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How Leader Humility Influences Organizational Citizenship Behavior through Job Satisfaction and Employee Engagement

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Abstract

This study investigated the relationship between leader humility (LH) and organizational citizenship behavior (OCB), considering the mediating effects of job satisfaction (JS) and employee engagement (EE) among staff at a public university in Ghana. Employing a cross-sectional design, data were collected from 246 participants selected through stratified sampling using a structured questionnaire, and hypotheses were tested via structural equation modeling. Findings revealed that LH is positively and significantly associated with OCB, JS, and EE. Additionally, JS and EE were found to have significant positive relationships with OCB and partially mediated the link between LH and OCB. The results suggest that employees under humble leaders are more likely to experience satisfaction, engagement, and demonstrate OCB, highlighting the value of humble leadership in fostering positive employee behaviors. Consequently, organizations aiming to cultivate satisfied, engaged employees who exhibit OCB should promote humble leadership traits among their supervisors.

Keywords: Humble leadership, Trust in supervisor, Work engagement, Extra-role behaviour, Family supportive supervisor behaviour, Job satisfaction

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Introduction

Most employees recognize that their primary responsibility is to complete assigned tasks and deliver work that meets organizational standards. Organizational citizenship behavior (OCB), however, refers to voluntary actions that go beyond formal job requirements, contributing to the overall effectiveness of the organization [1, 2]. Although these discretionary behaviors support organizational efficiency, they are typically not directly rewarded or acknowledged by formal incentive systems [3]. Employees who consistently exceed their job expectations and dedicate extra effort are often found in high-performing organizations [4]. Social exchange theory explains OCB by suggesting that individuals feel compelled to reciprocate when they benefit from others' actions [5, 6]. Empirical studies indicate that Leader-Member Exchange (LMX) predicts OCB, as employees who maintain positive relationships with leaders frequently demonstrate behaviors that assist coworkers and enhance organizational performance [7-9].

This underscores the pivotal role of leaders in organizations. Leaders, as authority figures working closely with subordinates, influence employee attitudes and represent the organization [10, 11]. Leader humility (LH) has been highlighted as a valuable organizational trait due to its positive outcomes [12-16]. The first theoretical framework for humility in organizational leadership was developed by Owens and Hekman [17], detailing behaviors, processes, contingencies, and outcomes related to organizational functioning. Like other other-centered leadership styles, LH is recognized for promoting constructive employee behaviors that enhance productivity [10, 18-21]. Humble leaders adopt a bottom-up approach, avoid self-centeredness, and

value contributions from others [12, 22]. LH is defined as an interpersonal trait displayed in social contexts, characterized by accurate self-awareness, appreciation of others' strengths, and openness to feedback and learning [23].

Owens *et al.* [23] further emphasized that LH shapes perceptions, attitudes, and behaviors by influencing leader-follower interactions. Employees benefit from humble leaders, which often encourages reciprocal constructive behaviors. Since leaders symbolize the organization, followers interpret humble behaviors as organizational support, thereby fostering OCB [24]. Despite this, public sector organizations sometimes experience egocentric leaders who negatively impact corporate culture and employee performance, making humility in leadership an underexplored trait in scholarly literature [25]. Given that employees often leave supervisors rather than organizations [26], examining LH is crucial for both employee and organizational outcomes. Public sector institutions also face issues like absenteeism, lack of cooperation, resource misuse, and property theft [27, 28].

Research suggests that humble leaders model positive behaviors that encourage employees to engage in OCB via job satisfaction (JS) and employee engagement (EE) [23, 29, 30]. However, few studies have examined the direct influence of LH on followers' extra-role behaviors [16, 31], and the literature on humble leadership is still developing [22, 32]. Furthermore, LH characteristics may affect JS and EE, which could subsequently impact OCB, yet empirical studies on these mediating relationships remain limited. Addressing this gap, the current study investigates the effect of LH on OCB, considering the mediating roles of JS and EE in a public university context.

Public universities often face resource constraints, making LH and OCB especially important. Institutions known for humble leadership may attract talented faculty, staff, and students. Additionally, humble leaders can motivate employees to exceed job expectations, fostering collaboration, knowledge sharing, and a supportive learning environment, ultimately enhancing service experiences for students and the broader university community.

Theoretical Background and Hypotheses

Leader humility and organizational citizenship behavior

Leader-Member Exchange (LMX) theory emphasizes the importance of relationships between individuals of unequal status in organizations and their impact on work outcomes [33-35]. LMX suggests that humble leaders can stimulate OCB, as employees with positive relationships with their supervisors are more likely to engage in behaviors that support coworkers and enhance organizational performance [7-9, 32]. Humble leaders inspire followers to demonstrate extra-role behaviors, with their integrity and exemplary traits motivating employees to reciprocate with constructive actions [36]. Empirical evidence further supports a positive link between LH and OCB, showing that OCB is often facilitated by the guidance and support of humble leaders [37-39].

Hypothesis: H1: Leader humility is positively associated with organizational citizenship behavior.

Leader humility and job satisfaction

Humble leaders tend to positively impact their followers [14], including influencing employee job satisfaction (JS) [40]. According to Yang and Xu [41], leaders who exhibit humility often listen attentively before speaking, which cultivates a supportive environment and, over time, enhances employee satisfaction. Employees are also more likely to feel satisfied when leaders acknowledge their strengths, accept their weaknesses, and prioritize their personal growth [17]. Through the leader-member exchange (LMX) framework, team members who share strong relationships with humble leaders are provided opportunities to voice their opinions and engage in communication [42]. Employees embedded in positive social exchange relationships within teams led by humble and supportive supervisors are expected to develop favourable attitudes toward their jobs [43]. Empirical studies have confirmed this relationship; Owens *et al.* [23] and Ou *et al.* [29] both found that leader humility (LH) is positively associated with follower JS, while Oga and Worlu [44] reported that LH significantly influences employees' JS. Based on these findings, the hypothesis is proposed as follows:

H2: LH is positively related to JS.

Leader humility and employee engagement

Recent studies identify leader humility as a fundamental organisational virtue, linking it to enhanced employee engagement (EE) [16]. Wright *et al.* [45] assert that humble leaders show genuine interest in employee growth, fostering positive reciprocal exchanges. Yang and Xu [41] highlight that a humble leadership approach shapes employees' favourable work attitudes, including engagement. This nurtures a shared interpersonal process that motivates team members to achieve their full potential [46]. Furthermore, humble leaders inspire similar behaviours among their followers [46]. Kahn [47] emphasizes that when employees trust supportive and humble leaders, they are more willing to commit to their work due to feelings of psychological safety. Empirical evidence also suggests that LH helps employees manage stress by offering support, while simultaneously motivating them to exert greater effort in task performance and workplace engagement [48]. Similarly, Rich *et al.* [49] found that humble leaders energize subordinates, increasing focus and dedication to work, aligning with the concept of engagement.

Luo *et al.* [50], in their meta-analysis, further confirmed a positive relationship between humble leadership and employee engagement. Consequently, the hypothesis is stated as:

H3: LH is positively related to EE.

Job satisfaction and organisational citizenship behaviour

Job satisfaction (JS) refers to employees' overall attitudes toward various aspects of their work, including pay, supervisory style, coworkers, promotions, and the job itself [51]. Employees who are satisfied with their work take pride in their organisational affiliation, support its objectives, and demonstrate higher levels of organisational citizenship behaviour (OCB) [52, 53]. Yee *et al.* [54] emphasized that satisfied employees reflect the true value of the organisation, translating their contentment into OCB. Several studies have identified a positive link between JS and OCB; for example, Unal [55] found a significant relationship between JS and the four OCB dimensions: altruism, courtesy, sportsmanship, and civic virtue. Mohammad [56], Gunay [57], and Hemakumara [58] similarly demonstrated that JS positively influences OCB. Based on these findings, the hypothesis is formulated as:

H4: JS is positively related to OCB.

Employee engagement and organisational citizenship behaviour

Employee engagement (EE) is conceptualized as a positive state of mental well-being that promotes optimal functioning within organisational settings [59]. It manifests through vigour, dedication, and absorption [60], reflecting employees' physical, cognitive, and emotional connection to their work [61]. Uddin *et al.* [62] argue that higher EE produces a more productive workforce and elevates performance levels. Empirical research supports a strong link between EE and OCB; Ariani [63] found EE to be significantly and positively associated with OCB, while Amadi *et al.* [64] and Macey and Schneider [65] reported similar results. Additionally, Christian *et al.* [66] in a meta-analysis, and Byaruhanga and Othuma [67] also confirmed a positive correlation between EE and OCB. Accordingly, the hypothesis is:

H5: EE is positively related to OCB.

Job satisfaction as a mediator between leader humility and organisational citizenship behaviour

Employees' job satisfaction often manifests through workplace relationships, cooperative behaviour, and interactions, with supervisors' personalities serving as a key influencing factor [68]. Leaders who display humility can enhance their subordinates' satisfaction with their work. Farrington and Lillah [69] demonstrated a positive link between leader humility (LH) and employee JS, while Sabir *et al.* [70] argued that organisational outcomes are the product of both leader and employee contributions. Similarly, Luo *et al.* [50] confirmed that humble leadership positively shapes employees' job satisfaction. Since job satisfaction is also recognised as a determinant of organisational citizenship behaviour (OCB) [56-58], it is proposed that:

H6: JS mediates the relationship between LH and OCB.

Employee engagement as a mediator between leader humility and organisational citizenship behaviour

According to social exchange theory, employees reciprocate their leaders' positive intentions with constructive workplace behaviours and attitudes [71]. Engagement tends to increase when employees perceive that leaders genuinely care for their welfare and consistently embody organisational values [47]. Empirical studies support this: Nielsen *et al.* [72] found that humble leadership positively affects employees' emotions and attitudes, which in turn enhances employee engagement (EE). Humble leaders also recognise employees' contributions and help them appreciate the importance of their work, which fosters OCB [73]. Evidence from Aboramadan and Dahleez [74] shows that EE mediates the connection between positive leadership styles—such as transformational, transactional, or humble leadership—and OCB. Likewise, Ozturk *et al.* [75] found that EE serves as a mediator in the link between servant leadership and extra-role behaviours, and El-Gazar *et al.* [76] reported an indirect relationship between LH and proactive behaviours via engagement. Hence, the following hypothesis is advanced:

H7: EE mediates the relationship between LH and OCB.

Control variables

This study accounts for family-supportive supervisor behaviour (FSSB) and trust in supervisor (TIS) as control variables due to their potential impact on OCB and related constructs. For example, O'Grady [8] reported that employees who trust their supervisors are more likely to engage in OCB, while Alam *et al.* [77] suggested that supportive supervisors enhance leadership effectiveness and increase EE. Trust also plays a role in employees' job satisfaction [78], and high-quality leader-member exchanges characterised by trust are linked to discretionary employee behaviours beyond formal job requirements [79]. Including FSSB and TIS as controls ensures that the influence of LH on OCB via JS and EE is not confounded.

Conceptual framework

Figure 1 illustrates the study's conceptual framework, reflecting the seven hypotheses previously outlined. Direct paths from LH to OCB, JS, and EE correspond to H1, H2, and H3, respectively. The relationships from JS to OCB and EE to OCB represent H4 and H5. The mediating pathways—LH → JS → OCB and LH → EE → OCB—capture H6 and H7. FSSB and TIS are included as control variables to account for their potential effects.

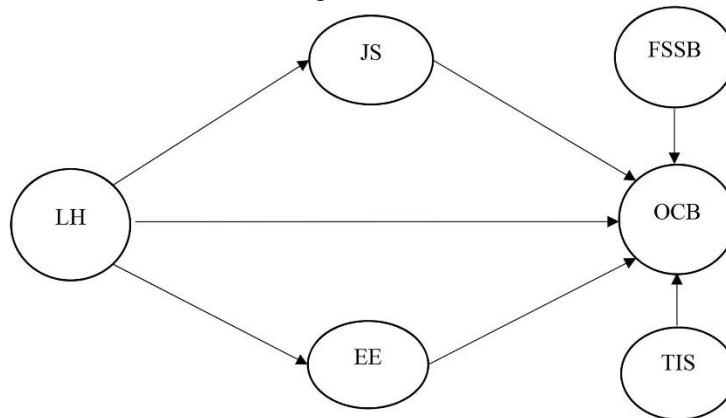


Figure 1. Conceptual framework

Research Methods

Research design

This study employed a cross-sectional survey design. This approach was deemed suitable because the research focused on individual employees as the unit of analysis and relied on a standardized questionnaire to collect data at a single point in time [80, 81]. Additionally, the design facilitated the collection of quantitative data, which was subsequently analysed using both descriptive and inferential statistical techniques, allowing the results to be generalizable to the broader population [82].

Sampling procedure

The study targeted 640 administrators from a public university in Ghana, from which a sample of 246 respondents was determined using Yamane's [83] formula for sample size calculation. To ensure that all staff categories were proportionately represented, a stratified random sampling technique was applied. Within each stratum, participants were selected through a lottery method, guaranteeing representativeness across the population. **Table 1** presents the sampling frame, detailing the various strata and the corresponding sample sizes. Importantly, respondents were considered knowledgeable enough to accurately complete the questionnaire, which helped mitigate potential common method bias [84].

Table 1. Population and sample

Stratum	Population	Sample
Administrative Assistants	177	68
Senior Administrative Assistants	184	71
Principal Administrative Assistants	233	90
Chief Administrative Assistants	46	17
Total	640	246

Instrument and data collection

For this study, a structured questionnaire was developed to allow respondents to self-report their perceptions. The instrument consisted of two main parts: the first captured participants' demographic details, and the second focused on the study variables. All items were assessed on a seven-point Likert scale ranging from 1 (indicating the lowest level of agreement) to 7 (indicating the highest level of agreement).

Leader humility (LH) was measured using the instrument by Owens *et al.* [23], with items such as, "My supervisor actively seeks my feedback even if it is critical." Organisational citizenship behaviour (OCB) was adapted from Podsakoff *et al.* [85], including statements like, "I help others who have heavy workloads." Job satisfaction (JS) was measured using selected items from the Minnesota Satisfaction Questionnaire (MSQ) by Weiss *et al.* [86], for instance, "I am satisfied with the feeling of accomplishment I get from the job." Employee engagement (EE) employed items adapted from Rich *et al.* [49], such as "I work with intensity on my job." Family-supportive supervisor behaviour (FSSB) used items from Hammer *et al.* [87], for example, "My supervisor is willing to listen to my problems in juggling work and non-work life." Trust in supervisor (TIS) was measured with items adapted from Yang *et al.* [88], including "I can depend on my supervisor to meet his/her responsibilities." All measures were adjusted to fit the Ghanaian context.

To reduce potential bias from self-reporting, the questionnaire included an introductory section explaining the study's objectives, emphasising confidentiality and anonymity, and providing clear instructions for completion [89-91]. The complete set of survey items is provided in the appendix. Ethical clearance was granted by the University of Cape Coast Institutional Review Board (UCCIRB/CHLS/2023/05), and respondents provided written informed consent before participating.

Data processing and analysis

Collected questionnaires were coded and analysed using SPSS and SmartPLS. Descriptive statistics, including frequencies and percentages, were computed to summarise demographic variables. Hypotheses were tested using partial least squares structural equation modelling (PLS-SEM) via SmartPLS.

The measurement model was assessed to ensure the reliability and validity of constructs. This involved examining indicator reliability through factor loadings, construct reliability via Cronbach's alpha, and composite reliability, convergent validity using average variance extracted (AVE), and discriminant validity using the HTMT criterion. The structural model was evaluated by considering the coefficient of determination (R^2), predictive relevance (Q^2), multicollinearity (VIF), effect sizes (f^2), and the significance of path coefficients (β).

Results

Sample characteristics

Table 2 summarises the demographic profile of respondents. Slightly more than half of the participants were female (50.8%). The majority (42.7%) fell within the 31–40-year age bracket, while 23.2% were aged 18–30 years. Most respondents (75.2%) held a bachelor's degree. Regarding professional rank, 36.6% were Principal Administrative Assistants. The majority of participants (43.1%) reported having between 2 and 5 years of work experience.

Table 2. Characteristics of sample

Characteristic	Category	Frequency	Percent
Gender	Female	125	50.8
	Male	121	49.2
Age	18–30 years	57	23.2
	31–40 years	105	42.7
	41–50 years	52	21.1
	51–60 years	32	13
Level of Education	Bachelor's degree	185	75.2
	Master's degree	58	23.6
	PhD	3	1.2
Rank	Administrative Assistant	68	27.6
	Senior Administrative Assistant	71	28.9
	Principal Administrative Assistant	90	36.6
	Chief Administrative Assistant	17	6.9
Number of years worked in the University	Less than one year	25	10.2
	2–5 years	106	43.1
	6–10 years	51	20.7
	over 10 years	64	26
	Total	246	100

Measurement model

As presented in **Table 3**, the analysis indicates that the data collected from respondents were free from common method bias. This conclusion is based on variance inflation factor (VIF) scores, which Kock [92] identifies as a diagnostic tool for detecting common method bias. All indicators exhibited VIF values below the 5.0 threshold recommended by Hair *et al.* [93], confirming that the data met the acceptable criteria for bias-free measurement.

Table 3. Indicator loadings test statistics and common method bias

Construct indicator	Loading	t value	VIF
EE1	0.780	11.540	3.688
EE2	0.903	29.071	2.272
EE3	0.575	10.314	1.540
EE4	0.924	31.833	4.740
EE5	0.828	15.287	5.848
EE6	0.893	28.772	3.524

EE7	0.745	11.024	2.569
EE8	0.519	4.561	2.534
FSSB1	0.627	6.232	1.922
FSSB2	0.640	5.801	2.137
FSSB3	0.799	5.286	3.096
FSSB4	0.833	6.718	4.623
FSSB5	0.738	4.430	3.883
FSSB6	0.617	3.834	2.280
FSSB7	0.672	1.931	1.968
JS2	0.649	8.723	1.862
JS3	0.634	8.263	3.726
JS4	0.841	39.120	2.339
JS5	0.842	24.709	2.905
JS6	0.852	17.896	4.043
JS8	0.699	9.843	2.772
LH1	0.884	62.598	2.862
LH2	0.784	35.756	4.796
LH3	0.667	13.025	2.852
LH4	0.626	8.715	1.986
LH5	0.565	9.905	2.133
LH6	0.718	13.294	2.852
LH7	0.807	27.323	2.909
LH8	0.660	13.810	2.267
LH9	0.732	25.668	2.425
OCB1	0.893	42.760	2.665
OCB5	0.765	18.908	4.427
OCB6	0.435	5.280	2.817
OCB7	0.826	33.360	2.358
OCB8	0.736	16.575	4.012
OCB9	0.950	73.480	3.314
OCB10	0.785	27.163	4.633
TIS1	0.743	2.865	1.932
TIS2	0.845	4.297	2.843
TIS3	0.953	4.217	2.289
TIS4	0.813	3.563	3.433
TIS5	0.809	3.209	4.254

Regarding indicator reliability, **Table 3** shows that the construct loadings met the necessary requirements, and the corresponding t values confirmed their significance, justifying their retention in the model. Henseler *et al.* [94] suggested that indicators with loadings of 0.70 or higher can reliably measure their respective constructs, implying that those below this threshold should generally be removed. Nonetheless, Benitez *et al.* [95] argued that indicators with loadings as low as 0.50 can be retained if their inclusion does not compromise the overall model reliability and validity, which explains why some indicators below 0.70 were kept. Concerning internal consistency reliability, the Cronbach's alpha (CA) and composite reliability (CR) values presented in **Table 4** indicated that all constructs achieved satisfactory reliability, as all values exceeded 0.70. Furthermore, convergent validity, assessed via the average variance extracted (AVE), met the recommended criterion ($AVE \geq 0.50$), confirming that the constructs exhibited appropriate interrelationships.

Table 4. Construct reliability and convergent validity

Construct	CA	CR	AVE
EE	0.918	0.925	0.615
FSSB	0.846	0.849	0.557
JS	0.875	0.889	0.576
LH	0.890	0.906	0.521
OCB	0.890	0.916	0.617
TIS	0.925	0.920	0.698

The discriminant validity (DV) of the model was assessed using the HTMT ratio criterion, chosen for its effectiveness in evaluating the distinctiveness of constructs. As shown in **Table 5**, no DV concerns were identified, since all values remained

below both the conservative (0.85) and liberal (0.90) thresholds recommended for confirming the absence of DV issues [96]. Consequently, all variables were retained for further analysis of the phenomenon.

Table 5. Discriminant validity-HTMT

Construct	EE	FSSB	JS	LH	OCB	TIS
EE						
FSSB	0.846					
JS	0.805	0.819				
LH	0.307	0.321	0.312			
OCB	0.326	0.443	0.502	0.647		
TIS	0.304	0.265	0.341	0.457	0.279	

Structural model

The structural model was subsequently evaluated, with **Table 6** presenting key parameters such as R^2 and Q^2 . Regarding R^2 , the findings indicated that 58.6% of the variance in OCB was explained collectively by LH, JS, EE, FSSB, and TIS, which, according to Hair *et al.* [93], represents a moderate level of explanatory power. Additionally, LH accounted for 10.7% of the variance in JS and 10.8% of the variance in EE. Concerning predictive relevance (Q^2), the results revealed that OCB ($Q^2 = 0.515$) exhibited substantial predictive relevance, whereas JS ($Q^2 = 0.098$) and EE ($Q^2 = 0.098$) demonstrated only limited predictive relevance within the model.

Table 6. Coefficient of determination and predictive relevance

Construct	R^2	Q^2
OCB	0.586	0.515
JS	0.107	0.098
EE	0.108	0.098

Table 7 presents the hypothesis testing results along with the effect sizes (f^2), while **Figure 2** illustrates the beta values of the hypothesized model. The results were analyzed across three categories: direct links, indirect links, and controls. Regarding direct paths, LH showed significant positive relationships with OCB ($LH \rightarrow OCB; \beta = 0.620$), JS ($LH \rightarrow JS; \beta = 0.327$), and EE ($LH \rightarrow EE; \beta = 0.329$). Additionally, JS ($JS \rightarrow OCB; \beta = 0.335$) and EE ($EE \rightarrow OCB; \beta = 0.291$) were significantly positively associated with OCB. The indirect effects indicated that LH influenced OCB via JS ($LH \rightarrow JS \rightarrow OCB; \beta = 0.109$) and EE ($LH \rightarrow EE \rightarrow OCB; \beta = 0.095$), representing complementary partial mediation [97], consistent with the study's hypotheses, all seven of which were supported. In the control category, FSSB and TIS were examined to account for potential confounding influences; however, neither FSSB ($FSSB \rightarrow OCB; \beta = 0.217$) nor TIS ($TIS \rightarrow OCB; \beta = 0.050$) showed significant relationships with OCB. Regarding effect sizes, **Table 7** shows that LH had a large effect on OCB but only weak effects on JS and EE, whereas JS and EE exerted small effects on OCB.

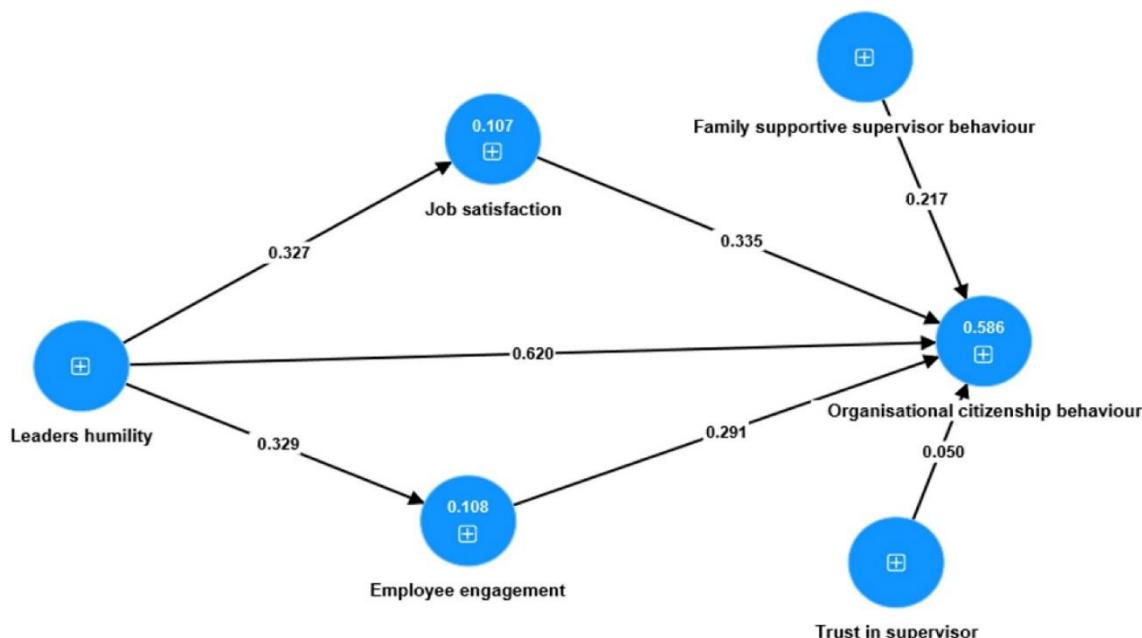


Figure 2. Beta values of hypothesised PLS-SEM model

Table 7. Results of hypotheses test

Hypotheses: Paths	β	t value	p value	f^2
<i>Direct link</i>				
H1: LH → OCB	0.620	7.450	0.000	0.549
H2: LH → JS	0.327	6.734	0.000	0.120
H3: LH → EE	0.329	7.069	0.000	0.121
H4: JS → OCB	0.335	2.493	0.013	0.089
H5: EE → OCB	0.291	2.833	0.005	0.073
<i>Indirect link</i>				
H6: LH → JS → OCB	0.109	2.087	0.037	
H7: LH → EE → OCB	0.095	2.679	0.007	
<i>Controls</i>				
FSSB → OCB	0.217	1.031	0.303	0.029
TIS → OCB	0.050	0.292	0.770	0.003

Note: f^2 of 0.02, 0.15 and 0.35 is seen as small, medium and large respectively.

Discussion

The present study investigated the relationship between leader humility (LH) and organizational citizenship behavior (OCB), considering the mediating effects of job satisfaction (JS) and employee engagement (EE) within a public university. Seven hypotheses were tested in this research. The results indicated that LH is positively and significantly associated with OCB, JS, and EE. The observed link between LH and OCB aligns with prior studies by Bradley and Klotz [37], Chon and Zoltan [36], Khan and Malik [38], and Organ [39]. Likewise, the positive association between LH and JS corroborates findings by Owens *et al.* [23], Ou *et al.* [29], and Oga and Worlu [44]. In addition, this study confirms the positive and significant connection between LH and EE reported by Rich *et al.* [49] and Wang *et al.* [48]. These outcomes suggest that LH, via leader-member exchange (LMX), fosters favorable work outcomes for employees [14, 35]. By exhibiting humility, leaders cultivate constructive relationships with their staff, which in turn promotes beneficial outcomes such as OCB, JS, and EE [32, 41, 48]. Furthermore, this study supports the view of leader humility as a critical organizational virtue that enhances employees' positive work behaviors and overall productivity [12, 14-16, 21]. Finally, the findings reinforce the broader notion that leaders play a pivotal role in shaping employee attitudes, as emphasized by prior research [10, 11].

Moreover, the study confirmed that job satisfaction (JS) and employee engagement (EE) are significantly and positively associated with organizational citizenship behavior (OCB). The positive connection between JS and OCB aligns with prior research by Gunay [57], Hemakumara [58], Mohammad [56], and Unal [55], while the link between EE and OCB is consistent with findings from Ariani [63], Amadi *et al.* [64], Byaruhanga and Othuma [67], Christian *et al.* [66], and Macey and Schneider [65]. These results indicate that both JS and EE serve as important predictors of OCB. The association between JS and OCB supports the views of Awang *et al.* [52] and Steinhause and Perry [53], who argued that satisfied employees take pride in their organizational affiliation, endorse its objectives, and display higher levels of OCB. Likewise, the relationship between EE and OCB demonstrates that engaged employees, who are physically, cognitively, and emotionally committed to their organization, are more productive and willingly engage in extra-role behaviors [61, 62].

Additionally, the findings revealed that JS and EE partially mediate the relationship between LH and OCB, indicating that these factors not only relate directly to OCB but also convey the influence of LH on it. In essence, LH positively affects JS and EE, which in turn are associated with enhanced OCB. Through leader-member exchange (LMX), humble leaders foster positive employee attitudes, recognize their contributions, and help them appreciate the significance of their work, thereby promoting both satisfaction and engagement, which ultimately translate into greater OCB [68, 72, 73].

Conclusions

The study concludes that LH is positively linked to JS, EE, and OCB. Furthermore, JS and EE not only directly contribute to OCB but also act as mediators in the LH-OCB relationship. Therefore, organizations aiming to enhance employee satisfaction, engagement, and OCB should prioritize cultivating humble leadership traits among their supervisors, as LH directly promotes these outcomes while JS and EE both reinforce and mediate its effects on OCB.

Theoretical implications

From a theoretical perspective, this study highlights the importance of incorporating humble leadership (LH) into leadership and management research due to its beneficial effects on employee work outcomes. The findings provide support for leader-member exchange (LMX) theory, illustrating how reciprocal relationships develop between leaders and employees through a series of exchanges [98, 99]. Employees respond to the positive behaviors of humble leaders by engaging in quid pro quo arrangements and extra-role behaviors [100, 101], reflecting the principle of reciprocity outlined by Blau [71]. Beyond

fostering OCB, LH also enhances other favorable employee outcomes such as job satisfaction (JS) and employee engagement (EE). Through the leader–subordinate relationship, humility exhibited by leaders influences employees, increasing their satisfaction and engagement, which subsequently drives extra-role behaviors, including OCB.

Practical implications

Practically, the study underscores the critical role of LH in cultivating a positive work environment and encouraging desirable employee behaviors. By promoting JS and EE, humble leaders enhance OCB, demonstrating that employees under humble supervision are more satisfied, engaged, and likely to exhibit extra-role behaviors. Organizations aiming to achieve these outcomes should prioritize recruiting and selecting supervisors with humble leadership traits [15]. Recruitment efforts should clearly specify humility-related qualities in job descriptions, while interviews should assess candidates' demonstration of such traits. For existing supervisors, leadership development initiatives, such as attitudinal training, can reinforce or cultivate humility in leadership.

Furthermore, given the established links between JS and OCB and EE and OCB, organizations should ensure that employees remain satisfied and engaged, as these outcomes foster commitment and loyalty [61]. Job satisfaction encourages employees to act dutifully, benefiting colleagues and the organization as a whole [102], which, in turn, enhances OCB. Since LH influences OCB partly through JS and EE, leaders should actively engage with employees, communicate regularly about task progress, show concern for their well-being, delegate responsibilities, and provide autonomy in task execution.

Limitations and directions for future research

Caution should be exercised when generalizing these findings to other public sector organizations, as the study focused on a single unit. Future research should investigate LH and OCB across multiple public sector organizations to strengthen generalizability. Additionally, the cross-sectional design limits understanding of the phenomenon over time, suggesting that longitudinal studies could provide insights into its temporal dynamics. Further research should also examine the LH–OCB relationship, with JS and EE as mediators, at both individual and group levels, to allow for comparisons across these levels.

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References

1. Robbins SP, Judge TA, Vohra N. *Organizational behaviour*: Pearson Education Services; 2013.
2. Tashtoush L, Eyupoglu SZ. The relationship between human resource management practices and organisational citizenship behaviour. *S Afr J Bus Manag*. 2020;51(1):a1726.
3. Organ DW. *Organizational citizenship behaviour: The good soldier syndrome*: Lexington Books; 2006.
4. Kashif M, Khan Y, Rafi M. An exploration of the determinants of organisational citizenship behaviour in telecommunication sector of Pakistan. *Asian J Bus Manag*. 2011;3(2):91-7.
5. Coyle-Shapiro J, Kessler I, Purcell J. Reciprocity or “it’s my job”: Exploring organizationally direct citizenship behaviour in a National Health Service setting. *J Manag Stud*. 2004;41(1):85-106.
6. Zoghbi-Manrique-de-Lara P, Ruiz-Palomino P, Linuesa-Langreo J. Compassion in hotels: Does person–organization fit lead staff to engage in compassion-driven citizenship behavior? *Cornell Hosp Q*. 2023;64(4):473-84.
7. Martin R, Guillaume Y, Thomas G, Lee A, Epitropaki O. Leader-member exchange (LMX) and performance: A meta-analytic review. *Pers Psychol*. 2016;69(1):67-121.
8. O’Grady S. Organisational citizenship behaviour: Sensitization to an organisational phenomenon. *J Nurs Manag*. 2018;26(7):795-801.
9. Organ DW. *Organizational citizenship behaviour: The good soldier syndrome*: Lexington Books; 1988.
10. Jiménez-Estevez P, Yáñez-Araque B, Ruiz-Palomino P, Gutiérrez-Broncano S. Personal growth or servant leader: What do hotel employees need most to be affectively well amidst the turbulent COVID-19 times? *Technol Forecast Soc Change*. 2023;190:122410.
11. Nazir S, Shafi A, Asadullah MA, Qun W, Khadim S. Linking paternalistic leadership to follower’s innovative work behavior: The influence of leader–member exchange and employee voice. *Eur J Innov Manag*. 2021;24(4):1354-78.
12. Hassan S, Nasim H, Shah M, Ishaque A, Fiza M. The bright and dark side of humble leadership for project success: A conservation of resources perspective. *Cogent Bus Manag*. 2023;10(2):2249559.

13. Hendijani R, Sohrabi B. The effect of humility on emotional and social competencies: The mediating role of judgment. *Cogent Bus Manag.* 2019;6(1):1641257.
14. Li R, Wang S, Wang H. Leader humility and team creativity: The role of team creative efficacy and task interdependence. *J Gen Manag.* 2022;47(4):246-58.
15. Maldonado T, Vera D, Spangler WD. Unpacking humility: Leader humility, leader personality, and why they matter. *Bus Horiz.* 2022;65(2):125-37.
16. Qiuyun G, Liu W, Zhou K, Mao J. Leader humility and employee organizational deviance: The role of sense of power and organizational identification. *Leadersh Organ Dev J.* 2020;41(3):463-79.
17. Owens BP, Hekman DR. Modeling how to grow: An inductive examination of humble leader behaviours, contingencies, and outcomes. *Acad Manag J.* 2012;55(4):787-818.
18. Hu J, Erdogan B, Jiang K, Bauer TN, Liu S. Leader humility and team creativity: The role of team information sharing, psychological safety, and power distance. *J Appl Psychol.* 2018;103(3):313-23.
19. Jeung C, Yoon H. Leader humility and psychological empowerment: Investigating contingencies. *J Manag Psychol.* 2016;31(7):1122-36.
20. Lin X, Chen Z, Tse H, Wei W, Ma C. Why and when employees like to speak up more under humble leaders? The roles of personal sense of power and power distance. *J Bus Ethics.* 2019;158(4):937-50.
21. Ruiz-Palomino P, Linuesa-Langreo J, Rincón-Ornelas RM, Martinez-Ruiz MP. Putting the customer at the center: Does store managers' ethical leadership make a difference in authentic customer orientation? *Academia Rev Latinoam Adm.* 2023;36(2):269-88.
22. Wang J, Zhang Z, Jia M. Understanding how leader humility enhances employee creativity: The roles of perspective taking and cognitive reappraisal. *J Appl Behav Sci.* 2017;53(1):5-31.
23. Owens BP, Johnson MD, Mitchell TR. Expressed humility in organizations: Implications for performance, teams, and leadership. *Organ Sci.* 2013;24(5):1517-38.
24. Andiyasari R, Hidayat W, Cahyono B. The effect of leader's humility on employee's organizational citizenship behaviour: The mediating role of perceived organizational support. *Int J Econ Commer Manag.* 2017;5(9):199-209.
25. Abdullah M. The effect of humility on leadership effectiveness. *Int J Acad Res Bus Soc Sci.* 2020;10(9):1-18.
26. Han GH, Bai Y. Leaders can facilitate creativity: The moderating roles of leader dialectical thinking and LMX on employee creative self-efficacy and creativity. *J Manag Psychol.* 2020;35(5):405-17.
27. Hassan S, Wright BE, Yukl G. Does ethical leadership matter in government? Effects on organizational commitment, absenteeism, and willingness to report ethical problems. *Public Adm Rev.* 2014;74(3):333-43.
28. Vishwakarma RK, Shukla A, Nougriaya S. Job satisfaction and its impact on absenteeism: A case study related to teachers in private engineering colleges. *Int J Eng Technol Manag Res.* 2015;3(1):10-5.
29. Ou AY, Seo J, Choi D, Hom PW. When can humble top executives retain middle managers? The moderating role of top management team fault lines. *Acad Manag J.* 2017;60(5):1915-31.
30. Owens BP, Wallace AS, Waldman DA. Leader narcissism and follower outcomes: The counterbalancing effect of leader humility. *J Appl Psychol.* 2015;100(4):1203-13.
31. Mao J, Liao J, Han Y, Liu W. The mechanism and effect of leader humility: An interpersonal relationship perspective. *Acta Psychol Sin.* 2017;49(9):1219-33.
32. Qin X, Chen C, Yam KC, Huang M, Ju D. The double-edged sword of leader humility: Investigating when and why leader humility promotes versus inhibits subordinate deviance. *J Appl Psychol.* 2020;105(7):693-712.
33. Obeng AF, Zhu Y, Azinga SA, Quansah PE. Organizational climate and job performance: Investigating the mediating role of harmonious work passion and the moderating role of leader-member exchange and Coaching. *SAGE Open.* 2021;11(2):215824402110084.
34. Shin N, Park S. Supply chain leadership driven strategic resilience capabilities management: A leader-member exchange perspective. *J Bus Res.* 2021;122:1-13.
35. Sunaryo S, Rahardian R, Suyono J, Ekowati D, Risgiyanti. Leader-member exchange and glass ceiling: The effects on career satisfaction and work engagement. *Cogent Bus Manag.* 2024;11(1):2336285.
36. Chon MY, Zoltan J. The impact of humble leadership on organizational citizenship behaviour: The mediating role of psychological ownership. *J Bus Res.* 2019;103:1-11.
37. Bradley BH, Klotz AC. How leader humility helps teams to be more innovative. *MIT Sloan Manag Rev.* 2018;59(4):21-3.
38. Khan MN, Malik FM. "My leader's group is my group": Leader member exchange and employees' behaviours. *Eur Bus Rev.* 2017;29(5):551-71.
39. Organ DW. Organizational citizenship behaviour: Recent trends and developments. *Annu Rev Organ Psychol Organ Behav.* 2018;5:295-306.

40. Dirks KT, Ferrin D. Trust in leadership: Meta-analytic findings and implications for research and practice. *J Appl Psychol.* 2002;87(4):611-28.

41. Yang W, Xu S. The indirect effect of leader humility on employee creativity through a growth mindset for creativity. *J Pac Rim Psychol.* 2022;16:183449092211136.

42. Botero IC, Van Dyne L, Tan J. Organizational citizenship behaviour and the intersection between work and family domains: The moderating role of supervisor support and work-family culture. *J Appl Psychol.* 2009;94(5):1228-40.

43. Flynn FJ. Identity orientations and forms of social exchange in organizations. *Acad Manag Rev.* 2005;30(4):737-50.

44. Oga VN, Worlu RE. The nexus between leader humility, productive behaviour, job satisfaction and work happiness among workers in Nigeria. *Int J Bus Soc.* 2022;23(1):107-26.

45. Wright BE, Moynihan DP, Pandey SK. Pulling the levers: Transformational leadership, public service motivation, and mission valence. *Public Adm Rev.* 2016;76(3):405-17.

46. Owens BP, Hekman DR. How does leader humility influence team performance? Exploring the mechanisms of contagion and collective promotion focus. *Acad Manag J.* 2016;59(3):1088-111.

47. Kahn WA. Psychological conditions of personal engagement and disengagement at work. *Acad Manag J.* 1990;33(4):692-724.

48. Wang L, Owens BP, Li J, Shi L. Exploring the affective impact, boundary conditions, and antecedents of leader humility. *J Appl Psychol.* 2018;103(9):1019-38.

49. Rich BL, Lepine JA, Crawford ER. Job engagement: Antecedents and effects on job performance. *Acad Manag J.* 2010;53(3):617-35.

50. Luo Y, Zhang Z, Chen Q, Zhang K, Wang Y, Peng J. Humble leadership and its outcomes: A meta-analysis. *Front Psychol.* 2022;13:980322.

51. Luthans F, Avey JB, Avolio BJ, Peterson SJ. The development and resulting performance impact of positive psychological capital. *Hum Resour Dev Q.* 2010;21(1):41-67.

52. Awang Z, Ahmad JH, Zin NM. Modelling job satisfaction and work commitment among lecturers: A case of UiTM Kelantan. *J Stat Model Anal.* 2010;1(2):45-59.

53. Steinhause CS, Perry JL. Organizational commitment: Does sector matter? *Public Prod Manag Rev.* 1996;19(3):278-88.

54. Yee RW, Yeung AC, Cheng TC. The effects of employee satisfaction, organizational citizenship behaviour, and turnover on organizational effectiveness: A unit-level, longitudinal study. *Pers Psychol.* 2010;63(1):89-111.

55. Unal F. The effect of job satisfaction on organizational citizenship behaviours: A research on hotel enterprises in Nevsehir, Turkey. *Procedia-Soc Behav Sci.* 2013;99:844-52.

56. Mohammad J. The relationship between job satisfaction and organizational citizenship behaviour of non-academic staff in a Malaysian public university. *Procedia Econ Finance.* 2016;37:356-62.

57. Gunay G. The impact of job satisfaction on organizational citizenship behaviour: An empirical study in the banking sector. *Int J Contemp Econ Admin Sci.* 2018;8(2):62-77.

58. Hemakumara GPT. The impact of job satisfaction on organizational citizenship behaviour with reference to executive level employees in Sri Lankan private sector organizations. *J Manag Sustain.* 2020;10(5):190-207.

59. Adnan N, Bhatti OK, Farooq W. Relating ethical leadership with work engagement: How workplace spirituality mediates? *Cogent Bus Manag.* 2020;7(1):1739494.

60. Schaufeli WB, Salanova M, González-Romá V, Bakker AB. The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *J Happiness Stud.* 2002;3(1):71-92.

61. Albrecht SL. *Handbook of employee engagement: Perspectives, issues, research and practice*: Edward Elgar Publishing; 2010.

62. Uddin MJ, Luva R, Hossain MA. Employee engagement and organizational performance: An empirical investigation. *J Hum Resour Manag Labor Stud.* 2018;6(1):1-13.

63. Ariani DW. The relationship between employee engagement, organizational citizenship behaviour, and counterproductive work behaviour. *Int J Bus Admin.* 2013;4(2):46-56.

64. Amadi CA, Ugwu FO, Ugwu CN. Employee engagement and organizational citizenship behaviour: A study of Nigerian banking industry. *Int J Hum Resour Stud.* 2017;7(4):29-40.

65. Macey WH, Schneider B. The meaning of employee engagement. *Ind Organ Psychol.* 2008;1(1):3-30.

66. Christian MS, Garza AS, Slaughter JE. Work engagement: A quantitative review and test of its relations with task and contextual performance. *Pers Psychol.* 2011;64(1):89-136.

67. Byaruhanga J, Othuma OE. The role of employee engagement in enhancing organizational citizenship behaviour. *Int J Econ Commer Manag.* 2016;4(6):150-62.

68. Hajdukova E, Hommerova D, Sopkova G. Job satisfaction factors and their importance for the labour market. *Procedia Econ Finance.* 2015;26:639-44.

69. Farrington TA, Lillah N. Humble leadership and employee job satisfaction: Exploring the mediating role of trust in leader. *J Leadersh Stud.* 2019;13(4):58-71.

70. Sabir I, Zia-Ur-Rehman M, Ahmad N. Impact of leadership style on organizational performance: A case study of Pakistani banks. *Afr J Bus Manag.* 2012;6(21):6373-83.

71. Blau PM. Justice in social exchange. *Sociol Inq.* 1964;34(2):193-206.

72. Nielsen R, Marrone JA, Slay HS. A new look at humility: Exploring the humility concept and its role in socialized charismatic leadership. *J Leadersh Organ Stud.* 2010;17(1):33-43.

73. Chen X, Wang M, Shi J. Linking humble leader behaviour to employee creativity: The role of psychological safety and intrinsic motivation. *J Bus Res.* 2018;88:212-22.

74. Aboramadan M, Dahleez KA. Leadership styles and employees' work outcomes in nonprofit organizations: The role of work engagement. *J Manag Dev.* 2020;39(7/8):869-93.

75. Ozturk A, Karatepe OM, Okumus F. The effect of servant leadership on hotel employees' behavioral consequences: Work engagement versus job satisfaction. *Int J Hosp Manag.* 2021;97:102994.

76. El-Gazar HE, Zoromba MA, Zakaria AM, Abualruz H, Abousoliman AD. Effect of humble leadership on proactive work behaviour: The mediating role of psychological empowerment among nurses. *J Nurs Manag.* 2022;30(7):2689-98.

77. Alam I, Kartar Singh JS, Islam MU. Does supportive supervisor complements the effect of ethical leadership on employee engagement? *Cogent Bus Manag.* 2021;8(1):1978371.

78. Hassan M, Bin Nadeem A, Akhter A. Impact of workplace spirituality on job satisfaction: Mediating effect of trust. *Cogent Bus Manag.* 2016;3(1):1189808.

79. Vermeulen M, Kreijns K, Evers AT. Transformational leadership, leader-member exchange and school learning climate: Impact on teachers' innovative behaviour in the Netherlands. *Educ Manag Adm Leadersh.* 2022;50(3):491-510.

80. Bhattacherjee A. Social science research: Principles, methods, and practices: Open Access Textbooks; 2012.

81. Ofori R, Dampson DG. Research methods and statistics using SPSS: Payless Publication Ltd; 2011.

82. Saunders M, Lewis P, Thornhill A. Research methods for business students: Pearson Education Ltd; 2012.

83. Yamane T. Statistics: An introductory analysis: Harper and Row; 1967.

84. Jakobsen M, Jensen R. Common method bias in public management studies. *Int Public Manag J.* 2015;18(1):3-30.

85. Podsakoff PM, MacKenzie SB, Moorman RH, Fetter R. Transformational leader behaviours and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviours. *Leadersh Q.* 1990;1(2):107-42.

86. Weiss DJ, Dawis RV, England GW, Lofquist LH. Minnesota satisfaction questionnaire – Short form: University of Minnesota; 1977.

87. Hammer LB, Kossek E, Yragui NL, Bodner TE, Hanson GC. Development and validation of a multidimensional measure of family supportive supervisor behaviours (FSSB). *J Manag.* 2009;35(4):837-56.

88. Yang J, Mossholder KW, Peng TK. Supervisory procedural justice effects: The mediating roles of cognitive and affective trust. *Leadersh Q.* 2009;20(2):143-54.

89. Chang SJ, Van Witteloostuijn A, Eden L. From the Editors: Common method variance in international business research. *J Int Bus Stud.* 2010;41(2):178-84.

90. Jordan PJ, Troth AC. Common method bias in applied settings: The dilemma of researching in organizations. *Aust J Manag.* 2020;45(1):3-14.

91. Podsakoff PM, MacKenzie SB, Podsakoff NP. Sources of method bias in social science research and recommendations on how to control it. *Annu Rev Psychol.* 2012;63(1):539-69.

92. Kock N. Common method bias in PLS-SEM: A full collinearity assessment approach. *Int J e-Collab.* 2015;11(4):1-10.

93. Hair JF, Risher JJ, Sarstedt M, Ringle CM. When to use and how to report the results of PLS-SEM. *Eur Bus Rev.* 2019;31(1):2-24.

94. Henseler J, Ringle CM, Sinkovics RR. The use of partial least squares path modeling in international marketing. In: Sinkovics RR, Ghauri PN, editors. New challenges to international marketing. Bingley: Emerald Group Publishing Limited; 2009. p. 277-319.

95. Benitez J, Henseler J, Castillo A, Schuberth F. How to perform and report an impactful analysis using partial least squares: Guidelines for confirmatory and explanatory IS research. *Inf Manag.* 2020;57(2):103168.

96. Henseler J, Ringle CM, Sarstedt M. A new criteria for assessing discriminant validity in variance-based structural equation modelling. *J Acad Mark Sci.* 2015;43(1):115-35.

97. Nitzl C, Roldan JL, Cepeda G. Mediation analysis in partial least squares path modelling: Helping researchers discuss more sophisticated models. *Ind Manag Data Syst.* 2016;116(9):1849-64.

98. Dienesch RM, Liden RC. Leader-member exchange model of leadership: A critique and further development. *Acad Manag Rev.* 1986;11:618-34.

99. Gerstner CR, Day DV. Meta-analytic review of leader-member exchange theory: Correlates and construct issues. *J Appl Psychol.* 1997;82(6):827-44.

100. Eisenberger R, Lynch P, Aselage J, Rohdieck S. Who takes the most revenge? Individual differences in negative reciprocity norm endorsement. *Pers Soc Psychol Bull.* 2001;27(6):786-97.

101. Liden RC, Graen G. Generalizability of the vertical dyad linkage model of leadership. *Acad Manag J.* 1980;23(3):451-65.

102. Frolova Y, Mahmood M. Variations in employee duty orientation: Impact of personality, leadership styles and corporate culture. *Eurasian Bus Rev.* 2019;9(4):423-44.