

The roles of public service motivation and humble leadership in promoting work engagement among healthcare professionals

Nguyen Hoang Kim^{1,2}

¹Ho Chi Minh City Open University, Vietnam

²University of Economics Ho Chi Minh City, Vietnam

Corresponding Author: Nguyen Hoang Kim **Email:** hoangkimnguyen.hkn@gmail.com

Received: 24 May 2024 **Revised:** 20 August 2024 **Accepted:** 21 August 2024 **Available online:** January 2025

DOI: 10.55131/jphd/2025/230108

ABSTRACT

Work engagement is the central issue for healthcare employees not only in preventing occupational stress but also in improving job performance. The purpose of this study is to examine if work engagement can be enhanced by public service motivation and humble leadership. The snowball sampling approach was used for building a healthcare professional sample of physicians and nurses. Instruments used in self-administered questionnaires were validated and commonly utilized in previous studies with appropriate reliability. The model fit indices ($\chi^2 = 449.308$; $df = 227$; $\chi^2/df = 1.979$; CFI = 0.935; TLI = 0.928; RMSEA = 0.063) and factor loadings (ranging from 0.64 to 0.86) indicated satisfactory reliability and validity of the constructs and their indicators. The findings demonstrated positive and significant path coefficients between public service motivation and work engagement ($b = 0.218$, $p < 0.001$). Humble leadership also exhibited a significantly positive relationship with work engagement ($b = 0.231$, $p < 0.001$). The findings further revealed that humble leadership served as a moderator to attenuate the relationship between public service motivation and work engagement ($b = -0.140$, $p < 0.01$). The positive nexus between public service motivation and work engagement was found to be stronger when healthcare supervisors demonstrated low levels of humble leadership. As such, this study advances the healthcare management literature by gaining insights into work engagement among healthcare professionals. An essential contribution to existing knowledge has been made by examining the relationships that exist between public service motivation, humble leadership, and work engagement. Based on the results, healthcare organizations should implement relevant policies in terms of recruitment and training to foster public service motivation and humble leadership in order to promote work engagement.

Key words:

public service motivation; humble leadership; work engagement; Vietnam

Citation:

Nguyen Hoang Kim. The roles of public service motivation and humble leadership in promoting work engagement among healthcare professionals. J Public Hlth Dev. 2025;23(1):102-118 (<https://doi.org/10.55131/jphd/2025/230108>)

INTRODUCTION

The experience of patients is strongly associated with healthcare professionals' engagement.¹ Due to recent workload increases in situations with high risk, healthcare professionals have faced significant levels of stress, burnout, and depression.² The distinctiveness of the public sector environment poses many challenges in motivating public healthcare professionals as they engage in their work.³ Work engagement is depicted as a positive, fulfilling, work-related state of mind that is comprised of vigor, dedication, and absorption.⁴ Vigor presents as exhibiting high energy at work. Dedication is depicted by passionate involvement in one's work. Absorption is characterized by concentrating fully when working. In Vietnam, in 2015, the Ministry of Health⁵ issued Decision No. 2151/QĐ-BYT outlining a national plan to prioritize innovation of serving manners and attitude of health officials toward the satisfaction of patients. Moreover, in 2023, Vietnam's National Assembly⁶ approved a law on medical examination and treatment that incorporated new provisions for patient-centered care. In the academic field, more recent attention has been given to public service employees' engagement.⁷ In their meta-analysis on work engagement and patient quality of care, Wee and Lai⁸ argued that the work engagement of healthcare professionals is associated with quality of care. Yet, empirical research on work engagement in the public healthcare context is scarce despite the prominence of healthcare professionals' engagement.⁹ Furthermore, the findings unveiled that not all healthcare employees have an exemplary engagement level in specialized work that requires meaningful dedication.¹⁰ Healthcare professionals need sufficient resources in order to deal with their complex working environment and in turn

dispense good healthcare service. Social support and public service motivation may be a crucial element for individuals.¹¹ Moreover, there is an increasing interest in exploring public service motivation in managing the public sector workforce.¹² Concurrently, in terms of leadership, different leadership styles such as servant leadership and transformational leadership have been proposed in relevant fields by scholars.¹³ However, this study aims to enrich the conversation on this topic by delving into humble leadership in the healthcare context. Humility has been viewed as a vital element in public service leadership,¹⁴ especially in nations with high power distance.¹⁵ Though humble leadership might potentially shape various positive consequences, inadequate attention has been paid to its role in the healthcare sector.¹⁶ This void in the literature leads to the important questions in this research on whether humble leadership can influence and interact with psychological factors to affect healthcare professionals' engagement in the public sector in Vietnam.

Public service motivation or altruistic motivation is defined as the will to serve other people and society through the delivery of public services.¹⁷ Public service motivation theory argues that some individuals have a predisposition to respond to public institutions and organizations.¹⁸ Perry and Wise¹⁸ offered original formulation including elements such as policy-making, public interest, compassion, and self-sacrifice. Rainey and Steinbauer¹⁷ later viewed public service motivation as a "general altruistic motivation to serve the interests of a community of people, a state, a nation or humanity" (p. 23). In an attempt to integrate these distinct opinions, Vandenabeele¹⁹ defined public service motivation as "the belief, values and attitudes that go beyond self-interest and organizational interest,

that concern the interest of a larger political entity and that motivate individuals to act accordingly whenever appropriate” (p. 549). In a similar vein, public service motivation is depicted as a motivation that drives individuals to contribute to society through public service provision.²⁰ Public servants view their profession as a calling to do good for other people and are committed to the public interest.²¹ Persons with high public service motivation have internal motives that encourage them to sacrifice for other people and society through the delivery of public services.²² A systematic review of work engagement in the public sector categorizes public service motivation as an exclusive key antecedent concentrated on the public sector.²³ Recent findings²⁴ have suggested that healthcare professionals hold beliefs about their motivation to serve the community good (i.e., the combination of self-sacrifice and public interest) and the motivation to meet specific patient needs (i.e., compassion). This positive attitude toward public service is a basic attitude toward work among people working in public organizations²¹. Thus, public service motivation may affect healthcare professionals’ engagement with their duties through the daily activities and processes that take place at work. In various studies,^{25,26} public service motivation was found to have a positive influence on work engagement as an antecedent. Conversely, Borst²⁵ discovered that attraction to public policy, one of the dimensions of public service motivation, did not express a significant effect on work engagement among organizations operating in education and healthcare settings. Given these inconsistent empirical findings, it is theoretically substantial to examine the question of when public service motivation leverages work engagement. We fill this gap by testing the direct impact of public service motivation on work engagement using a sample from the healthcare public sector.

Humble leadership is a leadership style that enables leaders to notice employees’ contributions, which consequently develops their sense of value and leads to higher work engagement.²⁷ Humble leadership is depicted as an attribute that shows a high level of willingness to admit personal limits, appreciate others’ contributions and strengths, and remain open to others’ ideas and views.²⁸ In light of the job demands - resources model,²⁹ we assume that a motivational process can be activated by public service motivation as a personal resource, which in turn nurtures psychological well-being. Additionally, since perceived leadership plays a role in job resources,²³ it is also postulated herein that humble leadership can function as another resource and interact with personal resources to have a significant influence on work engagement.

These arguments raise the following research questions: (1) Does public service motivation foster work engagement? (2) Does humble leadership nurture work engagement? and (3) Does humble leadership play an essential role as a boundary condition in the nexus between public service motivation and work engagement? The job demands - resources model²⁹ provides a framework for addressing the aforementioned questions and understanding the impact of job resources on employee well-being. In our research model, humble leadership serves as a job resource,³⁰ potentially fostering a positive work outcome. Humble leaders are likely to create a trusting and empowering atmosphere, and thus enhance employees’ job performance.³¹ This positive influence of humble leadership aligns with the job demands - resources model. In this study, humble leadership is theorized as a job resource to positively influence work engagement.

Taken together, our study has three research objectives. The first objective is to inspect the role of public service motivation

for work engagement. The second objective is to examine the relationship between humble leadership and work engagement. The third objective is to seek insight into the moderating mechanism of humble leadership for the public service motivation – work engagement linkage. Through these research objectives, this study makes several contributions to the healthcare management literature in various aspects. First, since work engagement is a psychological aspect that individuals need to develop, this research adds to the scarcity of empirical findings on healthcare professionals' work engagement. The public healthcare sector in Vietnam may hence serve as an appealing context for investigating the proposed model of work engagement. Second, while previous inquiries into work engagement have separately targeted public service motivation as a personal antecedent³² and humble leadership as an organizational antecedent,³³ the current research addresses

both leadership and motivation in response to Alamri's³⁴ call for further empirical study on the antecedents of work engagement. Third, our research follows recent calls to investigate a boundary condition of humble leadership³⁵ for the link between job resource and work engagement³⁶ by employing the job demands - resources model of work engagement.²¹

This study seeks to bridge this gap by developing a research model that examines the linkage between public service motivation, humble leadership, and work engagement. As shown in Figure 1, three hypotheses were stated in the model: first, public service motivation is positively related to work engagement (H_1); second, humble leadership is positively related to work engagement (H_2); and third, humble leadership moderates the relationship between public service motivation and work engagement (H_3).

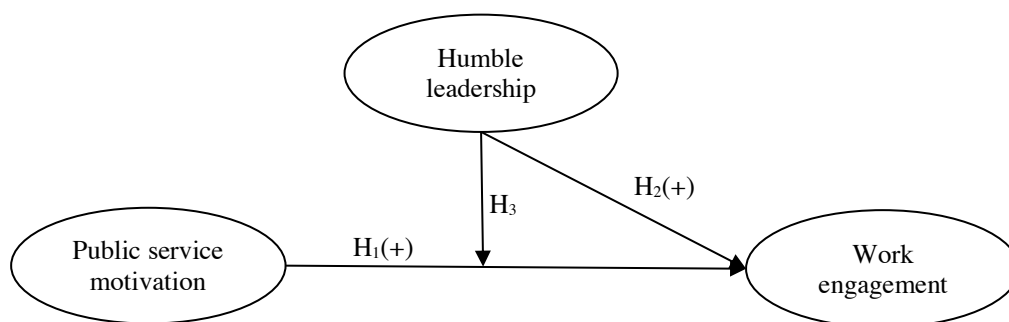


Figure 1. Research model

The structure of this research is as follows. First, we review the related literature and propose hypotheses about how public service motivation and humble leadership affect public healthcare professionals' work engagement. Following this will be the method section, which explains how we collect the data, measure the variables, and adopt analysis strategies to test our hypotheses. The next

section presents the results of testing the hypothesized model. Finally, we provide theoretical and practical implications, acknowledge our limitations, and suggest directions for future research.

METHODS

Study design

This study adopted a quantitative design based on the survey data collection method. The quantitative data were cross-sectionally collected via self-administered questionnaires. As there were 23 measurement items, the threshold of the sample size of this study should be 115, a figure five times the number of the measurement items.³⁷ This study was grounded in the public healthcare setting. From the population of Vietnamese healthcare professionals, physicians and nurses were identified as meeting the inclusion criteria and were thus recruited for data collection. Due to 225 responses (response rate: 86.5%) being much more than 115, this study demonstrated an adequate sample size. The snowball sampling method, a nonprobability sampling technique, was utilized for data collection because this method helps surpass the lack of sampling frames and adequate contact details for accessing the population. This method has been recently used in quantitative studies on healthcare professionals in Vietnam³⁸. A cover letter informed participants that their answers would be used uniquely for research purposes and would not be shared. Additionally, the cover letter also emphasized the guarantee of anonymity, confidentiality, and voluntary participation. Hardcopy questionnaires were then distributed to participants, facilitating the investigator to collect the completed questionnaires on the spot. Among 225 public healthcare professionals, 104 (46.2%) were male and 121 (53.8%) were female. The healthcare professionals' mean age was 33.31 years (SD = 7.28) and their mean tenure with the organization was 3.98 years (SD = 1.82).

Research instruments

All items used to measure public service motivation, humble leadership, and work engagement were adopted from relevant studies that are open access. This study employed the back translation

approach³⁹ to guarantee linguistic equivalence between the original English questionnaires and the translated Vietnamese questionnaires.

Public service motivation.

Healthcare professionals rated their public service motivation level by five items from Perry's measurement⁴⁰. Response options ranged from 1 = strongly disagree to 5 = strongly agree. Cronbach's alpha for the public service motivation scale was 0.914

Humble leadership. Healthcare professionals rated their leader using Owens and Hekman's nine-item humble leadership scale³⁰. Participants rated their answers on a five-point Likert scale (1 = Strongly disagree, 5 = Strongly agree). The humble leadership scale had a Cronbach's alpha value of 0.900

Work engagement. Healthcare professionals rated their work engagement using Schaufeli et al.'s nine-item scale⁴¹. All items were measured using a five-point Likert scale (0 = Never to 5 = Always). Work engagement was treated as a unidimensional construct to yield a Cronbach's alpha of 0.926

Control variables. Gender, age, and organizational tenure can be related to work engagement⁴². Following prior studies' recommendations, we therefore controlled the above variables.

Data analyses

This study followed Anderson and Gerbing's structural equation modelling (SEM) two-step approach⁴³. The first step was handling confirmatory factor analysis (CFA) to estimate model fit. The second step was model validation and hypotheses testing through SEM via Mplus 8.4. Since this estimation method counts on data normality, the distribution of the collected data was assessed through the coefficients of skewness and kurtosis. The model fit concentrated on testing model fit indices of Chi-Squared (χ^2), degree of freedom (df), Chi-Squared/degree of freedom (χ^2/df), comparative fit index (CFI), Tucker Lewis

index (TLI), and root mean square error of approximation (RMSEA). A good fit is accepted when χ^2/df^{44} falls below 2, CFI and TLI⁴⁵ exceed 0.90, and RMSEA⁴⁶ falls under 0.08. The unidimensionality of the constructs was assessed through the model fit in the CFA results⁴³ and the loadings on the target construct surpassed 0.60.³⁷ Convergent validity was achieved when all factor loadings surpassed the recommended level of 0.60 (t-value > 1.96).⁴⁷ SEM was employed to test research hypotheses H₁ and H₂. A moderating effect for testing hypothesis H₃ had two sequential steps. The first step was testing the linear regression path between a newly created interaction variable (public service motivation x humble leadership) and the dependent variable (i.e., work engagement). If the linear regression path was statistically significant ($p < 0.05$), the moderating effect existed. The second step was to conduct a simple slope test. The purpose of the simple slope test was to determine the extent to which the moderator affected its related relationships. This study also visualized the moderating effect and its simple slope results for the purpose of obtaining an understanding of these moderating effects. We plotted the conditional effect of the predictor (i.e., public service motivation) on the outcome (i.e., work engagement) at high (1 standard deviation above the mean) and low (1 standard deviation below the mean) levels of the moderator (i.e., humble leadership).

Ethical consideration

The research protocol has been approved by the Institutional Review Board of Ho Chi Minh City Open University (IRB No. 1373/QD-DHM). Prior to the data-gathering process, the participants were informed about the research's objectives and their right to consent to report their perceptions regarding measurement items voluntarily. The inquiry did not demand the participant's name in the questionnaire. Participants have the right to withdraw from the research at any time without any consequences. All responses collected were warranted confidentiality. After the data analysis, only the summary of the results was presented.

RESULTS

As shown in Table 1, every Cronbach's alpha surpassed the 0.70 threshold, implying that all three scales had acceptable internal consistency. This study estimated convergent validity by using composite reliability (CR) and average variance extracted (AVE). Conforming to Table 1, the CR ranges were from 0.901 to 0.926, exceeding the threshold of 0.70. The AVE ranges were from 0.503 to 0.682, surpassing the cut off value of 0.50. Thus, the three latent variables had adequate convergent validity. Moreover, the square roots of AVEs of three variables were below the correlations with other variables, unveiling passable discriminant validity.²⁸

Table 1. Descriptive statistics, correlation matrices and reliabilities

Variables	1	2	3	4	5	6	α	CR	AVE
1. Gender	-								
2. Age	0.045	-							
3. Organizational tenure	0.006	0.841**	-						
4. Public service motivation	-	0.069	0.039	(0.825)			0.914	0.915	0.682
5. Humble leadership	0.017	-0.037	-	0.381**	(0.709)		0.900	0.901	0.503
6. Work engagement	0.029	0.044	-	0.465**	0.457**	(0.763)	0.926	0.926	0.583
			0.069						
			0.003						

Note: Values in parentheses demonstrate the square root of the average variance extracted.

**p < 0.01

The coefficients of skewness for the observed variables ranged from -0.911 to 0.078, and the coefficients of kurtosis ranged from -1.026 to 0.606, all under the 3.0 cutoff value (Kline, 1998). The results indicate the normal distribution of the data, satisfying the assumption underlying maximum likelihood estimation. CFA was conducted to ensure convergent and discriminant validity among all constructs.

The model fit was confirmed through $\chi^2/df = 449.308/227 = 1.979$, CFI = 0.935, TLI = 0.928 and RMSEA = 0.063. The results revealed a good fit between the hypothesized model and the data. The unidimensionality of the constructs was also ensured through the good model fit in the CFA results. Convergent validity was established since factor loadings ranged from 0.64 to 0.86 (t-value > 1.96) (Table 2).

Table 2. Measurement items, factor loadings, and model fit indices

Constructs and measurement items	Standardized loadings	t-value
<i>Public service motivation</i>		
1. I feel a strong responsibility for society	0.86	39.19
2. Serving the public is more meaningful than my own self-interest	0.83	33.35
3. As a citizen, serving other citizens is my duty	0.77	24.63
4. I am willing to help others even at significant cost to myself	0.83	33.08
5. My contribution to society is more important than my own accomplishments	0.83	34.05
<i>Humble leadership</i>		
1. My supervisor actively seeks feedback, even if it is critical	0.67	16.58
2. My supervisor admits it when he or she does not know how to do something	0.74	21.15
3. My supervisor acknowledges when others have more knowledge and skills than himself or herself	0.71	19.27
4. My supervisor takes notice of others' strengths	0.64	14.96
5. My supervisor often compliments others on their strengths	0.69	17.98
6. My supervisor shows appreciation for the unique contributions of others	0.70	18.51
7. My supervisor shows a willingness to learn from others	0.72	19.76
8. My supervisor shows he or she is open to the advice of others	0.69	17.75

Constructs and measurement items	Standardized loadings	t-value
9. My supervisor shows he or she is open to the ideas of others	0.81	30.11
<i>Work engagement</i>		
1. At my work, I feel bursting with energy	0.78	27.11
2. At my job, I feel strong and vigorous	0.78	26.92
3. When I get up in the morning, I feel like going to work	0.77	25.88
4. I am enthusiastic about my job	0.75	22.90
5. I am proud on the work that I do	0.76	23.93
6. My job inspires me	0.75	23.43
7. I am immersed in my work	0.78	26.46
8. I get carried away when I am working	0.73	21.14
9. I feel happy when I am working intensely	0.77	26.07

CFA model fit indices

$\chi^2 = 449.308$; $df = 227$; $\chi^2/df = 1.979$; CFI = 0.935; TLI = 0.928; RMSEA = 0.063

The discriminant validity of the three constructs was examined by comparing the three-factor model with alternative models. In the two-factor alternative measurement model, public service motivation and humble leadership were combined as one variable. In the one-factor alternative measurement model, all the three variables from the hypothesized model were combined as one variable. The findings in Table 3 revealed that all the model fit indices (χ^2/df , CFI, TLI, and

RMSEA) were better for the three-factor hypothesized model than for the alternative measurement model fit indices, providing evidence for the distinctiveness of the construct. Therefore, the hypothesized three-factor model was the most appropriate model. Moreover, as the model fit indices became worse as more variables were combined together, the three constructs were obviously distinguished, confirming adequate discriminant validity.

Table 3. Comparisons of measurement models

Measurement models	χ^2	$\Delta\chi^2$	df	χ^2/df	CFI	TLI	RMSEA
Hypothesized three-factor model	449.308		227	1.979	0.935	0.928	0.063
Two-factor model: Public service motivation and humble leadership combined	1032.484	583.176**	229	4.508	0.743	0.716	0.123
One-factor model: All variables combined	1534.120	1084.812**	230	6.670	0.583	0.541	0.159

Note: ** $p < 0.01$

As detailed in Table 4, public service motivation significantly enhanced work engagement ($b = 0.218$, $p < 0.001$), supporting H₁. Humble leadership also exhibited a significantly positive relationship with work engagement ($b = 0.231$, $p < 0.001$). Therefore, H₂ was supported. The result showed that the interaction of public service motivation and

humble leadership was negatively related to work engagement ($b = -0.140$, $p < 0.01$), lending credence to H₃. The moderating effects (see Figure 1) were plotted at higher (+1 SD) and lower (-1 SD) levels of humble leadership. The results revealed that the effect of public service motivation on work engagement was significant when humble leadership was low (simple slope = 0.358,

$p < 0.001$), but insignificant when humble leadership was high (simple slope = 0.078, n.s.)

Table 4. Model results

Path description	Estimate (Unstandardized <i>b</i>)	S.E.	Est./S.E.	p-value	Conclusion
<i>Main effects</i>					
H ₁ . Public service motivation → Work engagement	0.218	0.052	4.225	<0.001	Supported
H ₂ . Humble leadership → Work engagement	0.231	0.046	5.075	<0.001	Supported
<i>Moderating effect</i>					
H ₃ . Public service motivation x Humble leadership → Work engagement	-0.140	0.046	-3.050	0.002	Supported

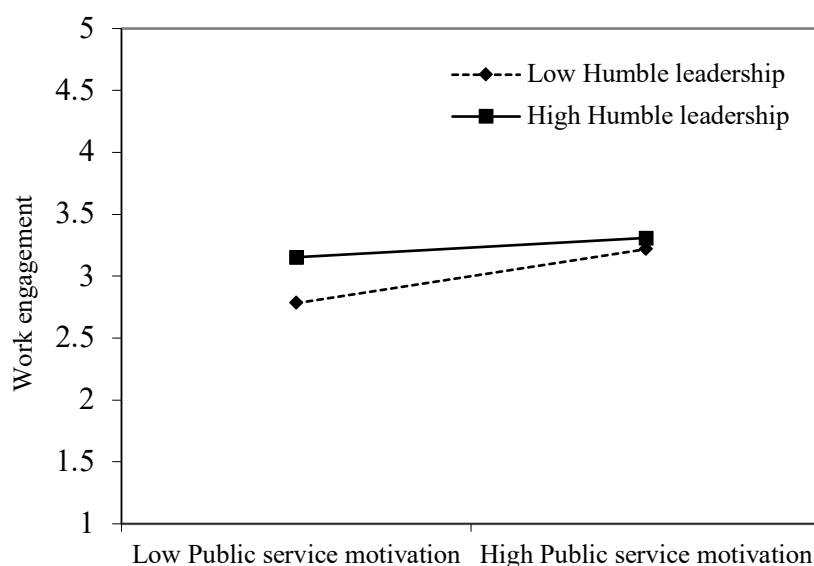


Figure 2. Interactive effect of public service motivation and humble leadership on work engagement

DISCUSSION

This study examines how public service motivation influences work engagement among public healthcare professionals in Vietnam. First, the results lend credence to hypothesis H₁, which announces the positive relationship between public service motivation and work engagement. Borst²⁵ found that one of the dimensions of public service motivation did not exhibit a significant effect on work engagement in a sample from educational

and healthcare organizations. Additionally, Bao et al.⁴⁸ posited that public service motivation was marginally related to work engagement among Chinese public sector employees. Given the fulfillment of promises in the Hippocratic Oath and Florence Nightingale Pledge, public physicians and nurses in the current study may find the meaning in caring for patients as well as the community, leading to their high engagement with work. Public service motivation hence strongly affected work engagement. This study also contributes to

previous findings on enhancing the understanding of the nexus between public service motivation and work engagement, which has not been discovered specifically in the healthcare discipline.²³

Second, these findings endorse a significant relationship between humble leadership and work engagement. Another study³³ which recruited participants living in the United States found that humble leadership and follower engagement were significantly correlated. Therefore, the research from the perspectives of a country with a high-power distance culture (i.e., Vietnam) could be considered to complement the distinction of culture. When a humble leader emphasizes the importance of development and fosters psychological safety, it may lead to greater follower engagement.

Third, this study contributes evidence for hypothesis H₃ demonstrating how humble leadership acts as a moderator for the effect of public service motivation on work engagement among healthcare professionals. Kroll and Vogel⁴⁹ concluded that low levels of transformational leadership did not significantly weaken the effect of public service motivation on performance information uses in a local German government sample. Their findings revealed that transformational leadership makes a substantive difference only when it is experienced at a high level. Moreover, Potipiroon and Ford⁵⁰ unveiled that ethical leadership did not interact with public service motivation to affect organizational commitment among public agencies in Thailand. Given the inconsistent findings regarding the interaction between public service motivation and leadership, our study narrows this gap by confirming the moderating role of humble leadership on the nexus between public service motivation and work engagement in the Vietnamese public healthcare context.

RECOMMENDATIONS

This study makes several theoretical contributions by expanding research streams on public service motivation, humble leadership, and work engagement. Our research results reveal the predictive role of public service motivation in fostering work engagement and the moderating role of humble leadership in the public healthcare sector, contributing to the healthcare management literature in different ways. First, our research concentrates on work engagement which is a vital element for healthcare professionals since there is a linkage between work engagement and performance established not only in the general context,^{51,52} but also within the public healthcare sector.⁵³ Empirical studies on the impact of public service motivation on work engagement remain scarce, particularly in the public healthcare sector. Our research hence expands healthcare management research by providing evidence for the role of public service motivation and humble leadership in the work engagement of public healthcare professionals in Vietnam. Second, we introduce humble leadership as a boundary condition for the impact of public service motivation on work engagement, finding that the facilitating effect of public service motivation on healthcare professionals' work engagement is moderated by humble leadership. Differing from prior studies that have focused on transformational leadership⁴⁹ or ethical leadership⁵⁰ as a boundary condition, our research seeks to explore the moderating role of humble leadership in the public healthcare context, thereby extending the public service motivation and work engagement literature. Additionally, because the care of a direct supervisor may directly lead to a positive perception,⁵⁴ by investigating humble leadership as a boundary condition, our research not only

distinguishes itself from prior research that examined other leadership moderators but also is in line with a recent call for inquiries into different contexts⁵⁰ such as the Vietnam public healthcare sector. Third, our research enriches the job demands – resources model²⁹ by examining evidence for its role in casting insights into the associations between public service motivation, humble leadership, and work engagement among healthcare professionals. Moreover, the demonstration of the moderating effect of humble leadership suggests that leadership stresses the importance of the public service motivation – work engagement relationship, and this extends the literature on the Job Demands–Resources approach to public service motivation.²¹ Accordingly, the job demands–resources model may be a relevant answer for understanding the work engagement of public employees since they need both personal resources (i.e. public service motivation) and job resources (i.e. humble leadership) in order to develop engagement in their work.

Through these findings, this study can make several practical contributions to the field of healthcare management. This study unveils that public service motivation and humble leadership, a leadership style in which the leader encourages followers' growth and learning, are effective at promoting work engagement. More specifically, by inspecting the importance of various aspects in the workplace, the present study gives more nuanced insights than previous work into how motivation and leadership shape healthcare professionals' work engagement. As individuals with high public service motivation have been found to elicit work engagement, hiring practices could therefore include the evaluation of potential healthcare candidates' public service motivation. Moreover, the results of this study show that public healthcare organizations would be implied to entail jobs that offer meaningful value to other

people and society. A humble leader is a person who not only recognizes his/her own mistakes and limitations but also acknowledges the strengths and contributions of others.⁵⁵ Effective and humble leaders can enhance employees' work engagement in two ways. First, a humble leader respects employees' efforts and is open to everyone discussing new solutions and eliciting feedback, thereby developing a workplace environment characterized by unity, commitment, and accomplishment.⁵⁶ Second, humble leadership has been recognized as a people-first leadership style in which a leader pays attention to the concerns of others.⁵⁷ Additionally, Afshan et al.⁵⁸ indicated that via humble leadership, as a bottom-up management approach, such leaders observe and listen to employees' issues, as well as increase interactions with their followers. Therefore, humble leaders build a supportive environment in a workplace where employees face fewer conflicts. All these factors are essential to improve employees' mental health, ultimately enhancing individual work engagement.

Humble leaders might create a positive climate in organizations that foster greater involvement among employees.⁵⁹ At the organizational level, supervisors who foster the humble style in their interactions with others through information sharing could transmit organizational values such as cooperation and communication. This approach allows supervisors to disseminate organizational values to their followers in their relevant departments and create a positive climate of empowerment throughout the organization. This comprehensive approach to decision making highlights the importance of the majority and then promotes a climate that prioritizes others in the organization. Leaders could acknowledge and act on power imbalances impacting the cultural safety and health of community residents.⁶⁰ At the community level, humility is

relevant to public health because it leads to a consideration of both the effect on individuals and the values of the population. Given this feature in the public health context, public healthcare professionals should cultivate active listening as part of their efforts to act according to the virtue of humility. Therefore, exhibiting humble leadership characteristics and the ability to engage employees in their work could be considered prerequisites for promotion. Humble leadership should be engraved among supervisors via leadership training. In preparing for these roles, humble leadership training could be offered to all healthcare supervisors above a significant level. Moreover, healthcare supervisors should practice how to acknowledge their restraints and empathize with their subordinates' limitations, as well as value subordinates' contributions to healthcare service delivery.

These leadership practices will inspire employees to develop a sense of engagement in their work. Moreover, this study reveals that public service motivation and humble leadership may also have an impact on each other in connection to work engagement. In particular, the effect of public service motivation may be fortified when humble leadership is lower or missing, meaning healthcare professionals with high levels of public service motivation are more inclined to engage in work that serves the interests of the community and are less likely to be affected by their leader. Public healthcare organizations should hence recognize that public service motivation can act as an alternative resource for leadership in fostering work engagement. Healthcare supervisors should support the development of public service motivation, enabling healthcare professionals to naturally engage in their work to bring better services for patients.

Although our study has made important contributions to healthcare management literature, it has some limitations, and such limitations in the current research may open up paths for further research. Because this research took its sample from a public healthcare setting, the generalizability of empirical findings can be reinforced by examining the research model in alternative service contexts, such as the hotel, restaurant, or tourism industries. While this inquiry can provide implications for healthcare management in Vietnam, future studies are advised to examine the model in different countries or from other cultures. In addition, the findings of this study may not exhibit the effect on work engagement over a long-term period. A longitudinal research design is suggested to explore how changes in motivation and leadership style might impact work engagement.

CONCLUSION

The findings of this study demonstrate that public service motivation and humble leadership are crucial elements of work engagement. The results further reveal the moderating role of humble leadership and its effect on public service motivation toward work engagement. The findings showed that when humble leadership was low, public service motivation enhanced work engagement to a higher degree among public healthcare professionals in Vietnam.

FUNDING

This study did not receive funding.

CONFLICTS OF INTERESTS

Authors declare that they have no conflict of interest.

ACKNOWLEDGEMENTS

We would like to thank all healthcare professionals who responded to the questionnaire and provided beneficial information for this study.

REFERENCES

1. Lee TH. How US health care got safer by focusing on the patient experience. *Harvard Business Review*. 2017 [Internet]. [Cited 2024 May 15]. Available from: <https://hbr.org/2017/05/how-u-s-health-care-got-safer-by-focusing-on-the-patient-experience>
2. Das SR, Sultana S, Abedin ES, Chowdhury AA, Haque MI. Mental health status and associated factors with stress among healthcare workers during the COVID-19 pandemic: a cross-sectional study. *J Public Hlth Dev*. 2024;22(1):93-109. doi: 10.55131/jphd/2024/220108
3. Ritz A, Brewer GA. Does societal culture affect public service motivation? Evidence of sub-national differences in Switzerland. *Int Public Manag J*. 2013;16(2):224–51. doi: 10.1080/10967494.2013.817249
4. Schaufeli WB, Bakker AB. Defining and measuring work engagement: Bringing clarity to the concept. *Work engagement: a handbook of essential theory and research*. New York: Psychology Press. 2010:10-24.
5. Ministry of Health. Innovation of serving manner and attitude of health officials toward the satisfaction of patients [Internet]. [Cited 2024 August 1]. Available from: [https://luatminhkhue.vn/en/decision-no--2151-qd-byt-dated-june-04--2015-of-the-ministry-of-health-approving-the-plan-for-implementation-of--innovation-of-serving-manner-and-](https://luatminhkhue.vn/en/decision-no--2151-qd-byt-dated-june-04--2015-of-the-ministry-of-health-approving-the-plan-for-implementation-of--innovation-of-serving-manner-and-attitude-of-health-officials-toward-the-satisfaction-o.aspx)
6. National assembly. Law on Medical Examination and Treatment [Internet]. [Cited 2024 August 1]. Available from: <https://lawnet.vn/en/vb/Law-15-2023-QH15-medical-examination-and-treatment-87FB7.html>
7. Noesgaard MS, Hansen JR. Work engagement in the public service context: The dual perceptions of job characteristics. *Int J Publ Adm*. 2018;41(13):1047–60. doi: 10.1080/01900692.2017.1318401
8. Wee KZ, Lai AY. Work engagement and patient quality of care: a meta-analysis and systematic review. *Med Care Res Rev*. 2022;79(3):345-58. doi: 10.1177/10775587211030388
9. Gupta V, Agarwal UA, Khatri N. The relationships between perceived organizational support, affective commitment, psychological contract breach, organizational citizenship behaviour and work engagement. *J Adv Nurs*. 2016;72(11):2806–2817. doi: 10.1111/jan.13043
10. Szilvassy P, Širok K. Importance of work engagement in primary healthcare. *BMC Health Serv Res*. 2022;22(1):1044. doi: 10.1186/s12913-022-08402-7
11. Deng J, Liu J, Guo Y, Gao Y, Wu Z, Yang T. How does social support affect public service motivation of healthcare workers in China: the mediating effect of job stress. *BMC Public Health*. 2021;21(1):1076. doi: 10.21203/rs.3.rs-19470/v1
12. O’leary C. Public service motivation: A rationalist critique. *Public Personnel Management*. 2019;48(1):82-96. doi: 10.1177/0091026018791962
13. Allen GP, Moore WM, Moser LR, Neill KK, Sambamoorthi U, Bell HS. The role of servant leadership and transformational leadership in academic pharmacy. *American journal*

-
- of pharmaceutical education. 2016; 80(7):113. doi: 10.5688/ajpe807113
14. Destler KN. A matter of trust: Street level bureaucrats, organizational climate and performance management reform. *J Publ Admin Res Theory*. 2017;27(3):517-34. doi: 10.1093/jopart/muw055
 15. Vu TA, Plimmer G, Berman E, Sabharwal M. Managing employee performance in transition economies: A study of Vietnamese public organizations. *Publ Admin Dev*. 2019;39(2):89-103. doi: 10.26686/wgtn.17135195
 16. Salehzadeh R, Ziaeeian M. Advancing our understanding of humble leadership in healthcare: a scoping review. *Leadership Health Serv (Bradford Engl)*. 2024;ahead-of-print(ahead-of-print). doi: 10.1108/LHS-07-2023-0050
 17. Rainey HG, Steinbauer P. Galloping elephants: Developing elements of a theory of effective government organizations. *J Publ Admin Res Theory*. 1999;9(1):1-32. doi:10.1093/oxfordjournals.jpart.a024401
 18. Perry JL, Wise LR. The motivational bases of public service. *Public Admin Rev*. 1990;367-73. doi: 10.2307/976618
 19. Vandenabeele W. Toward a public administration theory of public service motivation: An institutional approach. *Publ Man Rev*. 2007;9(4):545-556. doi: 10.1080/14719030701726697
 20. Schott C, Neumann O, Baertschi M, Ritz A. Public service motivation, prosocial motivation and altruism: Towards disentanglement and conceptual clarity. *Inter J Publ Admin*. 2019;42(14):1200–1211. doi: 10.1080/01900692.2019.1588302
 21. Bakker AB. A job demands-resources approach to public service motivation. *Public Adm Rev*. 2015;75(5):723–732. doi: 10.1111/puar.12388
 22. Perry JL, Brudney JL, Coursey D, Littlepage L. What drives morally committed citizens? A study of the antecedents of public service motivation. *Public Adm Rev*. 2008; 68(3):445–458. doi: 10.1111/j.1540-6210.2008.00881.x
 23. Zahari N, Kaliannan M. Antecedents of work engagement in the public sector: A systematic literature review. *Rev Publ Pers Adm*. 2023;43(3):557-582. doi: 10.1177/0734371X221106792
 24. Stefurak T, Morgan R, Johnson RB. The relationship of public service motivation to job satisfaction and job performance of emergency medical services professionals. *Public Pers Man*. 2020;49(4):590-616. doi: 10.1177/0091026020917695
 25. Borst RT. Comparing work engagement in people-changing and people-processing service providers: A mediation model with red tape, autonomy, dimensions of PSM, and performance. *Publ Pers Man*. 2018;47(3):287–313. doi: 10.1177/0091026018770225
 26. Borst RT, Kruyen PM, Lako CJ. Exploring the job demands–resources model of work engagement in government: Bringing in a psychological perspective. *Rev Public Pers Adm*. 2019;39(3):372–397. doi: 10.1177/0734371X17729870
 27. Yang K, Zhou L, Wang Z, Lin C, Luo Z. Humble leadership and innovative behaviour among Chinese nurses: The mediating role of work engagement. *J Nurs Manag*. 2019;27(8):1801–1808. doi: 10.1111/jonm.12879
 28. Owens BP, Johnson MD, Mitchell TR. Expressed humility in organizations: Implications for performance, teams, and leadership. *Organ Sci*. 2013;24(5):1517–1538. doi: 10.1287/orsc.1120.0795
-

29. Bakker AB, Demerouti E. The job demands-resources model: State of the art. *Journal of managerial psychology*. 2007;22(3):309-328. doi: 10.1108/02683940710733115
30. Owens BP, Hekman DR. How does leader humility influence team performance? Exploring the mechanisms of contagion and collective promotion focus. *Acad Manage J*. 2016;59(3):1088-1111. doi: 10.5465/amj.2013.0660
31. Cho J, Schilpzand P, Huang L, Paterson T. How and when humble leadership facilitates employee job performance: the roles of feeling trusted and job autonomy. *J Leadership Org Studies*. 2021;28(2):169-84. doi: 10.1177/1548051820979634
32. Cooke DK, Brant KK, Woods JM. The role of public service motivation in employee work engagement: A test of the job demands-resources model. *Int J Publ Adm*. 2019;42(9):765-75. doi: 10.1080/01900692.2018.1517265
33. Walters KN, Diab DL. Humble leadership: Implications for psychological safety and follower engagement. *J Lead. Stud*. 2016; 10(2):7-18. doi: 10.1002/jls.21434
34. Alamri M. Transformational leadership and work engagement in public organizations: promotion focus and public service motivation, how and when the effect occurs. *Leadersh Organ Dev J*. 2023;44(1):137-55. doi: 10.1108/LODJ-12-2021-0544
35. Kelemen TK, Matthews SH, Matthews MJ, Henry SE. Humble leadership: A review and synthesis of leader expressed humility. *Journal of Organizational Behavior*. 2023 Feb; 44(2):202-24. doi: 10.1002/job.2608
36. Mussagulova A. Predictors of work engagement: Drawing on job demands-resources theory and public service motivation. *Aust J Publ Adm*. 2021;80(2):217-238. doi: 10.1111/1467-8500.12449
37. Hair JF, Hult GTM, Ringle CM, Sarstedt M. A primer on partial Least Squares Structural Equation Modeling (PLS-SEM). Thousand Oaks, California: SAGE Publications. 2014
38. Doan LP, Boyer L, Auquier P, Fond G, Tran B, Latkin CA, et al. Social and economic impacts of COVID-19 among health professionals in Vietnam: Status and associations with quality of life and sleep quality. *J Epidemiol Glob Health*. 2023;13(4):842-56. doi: 10.1007/s44197-023-00156-7
39. Brislin RW. Back-translation for cross-cultural research. *J Cross-Cult Psychol*. 1970;1(3):185-216. doi: 10.1177/135910457000100301.
40. Perry JL. Measuring public service motivation: An assessment of construct reliability and validity. *J Public Adm Res Theory*. 1996;6(1):5-22. doi: 10.1093/oxfordjournals.jpart.a024303
41. Schaufeli WB, Bakker AB, Salanova M. The measurement of work engagement with a short questionnaire: A cross-national study. *Educ Psychol Meas*. 2006;66(4):701-716. doi: 10.1177/0013164405282471
42. Giallourous G, Nicolaides C, Gabriel E, Economou M, Georgiou A, Diakourakis M. Enhancing employee engagement through integrating leadership and employee job resources: evidence from a public healthcare setting. *Int Publ Manag J*. 2023;7(4):533-558. doi: 10.1080/10967494.2023.2215754
43. Anderson JC, Gerbing DW. Structural equation modeling in practice: A review and recommended two-step approach. *Psychol Bull*. 1988; 103(3):411-423. doi: 10.1037/0033-2909.103.3.411
44. Carmines E, McIver J. Analyzing models with unobserved variables: Analysis of covariance structures. Beverly Hills, CA: Sage Publications. 1981.

45. Tabachnick BG, Fidell LS. Using Multivariate Statistics (5th ed.) New York: Allyn and Bacon. 2007.
46. Hu LT, Bentler PM. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary J.* 1999;6(1):1-55. doi:10.1080/10705519909540118
47. Gefen D, Straub D. A practical guide to factorial validity using PLS-Graph: Tutorial and annotated example. *Communications of the Association for Information systems.* 2005;16(1):91-109. doi: 10.17705/1cais.01605
48. Bao Y, Li C, Zhao H. Servant leadership and engagement: a dual mediation model. *J Man Psychol.* 2018;33(6):406–417. doi: 10.1108/JMP-12-2017-0435
49. Kroll A, Vogel D. The psm-leadership fit: A model of performance information use. *Public Adm.* 2014; 92(4):974–91. doi: 10.1111/padm.12014
50. Potipiroon W, Ford MT. Does public service motivation always lead to organizational commitment? Examining the moderating roles of intrinsic motivation and ethical leadership. *Public Pers Man.* 2017;46(3):211–38. doi: 10.1177/0091026017717241
51. Hasan AA, Ahmad SZ, Osman A. Transformational leadership and work engagement as mediators on nurses' job performance in healthcare clinics: work environment as a moderator. *Leadersh Health Serv.* 2023;36(4):537–61. doi: 10.1108/LHS-10-2022-0097
52. Kartal N. Evaluating the relationship between work engagement, work alienation and work performance of healthcare professionals. *Int J Healthc Manag.* 2018;11(3):251–259. doi: 10.1080/20479700.2018.1453969
53. Al Badi FM, Cherian J, Farouk S, Al Nahyan M. Work engagement and job performance among nurses in the public healthcare sector in the United Arab Emirates. *J Asia Bus Stud.* 2023; 17(5):1019-1041. doi: 10.1108/JABS-06-2022-0216
54. Long NLH, Ho VA. Determinants of perceived organizational support: An empirical study of administrative staff at public hospitals in Vietnam. *J Public Hlth Dev.* 2021;19(1):186-96.
55. Owens BP, Hekman DR. Modeling how to grow: An inductive examination of humble leader behaviors, contingencies, and outcomes. *Academy Manag J.* 2012;55(4):787-818. doi: 10.5465/amj.2010.0441
56. Gonçalves L, Brandão F. The relation between leader's humility and team creativity: The mediating effect of psychological safety and psychological capital. *Internat J Org Analysis.* 2017;25(4):687-702. doi: 10.1108/ijoa-06-2016-1036
57. Cable D. How humble leadership really works. *Harvard Business Review.* 2018 [Internet]. [Cited 2024 August 4]. Available from: <https://hbr.org/2018/04/how-humble-leadership-really-works>
58. Afshan G, Kashif M, Khanum F, Khuhro MA, Akram U. High involvement work practices often lead to burnout, but thanks to humble leadership. *J Manag Dev.* 2021;40(6):503-25. doi: 10.1108/jmd-10-2020-0311
59. Aarons GA, Ehrhart MG, Torres EM, Finn NK, Beidas RS. The humble leader: Association of discrepancies in leader and follower ratings of implementation leadership with organizational climate in mental health. *Psychiatric Serv.* 2017;68(2):115-122. doi: 10.1176/appi.ps.201600062

60. Kellett P, Fitton C. Supporting transvisibility and gender diversity in nursing practice and education: embracing cultural safety. *Nursing Inquiry*. 2017;24(1):e12146. doi: 10.1111/nin.12146