

Donkor, James; Segbenya, Moses; Ofosuhen, Daisy

## Article

# Dimensions of organisational leadership and organisational citizenship behaviour in Ghanaian workplaces

Cogent Business & Management

## Provided in Cooperation with:

Taylor & Francis Group

*Suggested Citation:* Donkor, James; Segbenya, Moses; Ofosuhen, Daisy (2023) : Dimensions of organisational leadership and organisational citizenship behaviour in Ghanaian workplaces, Cogent Business & Management, ISSN 2331-1975, Taylor & Francis, Abingdon, Vol. 10, Iss. 3, pp. 1-17, <https://doi.org/10.1080/23311975.2023.2281711>

This Version is available at:

<https://hdl.handle.net/10419/294737>

### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

### Terms of use:

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



<https://creativecommons.org/licenses/by/4.0/>

# Dimensions of organisational leadership and organisational citizenship behaviour in Ghanaian workplaces

James Donkor, Moses Segbenya & Daisy Ofosuhene

**To cite this article:** James Donkor, Moses Segbenya & Daisy Ofosuhene (2023) Dimensions of organisational leadership and organisational citizenship behaviour in Ghanaian workplaces, Cogent Business & Management, 10:3, 2281711, DOI: [10.1080/23311975.2023.2281711](https://doi.org/10.1080/23311975.2023.2281711)

**To link to this article:** <https://doi.org/10.1080/23311975.2023.2281711>



© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 14 Nov 2023.



[Submit your article to this journal](#)



Article views: 715



[View related articles](#)



[View Crossmark data](#)



Received: 01 July 2023  
Accepted: 06 November 2023

\*Corresponding author: Moses Segbenya, Department of Business Studies, College of Distance Education, University of Cape Coast, Cape Coast, Ghana  
E-mail: [moses.segbenya@ucc.edu.gh](mailto:moses.segbenya@ucc.edu.gh)

Reviewing editor:  
Rocio Gallego-Losada, Universidad Rey Juan Carlos - Campus de Móstoles: Universidad Rey Juan Carlos, Spain

Additional information is available at the end of the article

## MANAGEMENT | RESEARCH ARTICLE

# Dimensions of organisational leadership and organisational citizenship behaviour in Ghanaian workplaces

James Donkor<sup>1</sup>, Moses Segbenya<sup>2\*</sup> and Daisy Ofosuhen<sup>2</sup>

**Abstract:** This study examined the dimensions of leadership style and organisational citizenship behaviour among workers in Ghana. The explanatory study design was used from the quantitative approach and a sample of 636 workers from judicial service, local government, insurance, banking and finance, health, education, ICT, and immigration workers from both the public and private sectors of Ghana. A questionnaire was the data collection instrument for the cross-sectional survey method adopted, and the data gathered was analysed with Partial Least Square-Structural Equation Modelling. The results revealed that directive, supportive, and achievement-oriented leadership styles achieved a significant relationship with organisational citizenship behaviour. Participatory leadership style is also significantly related to directive leadership behaviour in the workplace. The non-significant relationship between the participative leadership style and organisational behaviour was, however, significantly mediated by the directive leadership style. It is recommended that leaders or superiors at workplaces should give more attention to the directive, participatory, achievement-oriented, and supportive leadership styles to be able to enhance organisational citizenship behaviour among workers.

**Subjects:** Social Influence; Social Psychology; Work & Organizational Psychology

**Keywords:** directive leadership style; participatory leadership style; achievement-oriented leadership style; supportive leadership style; organisational citizenship behaviour

## 1. Introduction

The role of leadership in organisational success cannot be underestimated. Leadership relates to the ability to influence followers or workers to perform the necessary tasks to attain organisational goals (Karam et al., 2019). Leadership provides direction for organisational members or workers and is important for achieving both employee and organisational performance (Dartey-Baah & Addo, 2019). Leadership has been found to have influenced employees' attitudes and actions at the workplace (Dartey-Baah & Addo, 2019; Karam et al., 2019). The kind of influence leadership can exert on the performance of employees is determined by the leadership style exhibited by leaders.

The four main leadership styles found to have influenced employee performance based on the goal-path theory are participative, directive, supportive, and achievement-oriented leadership style (Tran, 2023). Thus, the type of leadership style used by a leader determines the employees and

organisational outcomes in terms of performance and the attainment of organisational goals (Subhaktiyasa et al., 2023). The outcome of a leader who exhibits either a participative, directive, supportive, or achievement-oriented leadership style is not the same (Hermawan et al., 2023). For example, a friendly and open leader who shows concern for the status, well-being, and needs of subordinates (supportive) will get different results as compared to a leader who sets challenging goals, and expects subordinates to perform at their highest level (achievement-oriented).

Leadership style influences employee performance, which is either measured in profitability, meeting targets set for workers or reduction in errors as well as pleasing or meeting customers' deadlines. Organisational existence and progress are highly dependent on employee performance. It is for this reason that the employees or workers have remained the most important resource among all the resources at the disposal of organisations. Employee performance is influenced by reciprocity (Mekpor & Dartey-Baah, 2017). That is, employees give out their best depending on what they will personally profit from the outcome of their actions. Another new area of employee performance outside the equity argument is the voluntary behaviour of workers beyond which they are remunerated. This extra and voluntary behaviour of workers required for organisational efficiency and growth is what is termed organisational citizenship behaviour (OCB) (Mostafa, 2018). The leadership style of a leader could serve as a springboard for exhibiting OCB among workers (Lee et al., 2019). Alternatively, workers could decide not to take on extra and voluntary work behaviour due to the kind of leadership style of the leader (Rezaei et al., 2017).

Studies on leadership style and organisational citizenship behaviour by Pratiwi et al. (2023); Tran (2023); Subhaktiyasa et al. (2023); Khan and Muhammad (2023) and Hermawan et al. (2023) have confirmed that leadership style influences organisational citizenship behaviour and organisational performance. Unfortunately, these studies were conducted outside Ghana and focused on the servant, transformative, and transactional leadership styles other than the participative, directive, supportive, or achievement-oriented leadership styles which are the focus of this study. Similar studies on leadership style and organisational citizenship behaviour in Ghana by Azila-Gbetteor (2023); Osei-Owusu (2023); Kwarteng et al. (2023) and Emur et al. (2023) have also centred on transformational leadership and customer OCB in the hotel and health sectors in Ghana, and Authentic Leadership in the educational sector among others.

There are limited studies on participative, directive, supportive, or achievement-oriented leadership style and organisational citizenship behaviour among workers. Meanwhile, the path-goal theory and the leader-member exchange theory have all suggested the importance of participative, directive, supportive, or achievement-oriented leadership style to organisational performance. Thus, there is a dearth of research on the leadership style of using participative, directive, supportive, or achievement-oriented leadership to achieve organisational citizenship across all or several sectors from a developing economy like Ghana creating a contextual and conceptual gap. To fill the lacunae in the literature, this study sought to examine how dimensions of leadership style (such as participative, directive, supportive, or achievement-oriented leadership style) can lead to organisational citizenship behaviour among Ghanaian workers.

## 2. Literature review

### 2.1. Theoretical framework

This study has its foundation in the Leader-Member Exchange (LMX) theory of leadership which was proposed by Dansereau et al., (1995). The theory was originally positioned as the Vertical Dyad Linkage (VDL) theory of leadership, which did not focus on the leader or subordinates, but instead looked at the dyadic relationship between them (Erdogan & Bauer, 2014). As extensive research was carried out on the VDL theory, it was renamed as the Leader-Member Exchange (LMX) theory in the 1980s. The theory postulates that leaders do not assume a steady or prescribed leadership style towards all followers at the various work units within an organisation. Instead, leaders adopt different types of relationships with their followers with different qualities of the relationship (Lee

et al., 2019). The central tenet of this theory lies in its focus on effective leadership through the development of good leadership relationships between the leader and the followers. The LMX theory is regarded as a process as well as a transactional approach. It takes a process approach because it emphasises the need for collaboration between the leader and his followers. It is also considered a transactional approach because of the requirement for the leader and the followers to be active participants. The nature of the transaction or interaction between the leader and the subordinates is a recipe for counter-influence (Northouse, 2019); thus, it is not only the leader who influences his followers; the influence of the followers or subordinates also affects the leader.

The interaction between the leader and the subordinates is likely to produce two outcomes—high-quality for “in-group” members and low-quality relationships for “out-group” members. Masood et al. (2019) noted that subordinates with high-quality relationships enjoy support and affection from leaders and exhibit trust, honesty, and organisational citizenship behaviours. They enjoy the challenging task, which provides an opportunity for learning and creativity and makes work more meaningful. Zhao et al. (2020) also observed that a high-quality relationship between the leader and the subordinates was characterized by team improvement, reduced turnover, and team performance. This theory was selected over the goal-path theory because the latter focuses on the target or attainment of organisational goals, while the former focuses on both the relationship between the leader and the followers and how the relationship can lead to the attainment of goals. In his study, how it can lead to organisational citizenship behaviour among workers. Thus, the Leader-Member Exchange (LMX) theory helps explain how leadership style dimensions such as participative, directive, supportive, and achievement-oriented leadership styles relate to organisational citizenship behaviour in Ghanaian workplaces.

### **3. Conceptual review, hypothesis development, and conceptual framework**

#### **3.1. Organisational Citizenship Behaviour (OCB)**

Organisational citizenship behaviour (OCB) is frequently seen as an individual's self-driven behaviour that does not appear to be openly or directly described by the formal incentive system (Wengang et al., 2023). According to several authors (Thompson et al., 2020; Yaakobi & Weisberg, 2020), organisational citizenship behaviour generally refers to employee discretionary and beneficial roles that are not directly or explicitly recognised by the formal reward system but nonetheless significantly contribute to a variety of desirable work outcomes. The studies of Ramadhanty et al. (2022); Saadah and Rijanti (2022); Sunarsi et al. (2020) describe organizational citizenship behaviour as any act that is discretionary and is not explicitly or outside of organization's formal performance management system. Organizational citizenship behavior (OCB), is very profitable for companies because it can lead to organizational effectiveness and efficiency even though it is not recognized by a formal reward system.

The OCB direction is typically divided into two categories: OCB-O and OCB-P. OCB-O represents organisational citizenship behaviour towards organisations and relates to those activities that are focused on the organisation as a whole. OCB-P represents organisational citizenship behaviour towards persons which relates to those activities that are focused on the advantages of the individual members or co-workers (Butt et al., 2020; Spector et al., 2010). Actions requiring behaviours that go above and beyond one's job schedule are considered extra efforts. Organisational citizenship behaviours are acts of invention, creativity, taking on additional duties, and motivating people inside the organisation with the goal of enhancing individual and organisational performances. All dimensions of OCB include Helping behaviour, Sportsmanship, organizational loyalty, Obedience, Civic Virtue, and Self-development (Khali, 2017; Mekpor & Dartey-Baah, 2017; Özduran & Tanova, 2017).

#### **3.2. Achievement-oriented leadership style and organisational citizenship behaviour**

The achievement-oriented leader sets challenging goals, expects subordinates to perform at their highest level, continuously seeks improvement in performance, and shows a high degree of

confidence that the subordinates will assume responsibility, put forth an effort, and accomplish challenging goals (Wijaya, 2023). This behaviour was asserted to cause subordinates to strive for higher standards of performance and to have more confidence in their ability to meet challenging goals (Wijaya, 2023). Since achievement-oriented is based on goal-setting and motivation, it is likely to increase subordinates' motivation and competency if they successfully achieve the challenging task in an uncertain work environment (Dartey-Baah & Addo, 2019; Karam et al., 2019). This has the potential to enable the practice of OCB. Following this, a hypothesis has been formulated that:

**H<sub>0</sub>: 1** Achievement-oriented leadership style significantly relates to organisational citizenship behaviour at Ghanaian workplaces.

### **3.3. Directive leadership style and organisational citizenship behaviour**

According to Organ et al. (2006), directive leadership styles correlate positively with employee OCB practice. Directive leadership entails giving specific guidance on what should be done and how it should be done, clarifying the path to the subordinate, scheduling work to be done, maintaining definite performance standards, and so on. It stands to reason that directive leadership can occasion voluntary work behaviours from subordinates for reciprocity (Mahdi et al., 2014) since managers show interest in clarifying work expectations and showing subordinates what to do. The study of Puni and Hilton (2020) identified no significant effect of directive leadership style on OCB. Thus, there is an inconclusive debate on the influence of directive leadership style on OCB, and further studies on this are required. For this reason, this study hypothesised that:

**H<sub>0</sub>: 2** Directive Leadership style has a direct effect on OCB practice at Ghanaian workplaces.

**H<sub>0</sub>: 3** Directive Leadership style is significantly influenced by participative leadership style at Ghanaian workplaces

### **3.4. Participative leadership style and organisational citizenship behaviour**

The participative leadership style relates to how leaders clarify path-goal relationships in relation to efforts and work-goal attainment. Participative leadership style also increases congruence between subordinate goals and organisational goals, increases subordinate autonomy, and increases subordinate involvement and commitment (House, 1996). Also known as the democratic style, the participative leadership style encourages staff to be a part of the decision-making, keeps staff informed about everything that affects their work and shares decision-making and problem-solving responsibilities. As one of the four leadership styles of the path-goal leadership theory, it is posited to have a positive relationship with employee's extra-curricular activities (OCB) (Bogler & Somech, 2019). The study of Sagnak (2016) indicates that participative leadership facilitates OCB practice among employees. The study of Puni et al. (2019) found that participative leadership behaviour indirectly affects subordinate's OCB and the growth of competent employees. However, it is unclear what the relationship between participative leadership style and OCB will be among workers from a developing country like Ghana. In view of this, the study hypothesized that:

**H<sub>0</sub>: 4** Participative leadership style significantly relates to organisational citizenship behaviour in Ghanaian workplaces.

### **3.5. Supportive leadership style and organisational citizenship behaviour**

The study of Ehrhart and Naumann (2004) has established a positive influence between leadership style and subordinate's OCB practices in several instances. Aside from personality and attitude, leadership is identified as a great antecedent of OCB (Organ et al., 2006). Studies by several scholars have established a positive relationship between supportive leadership style on voluntary employee behaviours (e.g., Al-Sharafi & Rajiani, 2013; Özduran & Tanova, 2017; Zhang & Chen,

2013). Supportive leadership and OCB are found to be significantly and positively correlated in the study of Puni and Hilton (2020). Furthermore, some other studies (Euwema et al., 2007; Pearce & Herbig, 2004; Podsakoff et al., 2000) identified that empowerment (supportive) leadership behaviour has a significant positive effect on extra-role behaviours of employees. All these studies were conducted outside Ghana, and it is not clear what the relationship will be from the developing economy perspective. In view of this, the study hypothesized that:

**H<sub>0</sub>: 5** Supportive leadership style significantly relates to organisational citizenship behaviour at Ghanaian workplaces

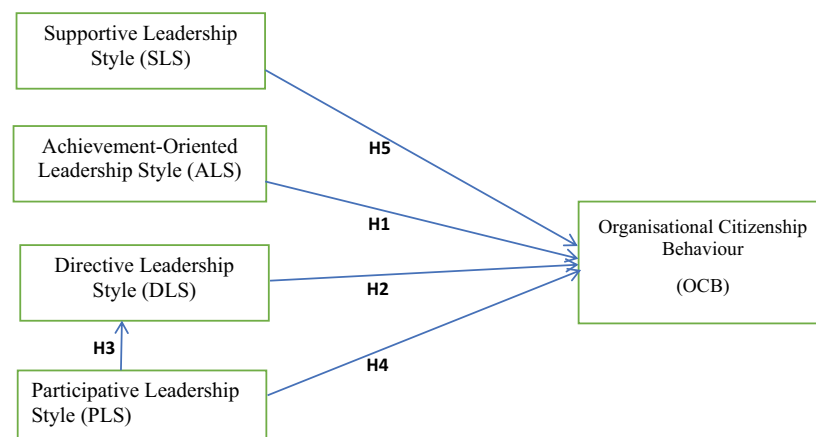
Based on the conceptual review of the relationship between the various dimensions of path-goal leadership style and organisational citizenship behaviour, a conceptual framework was designed to guide this study, as shown in Figure 1.

#### 4. Methodology

This study adopted the explanatory study design from the quantitative approach. The study used the stratified random sampling technique to collect data from a sample of 636 out of 2760 000 study population of workers from banking and finance, judicial service, education, health, ICT, Local Government, insurance, and immigration workers from both the public and private sectors of Ghana (Danish Trade Union Development Agency, 2023). The 2,760 000 workers are made up of 1,200 000 workers in the public sector and 1, 560 000 workers in the formal private sector of Ghana (Danish Trade Union Development Agency, 2023, Oppong & Segbenya, 2023).

An adopted questionnaire with an OCB scale from Salam (2020) and Donkor and Segbenya (2023), and the dimensions of the leadership style scale from Wittner et al. (2020) were used for the study. The scale was, however, modified to suit the context of Ghana and was measured on a 4-point scale where 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree. The 4-point scale was used instead of the 5-point measurement Likert scale due to the fact that this study did not use undecided or neutral since the study wanted each respondent to take a stand either by agreeing or disagreeing with the statements. Additionally, the undecided or neutral response could also influence the mean values/results to be obtained since such undecided results could not belong to any of the two extremes (agree or disagree). The questionnaire had six parts which were focused on the demographic characteristics of respondents, supportive leadership style, directive leadership style, participative leadership style, and organisational citizenship behaviour. Reliability and validity were checked for the instrument using the Cronbach Alpha coefficient, and all variables achieved a value above the minimum co-efficient threshold of 0.70 (Segbenya & Anokye, 2022). The OCB scale produced a Cronbach's Alpha value of 0.936, and each dimension of leadership style - Supportive Leadership Style (SLS) had 0.724, Directive Leadership Style (DLS) =

**Figure 1. Conceptual framework of the study.**





.790; Participative Leadership Style (PLS) = .728 and lastly Achievement-Oriented Leadership Style (ALS) = .753. Details of the pretest analyses of the instrument can be found in Appendix A.

All ethical considerations, including anonymity, confidentiality, respondents' free consent, and freedom to withdraw even if the participant had begun the process, among others, were ensured. Partial Least Square- Structural Equation Modelling (PLS-SEM) was used for the analysis of the hypotheses that guided the study. Ethical clearance was granted by the Department of Business Studies, College of Distance Education, for the University of Cape Coast Institutional Review Board.

## 5. Results and discussion

The presentation of the results of the study in this section will focus on three aspects: demographic characteristics of respondents, preliminary analysis for the PLS-SEM used and results for testing of hypotheses guiding the study. Results for respondents' demographic characteristics are therefore presented in Table 1. It is clear from Table 1 that most of the respondents had one 1–5 years of working experience (49.4%) worked in the public sector (71.4%), were male workers (50.2%), were 31–40 years (48.1%), and were in non-managerial positions (67.9%).

The preliminary analysis for the study to test the PLS-SEM was done by checking the factor loading for all the variables of the study, and the results are presented in Table 2. The results in Table 2 reveal that all were kept in the table used for measuring the five variables of the study above the minimum threshold of 0.70 (Segbenya et al., 2022). Specifically, three items were used to measure achievement-oriented leadership style (ALS), four items for directive leadership style (DLS), 10 good items for organisational citizenship behaviour (OCB), four well-loaded items used for participative leadership style (PLS), and finally, three well-loaded items used for supportive leadership style (SLS).

It is also important to take note of the pictorial presentation of the loading of the items measuring the variables of the study, as presented in Figure 2. The results presented in Figure 2 are a confirmation that all the items reported in Table 2 really loaded well. These are displayed with the arrows in Figure 2.

The second preliminary analysis was to check the construct's reliability and validity, and the analysis was done by using four main indicators (Donkor & Segbenya, 2023). The results of this effect are presented in Table 3. The results revealed that the values recorded for Cronbach's Alpha ranged between 0.798 and 0.928; rho\_A ranged from 0.801 to 0.931. It is also important to note the Composite Reliability and the Average Variance Extracted (AVE), respectively, recorded values ranging between 0.881 to 0.939 and 0.605 to 0.757. All values obtained for the first three indicators were judged with a criterion suggested by Hair et al. (2017) and Segbenya and Anokye (2022) that a minimum threshold of 0.70 is acceptable. The last indicator was also evaluated based on Segbenya et al. (2022) and Hair et al. (2017) suggestion of a minimum threshold of 0.50. Comparing all values obtained for rho\_A, Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE) to the required thresholds, it can be seen that all the indicators are within the acceptable thresholds. The results indicate that the model has attained the construct reliability and validity requirement and could be used for further higher-level analysis.

## 6. Discriminant validity

The PLS-SEM model used was also checked in terms of discriminant validity to see how unique the factors or variables of the study were (Segbenya & Mensah-Minadzi, 2022), and the results are presented in Table 4. The analysis was done with Heterotrait–Monotrait Ratio (HTMT). Henseler et al. (2015) and Segbenya et al. (2023) recommended that HTMT value is less than the maximum threshold of 0.850 was used. Thus, judging from the values reported in Table 4 for the HTMT, which were between 0.309 and 0.799, indicating that these values were below the maximum thresholds.



**Table 1. Demographic characteristics**

Demographic variable	No.	%
<b>Tenure</b>		
1–5 Years	314	49.4
6–10 Years	147	23.1
11 Years and Above	175	27.5
Total	636	100.0
<b>Gender</b>		
Female	317	49.8
Male	319	50.2
Total	636	100.0
<b>Sector</b>		
Public	454	71.4
Private	182	28.6
Total	636	100.0
<b>Age</b>		
20–30	223	35.1
31–40	306	48.1
41–50	89	14.0
51 Years and Above	18	2.8
Total	636	100.0
<b>Levels</b>		
Management Member	204	32.1
Non-Management Member	432	67.9
Total	636	100.0

Field survey (2023)

This means that the PLS-SEM model used met the discriminant validity test and the variables used for this study were distinct.

## 7. Collinearity statistics

Path relationship to be established for the hypotheses of the study can be spurious if there is the presence of multicollinearity. For this reason, the study checked for the presence of multicollinearity, and the results are presented in Table 5. Segbenya et al. (2022) revealed that a multicollinearity value of 3.30 and above indicates that the model contains multicollinearity. Values obtained from the model used for this study revealed that they were between 1.000 and 2.391; these values were below the maximum threshold, suggesting that the PLS-SEM was without the presence of multicollinearity. Thus, the path relationship to be obtained will not be spurious, and type 1 and type 2 errors will not be committed.

## 8. Path coefficients

The main results for testing the hypotheses of the study are presented in Table 6. The results for the path relationship between the variables of the study show that one hypothesis was not supported by the study due to a non-significant relationship. The remaining five hypotheses were, however, adopted or accepted by the study because of the significant relationship between these variables of the study. Specifically, hypothesis one achieved a significant relationship between Achievement-Oriented Leadership Style (ALS) and organisational citizenship behaviour (OCB) at ( $\beta = 0.124$ ,  $t = 2.385$ ,  $p = 0.017$ ). There was a significant relationship between Directive Leadership Style (DLS) and organisational citizenship behaviour (OCB) at ( $\beta = 0.209$ ,  $t = 3.941$ ,  $p = 0.000$ ) for the second hypothesis of the study. Furthermore, it was also observed for hypothesis three that Participative Leadership Style (PLS)

**Table 2. Outer loadings**

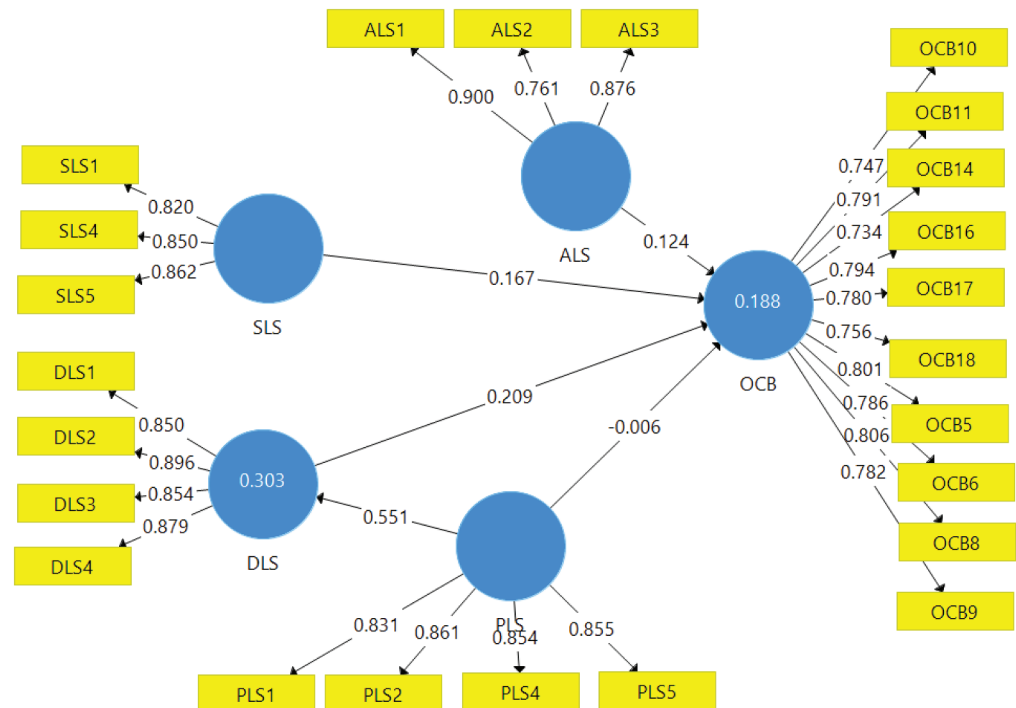
	ALS	DLS	OCB	PLS	SLS
ALS1	0.900				
ALS2	0.761				
ALS3	0.876				
DLS1		0.850			
DLS2		0.896			
DLS3		0.854			
DLS4		0.879			
OCB10			0.747		
OCB11			0.791		
OCB14			0.734		
OCB16			0.794		
OCB17			0.780		
OCB18			0.756		
OCB5			0.801		
OCB6			0.786		
OCB8			0.806		
OCB9			0.782		
PLS1				0.831	
PLS2				0.861	
PLS4				0.854	
PLS5				0.855	
SLS1					0.820
SLS4					0.850
SLS5					0.862

Field survey (2023)

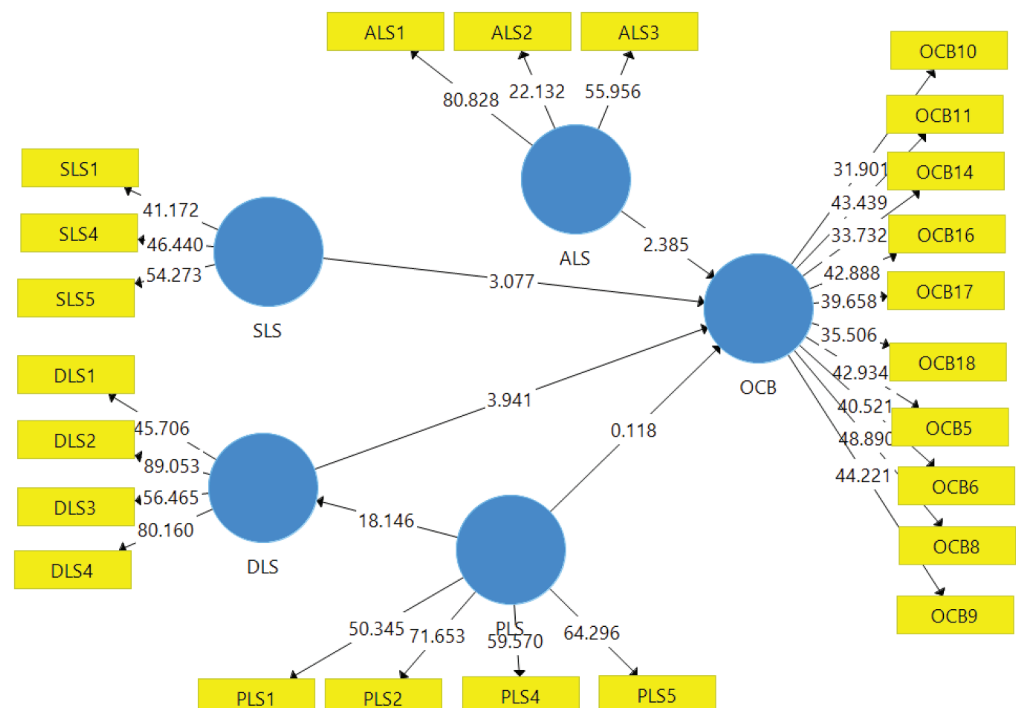
obtained a significant relationship with Directive Leadership Style (DLS) at ( $\beta = 0.551$ ,  $t = 18.146$ ,  $p = 0.000$ ). The fourth hypothesis of the study was, however, not accepted because it established that there was a non-statistically significant relationship between Participative Leadership Style (PLS) and organisational citizenship behaviour (OCB) at ( $\beta = -0.006$ ,  $t = 0.118$ ,  $p = 0.906$ ). It is also important to note that the last direct hypothesis was also validated because it attained a statistically significant relationship. That is, Supportive Leadership Style (SLS) significantly influenced organisational citizenship behaviour (OCB) at ( $\beta = 0.167$ ,  $t = 3.077$ ,  $p = 0.002$ ). The final hypothesis of the study, which bordered on the indirect relationship, was also accepted. That is, Directive Leadership Style (DLS) significantly mediated the relationship between Participative Leadership Style (PLS) and organisational citizenship behaviour (OCB) at ( $\beta = 0.115$ ,  $t = 4.002$ ,  $p = 0.000$ ). The results in Table 6 also reveal that the overall contributions of the dependent variables expressed as the R-square suggest that the model explained about 30% variance in Directive Leadership Style (DLS) and approximately 19% of the variance in organisational citizenship behaviour (OCB).

Apart from the results for the overall contributions of the variables of the study presented in Table 6, a graphical presentation of the same has also been provided in Figure 2. The bootstrapping results using the recommended 5000 samples by Hair et al. (2017) also further confirm the significant relationship between the variables presented earlier in Table 6. Thus, the arrows and values obtained and presented in Figure 3 strongly highlight the significant relationship between the variables and also further show the pictorial view of how these variables relate to each other in terms of significance.

**Figure 2. CFA Algorithm**



**Figure 3. Bootstrapping**



## 9. Discussion of the results

A deeper reflection on each of the findings for each hypothesis of the study is provided in this section. The first findings of the study showed that Achievement-Oriented Leadership Style (ALS) significantly predicted organisational citizenship behaviour (OCB) could be explained further. The results mean that any percentage increase in Achievement-Oriented Leadership Style (ALS) by

**Table 3. Construct Reliability and validity**

	<b>Cronbach's Alpha</b>	<b>rho_A</b>	<b>Composite Reliability</b>	<b>Average Variance Extracted (AVE)</b>
ALS	0.805	0.840	0.884	0.719
DLS	0.893	0.898	0.926	0.757
OCB	0.928	0.931	0.939	0.605
PLS	0.873	0.880	0.913	0.723
SLS	0.798	0.801	0.881	0.712

Field survey (2023)

**Table 4. Heterotrait-monotrait ratio (HTMT)**

	<b>ALS</b>	<b>DLS</b>	<b>OCB</b>	<b>PLS</b>	<b>SLS</b>
ALS					
DLS	0.799				
OCB	0.400	0.434			
PLS	0.659	0.614	0.309		
SLS	0.671	0.766	0.419	0.749	

Field survey (2023)

**Table 5. Collinearity Statistics (VIF) inner VIF values**

	<b>ALS</b>	<b>DLS</b>	<b>OCB</b>	<b>PLS</b>	<b>SLS</b>
ALS			2.103		
DLS			2.391		
OCB					
PLS		1.000	1.881		
SLS			2.131		

Field survey (2023)

leaders of organisations in Ghana will lead to a proportional percentage increase in organisational citizenship behaviour (OCB) of workers in Ghana. This means that leaders who let subordinates know what he expects them to perform at their highest level and set quite challenging goals for subordinates' performance are in a better position to move or urge their subordinates to bring on board voluntary behaviours to enhance the organisational efficiency and effectiveness. Furthermore, the results suggest that leaders who encourage continual improvement in subordinates' performance will be able to influence OCB among subordinates in the workplace. The findings of this study are in tandem with earlier findings of Wijaya (2023) that also found a significant relationship between Achievement-Oriented Leadership Style and organisational citizenship behaviour (OCB). The findings of Dartey-Baah and Addo (2019) that Achievement-Oriented Leadership Style (ALS) significantly predicts organisational citizenship behaviour are upheld by the findings of this study. The findings of this study further corroborate the earlier findings of Karam et al. (2019) that Achievement-Oriented Leadership Style (ALS) significantly predicted organisational citizenship behaviour.

The findings for the study's second hypothesis that Directive Leadership Style (DLS) significantly influenced organisational citizenship behaviour also mean a lot. The results suggest that any percentage increase in Directive Leadership Style among leaders in workplaces will elicit the same percentage increase in organisational citizenship behaviour among workers under such

Table 6. Path coefficients									
	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values	Confidence intervals		f <sup>2</sup>	
1. ALS -> OCB	0.124	0.126	0.052	2.385	0.017	2.5%	97.5%	0.009	
2. DLS -> OCB	0.209	0.211	0.053	3.941	0.000	0.109	0.316	0.023	
3. PLS -> DLS	0.551	0.551	0.030	18.146	0.000	0.484	0.600	0.436	
4. PLS -> OCB	-0.006	-0.009	0.054	0.118	0.906	-0.118	0.098	0.000	
5. SLS -> OCB	0.167	0.170	0.054	3.077	0.002	0.066	0.272	0.016	
6. PLS -> DLS -> OCB	0.115	0.116	0.029	4.002	0.000	0.061	0.172		
	<b>R Square</b>				<b>R Square Adjusted</b>				
DLS	0.303				0.302				
OCB	0.188				0.183				
Field survey (2023)									

leaders. Thus, leaders can use Directive Leadership Style to influence voluntary work behaviour among their subordinates. The leaders who use Directive Leadership Style believe that though subordinates may know what is expected of them, there is a need to inform them about what needs to be done and how it needs to be done. Directive Leadership Style also ensures that subordinates follow standard rules and regulations. This finding corroborates Puni and Hilton (2020) findings that Directive Leadership Style influences OCB. Furthermore, the findings of this study corroborate the earlier findings of Mahdi et al. (2014) that directive leadership style influences OCB.

Hypothesis three established that Participative Leadership Style (PLS) obtained a significant relationship with Directive Leadership Style (DLS). These results mean that leaders who consult with subordinates when facing a problem listen receptively to subordinates' ideas and suggestions and ask for suggestions from subordinates concerning how to carry out assignments stand a better chance of ensuring a directive leadership style at the workplace. That means that it explains the level of performance that is expected of subordinates, if a leader pays more attention to Participative Leadership Style in the workplace. The results agree with the findings of Puni et al. (2019), who earlier established a significant relationship between Participative Leadership Style and organisational citizenship behaviour. Also, the findings of Mahdi et al. (2014) that participative leadership style influences organisational citizenship behaviour are upheld by this study.

The findings of hypothesis four that there was a non-statistically significant relationship between Participative Leadership Style (PLS) and organisational citizenship behaviour (OCB) meant that participatory leadership style was not adequate in predicting OCB behaviour among workers. That means that workers in Ghanaian workplaces require a more influencing leadership style other than participatory leadership style in order to act voluntarily for the betterment of their organisations. That is, any percentage increase in participatory leadership style will not necessarily induce organisational citizenship behaviour among workers. Participatory leadership is significantly related to the distributive leadership style but fails to attain the same significant relationship. Thus, leaders who exhibit a solely participatory leadership style will not succeed in eliciting voluntary behaviour or OCB among their subordinates in the workplace. The findings of this study, therefore, disagree with the findings of Dartey-Baah and Addo (2019); Karam et al. (2019) that participatory leadership style affects organisational citizenship behaviour. The disparity could be coming from contextual differences and analytical differences.

The findings that Supportive Leadership Style (SLS) significantly influenced organisational citizenship behaviour for hypothesis five can be explained further. The findings suggest that any percentage increase in supportive leadership style will result in the same percentage increase in inducing organisational citizenship behaviour among workers in the workplace. That is, leaders who behave in a manner that is thoughtful of subordinates' personal needs and helps subordinates overcome problems that stop them from carrying out their tasks stand a better chance to influence their workers to contribute to the organisational success voluntarily. Supportive leaders also maintain friendly working relationships with subordinates and do little things to make it pleasant to be members of a group. The results mean that for workers to exhibit organisational citizenship behaviour at the workplace, leaders in superior positions will need to demonstrate supportive leadership towards workers. The findings are in agreement with the earlier findings of Özduran and Tanova (2017); that supportive leadership style significantly relates to organisational citizenship behaviour at the workplace. The findings further agree with the findings of Al-Sharafi and Rajjani (2013) that a supportive leadership style significantly relates to organisational citizenship behaviour at the workplace. The results further support the assertion held by Zhang and Chen (2013) that a supportive leadership style significantly relates to organisational citizenship behavior in the workplace.

The findings for the last hypothesis of the study are very important because it is the contribution of this paper to knowledge. The findings that the directive leadership style significantly mediates the relationship between participatory leadership and organisational citizenship behaviour can be



explained further. The results are very important because it takes the results for hypothesis four to a further level. That is, though participatory leadership did not significantly relate to organisational citizenship behaviour when directive leadership behaviour was introduced, the non-significant relationship soon became significant. The results indicate that participatory leadership style and organisational citizenship behaviour share their potency or predictive power with the directive leadership style. That is, the participatory leadership style effectively predicts organisational citizenship behaviour only when shared with the distributive leadership style. Therefore, leaders exhibiting only participatory leadership style will need to combine it with a directive leadership style to be able to influence organisational citizenship behaviour among workers. The findings for the significant mediating role of directive leadership style are the contribution of this study to existing knowledge on the topic since this relationship does not exist in the literature. Even though the existing literature (Özduran & Tanova, 2017) has established a relationship between participatory leadership and OCB, the literature did not examine the mediating power of directive leadership style on the relationship between participative leadership behaviour and organisational citizenship behaviour.

### 10. Theoretical and practical implications

The outcome of this study, in terms of findings, has several implications for theory and practice. That is, the leadership exchange theory used for this study is very much linked to the outcomes of this study. Specifically, the theoretical implication of the findings of this study is that leadership is very important for organisational growth and direction. The review of the theory has been limited to how it could influence the performance of employees' job schedules for which they are paid. This study has proven and contributed to the leadership exchange theory by extending its dimensions (directive, supportive, participative, and achievement-oriented leadership styles) to establish their ability to predict voluntary work behaviour among workers beyond the work schedules for which they are paid. Thus, a review of the theory has now been expanded to cover organisational citizenship behaviour in developing economies.

The practical implications of the findings of this study are also very important. The practical implication for leaders based on the findings of this study is that in order to influence OCB among their workers, there is the need to pay attention to directive leadership behaviour followed by a supportive leadership style and, finally, achievement-oriented leadership style. Though the participative leadership style was not adequate to predict OCB in Ghanaian workplaces, it can be successful when the directive leadership style is closely associated with it.

### 11. Conclusions and recommendations

This study examined the dimensions of leadership style and organisational citizenship behaviour among workers in Ghana. It can be concluded that directive, supportive, and achievement-oriented leadership styles achieved a significant relationship with organisational citizenship behaviour. Participatory leadership style is also significantly related to directive leadership behaviour in the workplace. The non-significant relationship between the participative leadership style and organisational behaviour was, however, significantly mediated by the directive leadership style.

Based on the conclusions of this study, it is recommended that leaders or superiors at workplaces should give more attention to the directive leadership style by explicitly indicating what is expected of subordinates, informing subordinates about what needs to be done and how it needs to be done, and finally explains the level of performance that is expected of subordinates. Leaders are further encouraged to pay attention to a supportive leadership style at the workplace. This can be done by ensuring that he/she maintains a friendly working relationship with subordinates, behaves in a manner that is thoughtful of subordinates' personal needs and helps subordinates overcome problems that stop them from carrying out their tasks. It is finally recommended that leaders and supervisors in workplaces use more of an achievement-oriented leadership style. This can also be exhibited by encouraging continual improvement in subordinates' performance, as well as setting challenging goals for subordinates' performance.

## 12. Suggestions for further studies

The findings of this study are limited to workers in Ghana and further studies could consider a comparative study between workers in Ghana and other African countries. The R-square value of approximately 19% explanation of the variance in the OCB suggests that there are other variables contributing about 81% variance in the OCB that were not included in this model. Further studies should consider other variables in explaining antecedents of OCB among workers.

### Acknowledgments

We acknowledge the support received from all respondents who took time off their busy schedules to respond to this study.

### Funding

There was no funding for this study.

### Author details

James Donkor<sup>1</sup>

Moses Segbenya<sup>2</sup>

E-mail: [moses.segbenya@ucc.edu.gh](mailto:moses.segbenya@ucc.edu.gh)

ORCID ID: <http://orcid.org/0000-0003-0065-2183>

Daisy Ofosuhen<sup>2</sup>

<sup>1</sup> College of Distance Education, University of Cape Coast, Cape Coast, Ghana.

<sup>2</sup> Department of Business Studies, College of Distance Education, University of Cape Coast, Cape Coast, Ghana.

### Availability of data and materials

The datasets for this study are available from the corresponding author on reasonable request.

### Disclosure statement

No potential conflict of interest was reported by the author(s).

### Ethical clearance

The Department of Business Studies of the College of Distance Education granted ethical clearance on behalf of the Institutional Review Board, University of Cape Coast.

### Informed consent

All respondents of this study participated in this study with clear consent to participate in this study.

### Citation information

Cite this article as: Dimensions of organisational leadership and organisational citizenship behaviour in Ghanaian workplaces, James Donkor, Moses Segbenya & Daisy Ofosuhen, *Cogent Business & Management* (2023), 10: 2281711.

### References

- Al-Sharafi, H., & Rajiani, I. (2013). Promoting organizational citizenship behaviour among employees: The role of leadership practices. *International Journal of Business & Management*, 8(6), 47–54. <https://doi.org/10.5539/ijbm.v8n6p47>
- Azila-Gbette, E. M. (2023). Transformational leadership and customer OCB: The mediating role of job involvement among Ghanaian budget family hotel employees. *Journal of Human Resources in Hospitality and Tourism*, 22(1), 120–142. <https://doi.org/10.1080/15332845.2023.2127051>
- Bogler, R., & Somech, A. (2019). Psychological capital, team resources and organizational citizenship behavior. *The Journal of Psychology*, 153(8), 784–802. <https://doi.org/10.1080/00223980.2019.1614515>
- Butt, A., Lodhi, R. N., & Shahzad, M. K. (2020). Staff retention: A factor of sustainable competitive advantage in the higher education sector of Pakistan. *Studies in Higher Education*, 45(8), 1584–1604. <https://doi.org/10.1080/03075079.2019.1711038>
- Danish Trade Union Development Agency. (2023). *Labour market profile – 2023/2024*. Danish Trade Union Development Agency.
- Dansereau, F., Seitz, S. R., Chiu, C. Y., Shaughnessy, B., & Yammarino, F. J. (1995). What makes leadership, leadership? Using self-expansion theory to integrate traditional and contemporary approaches. *The Leadership Quarterly*, 24(6), 798–821.
- Dartey-Baah, K., & Addo, S. A. (2019). Psychological identification with job: A leadership-OCB mediator. *International Journal of Organizational Analysis*, 27(3), 548–565. <https://doi.org/10.1108/IJOA-10-2017-1262>
- Donkor, J. & Segbenya, M. (2023). Modelling the relationship between dimensions of organisational justice and organisational citizenship behaviour in the Ghanaian workplaces. *Employ Respons Rights Jounl*, 4(1), 1–18. <https://doi.org/10.1007/s10672-023-09477-y>
- Ehrhart, M. G., & Naumann, S. E. (2004). Organizational citizenship behavior in work groups: A group norms approach. *Journal of Applied Psychology*, 89(6), 960. <https://doi.org/10.1037/0021-9010.89.6.960>
- Emur, A. P., Widyasari, M. N., Kinnary, N. R., & Putra, R. N. (2023). The effect of authentic leadership on organizational citizenship behavior: The role of psychological empowerment and quality of working life. *Jurnal Manajemen Teori Dan Terapan/ Journal of Theory and Applied Management*, 16(1), 64–80. <https://doi.org/10.20473/jmtt.v16i1.43505>
- Erdogan, B., & Bauer, T. N. (2014). Leader-Member Exchange (LMX) theory: The relational approach to leadership (D. V. Day, Ed.). The Oxford handbook of Leader-Member Exchange.
- Euwema, M. C., Wendt, H., & Van Emmerik, H. (2007). Leadership styles and group organizational citizenship behavior across cultures. *Journal of Organizational Behavior*, 28(8), 10351057. <https://doi.org/10.1002/job.496>
- Hair, J. F., Jr., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: Updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1(2), 107–123. <https://doi.org/10.1504/IJMDA.2017.087624>
- Henseler, J., Ringle, C. M. & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43, 115–135.
- Hermawan, A., Sunaryo, W., & Hardhienata, S. (2023). Optimal solution for OCB improvement through strengthening of servant leadership, creativity, and empowerment. *Aptisi Transactions on Technopreneurship (ATT)*, 5(1Sp), 11–21. <https://doi.org/10.34306/att.v5i1Sp.307>
- House, R. J. (1996). Path-goal theory of leadership: Lessons, legacy, and a reformulated theory. *The Leadership Quarterly*, 7(3), 323–352. [https://doi.org/10.1016/S1048-9843\(96\)90024-7](https://doi.org/10.1016/S1048-9843(96)90024-7)
- Karam, E. P., Hu, J., Davison, R. B., Juravich, M., Nahrgang, J. D., Humphrey, S. E., & Scott DeRue, D.

- (2019). Illuminating the 'face' of justice: A meta-analytic examination of leadership and organizational justice. *Journal of Management Studies*, 56(1), 134–171. <https://doi.org/10.1111/joms.12402>
- Khali, A. (2017). Transformational leadership and organizational citizenship behavior: The moderating role of emotional intelligence. *Leadership & Organization Development Journal*, 38(7), 1004–1015. <https://doi.org/10.1108/LODJ-11-2016-0269>
- Khan, D., & Muhammad, J. (2023). Organizational citizenship behavior in the context of leadership style: A case of public sector organizations in Balochistan. *Journal of Development and Social Sciences*, 4(2), 579–588. [https://doi.org/10.47205/jdss.2023\(4-II\)52](https://doi.org/10.47205/jdss.2023(4-II)52)
- Kwarteng, S., Frimpong, S. O., Asare, R., & Wiredu, T. J. N. (2023). Effect of employee recognition, employee engagement on their productivity: The role of transformational leadership style at Ghana health service. *Current Psychology*, 1–12. <https://doi.org/10.1007/s12144-023-04708-9>
- Lee, A., Thomas, G., Martin, R., Guillaume, Y., & Marstand, A. F. (2019). Beyond relationship quality: The role of leader–member exchange importance in leader–follower dyads. *Journal of Occupational and Organizational Psychology*, 92(4), 736–763. <https://doi.org/10.1111/joop.12262>
- Mahdi, O. R., Mohd, E. S., & Almsafir, M. K. (2014). Empirical study on the impact of leadership behavior on organizational commitment in plantation companies in Malaysia. *Procedia - Social & Behavioral Sciences*, 109, 1076–1087. <https://doi.org/10.1016/j.sbspro.2013.12.591>
- Masood, N. K., Usta, A., & Shafique, I. (2019). When ethical leadership and LMX are more effective in promoting creativity. *Baltic Journal of Management*, 15(1), 61–80. <https://doi.org/10.1108/BJM-02-2019-0042>
- Mekpor, B., & Dartey-Baah, K. (2017). Leadership styles and employees' voluntary work behaviors in the Ghanaian banking sector. *Leadership & Organization Development Journal*, 38(1), 74–88. <https://doi.org/10.1108/LODJ-09-2015-0207>
- Mostafa, A. M. S. (2018). Ethical leadership and organizational citizenship behaviours: The moderating role of organizational identification. *European Journal of Work & Organizational Psychology*, 27(4), 441–449.
- Northouse, P. G. (2019). *Leadership: Theory and practice* (8th ed.). SAGE Publications.
- Oppong, N. Y., & Segbenya, M. (2023). Inter-sector managerial skills requirements in Ghana: Group interactive brainstorming approach. *Social Sciences & Humanities Open*, 8(1), 100–112.
- Organ, D. W., Podsakoff, P. M., & MacKenzie, S. B. (2006). Organizational citizenship: Organizational-level consequences of organizational citizenship behaviours: A meta-analysis. *Journal of Applied Psychology*, 94(1), 122–141. <https://doi.org/10.1037/a0013079>
- Osei-Owusu, K. (2023). *Perceptions of Principals' leadership style influencing teachers' Job satisfaction: Catholic high schools in Ghana* [Doctoral dissertation, Fordham University].
- Özduran, A., & Tanova, C. (2017). Manager mindsets and employee organizational citizenship behaviours. *International Journal of Contemporary Hospitality Management*, 29(1), 589–606. <https://doi.org/10.1108/IJCHM-03-2016-0141>
- Pearce, C. L., & Herbig, P. A. (2004). Citizenship behavior at the team level of analysis: The effects of team leadership, team commitment, perceived team support, and team size. *The Journal of Social Psychology*, 144(3), 293–310. <https://doi.org/10.3200/SOCP.144.3.293-310>
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, 26(3), 513–563. <https://doi.org/10.1177/014920630002600307>
- Pratiwi, I., Asfar, A. H., Quraysin, I., & Tukiran, M. (2023). Organizational citizenship behavior, leadership style, work motivation and effect on employee performance. *Asian Journal of Management, Entrepreneurship and Social Science*, 3(1), 183–199.
- Puni, A., & Hilton, S. K. (2020). Power distance culture and whistleblowing intentions: The moderating effect of gender. *International Journal of Ethics and Systems*, 36(2), 217–234. <https://doi.org/10.1108/IJOES-10-2019-0163>
- Puni, A., Hilton, S. K., & Quao, B. (2019). The interaction effect of transactional-transformational leadership on employee commitment in a developing country. *Management Research Review*, 44(3), 399–417. <https://doi.org/10.1108/MRR-03-2020-0153>
- Ramadhanty, R. D., Sahrupi, S., Bastuti, S., & Hanif, M. (2022). Analisis perawatan mesin injeksi menggunakan metode overall equipment effectiveness dan failure mode and effect analysis. *JENIUS: Jurnal Terapan Teknik Industri*, 3(2), 123–136. <https://doi.org/10.37373/jenius.v3i2.328>
- Rezaei, B., Yarmohammadian, M. H., & Mahmoodzadeh Ardakani, H. (2017). The relationship between nurse managers' leadership styles and procrastination in nursing staff in Isfahan social welfare hospitals. *Avicenna Journal of Nursing and Midwifery Care*, 25(1), 60–68. <https://doi.org/10.21859/nmj-25018>
- Saadah, N., & Rijanti, T. (2022). The role of knowledge sharing, Leader-Member Exchange (LMX) on organizational citizenship behavior and employee performance: An empirical study on public health center of pati 1, pati 2 and tranquil in central java. *International Journal of Social and Management Studies*, 3(1), 112–131.
- Sagnak, M. (2016). Participative leadership and change-oriented organizational citizenship: The mediating effect of intrinsic motivation. *Eurasian Journal of Educational Research*, 16(62). <https://doi.org/10.14689/ejer.2016.62.11>
- Segbenya, M., & Anokye, F. A. (2022). Challenges and coping strategies among distance education learners: Implication for human resources managers. *Current Psychology*, 42(31), 1–15. <https://doi.org/10.1007/s12144-022-03794-5>
- Segbenya, M., Atadika, D., Aheto, S. P. K. & Nimo, E. B. (2023). Modelling the relationship between teaching methods, assessment methods and acquisition of 21st employability skills among university graduates. *Industry and Higher Education*, 9(5), 42–65.
- Segbenya, M. & Mensah-Minadzi, V. (2022). Post-Covid Lockdown Assessment of Blended Learning Approach for Distance Education in Ghana: Implications for human resource managers and curriculum implementers. *Education and Information Technologies*, 28(7), 7955–7973.
- Segbenya, M., Okorley, E. N. A., & Yan, Z. (2022). Effect of teleworking on working conditions of workers: A post-COVID-19 lockdown evaluation. *Human Behavior and Emerging Technologies*, 2022, 1–14. <https://doi.org/10.1155/2022/4562263>
- Spector, P. E., Bauer, J. A., & Fox, S. (2010). Measurement artifacts in the assessment of counterproductive work behavior and organizational citizenship behavior: Do we know what we think we know? *Journal of*

- Applied Psychology*, 95(4), 781. <https://doi.org/10.1037/a0019477>
- Subhaktiyasa, P. G., Andriana, K. R. F., Sintari, S. N. N., Wati, W. S., Sumaryani, N. P., & Lede, Y. U. (2023). The effect of transformational leadership, servant leadership, and spiritual leadership on organizational citizenship behavior. *Jurnal Organisasi dan Manajemen*, 19(1), 224–238. <https://doi.org/10.33830/jom.v19i1.3695.2023>
- Sunarsi, D., Rohaeni, N., Wulansari, R., Andriani, J., Muslimat, A., Rialmi, Z., & Fahlevi, M. (2020). Effect of e-leadership style, organizational commitment and service quality towards Indonesian school performance. *System Revision Pharmacy*, 11(10), 472–481.
- Thompson, P. S., Bergeron, D. M., & Bolino, M. C. (2020). No obligation? How gender influences the relationship between perceived organizational support and organizational citizenship behavior. *Journal of Applied Psychology*, 105(11), 1338. <https://doi.org/10.1037/apl0000481>
- Tran, Q. H. N. (2023). Explore the relationship between leadership skills, organizational citizenship behavior and organizational culture in Vietnamese public organizations. *Industrial and Commercial Training*, 55(3), 309–323. <https://doi.org/10.1108/ICT-10-2022-0078>
- Wengang, Z., Fenglian, W., & Feng, X. (2023). Motivating servant process for employee organizational citizenship behavior towards the environment: A goal setting perspective of integrating person-organization fit model. *Journal of Cleaner Production*, 387, 135932. <https://doi.org/10.1016/j.jclepro.2023.135932>
- Wijaya, E. (2023). The correlation of leadership and leader-member exchange on the performance of SMEs by mediation of organizational commitment. *International Journal of Social, Policy and Law*, 4(1), 12–21.
- Wittner, B., Barthauer, L., & Kauffeld, S. (2020). Accessibility and mobilisation of social capital in first-generation students' social networks—A mixed-methods approach. *Journal of College Student Retention: Research, Theory & Practice*, 25(2), 254–278. <https://doi.org/10.1177/1521025120979643>
- Yaakobi, E., & Weisberg, J. (2020). Organizational citizenship behavior predicts quality, creativity, and efficiency performance: The roles of occupational and collective efficacies. *Frontiers in Psychology*, 11, 758. <https://doi.org/10.3389/fpsyg.2020.00758>
- Zhang, Y., & Chen, C. C. (2013). Developmental leadership and organizational citizenship behavior: Mediating effects of self-determination, supervisor identification, and organizational identification. *The Leadership Quarterly*, 24(4), 534–543. <https://doi.org/10.1016/j.leaqua.2013.03.007>
- Zhao, D., Wu, J., & Gu, J. (2020). Higher-quality leader-member exchange (lmx), higher-level voice? the impact of lmx differentiation and lmx mean on promotive and prohibitive team voice. *Current Psychology: A Journal for Diverse Perspectives on Diverse Psychological*, 41(7), 4692–4710. <https://doi.org/10.1007/s12144-020-00985-w>

#### Appendix A: Pretest results for the instrument

Variables	Cronbach's Alpha	No of Items
OCB	.936	18
Dimensions of Leadership		
Supportive Leadership Style (SLS)	.724	5
Directive Leadership Style (DLS)	.790	5
Participative Leadership Style (PLS)	.728	5
Achievement-Oriented Leadership Style (ALS)	.753	4