses (AlEsa & Durugbo, 2021). Innovation is an indispensable factor in enabling organizations to adapt to rapid economic changes and gain a competitive advantage (Bos-Nehles et al., 2017). However, considerable attention must be paid to the driving factors of such needed innovation. Leadership approaches are the key determinant of organizational effectiveness through their influence on followers' behaviours in achieving goals (Neculae & David, 2017; Kark et al., 2018).

Innovative work behaviour (IWB) is the intentional behaviour of individuals to produce and implement new and useful ideas explicitly intended to benefit the individual, group, or organization (Bos-Nehles et al., 2017). Innovation at the workplace is also crucial for maintaining and sustaining organizational development as well as the success of any institution. IWB is conceived as a complex behaviour consisting of four interrelated sets of behavioural activities, namely problem recognition, idea exploration, idea generation, idea championing, and implementation (Khan et al., 2020).

According to McCann & Sparks (2019), a problem is initially identified, and the need to solve it is felt. Following that, a solution to this problem emerges in the form of an idea. The organization as a whole need to support and promote this idea. An idea can only be realized and put into action after that. Employees must be cognizant of issues during the idea generation process in order to develop innovations. On the other hand, at the implementation stage, staff members require leadership assistance in order to integrate ideas into

organizational procedures (Alheet et al., 2021). Therefore, innovative work behaviour can be described as being much more than just being creative, though it may also involve the development of ideas (Muksoud et al., 2022).

Current research has emphasized leadership as the most significant predictor of creative work behaviour (Kark et al., 2018). As a result, modern organizations have recognized the need for leaders who are capable of tackling difficult problems through creative behaviours. According to McCann and Sparks (2019), organizational leadership has a significant impact on how creative and innovative an individual performs. Managers must build leadership philosophies that support innovation and sustainability in public organizations as they continuously look for new ways to motivate staff. Hence, it is crucial to identify which leadership style enhances or promotes followers' innovative work behaviour (Kark et al., 2018). This calls for organizations to emphasize such behaviour, especially as the latter becomes one of the critical issues that might impede their survival (Alheet et al., 2021).

Transformational leadership (TL) is one of the main paths to innovation, creativity, and success in organizations. Transformational leadership (TL) plays a significant role in fostering employees' IWB to create and deliver new products or services. TL motivates employees to change, empowers and inspires them to step out of their comfort zone, and encourages teamwork to achieve a visualized new future (Al-Shammari et al., 2019). According to Alheet et al., (2021), transformational leaders are known for actively engaging their followers' value systems, which go beyond simple transactional agreements and have been demonstrated to improve organizational outcomes. A study by Al Ahmad et al., (2019) came to the conclusion that transformational leadership and innovation in the banking industry have a favorable, substantial association. Additionally, it was noted that while all of the leadership philosophies positively correlated with innovation performance when considered collectively, only the transformational leadership philosophies did so when considered individually. The findings may help to promote transformational leadership in order to foster innovation, enterprise survival, growth, and job creation, ultimately resulting in beneficial societal change (Ossai, 2021).

Reciprocally, transactional leadership, including contingent compensation and management-by-exception (both active and passive), was negatively correlated with organizational success (Afsar et al., (2018); Alheet et al., (2021). Some empirical studies have provided inconsistent findings. For example, Faraz et al., (2018) found that there is a positive and significant relationship between transactional leadership and employees' innovative behaviour.

Based on these contradictory findings and the fact that innovative behavior is complex, challenging, and unpredictable, there may be an intermediate variable that explains the relationship between transactional leadership and innovative work behavior. Therefore, this research will respond by examining leader-member exchange as a mediating variable.

Scholars have found that leader-member exchange(LMX) is particularly effective in promoting employee's innovative work behaviour, but it has been suggested that the relationship between leader-member exchange and creative outcomes is dependent on a host of factors and is likely to be more complicated than previously thought (Alheet et al., 2021). Given the importance of employees' innovative behaviour, researchers have examined whether it is possible to (positively) influence it through the supervisor-subordinate relationship.

According to LMX theory, the supervisor and the employee are in a continuous social exchange process. Saeed et al., (2019) proposed that the outcome of the leader-member exchange may not be as positive as intended for all employees. One possible difference that may stand out in this regard is levels of individuals' core self-evaluation (CSE), for the reason that they are essentially related to both innovative work behaviour and leader-member exchange (Chang et al., 2020).

Studies on the impact of leadership approaches on creative work practices are scarce in Tanzania; the majority of the studies that are accessible have shown a link between leadership styles and employee or organizational performance (Mwita and Mrema, 2023). The goal of this study is to fill the existing knowledge gap and add to

the body of knowledge regarding how much innovative work behaviour in the public sector is influenced by or affected by leadership approaches.

Statement of problem

Water is an essential resource for basic human survival, but today several cities and people lack access to both reliable and clean water. The Sustainable Development Goal (SDG) of sanitation for all by 2030 is increasingly elusive (Yap et al., 2023). Dar es Salaam city is undergoing rapid population growth and needs to improve its current water delivery system in order to provide water to the city's inhabitants. Water and sanitation are formally provided by Dar es Salaam Water Supply and Sanitation Authority (DAWASA), that is responsible for building and maintaining infrastructure and operating the water and sewer networks and service connections.

According to Serck and Nilsson (2019), the largest overall long-term challenge for DAWASA is to connect all the citizens in Dar es Salaam to a reliable and potable piped water and sewerage system. The most essential problem is that only a small percentage of the population is connected to the water supply network (Serck and Nilsson, 2019). But even those who are connected are often exposed to an unreliable water supply. Additionally, inefficient customer care is a problem for DAWASA since the complaints from the customers are not handled within time, the feedback is badly managed, and the billing and revenue collection management are poorly handled (Makoba et al., 2023)

The government has made some effort to address the aforementioned problems, including the change of leadership, but there is still minimal evidence that leadership approaches influence or affect employee innovative work behaviour at DAWASA as a public organization. DAWASA leaders are presidential appointees, and thus their ability to lead and influence workers innovative work behaviour is significant, which would sustain and guarantee their positions. Regardless of the fact that there is a strategic plan (SP) to implement, DAWASA still needs a leader that would be able to interpret the SP and enable the organization to attain the strategic objectives. In this sense, a leader's responsibility as it relates to influencing workers' innovative work behaviour might range from transactional to transformational and leader-member exchange.

Researchers Muksoud et al., (2022); Alheet et al., (2021); Kark et al., (2018); and McCann & Sparks (2019) from all around the world have agreed on the subject of how a leader's style affects employees' willingness to take risks and innovate. Some studies, Kark et al., (2018), Muksoud et al., (2022), and Alheet et al., (2021), were conducted concerning leadership behaviour and innovative work behaviour in Europe, Africa, and Asia, respectively. There is scarce literature concerning the influence of leadership approaches on innovative work behaviour in Tanzania's public organizations. This study is intended to bridge the existing gap in establishing the influence of leadership behaviour on workers' innovative behaviour in public organizations in Tanzania, with reference to DAWASA.

METHODS

The present investigation was carried out at the Dar es Salaam Water and Sanitization Authority (DAWASA), which operates within the Dar es Salaam region. The researcher is interested in this region because it is the most urbanized and industrialized in Tanzania. The study utilized a quantitative methodology to collect data, and data analysis, descriptive and inferential statistics were used to measure the relationship between the variables, and regression was used to examine the extent of the influence of leadership approaches on the innovative work behaviour of employees. The selection of the quantitative research methodology is influenced by the recognition that this approach effectively and precisely elucidates the cause-and-effect connection between independent and dependent variables, as intended in the proposed study. The present study adopts an explanatory approach as it comprehensively investigates the relationship between leadership styles and innovative work behaviour in intricate and multifaceted scenarios.

The current study's sample size consisted of 211 respondents from DAWASA Headquarters, who were randomly selected to reflect the whole population of 466 employees. The determination of the sample size was conducted using Yamane's formula: $n = N / (1 + N(e)^2)$. A simple random sampling technique was used as a

sampling strategy. In this study, the names of the respondents were listed, starting with the first respondent, and then, after every two respondents, the third name was picked at the end, so as to ensure that all respondents have an equal chance of being included in the study. The survey included data pertaining to innovative work behaviour as well as the leadership behaviours of transformational, transactional, and leader-member exchange. These leadership behaviours are considered the independent variables in the proposed study. The utilization of a multiple regression analysis facilitates the analysis of the relationship between independent and dependent variables, enabling the interpretation of the physical implications of this relationship.

The assumptions of linearity, normality, homoscedasticity, and multicollinearity were thoroughly addressed during the analysis of the data, where the correlation analysis indicated a significant relationship between the variables under study. The deduced regression equation model for the study was.

$$IWB = \beta_0 + TLS\beta_1 + TRL\beta_2 + LME\beta_3 + e$$

IWB = Innovative Work Behavior

TLS = Transformational Leadership

β_0 = a constant showing intercepts for regression equation

TRL = Transactional Leadership

LME = Leader-Member Exchange

e = error term

RESULTS AND DISCUSSION

The measurement of the scales follows a Likert-scale structure consisting of five points, ranging from "strongly disagree" (1) to "strongly agree" (5). The independent variables utilized in this investigation were classified as either numerical or categorical variables. Consequently, the researchers constructed linear multiple regression models based on these variables.

Regression Analysis Modal Summary

The regression analysis was conducted in order to ascertain the correlation between the independent and dependent variables in the study. Table 1 presents a modal summary.

Table 1: Modal Summary

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.819 ^a	0.671	0.636		0.5598
a. Predictors: (Constant), Total Team Leader Exchange, Total Transactional Leadership, Total Transformational Leadership					
b. Dependent Variable: Innovative Work Behaviour					
1. Source: Field Data, (2023)					

According to the regression analysis model summary, the coefficient of determination (R-squared) is 67.1%, indicating that about 67.1% of the variance in the dependent variable can be explained by the independent variables. Additionally, the correlation coefficient (R) is 81.9%, suggesting a positive relationship between the variables under investigation. These findings suggest that there was a statistically significant effect between the existing variables. The data indicates a relationship percentage of 67.1%, indicating that the independent variable (leadership styles) has a 67.1% impact on the dependent variable (innovative work behaviour).

Table 2: Anova

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	32.333	3	10.778	34.392	.000 ^b
	Residual	47.947	153	.313		
	Total	80.280	156			
a. Dependent Variable: Innovative Work Behaviour b. Predictors: (Constant), Total Team Leader Exchange, Total Transactional Leadership, Total transformational Leadership.						

Source: Field Data, (2023)

Based on the ANOVA table provided, the obtained significance level suggests that the model is statistically significant. This implies that the collective values of the independent variable significantly contribute to the prediction of the dependent variable and are sometimes referred to as indicators of model fit. The F-statistics and their corresponding significance values are of particular significance in this table. The F-statistic is 34.392 percent ($p < 0.001$), according to the results. The results of the study provide empirical evidence that aligns with the theoretical framework, indicating that the model possesses, the capability to accurately forecast employees' innovative work behaviour based on their scores in leadership style assessments. Consequently, it is evident that the model has the potential to effectively forecast innovative employee work behaviour by utilizing leadership style scores.

Hence, the modal summary suggests a statistically significant relationship between innovative work behaviour and factors such as team leader exchange, transactional leadership, and transformational leadership. The comprehensive findings of the study suggest that the leadership styles employed at DAWASA have an impact on the innovative work behaviour exhibited by employees. From the table below, the p-value is < 0.05 with β values of 0.160, 0.297, and 0.257, which makes a total of 0.714, which is equivalent to 71.4% influence, which indicates the acceptability of the significance level. The table has posted a significance level between 0.000 and < 0.047 , which indicates that there is a significant relationship between the variables and that the independent variable (leadership styles) influences the dependent variable (innovative work behaviour).

Table 3: Coefficient – Collinearity Statistics

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.927	.235		8.187	.000		
	Total Transformational Leadership	.111	.080	.160	1.390	.047	.293	3.414

Total Transactional Leadership	.212	.059	.297	3.600	.000	.575	1.738
Total Team Leader Exchange	.238	.115	.257	2.074	.040	.254	3.929

a. Dependent Variable: Innovative Work Behaviour

Source: Field Data, (2023)

Correlation Analysis

The correlation analysis was performed during data analysis for the purpose of establishing the level of relationship between the variables under study. The following table presents the analysis result.

Table 4. Correlations

		Total transformational Leadership	Total Transactional Leadership	Total Team Leader Exchange	Innovative Work Behaviour
Total transformational Leadership	Pearson Correlation	1	.578**	.840**	.548**
	Sig. (2-tailed)		.000	.000	.000
	N	157	157	157	157
Total Transactional Leadership	Pearson Correlation	.578**	1	.649**	.556**
	Sig. (2-tailed)	.000		.000	.000
	N	157	157	157	157
Total Team Leader Exchange	Pearson Correlation	.840**	.649**	1	.584**
	Sig. (2-tailed)	.000	.000		.000
	N	157	157	157	157
Innovative Work Behaviour	Pearson Correlation	.548**	.556**	.584**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	157	157	157	157

** . Correlation is significant at the 0.01 level (2-tailed).

The study findings in Table 4 indicate that the significance level is 0.000 and there is a 54.8% influence between the variables, showing that there is a significant correlation between the variables and that the

independent variables influence the dependent variable positively. These findings are supported by the studies by Alheet et al., (2021), Eyamba et al., (2020), and Majia (2020), which have indicated that there is a significant relationship between transformational leadership style and employee innovative work behaviour. Similar to Jun et al., (2023) and

Kirimi et al., (2023), who found the same. Also, studies conducted by Baafi et al., (2021) and Mwita and Mrema (2023) support the current study by revealing the relationship between transactional leadership style and the innovative work behaviour of employees.

The significant relationship between leader-member exchanges and the innovative work behaviour of employees is supported by Dwi Putri et al., (2023) and Alsughayir (2017). The findings were also supported by Mulligan et al., (2021).

The findings are in line with the guiding theory of this study (Social Exchange Theory), which states that the relationship between transformational leadership style and innovative work behaviour posits that leaders develop unique relationships with each of their subordinates. The unique relationship is strengthened by the way employees become innovative and perform their respective jobs better.

CONCLUSION, IMPLICATION AND RECOMMENDATION

Based on the findings of the study, it is concluded that supervisors seeking to foster positive employee innovative work behaviour should prioritize the use of both transactional, transformational, and team member exchange as they positively influence employee's innovative behaviour. It is imperative to underscore that transformational and transactional leadership are not inherently contradictory concepts but rather mutually reinforcing ideologies. Given the demonstrated effectiveness of both leadership styles, it may be argued that combining and implementing both types would yield favourable outcomes. It is imperative to bear in mind that placing exclusive reliance on a leader's approach may have adverse consequences, potentially including unintended ramifications.

An effective leader should possess the capacity to engage in both transactional leadership, which involves the ability to govern and manage the organization, as well as transformational leadership, which entails the capability to bring about significant changes and advancements inside the organization. The utilization of leader-member exchange can enhance the cognitive abilities of managers while addressing prevalent challenges encountered in the workplace. Concurrently, the application of transformational leadership, characterized by inspiring and motivating individuals, can enable managers to effectively address these issues by fostering emotional engagement.

As a result of this, it is vital that DAWASA managers undergo training in order to effectively use both leadership styles. Given the constantly changing requirements of the community, which necessitate the acquisition of new leadership skills and competencies, the implementation of a leadership training program has become increasingly indispensable. In order to enhance the overall innovative work behavior of employees and improve the general performance of DAWASA, it is imperative to provide comprehensive training in transformational leadership to individuals across all hierarchical levels within the organization. Research has shown that training can enhance both transformational and transactional leadership abilities.

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