

Leadership and Innovative Work Behaviour amongst Artisans in Construction Industry: A

Study of Vita Construction Ltd

By: Adebamowo, Oyeyemi I¹, Ifere, Simeon² and Ememe, Jude³

Abstract

Leadership has become an important discussion in the literature because of its relevance in building the resilience of organisations. This study, therefore, examines the influence of leadership on innovative work behaviour of construction artisans at Vita Construction Ltd Lagos, Nigeria. The study focuses on adaptive and transformational leadership to drive innovative work of artisans with the aid of social cognitive theory, and adaptive leadership model. The study applied a mixed-method using questionnaire and interview schedules for 604 artisans working at Vita Construction out of which 241 were selected. In the process of questionnaire administration, 238 copies were validly filled and returned while 7 artisans from Vita Construction Limited were selected for the interview schedules. Simple regression and Pearson correlation were deployed to analyse the two hypotheses. The findings reveal that adaptive and transformational leadership styles have positive and significant influence on innovative work behaviour of construction artisans and this is validated by the outcomes of the interviews. The study, therefore, recommends that entrenching effective leadership styles can improve innovation outcomes of artisans in construction sector.

Key Words: Adaptive leadership, adaptive model, innovative work behaviour, leadership styles, transformational leadership

1. Introduction

The study of leadership and artisans' innovation within Nigerian construction sector emerges as a notable discussion in the literature owing to its profound implications for economic advancement. Lagos State serves as Nigeria's economic hub, witnessing substantial construction endeavours driven by rapid urbanisation, infrastructural expansion, and demographic density. Delving into how leadership approaches and innovative work behaviour of artisans impact the operational efficiency and long-term viability of construction enterprises within this dynamic ecosystem assumes paramount importance for stakeholders, policymakers, and industry. Leadership is associated with the process of influencing people to willingly act in a manner that leads to achievement of organisational objectives (Weirich, Cannice and Koontz, 2008).

Within the construction landscape of Lagos State, leadership may intricately involve navigating through a myriad of challenges encompassing regulatory complexities, scarcity of skilled labour, infrastructural deficiencies, and economic fluctuations to achieve organisation's objectives.

¹ University of Lagos Business School, E-Mail: <u>Oyeyemiadebamowo@gmail.com</u>

² University of Lagos Business School

³ University of Lagos Business School

Consequently, effective leadership could serve as a linchpin for steering organisations towards the attainment of strategic objectives, nurturing the innovation pattern of employees, adeptly managing resources, and upholding stringent standards of productivity and safety across construction ventures. Exploring prevailing leadership paradigms, attributes and conduct that yield optimal results within Nigeria's construction industry could stimulate invaluable insights conducive to enhancing organisational efficiency and fostering sustainable innovation capability of employees.

Innovation is seen as an indispensable catalyst for improving competitiveness and ensuring enduring success within the construction ecosystem (Anugwo & Shakantu, 2020; Loon, Subramaniyan & Gunasekaran, 2022). In Lagos, where technological advancements, market dynamics, and societal imperatives undergo incessant evolution, influencing employee's innovative work attitudes could become imperative for maintaining a competitive edge and overcoming multifaceted challenges. This is because, innovative work behaviour encompasses the ability to generate new ideas and apply them into practical solutions, thereby enhancing performance through the adoption of new methods and processes in a multi-stage problem-solving process (Faraz et al., 2019; Jaruwanakul & Vongurai, 2021). Innovative work behaviour arises from a holistic set of actions encompassing idea generation, support, and implementation, reflecting an employee's dedication to generating valuable and creative outcomes within the workplace (Jaruwanakul & Vongurai, 2021). Three categories of employee's innovative work behaviour were identified by Grosser et al (2017) such as idea generation, advocacy, and realisation. However, continuous innovation seems essential for organisations to thrive in today's competitive landscape. The dynamic nature of the business environment necessitates a focus on innovation to drive productivity, efficiency, and sustainability, therefore, organisations are actively seeking to identify factors that can foster innovative behaviour among their employees (Alshoukri, Karim & Farhana, 2020; Anzarwati, 2021). In addition to recognising the importance of innovation, researchers emphasise the role of leadership in guiding and facilitating creative efforts towards organisational innovation (Anzarwati, 2021; Bannay, Hadi & Amanah, 2020). To cultivate innovation, organisations need to prioritise leadership that can effectively communicate and champion its vision to employees (Faraz et al., 2019).

Investigating the determinant opportunities or impeding factors within Lagos' construction sector might create an opportunity for refining industry norms and nurturing a culture conducive to innovation. However, the distinctive socio-economic fabric of Lagos State seems to introduce layers

of complexity to the exploration of leadership and innovation tendency of workforce within the construction domain. Therefore, studies on the interplay between leadership and innovative work behaviour of employees within Lagos State construction ecosystem may yield invaluable insights pivotal for enhancing organizational success, propelling economic improvement, and nurturing sustainable practices within one of the Africa's most vibrant urban centres.

1.2 Research Problem

Understanding the challenges confronting construction firms in Lagos State with regards to innovative work behaviour of employees is crucial for formulating effective strategies to foster organisational performance and facilitate sustainable development. Resistance to change often prevents employees to embracing new ideas, while resource constraints also pose a significant challenge in the ability to invest in innovation. The fear of failure associated with new initiatives are all red flags that can deter employees from pursuing innovative activities especially in environment that punish mistakes rather than view them as learning opportunities (Amabile, 1998). In addition, lack of incentives for innovation can demotivate employees particularly if reward structures prioritize short term results over long term innovation (Malik & Gard, 2020). Poor innovative work behaviour is marked by a lack of new ideas, stagnation, low employee engagement and poor collaboration (Zhang et al, 2022; Lee et al, 2023).

There could be a few among the artisans of the company that resist change, who might prefer familiar methods over new approaches. Measuring innovative behaviour among artisans in the Vita Construction Company in Lagos quantitatively appears difficult, because it requires the development of tailored assessment tools to accurately capture subtle and informal innovations, which the company may not possess.

Despite the sector's pivotal contribution to economic advancement, it appears that the operators in Lagos somehow encounter innovation deficiencies which might be characterised by a lack of strategic foresight, ineffective decision-making processes, and insufficient involvement of employees particularly the artisans and other stakeholders. These apparent deficiencies could inhibit construction firms from effectively navigating complex challenges, leveraging emerging opportunities, and cultivating an innovative work culture essential for sustainability. A prominent issue could lie in leadership approach such as autocratic styles and micromanagement and its effect can hinder

innovative work behaviour amongst artisans in the Nigerian construction sector. This study is undertaken, therefore, to empirically examine the effect of leadership on innovative work behaviour amongst artisans in the Nigerian construction sector with a focus on Vita Construction Company.

There is insufficient empirical research on the specific dynamics of leadership and its influence on promoting innovation within Nigerian enterprises (Malik et al., 2020; Nwachukwu & Vu, 2020). Despite the recognized importance of innovation for organisational longevity and competitive, it seems the subtle role of leadership in fostering innovative work behaviour among employees in Nigerian companies, such as construction firms remains largely unexplored.

While existing studies have established a general link between leadership and employees' work outcomes (Aboramadan & Dahleez, 2020; Idiata, Ehigiamusoe & Osagie, 2020; Oyetunji, Adebiyi & Olatunde, 2019), there remains a need for a deeper examination of the specific mechanisms (such as learning, orientation, problem solving, flexibility, emotional influence, inspirational motivation, intellectual stimulation, idealized influence, and individualised consideration) through which leadership influences innovative work behaviour of employees in construction industry with particular reference to Lagos State. Addressing these knowledge gaps represents a pivotal step toward advancing both theoretical insights and practical implications for organisational management in Nigeria and similar contexts in global perspective. This study, therefore, examines the relationship between leadership and innovative work behaviour among construction artisans in Lagos with a focus on Vita Construction Ltd with the specific objectives to i) explore the effect of adaptive leadership style on innovative work behaviour among construction artisans, ii) determine the relationship between transformational leadership style, and innovative work behaviour among construction artisans.

2. Literature Review

2.1 Theoretical Review

2.1.1 Social Cognitive Theory-SCT

Social cognitive theory was introduced in 1986 by Albert Bandura (Bandura, 2023). Social cognitive theory posits that individuals acquire knowledge and skills through observation, imitation of behaviours, social interaction, and emotional responses of others (Gruber, Bazhydai, Sievers, Clément & Dukes, 2022; O'Kelley, 2019). The assumption of SCT is that this process of observational learning significantly shapes human behaviour, cognitive processes, and motivational patterns (Beauchamp,

Crawford & Jackson, 2019; Martin & Guerrero, 2020). Additionally, SCT underscores the significance of self-efficacy, which refers to one's belief in their capability to effectively execute specific tasks and achieve desired outcomes (Downes et al., 2021). Through social modelling, persuasion, and mastery experiences, individuals have the potential to develop and fortify their self-efficacy beliefs, resulting in more adaptive behaviours and increased success across various life domains (Fong, 2022; Sachitra, 2024).

Social cognitive theory also emphasises the influence of social elements, such as leadership styles and organisational culture, on individuals' behaviour (Ford et al., 2020; McCormick, Alavi & Hanham, 2015). Leaders play a pivotal role in shaping the work atmosphere and cultivating a culture that champions innovation (Javed et al., 2021; Switzer, 2008). When leaders offer support, acknowledgement, and avenues for skill enhancement, employees are more likely to engage in creative problem-solving and contribute innovative concepts to the operational process (De Jong, & Den Hartog, 2007; Kremer, Villamor & Aguinis, 2019). In the context of this study, social cognitive theory is important to examine how leadership styles shape artisans' inclination towards innovative work behaviour through observational learning and social modelling. In addition, SCT could explore how leaders facilitate opportunities for artisans to learn from each other and collaborate on innovative initiatives.

2.2 Innovative Work Behaviour

Innovative work behaviour entails an individual's ability to conceive original and potentially valuable ideas, along with implementing these novel concepts into practical applications (Afsar & Badir, 2016; Jaruwanakul & Vongurai, 2021). It encompasses actions aimed at enhancing performance through the utilisation of new ideas, methods, and processes (Attiq et al., 2017; Jaruwanakul & Vongurai, 2021). This process involves multiple stages wherein individuals encounter challenges, generate ideas, seek support, and devise solutions to address specific issues through workplace innovation (Afsar & Badir, 2016). In the opinion of Janssen (2000), innovative work behaviour comprises a comprehensive set of behaviours related to idea generation, support, and implementation. It denotes an employee's intention and endeavour to generate beneficial and novel outcomes or innovations within the workplace (Majumdar & Ray, 2011; Jaruwanakul & Vongurai, 2021). However, Grosser et al. (2017) mentioned three categories of work behaviour exhibited by employees, namely idea generation, idea promotion, and idea realisation.

Innovative behaviour differs from creativity because it aims to provide benefits to the organisation (De Jong & Den Hartog, 2010; Faraz et al., 2019). Creativity is primarily needed during the idea generation stage (Faraz et al., 2019). An employee's idea generation involves thinking outside the box and developing unique solutions or improvements for existing services, products, or processes (Amabile, 1998). Idea promotion is essential to gain support from decision-makers for new ideas, which can often be unconventional and risky (Faraz et al., 2019; Scott & Bruce, 1994). Therefore, the backing of highly committed individuals in powerful positions is crucial for the success of innovative ideas (Howell, Shea, & Higgins, 2005). In addition, idea realization entails transforming concepts into tangible products, processes, or services, making the innovative vork behaviour is therefore fundamental for enhancing organizational performance, making it important to explore all factors that facilitate or enhance such behaviours (Monica & Krishnaveni, 2019; Scott & Bruce, 1994).

2.3 Innovative Work Behaviour in Construction Industry

The establishment of innovative work behaviour seems to have been recognised worldwide especially in the construction industry particularly with the integration of information technology and e-practises that could have significant impact on efficiency, safety and sustainability. Introduction of IT tools like BIM (Building Information Modelling) streamlines project management, and this has enhanced collaboration amongst construction workers and reduces errors and re-work (Zavadskas et al., 2021). This integration coordinates work flows, reduces communication gaps and minimises the likelihood of errors and rework leading to project delivery swiftly with greater accuracy, positively affects overall project efficiency and cost effectiveness (Zavadskas et al., 2021).

Drones have emerged as valuable latest innovation for improving safety on construction sites. Teizer et al (2017) highlights the utilisation of drone for real time monitoring of construction operations and site activities. Drones allow project managers to quickly identify potential hazards promptly by capturing high resolution imagery and videos (Teizer et al., 2017). This proactive approach to safety management improves the overall safety culture in the construction sector and reduces accidents and injuries (Israr et al., 2021).

2.4 The Concept of Leadership

The definition of leadership varies amongst individuals, often shaped by their perspectives, personalities, philosophies, values, and professions (Bass & Bass, 2009). Many experts characterise leadership as a social influence process wherein the leader seeks the willing participation of subordinates in efforts to achieve organisational objectives (Delia, 2018). It is a process of influencing the activities of an organised group in its pursuit of establishing and accomplishing goals (Stogdill, 1974). A recent study argued that leadership can be conceptualised as an influence process grounded in explicit values and convictions, ultimately leading to a collective vision for the organisation (Daniëls et al., 2019). Scholars such as Bwalya (2023) and Pembi et al (2022) among several other authors identified leadership as transformational leadership, transactional leadership, democratic leadership, laissez-faire leadership styles. While other scholars like Raei and Rasmussen (2021), Seibel et al (2023), and Pujianto et al (2023) included adaptive leadership style in their studies. This has justified that there are many leadership styles, but scholars decide to examine those that are relevant to a particular study at a point.

2.5 Types of Leadership Styles

In the construction industry leadership is vital for project success. Various styles including autocratic, democratic, transactional, situational, ethical, servant, adaptive and transformational leadership each have distinctive impacts (Bwalya, 2023). However, the focus of this study is on adaptive and transformational leadership styles as they could impact significantly on innovative work behaviour.

2.5.1 Adaptive Leadership

Adaptive leadership involves rallying people to surmount difficult challenges and flourish (Heifetz & Linsky, 2014). Unlike approaches that focus on the leader's position or inherent traits, adaptive leadership concept highlights leadership in the context of behaviour, because leaders undertake actions to galvanise, inspire, coordinate, direct, and concentrate the efforts of others (Heifetz & Linsky, 2014). In addition, adaptive leadership entails assisting others in examining and adjusting their values (Pujianto et al., 2023). Its objective is to prompt individuals to embrace change and acquire new skills, enabling them to confront challenges effectively and develop in the process (Allio, 2023; Shanker et al., 2017). Rather than being perceived as figures leading from a distance, adaptive leaders can integrate themselves within the team and offer guidance (Pujianto et al., 2023).

2.5.2 Transformational Leadership

A transformational leader is someone who motivates and energises (transforms) followers to attain exceptional results (Baškarada, Watson & Cromarty, 2017). They focus on the individual concerns and developmental needs of their followers, altering their perception of problems by encouraging them to view familiar issues from innovative perspectives (Odumeru & Ogbonna, 2013). Additionally, they have the ability to inspire, motivate, and ignite followers to exert additional effort in pursuit of collective objectives (Baškarada et al., 2017). Transformational leadership style reflects the moral values of followers, as they strive to heighten awareness of ethical concerns and galvanise their efforts and resources to institute reforms within institutions (Odumeru & Ogbonna, 2013; Yukl, 1999).

Fig. 2.1: The Study Conceptual Framework



Source: Researcher's field survey (2024)

The conceptual framework (fig.2.1) illustrates the assumed relationship between adaptive and transformational leadership styles and innovative work behaviour. The elements or dimensions of adaptive leadership-learning, orientation, problem solving, flexibility, and emotional influence are assumed to have effect or influence on innovative work behaviour. Similarly, the elements of transformational leadership- inspirational motivation, intellectual stimulation, idealized influence, and individualised consideration have effect or influence on innovative work behaviour (DV). These relationships were empirically examined in this study.

3. Methodology

This approach applied in this study is a mixed-method to examine the interaction between leadership styles and innovative work behaviour among employees at Vita Construction Ltd in Lagos State, Nigeria. This method provides a robust examination by combining both quantitative and qualitative research. The quantitative data were obtained through copies of questionnaire using 5-Likert scale (Strongly Disagree (SD)=1, Disagree (D)=2, Neutral (N)= 3, Agree (A)=4, Strongly Agree (SA)=5) from the population of 604 artisans working at Vita Construction Ltd in Lagos State as at the time this study was carried. The breakdown of the type of artisans is as follows: Masons 112, Carpenters 85, Iron Benders 80, Welders 62, Machine Operators 50, Electricians 40, plumbers 41, Tilers 35, Aluminum 34, Joinery 32, and Cleaners 33 making a total of 604 artisans at Vita Construction Ltd, Lagos, Nigeria. For the purpose of choosing sample size of this study, a sample size formula developed by Yamane (1967) was deployed to arrive at sizable number of 241 from the population of 604 artisans. Artisans were considered in this study to avoid bias because this study focuses on leadership styles of construction companies' managers.

Cross-sectional and random sampling techniques were deployed to gather data from the artisans. The primary data retrieved from the artisans were further subjected to statistical analysis with the aid of regression and Pearson Product Moment correlation coefficient to test the causal effect and relationship among adaptive leadership style, transformational leadership and innovative work behaviour of construction artisans. Complementing this, qualitative data were obtained through interview schedules with 7 selected artisans who have spent over 10 years on the job to offer deeper insights into employees' experiences, opinions, and the specific conditions that affect innovative work behaviour. Thematic analysis was employed to identify common themes and patterns as well as making sense out of qualitative data, and for the purpose of validating primary data of this study. Employing this combination of methods allows this research to investigate both the statistical relationships between leadership styles and innovation, as well as the underlying contextual factors that promote or inhibit innovative work behaviour at Vita Construction Ltd in Lagos State.

4. Analysis and Results

4.1 **Results of Quantitative**

In Table 2, the regression analysis indicated R coefficient of 0.313, and this has established an association between adaptive leadership and innovative work behaviour. The R-Square value of 0.98

established that only 9.8% of the variants in the innovative work behaviour could be explained by adaptive leadership while other factors that were not stated in this study could account for 90.2%. The F-statistic value of 25.722, p<.05 also signified the goodness of fit of the model to describe the variants and to consider the null hypothesis not suitable. Therefore, this admitted the alternative hypothesis which states that adaptive leadership has significant effect on innovative work behaviour among construction artisans. The value of t=5.072, p<.05 showed that when leaders are flexible in their approaches, it ensures the innovative behaviour of employees.

Model 1	R	R ²	F	<i>P</i> value	t	t	Decision
					(Constant)	(ADL)	
	.313ª	0.098	25.722	.000	7.004	5.072	Rejected
Dependent Variable: Innovative Work Behaviour (IWB); Predictors: (Constant), Adaptive Leadership (ADL)							

Table 2: Regression and Correlation table for the hypotheses

	Mean	Std. Dev.		IWB	TRL	Decision
IWB	3.77	.695	Pearson Correlation	1	.310**	Rejected
			Sig. (2-tailed		.000	
			N	238	238	
TRL	3.97	.482	Pearson Correlation	.310**	1	
			Sig. (2-tailed	.000		
			N	238	238	
Key Note	es: IWB= Innor	vation work behave	iour; TRL= Transformatio	nal Leadersi	hip; Std. Dev	. = Standard

Deviation

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

Table 2 further demonstrates the relationship between transformational leadership and innovative work behaviour among construction artisans. However, to check for mean is important in this study because it represents the central point of a dataset, offering an average value that can encapsulate the overall results. Therefore, the mean test score for this data using a 5 likert scale is 3.77 for innovative work behaviour, and 3.97 for transformational leadership. In addition, the study checked standard deviation of the data to measure variability and the extent to which the data used in this study likely deviate from the mean. A minimal standard deviation (i.e. close to zero) suggests that data points are tightly clustered around the mean, while a greater standard deviation signifies that data points are more dispersed from the mean. The results in table 2 indicates a standard deviation of 0.695 for innovative work behaviour, and 0.482 for transformational leadership, and they have demonstrated good

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confidence and prescription. The results of this study also show that there is a strong positive relationship between transformational leadership and innovative work behaviour with the value of .319^{**} at 0.01 significant level.

4.2 Presentation and Interpretation of Qualitative Results of Interview Schedules with the Artisans at Vita Construction Plc in Lagos State using Thematic Analysis

Themes associated with leadership styles and innovative work behaviour of artisans were established and analysed. Responses from the artisans at Vita Construction Plc in Lagos State established a validation of the findings from the research questions. Some germane and indispensable findings that could not be captured by using quantitative approach were observed and reported in this study. The data were analysed via thematic analysis and the summary of the findings was illustrated in the table 3.

	Questions	Summary of the findings of the participants
Q1	, i	Artisans at Vita Construction Ltd are not fully enjoying the support of their supervisors to think creatively and to be innovative.
Q2	What do you think are the main challenges or barriers to innovative work behaviour among artisans at Vita Construction Ltd?	Artisans have different opinions probably because they operate from different work units.

 Table 3:
 Summary of the findings of the interview schedules

5. Discussion of Findings

This study examined the influence of leadership styles on innovative work behaviour of construction artisans at Vital Construction Limited from the perspective of adaptive and transformational leadership. The results show that adaptive leadership, defined by its flexibility, responsiveness, and supportive nature, has a significant effect on the innovative behaviours of construction artisans. This is because, this leadership style creates an environment where artisans can be encouraged to experiment, take risks, and propose new ideas without fearing negative consequences. Consequently, this approach can stimulate a significant improvement in creativity, problem-solving, and the implementation of innovative solutions on construction sites. This finding corroborates the studies of

Allio (2023) and Pujianto et al (2023) who opined that adaptive leadership aids the innovative thinking and outcomes of employees.

In addition, the results of this study reveal that transformational leadership, marked by an inspiring vision, individualized consideration, intellectual stimulation, and motivational influence, significantly correlate with innovative work behaviour of construction artisans. Leaders who adopt this style effectively inspire and motivate artisans to exceed their standard performance, promoting creativity, proactive problem-solving, and the development of new ideas. This leadership approach cultivates a supportive and intellectually stimulating environment where artisans can feel valued and empowered to innovate. This finding is in tandem with the study Baškarada et al (2017) who emphasised the need for leaders to consider transformational leadership as an important tool towards innovative work outcomes.

6. Policy/Managerial Implications and Recommendations

The study of leadership and innovative work behaviour among artisans at Vita Construction Ltd in Lagos, Nigeria, carries important policy implications for both the company and the wider construction sector. The results indicate that adopting effective leadership styles, such as adaptive and transformational leadership, can greatly enhance the innovative abilities of artisans. Consequently, Vita Construction Ltd needs to implement policies that emphasize leadership development programs. These programs should aim to develop leadership skills that inspire, motivate, and intellectually stimulate artisans, fostering creative problem-solving and the generation of new ideas. In addition, policies should focus on creating a supportive work environment where artisans feel valued and empowered to innovate without fear of negative consequences. By adopting these policies, Vita Construction Ltd can increase its innovation capacity, leading to better project outcomes, greater operational efficiency, and a stronger competitive edge in the market. Also, implementing these could serve as a benchmark for other construction companies in Nigeria, encouraging industry-wide improvements in leadership and innovation.

7. Conclusion and Acknowledgment

The findings of this study have established the reasons why construction companies need to consider the right leadership for ensuring innovative behaviours towards better achieving better results. It underscores the importance of flexibility, responsiveness, and supportive nature of leaders to significantly influence construction artisans' behaviours, particularly in Lagos State with a huge population and commercial hub of the nation. Consequently, it is concluded in this study that leadership styles through adaptive and transformational can significantly influence innovative work behaviour of construction artisan in Lagos, Nigeria. In addition, this study recognizes the efforts of academic experts who have immensely contributed to the outputs of the research. The study also appreciates and acknowledges the readiness of artisans and management of Vita Construction Ltd to participate in the survey.

References

- Aboramadan, M., & Dahleez, K. A. (2020). Leadership styles and employees' work outcomes in nonprofit organisations: The role of work engagement. *Journal of Management Development*, *39*(7/8), 869-893.
- Afsar, B., & Badir, Y. (2016). The mediating role of psychological empowerment on the relationship between person-organisation fit and innovative work behaviour. *Journal of Chinese Human Resource Management*, 7(1), 5-26.
- Allio, R. J. (2023). Preparing leadership for daunting 21st Century challenges. Strategy & Leadership, 51(1), 3-9.
- Alshoukri, K. O., Karim, A. M., & Farhana, N. (2020). The impact of leadership on employee innovative work behaviour in facilities management service providers in Oman. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 10(1), 71-84.
- Amabile, T. M. (1998). A model of creativity and innovation in organizations. Research in Organizational Behavior, 10(1), 123-167.
- Anzarwati, E. (2021). The Influence of transformational leadership, distributive justice, and intrinsic motivation on innovative work behaviour. *Journal of Community Empowerment*, 2(2), 26-38.
- Attiq, S., Wahid, S., Javaid, N., Kanwal, M., & Shah, H. (2017). The impact of employees' core selfevaluation personality trait, management support, co-worker support on job satisfaction, and innovative work behaviour. *Pakistan Journal of Psychological Research*, 32(1), 247-271.
- Bandura, A. (2023). Social cognitive theory: An agentic perspective on human nature. John Wiley & Sons.
- Bannay, D. F., Hadi, M. J., & Amanah, A. A. (2020). The impact of inclusive leadership behaviours on innovative workplace behaviour with an emphasis on the mediating role of work engagement. *Problems and Perspectives in Management*, 18(3), 479-491.

- Baškarada, S., Watson, J., & Cromarty, J. (2017). Balancing transactional and transformational leadership. *International Journal of Organisational Analysis*, 25(3), 506-515.
- Bass, B. M., & Bass, R. (2009). The Bass handbook of leadership: Theory, research, and managerial applications. Simon and Schuster.
- Beauchamp, M. R., Crawford, K. L., & Jackson, B. (2019). Social cognitive theory and physical activity: Mechanisms of behaviour change, critique, and legacy. *Psychology of Sport and Exercise*, 42, 110-117.
- Bwalya, A. (2023). Leadership styles. Global Scientific Journal, 11(8), 181-194.
- Chanias, S., Myers, M. D., & Hess, T. (2019). Digital transformation strategy making in pre-digital organizations: The case of a financial services provider. *The Journal of Strategic Information Systems*, 28(1), 17-33.
- Daniëls, E., Hondeghem, A., & Dochy, F. (2019). A review on leadership and leadership development in educational settings. *Educational Research Review*, 27, 110-125.
- De Jong, J. P., & Den Hartog, D. N. (2007). How leaders influence employees' innovative behaviour. European Journal of Innovation Management, 10(1), 41-64.
- De Jong, J., & Den Hartog, D. (2010). Measuring innovative work behaviour. *Creativity and Innovation Management, 19*(1), 23-36.
- Delia, N. (2018). The concept of leadership. Ovidius University Annals, Economic Sciences Series, 18(2), 329-332.
- Downes, P. E., Crawford, E. R., Seibert, S. E., Stoverink, A. C., & Campbell, E. M. (2021). Referents or role models? The self-efficacy and job performance effects of perceiving higher performing peers. *Journal of Applied Psychology*, *106*(3), 422-438.
- Faraz, N. A., Mughal, M. F., Ahmed, F., Raza, A., & Iqbal, M. K. (2019). The impact of servant leadership on employees' innovative work behaviour-mediating role of psychological empowerment. *International Journal of Management Science and Business Administration*, 5(3), 10-21.
- Fong, C. J. (2022). Academic motivation in a pandemic context: a conceptual review of prominent theories and an integrative model. *Educational Psychology*, *42*(10), 1204-1222.
- Ford, T. G., Lavigne, A. L., Fiegener, A. M., & Si, S. (2020). Understanding district support for leader development and success in the accountability era: A review of the literature using social cognitive theories of motivation. *Review of Educational Research*, 90(2), 264-307.

- Grosser, T. J., Venkataramani, V., & Labianca, G. J. (2017). An alter-centric perspective on employee innovation: the importance of alters' creative self-efficacy and network structure. *Journal of Applied Psychology*, *102*(9), 1360-1374.
- Gruber, T., Bazhydai, M., Sievers, C., Clément, F., & Dukes, D. (2022). The ABC of social learning: Affect, behaviour, and cognition. *Psychological review*, *129*(6), 1296–1318.
- Hai, T. N., & Van, Q. N. (2021). Servant leadership styles: A theoretical approach. *Emerging Science Journal*, 5(2), 245-256
- Heifetz, R. A., & Linsky, M. (2014). *Adaptive leadership: The Heifetz collection (3 items)*. Harvard Business Review Press.
- Howell, J. M., Shea, C. M., & Higgins, C. A. (2005). Champions of product innovations: Defining, developing, and validating a measure of champion behavior. *Journal of business venturing*, 20(5), 641-661.
- Idiata, D. J., Ehigiamusoe, B. U., & Osagie, E. K. (2020). Nigeria construction industry leadership style and adaptability effectiveness: A case of civil engineers. *International Journal of Scientific Research & Engineering Trends*, 6(2), 1036-1041.
- Israr, A., Abro, G. E. M., Sadiq Ali Khan, M., Farhan, M., & Bin Mohd Zulkifli, S. U. A. (2021). Internet of things (IoT)-Enabled unmanned aerial vehicles for the inspection of construction sites: a vision and future directions. *Mathematical Problems in Engineering*, 1-15.
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and Organisational Psychology*, 73(3), 287-302.
- Jaruwanakul, T., & Vongurai, R. (2021). Determinants of employee innovative behaviour in Thai real estate companies. *International Journal of Economics & Business Administration (IJEBA)*, 9(1), 303-317.
- Javed, B., Fatima, T., Khan, A. K., & Bashir, S. (2021). Impact of inclusive leadership on innovative work behaviour: the role of creative self- efficacy. *The Journal of Creative Behaviour*, *55*(3), 769-782.
- Kremer, H., Villamor, I., & Aguinis, H. (2019). Innovation leadership: Best-practise recommendations for promoting employee creativity, voice, and knowledge sharing. *Business Horizons*, 62(1), 65-74.
- Lee, J., Park, J., & Kin, S. (2023). "Resource constraints and innovation performance: The moderating role of training and development." *Technology Analysis & Strategic Management*, 35(2), 115-130.

- Loon, L. Y., Subramaniyan, M., & Gunasekaran, K. (2022). *Advances in Construction Management*. Springer Singapore.
- Malik, S., & Garg, P. (2020). "Psychological contract and innovative work behaviour: Mediating role of employee engagement." *Management Decision*, 58(11), 2077-2095.
- Malik, A., Khan, N., Faisal, S., Javed, S., & Faridi, M. R. (2020). An investigation on leadership styles for the business productivity and sustainability of small medium enterprises (SMEs). *International Journal of Entrepreneurship*, 24(5), 1-10.
- Martin, J. J., & Guerrero, M. D. (2020). Social cognitive theory. In *Routledge Handbook of Adapted Physical Education* (280-295). Routledge.
- McCormick, J., Alavi, S. B., & Hanham, J. (2015). The importance of context when applying social cognitive theory in organisations. *Handbook of research on management ideas and panaceas: Adaptation and context*, 110-129.
- Monica, R., & Krishnaveni, R. (2019). Enhancing innovative work behaviour through work engagement: examining the role of psychological empowerment and social support. *International Journal of Business Innovation and Research*, 20(4), 527-553.
- Nwachukwu, C., & Vu, H. M. (2020). Strategic flexibility, strategic leadership and business sustainability nexus. *International Journal of Business Environment*, 11(2), 125-143.
- Odumeru, J. A., & Ogbonna, I. G. (2013). Transformational vs. transactional leadership theories: Evidence in literature. *International Review of Management and Business Research*, 2(2), 355-361.
- O'Kelley, K. (2019). New employees and safety culture: A social cognitive theory perspective. Professional Safety, 64(02), 37-40.
- Oyetunji, A. K., Adebiyi, J., & Olatunde, N. A. (2019). Leadership behaviour and worker performance in the Nigerian construction industry. *The Journal of Values-Based Leadership*, *12*(2), 1-17.
- Pembi, S., Usman, F. I., Kwajaffa, B. F., & Ametefe, M. D. (2022). Leadership styles and leadership qualities for organizational success: A review of literature. *Nigerian Journal of Management Sciences*, 23(2), 312-323.
- Pujianto, W. E., Haque, S. A. U., Dyatmika, S. W., & Tedja, F. W. (2023). Adaptive leadership model: A systematic literature review and future research. *Proceeding of the 2nd International Seminar of Multicultural Psychology*, 45-61.
- Raei, M., & Rasmussen, H. T. (2021). Adaptive leadership in a global economy. Routledge.
- Sachitra, V. (2024). Exploring the roles of personality traits and self-efficacy on environmental engagement: a Sri Lankan youth survey. *Social Responsibility Journal*, 20(4), 740-760.

- Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal*, 37(3), 580-607.
- Seibel, M., Kaufman, E. K., Cletzer, D. A., & Elliott- Engel, J. (2023). Advancing adaptive leadership through adaption- innovation theory: Enhancements to the holding environment. *Journal of Leadership Studies*, 17(1), 23-29.
- Shanker, R., Bhanugopan, R., Van der Heijden, B. I., & Farrell, M. (2017). Organisational climate for innovation and organisational performance: The mediating effect of innovative work behaviour. *Journal of Vocational Behaviour*, 100, 67-77.
- Spears, L.C., 2004. Practising servant leadership. Leader to Leader, 34, 7-11.
- Stogdill R. M. (1974). Handbook of leadership: A survey of literature. N.Y: Free Press.
- Switzer, C. (2008). Time for change: empowering organisations to succeed in the knowledge economy. Journal of Knowledge Management, 12(2), 18-28.
- Tan, A. B., van Dun, D. H., & Wilderom, C. P. (2023). Lean innovation training and transformational leadership for employee creative role identity and innovative work behavior in a public service organization. *International Journal of Lean Six Sigma*, 15(8), 1-31.
- Teizer, J., Wolf, M., Golovina, O., Perschewski, M., Propach, M., Neges, M., & König, M. (2017). Internet of things (IoT) for integrating environmental and localisation data in Building Information Modelling (BIM). In ISARC. Proceedings of the International Symposium on Automation and Robotics in Construction, 34, 1-7. IAARC Publications.
- Yamane, T. (1967). Statistics: An introductory analysis (2nd ed.). New York: Harper and Row.
- Young, J. (2020). Leadership in the state arts agency: A complexity perspective. Johnson University.
- Yukl, G. (1999). An evaluation of the conceptual weaknesses in transformational and charismatic leadership theories. *Leadership Quarterly*. 10(2), 285–305.
- Zavadskas, E. K., Turskis, Z., Šliogerienė, J., & Vilutienė, T. (2021). An integrated assessment of the municipal buildings' use including sustainability criteria. *Sustainable Cities and Society*, 67, 1-13.
- Zhang, X., Li, Y., & Wang, H. (2022). Organizational culture and innovative work behaviour: The role of leadership. *Journal of Business Research*, 145, 366-374.