

The Mediating Role of Teamwork in the Relationship Between Authentic Leadership and Work Engagement Among Japanese Nurses

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ABSTRACT

This study examined whether teamwork mediates the relationship between authentic leadership and work engagement among hospital nurses in Japan. A survey was conducted with 47 nurses using validated scales. Correlation analysis showed significant positive associations among authentic leadership, teamwork, and work engagement. Mediation analysis revealed that authentic leadership enhances work engagement indirectly through teamwork, while the direct effect was not significant. These results suggest that authentic leadership promotes work engagement by fostering teamwork. The findings highlight the importance of team-based processes in healthcare and suggest that leadership development should include a focus on strengthening teamwork.

Keywords: Authentic leadership, Teamwork, Work engagement, Healthcare settings, Nurses

INTRODUCTION

In recent years, the concept of authentic leadership has garnered significant attention within healthcare organizations, particularly as the industry faces increasing demands for quality care, ethical conduct, and collaborative team environments. Authentic leadership, characterized by self-awareness, relational transparency, balanced processing, and an internalized moral perspective, is recognized for its potential to foster trust, openness, and ethical behavior among healthcare professionals (Walumbwa et al., 2008). As healthcare systems become more complex and multidisciplinary, the leadership style adopted by nurse managers and supervisors is increasingly

seen as a critical factor influencing not only organizational outcomes but also the well-being and motivation of nursing staff.

Work engagement, defined as a positive, fulfilling, work-related state of mind characterized by vigor, dedication, and absorption (Schaufeli et al., 2002), has emerged as a key predictor of job performance, staff retention, and patient care quality in nursing. High levels of work engagement among nurses are associated with lower burnout rates, improved job satisfaction, and better patient outcomes (Bakker & Demerouti, 2008). Given the high-stress environment of healthcare settings, identifying organizational and interpersonal factors that enhance nurses' work engagement is of paramount importance.

Previous research has established a positive association between authentic leadership and work engagement among nurses (Laschinger et al., 2013; Wong & Laschinger, 2013). However, the mechanisms through which authentic leadership exerts its influence on work engagement remain insufficiently explored. In particular, team-level factors such as teamwork may play a pivotal mediating role in this relationship. Teamwork, defined as the collaborative efforts of a group to achieve shared goals and provide mutual support, is essential in healthcare settings where patient care is often delivered by multidisciplinary teams. Effective teamwork has been linked to improved communication, higher job satisfaction, and enhanced patient safety (Salas et al., 2015).

Despite the theoretical rationale for considering teamwork as a mediator, empirical studies examining the mediating role of teamwork in the relationship between authentic leadership and work engagement are limited, especially in the context of Japanese healthcare. Cultural and organizational characteristics unique to Japan, such as hierarchical structures and collectivist values, may further influence these dynamics, underscoring the need for context-specific research.

This study aims to address this gap by investigating whether teamwork mediates the relationship between authentic leadership and work engagement among hospital nurses in Japan. By employing validated measures of authentic leadership, teamwork, and work engagement, and utilizing mediation analysis, this research seeks to elucidate the pathways through which authentic leadership may foster higher engagement among nurses. Understanding these mechanisms is crucial for informing leadership development and team-building interventions in healthcare organizations, with the ultimate goal of enhancing nurse well-being and patient care quality.

The findings of this study are expected to contribute to the growing body of literature on leadership and engagement in healthcare by highlighting the central role of teamwork. Furthermore, the results may offer practical implications for nurse managers and policymakers aiming to cultivate supportive and high-performing teams within hospitals. Given the ongoing challenges faced by the nursing workforce, especially in the wake of global health crises, insights into effective leadership and teamwork strategies are more relevant than ever.

METHODS

This study targeted 150 staff nurses without managerial positions working at a mid-sized hospital (Hospital A) located in the Tokyo metropolitan area, Japan. Data were collected using a web-based questionnaire administered via Google Forms. A paper containing the survey link and QR code was distributed to Hospital A, and nurses were invited to participate in the study. The data collection period was from January to February 2024.

Prior to the survey, informed consent was obtained from all participants. Supervisors received a face-to-face explanation of the study's purpose and ethical considerations, while potential participants were provided written information and consent forms through the web interface. Only nurses who agreed to participate were asked to complete the questionnaire.

The survey consisted of several sections. First, demographic information was collected, including gender, age, years of employment, years of nursing experience, and average weekly working hours. Authentic leadership was assessed using the Japanese version of the Authentic Leadership Questionnaire (ALQ), originally developed by Walumbwa et al. (2008) and translated into Japanese (Copyright © 2007 by Bruce J. Avolio, William L. Gardner, & Fred O. Walumbwa). The ALQ consists of 16 items covering four factors: self-awareness, relational transparency, internalized moral perspective, and balanced processing. Responses were rated on a 5-point Likert scale ranging from 0 ("I do not agree at all") to 4 ("I agree").

Teamwork was measured using items from the team process scale for nurses developed by Misawa, Sasai, and Yamaguchi (2009). This scale includes four subscales: monitoring and mutual adjustment (4 items), task analysis and clarification (4 items), knowledge and information sharing (3 items), and feedback (3 items). Responses were rated on a 5-point scale from 1 ("not applicable") to 5 ("highly applicable").

Work engagement was assessed using the Japanese version of the Utrecht Work Engagement Scale (UWES-9, Shimazu et al., 2008; Schaufeli, et al., 2019). This scale measures three sub-factors: vigor, dedication, and absorption. Responses were recorded on a 7-point scale from "not at all" to "every day (feel it all the time)." Both total and subscale scores were used in the analysis.

Statistical analysis was conducted in several steps. First, descriptive statistics were calculated for all variables. Correlational analysis was then performed to examine the relationships among authentic leadership, teamwork, and work engagement. Mediation analysis was conducted using the PROCESS macro (Model 4; Hayes, 2022), with authentic leadership as the independent variable, teamwork as the mediating variable, and work engagement as the dependent variable. Bootstrapping with 5,000 resamples was used to estimate 95% confidence intervals. All statistical analyses were performed using IBM SPSS Statistics version 29 for Windows.

This study was approved by the ethics committee at the Graduate School of Sports and Health Science, Juntendo University (Application Number: 2021-115). All data were collected and managed in accordance with ethical guidelines, and participant anonymity was strictly maintained.

RESULTS

A total of 47 nurses (6 males and 41 females) participated in this study. The mean age of the respondents was 34.0 years ($SD = 8.0$), with a range from 23 to 57 years. The average number of years of service at the current workplace was 4.3 years ($SD = 2.5$, range: 1–9 years), and the mean years of nursing experience was 9.6 years ($SD = 6.0$, range: 2–34 years). The average weekly working hours were 40.2 ($SD = 9.2$), with a minimum of 8 and a maximum of 55 hours.

Due to the limited sample size, composite scores for authentic leadership, teamwork, and work engagement were calculated for each scale and treated as single-factor variables in the analysis. Correlation analysis revealed that all three variables-authentic leadership, teamwork, and work engagement-were significantly and positively correlated at the 1% level (Table 1). This indicates that higher perceptions of authentic leadership were associated with higher levels of teamwork and work engagement, and that teamwork was also positively related to work engagement.

Table 1: Correlation analysis results.

		Mean	SD	1	2	3
1.	Authentic Leadership	2.3	0.7	-		
2.	Teamwork	3.8	0.6	.61**	-	
3.	Work Engagement	2.1	1.4	.42**	.64**	-

** $p < 0.01$

Mediation analysis was conducted using the PROCESS macro (Model 4), with authentic leadership as the independent variable, teamwork as the mediator, and work engagement as the dependent variable. The results showed that authentic leadership significantly predicted teamwork ($B = 0.52$, $SE = 0.10$, $t = 5.11$, $p < .001$, 95% CI [0.32, 0.73], $\beta = 0.61$). When both authentic leadership and teamwork were included as predictors of work engagement, teamwork had a significant positive effect on work engagement ($B = 1.37$, $SE = 0.33$, $t = 4.14$, $p < .001$, 95% CI [0.70, 2.03], $\beta = 0.60$), while the direct effect of authentic leadership on work engagement was not significant ($B = 0.11$, $SE = 0.28$, $t = 0.40$, $p = .69$, 95% CI [-0.46, 0.69], $\beta = 0.06$). The total effect of authentic leadership on work engagement was significant ($B = 0.83$, $SE = 0.26$, $t = 3.14$, $p = .003$, 95% CI [0.30, 1.36], $\beta = 0.42$), but the direct effect became non-significant when teamwork was included in the model. The indirect effect of authentic leadership on work engagement via teamwork was significant (indirect effect = 0.72, BootSE = 0.28, 95% BootCI [0.26, 1.35]), as the confidence interval did not include zero.

These results indicate that teamwork fully mediates the relationship between authentic leadership and work engagement among nurses in this sample.

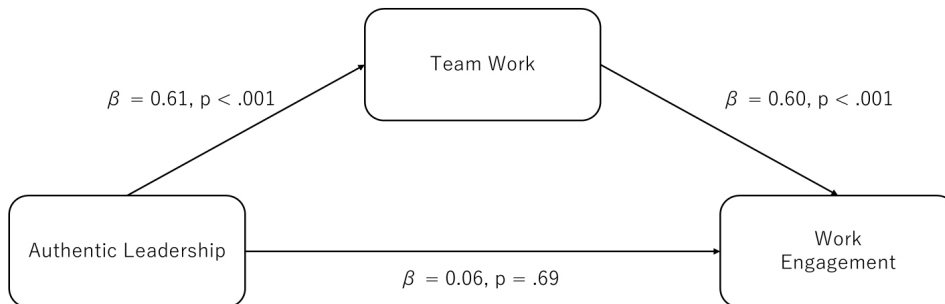


Figure 1: A model of authentic leadership and work engagement mediated by teamwork.

DISCUSSION

This study investigated the mediating role of teamwork in the relationship between authentic leadership and work engagement among nurses in a Japanese hospital. The results revealed that authentic leadership was significantly and positively associated with both teamwork and work engagement, and that teamwork fully mediated the relationship between authentic leadership and work engagement. These findings align with a growing body of literature in nursing and organizational psychology, which highlights the importance of leadership style and team processes in fostering positive work outcomes.

Authentic leadership, characterized by self-awareness, relational transparency, balanced processing, and an internalized moral perspective, has been shown to create trustful relationships and healthy work environments for nurses. Previous studies have demonstrated that authentic leaders can enhance job satisfaction, lower burnout, and promote well-being by empowering staff and building positive interpersonal relationships. In particular, Laschinger et al. (2012) found that authentic leadership indirectly improved job satisfaction and mental health among new nurses by fostering structural empowerment and relational social capital-concepts closely related to teamwork. Similarly, Laschinger et al. (2013) and Wong & Laschinger (2013) reported that authentic leadership's effects on job satisfaction and performance are often mediated by positive team climate, empowerment, and social capital.

The present study extends these findings by demonstrating a full mediation effect: authentic leadership did not have a direct effect on work engagement when teamwork was included in the model, but its indirect effect via teamwork was significant. This suggests that the influence of authentic leadership on engagement is realized primarily through the enhancement of team processes such as mutual support, information sharing, and

collaborative problem-solving. These results support theoretical frameworks like the Job Demands-Resources (JD-R) model (Demerouti et al., 2001), which posits that workplace resources-including effective teamwork-are critical mediators between leadership and employee engagement.

Moreover, the findings have practical implications for nurse managers and healthcare organizations. While leadership training remains important, these results indicate that interventions solely focused on individual leaders may be insufficient. Instead, comprehensive strategies that simultaneously develop authentic leadership and foster strong teamwork are likely to be more effective in improving nurse engagement and, ultimately, patient care quality. This is particularly relevant in the context of increasing demands on healthcare staff and persistent workforce challenges.

However, several limitations should be noted. The sample size was relatively small and drawn from a single hospital, which may limit the generalizability of the findings. The cross-sectional design precludes causal inference, and reliance on self-report measures may introduce bias. Future research should employ longitudinal or multi-site designs and incorporate objective indicators of teamwork and engagement to confirm and extend these findings.

CONCLUSION

This study demonstrated that teamwork fully mediates the relationship between authentic leadership and work engagement among Japanese hospital nurses. The findings highlight the necessity for nurse managers and organizations to not only cultivate authentic leadership, but also to actively foster effective teamwork in order to enhance work engagement. Interventions and training programs that simultaneously target leadership development and team-building are likely to yield the greatest benefits for nurse well-being and patient care quality. Further research with larger and more diverse samples is needed to confirm and extend these findings.

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