

The Effect of Perceived Leadership Support on Work Productivity through Work Engagement and Psychological Capital as Mediating Variables on Cleaning Service Employees at PT UNP Mandiri Berkarya

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A R T I C L E I N F O

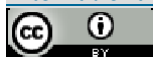
Keywords: Perceived Leadership Support, Employee Productivity, Work Engagement, Psychological Capital, Cleaning Service Employees

Received: 09, May

Revised: 12, June

Received: 31, July

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A B S T R A C T

This research investigates whether perceived leadership support contributes to the work productivity of cleaning service employees at PT UNP Mandiri Berkarya by considering the intervening roles of work engagement and psychological capital. A quantitative research design was implemented, and respondents were selected through simple random sampling. The study population consisted of 237 employees, from which 149 participants were chosen using the Slovin sampling formula. Data were gathered using a structured questionnaire with five-point Likert-scale responses and analyzed through PLS-SEM with SmartPLS 4. The findings reveal that employees who perceive stronger support from their leaders tend to report higher levels of work engagement, psychological capital, and productivity. The analysis further demonstrates that both work engagement and psychological capital contribute significantly to improving work productivity. Moreover, each variable functions as a significant mediating mechanism, indicating that leadership support enhances productivity both directly and indirectly by strengthening employees' psychological resources and encouraging greater involvement in their work.

INTRODUCTION

Effective human resource management serves as a strategic enabler of work productivity, especially in service-oriented organizations such as PT UNP Mandiri Berkarya. Employee productivity is a key indicator of organizational effectiveness and competitiveness (Appannan et al., 2022; Liberty et al., 2023).

In the cleaning service sector, employee productivity is a crucial factor in determining the quality of a company's services. Low productivity can lead to delays in task completion, a decline in cleaning quality, and an increase in complaints from service users. Various studies indicate that cleaning service productivity is influenced by organizational and psychological factors, such as perceived leadership support, work engagement, and psychological capital. As a cleaning service, PT UNP Mandiri Berkarya is required to deliver high quality cleaning services. Consequently, enhancing employee productivity is an aspect that demands attention.

Perceived leadership support, work engagement, and psychological capital are important factors that can effect work productivity. Perceived leadership support reflects employees' perceptions that their supervisors recognize their contributions and demonstrate genuine concern for their well-being (Heyns et al., 2022) . Psychological capital reflects employees' optimism, self-confidence, hope, and resilience. (Winarto & Chalidyanto, 2020) , ork engagement captures employees' psychological attachment and sustained commitment to their work and organizational environment (Ngwenya & Pelsers, 2020).

The existing body of literature presents divergent findings concerning the relationships among perceived supervisor support, work engagement, psychological capital, and productivity. Some studies found positive and significant effects (Abdelwahed & Doghan, 2023; Hamzah & Nordin, 2022; Marashdah & Albdareen, 2020; Nanasa & Fatmala, 2022), while others reported insignificant or weaker relationships (Faizah, 2022; Melati & Priyono, 2022) . These divergent findings underscore a research gap that warrants further empirical investigation.

Conservation of Resources (COR) Theory provides the conceptual foundation for this study. The theory explains that individuals actively strive to acquire, preserve, and develop resources that enable them to cope effectively with job demands and achieve desirable work outcomes. In this study, leadership support is viewed as an organizational resource available to employees, whereas work engagement and psychological capital are regarded as personal resources that strengthen employees' ability to fulfill their work responsibilities. Based on this perspective, the study examines the relationship between perceived leadership support and work productivity by incorporating the mediating roles of work engagement and psychological capital among cleaning service employees at PT UNP Mandiri Berkarya.

LITERATURE REVIEW

Conservation of Resources Theory (COR)

The Conservation of Resources (COR) Theory, originally introduced by Hobfoll (2001), aims that individuals seek to build, maintain, and protect

resources that help them respond to work demands and achieve desired outcomes. These resources can include personal, social, psychological, and organizational resources (Appannan et al., 2022; Hobfoll, 2001). COR Theory suggests that individuals continuously invest in acquiring, retaining, and enhancing valuable resources to effectively address workplace challenges and attain optimal performance (Hobfoll, 2001).

Within HRM, COR Theory explains that adequate resources encourage stronger work engagement, improve employees' ability to cope with workplace challenges, and enhance productivity. In contrast, limited resources can reduce motivation, weaken work engagement, and ultimately lower work performance (Hobfoll, 2001).

In this research, perceived leadership support is considered a key organizational resource because it reflects leaders' commitment to acknowledging employees' contributions, offering assistance, and fostering a supportive work environment. (Hamzah & Nordin, 2022; Heyns et al., 2022). This support helps employees obtain the psychological resources needed to perform their jobs effectively (Sun et al., 2023; Um-e-Rubbab et al., 2021). Meanwhile, work engagement and psychological capital are positioned as personal resources that enable employees to work more effectively, enthusiastically, and resiliently when facing challenges in the workplace (Luthans et al., 2007; Schaufeli et al., 2002). Based on the COR Theory perspective, perceived leadership support is expected to increase work productivity through increased work engagement and psychological capital (Khuram et al., 2023; Tian et al., 2023).

Perceived Leadership Support and Work Engagement

Perceived leadership support describes employees' perception that their supervisors appreciate their contributions and genuinely care about their well-being (Hamzah & Nordin, 2022; Heyns et al., 2022). For cleaning service employees at PT UNP Mandiri Berkarya, leadership support serves as an important organizational resource that helps them handle demanding tasks with greater confidence and commitment. Employees who receive consistent support from their supervisors are more likely to become psychologically attached to their work and actively participate in achieving organizational goals. As a result, stronger perceived leadership support is expected to foster higher levels of work engagement.

H1: Perceived leadership support has a significant positive effect on work engagement.

Perceived Leadership Support and Psychological Capital

Psychological capital can be understood as an individual's positive psychological resource, integrating self-efficacy, hope, optimism, and resilience into a unified construct (Luthans et al., 2007). Supportive leaders help strengthen these personal resources by providing guidance, appreciation, constructive feedback, and timely assistance, allowing employees to feel more

confident and optimistic in their work (Sun et al., 2023; Um-e-Rubbab et al., 2021). Within PT UNP Mandiri Berkarya, employees who experience greater leadership support are expected to develop stronger psychological capital, making them better prepared to perform their responsibilities and adapt to job demands (Khuram et al., 2023; Sun et al., 2023).

H2: Perceived leadership support has a significant positive effect on psychological capital.

Perceived Leadership Support and Work Productivity

Work productivity can be understood as employees' capability to transform available resources into optimal performance outcomes through efficient and effective work practices. Productivity is reflected in the quality and quantity of work, efficiency, timeliness, and achievement of organizational targets (Bernolak, 1997; Hanaysha, 2016).

Leadership support contributes to employee productivity by providing the guidance, assistance, recognition, and resources necessary for effective job performance. A supportive leadership environment fosters employees' commitment, enhances their enthusiasm for work, and motivates them to exert greater effort in fulfilling organizational goals (Heyns et al., 2022; Suhardoyo, 2022).

In a service organization like PT UNP Mandiri Berkarya, the productivity of cleaning service employees is crucial because it directly impacts service quality and user satisfaction. Based on previous research, perceived leadership support is expected to positively effect employee productivity by encouraging employees to perform their jobs more effectively and efficiently (Suhardoyo, 2022).

H3: Perceived leadership support has a significant positive effect on work productivity.

Work Engagement and Work Productivity

Work engagement can be understood as a positive work-related psychological state encompassing enthusiasm, dedication, and full immersion in one's job. Employees with high work engagement tend to exhibit strong energy, enthusiasm for their work, and full involvement in completing their tasks (Ngwenya & Pelser, 2020; Schaufeli et al., 2002).

Engaged employees are more willing to exert greater effort to achieve work goals. They display sustained focus, disciplined work practices, and a strong commitment to achieving excellence in their work. Consequently, higher work engagement is expected to increase work productivity (Abdelwahed & Doghan, 2023).

For cleaning service employees, work engagement is crucial because their work requires consistency, responsibility, and attention to detail. Accordingly, work engagement is anticipated to contribute positively to employees' work productivity. (Abdelwahed & Doghan, 2023; Ngwenya & Pelser, 2020).

H4: Work engagement has a significant positive effect on work productivity .

Psychological Capital and Work Productivity

Psychological capital can be understood as a positive psychological resource that equips individuals to manage workplace challenges and pursue work-related goals successfully (Luthans et al., 2007; Winarto & Chalidyanto, 2020) .

Psychological capital helps employees maintain motivation and enthusiasm despite work pressures or obstacles. Employees with positive psychological well-being are also better able to adapt to change and find solutions to workplace problems (Luthans et al., 2007; Nanasa & Fatmala, 2022)

In the cleaning service workplace, psychological capital is a crucial factor because employees often face physical demands and workplace stress. Therefore, psychological capital is expected to increase work productivity (Khuram et al., 2023; Nanasa & Fatmala, 2022) .

H5: Psychological capital has a significant positive effect on work productivity.

The Mediating Role of Work Engagement

Work engagement is anticipated to mediate the association between perceived leadership support and work productivity. While leadership support may directly enhance employees' productivity, it is also expected to foster greater work engagement, which subsequently translates into improved work productivity (Khuram et al., 2023; Tian et al., 2023) .

Consistent with COR Theory, leadership support provides organizational resources that strengthen employees' personal resources through higher work engagement, which ultimately contributes to greater work productivity (Hobfoll, 2001; Khuram et al., 2023) .

H6: Work engagement mediates the relationship between perceived leadership support and work productivity.

The Mediating Role of Psychological Capital

Psychological capital is likely to operate as an intervening variable through which perceived leadership support contributes to higher levels of work productivity. Leadership support provided through attention, appreciation, assistance, and constructive feedback can improve employees' positive psychological well-being (Luthans et al., 2007; Sun et al., 2023).

According to COR, leadership support is an organizational resource that can help employees acquire and develop valuable personal resources. One such personal resource is psychological capital. Employees endowed with strong psychological capital are more capable of navigating work pressures, sustaining motivation, responding positively to change, and delivering work outcomes with greater effectiveness and efficiency (Hobfoll, 2001; Khuram et al., 2023) .

H7: Psychological capital mediates the relationship between perceived leadership support and work productivity.

Drawing on this perspective, perceived leadership support is viewed as an organizational resource that enhances employee productivity through both direct and indirect pathways. Its indirect influence operates by strengthening work engagement and psychological capital, which represent key personal resources. The proposed conceptual framework is illustrated in Figure 1..

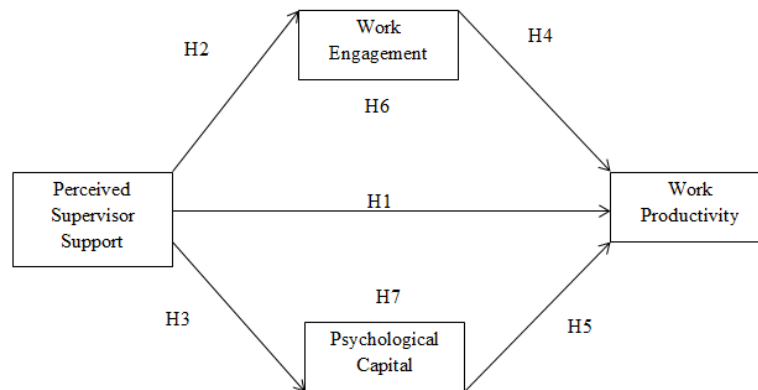


Figure 1. Conceptual Framework

METHODOLOGY

A quantitative approach formed the basis of this research. The study involved 149 respondents selected from a population of 237 cleaning service employees at PT UNP Mandiri Berkarya using the Slovin formula and simple random sampling. Data were obtained through a five-point Likert-scale questionnaire. The research model specified perceived leadership support as the predictor, work engagement and psychological capital as mediating variables, and work productivity as the outcome variable. The instruments were adapted from Eisenberger et al., (2002), the Utrecht Work Engagement Scale (UWES), Luthans et al., (2007) dan Hanaysha, (2016). The proposed model was analyzed using the PLS-SEM approach in SmartPLS 4. Construct validity and reliability were assessed using outer loadings, AVE, CR, and Cronbach's alpha. The structural model was subsequently evaluated through the using R^2 , F^2 , and bootstrapping o estimate both direct and mediating effects among the study constructs.

RESULTS

Table 2 presents the respondent characteristics of the 149 cleaning service employees of PT UNP Mandiri Berkarya who participated in this study. The respondent profile was dominated by female employees, accounting for 96 individuals (64.4%), while 53 respondents (35.6%) were male. In terms of age, the largest proportion of respondents was between 30 and 40 years old (55 respondents; 36.9%), followed by those younger than 30 years (53 respondents; 35.6%) and those older than 40 years (41 respondents; 27.5%). These findings indicate that most participants were within the productive working-age group.

Educational background was dominated by respondents who had completed senior high school (136 respondents; 91.3%), whereas 13 respondents (8.7%) held a bachelor's degree. With respect to work experience, Employees with more than three years of service constituted the largest proportion of the sample (78 respondents; 52.3%). Employees with 2-3 years of service accounted for 49 respondents (32.9%), followed by those with 1-2 years of service (14 respondents; 9.4%) and less than one year of service (8 respondents; 5.4%).

Table 2. Respondent Demographics

Characteristics	Number	Percentage (%)
Gender		
Man	53	35.6%
Woman	96	64.4%
Age		
< 30 years	53	35.6%
30-40 years	55	36.9%
>40 years	41	27.5%
Education		
Senior High School (SMA)	136	91.3%
Bachelor's Degree (S1)	13	8.7%
Years of service		
< 1 year	8	5.4%
1-2 years	14	9.4%
2-3 years	49	32.9
> 3 years	78	52.3

Source: Processed data, 2026.

Descriptive Analysis

The descriptive statistics were generated using the Respondent Achievement Level (TCR) approach. Table 3 indicates that all constructs exhibited very high scores. Perceived leadership support achieved a mean value of 4.68 (TCR = 93.72), followed by work engagement with a mean of 4.75 (TCR = 95.09), psychological capital with a mean of 4.74 (TCR = 94.95), and work productivity with a mean of 4.72 (TCR = 94.51). These descriptive results demonstrate that employees perceived strong leadership support, high work engagement, robust psychological capital, and high levels of work productivity within the cleaning service workforce of PT UNP Mandiri Berkarya.

Table 3. Respondents' Achievement Level

Variables	Means	TCR	Criteria
Work Productivity	4.72	94.51	Very high
Psychological Capital	4.75	94.95	Very high
Work Engagement	4.75	95.09	Very high
Perceived Leadership Support	4.68	93.72	Very high

Source: Processed data, 2026.

Outer Model Measurement

Following the recommended PLS-SEM criteria, only indicators with loading values exceeding 0.70 were retained. After excluding indicators that did not satisfy this threshold, all remaining indicators demonstrated acceptable loading values. Indicator loadings ranged from 0.738 to 0.820 for perceived leadership support, 0.712 to 0.848 for work engagement, 0.762 to 0.809 for psychological capital, and 0.714 to 0.766 for work productivity. These results provide evidence that the retained indicators exhibit satisfactory convergent validity and adequately capture their underlying latent constructs.

Table 4. Validity Test Results Based on AVE

Build	AVE	Criteria	Results
Perceived Leadership Support	0.592	> 0.50	Valid
Work Engagement	0.578	> 0.50	Valid
Psychological Capital	0.601	> 0.50	Valid

Build	AVE	Criteria	Results
Work Productivity	0.536	> 0.50	Valid

Source: Processed data, 2026.

Table 4 demonstrates that the AVE criterion was satisfied by all latent constructs, supporting the convergent validity of the measurement model. Specifically, perceived leadership support obtained an AVE of 0.592, followed by work engagement (0.578), psychological capital (0.601), and work productivity (0.536). The attainment of AVE values above the recommended threshold confirms adequate convergent validity, suggesting that each construct explains more than 50% of the variance in its associated indicators. Consequently, all latent constructs satisfied the convergent validity criterion and were considered appropriate for structural model evaluation.

Inner Model Measurement

The structural model was assessed using the coefficient of determination (R^2) to evaluate how well the independent variables explained the variance in the dependent variables, presented in Table 5.

Table 5. R-Square Results

Variables	R-Square	R-Square Adjusted
Work Engagement	0.465	0.461
Psychological Capital	0.497	0.494
Work Productivity	0.495	0.488

Source: Processed data, 2026.

The coefficient of determination (R^2) results suggest that perceived leadership support is an important predictor of work engagement and psychological capital, explaining 46.5% and 49.7% of their respective variances. When work engagement and psychological capital were considered alongside perceived leadership support, the model explained 49.5% of the variance in work productivity. These findings indicate that the proposed model offers moderate explanatory strength, while nearly half of the variation in the endogenous constructs may be attributable to variables not examined in the present study.

Hypothesis Test Results

The proposed relationships were examined through the SmartPLS 4 bootstrapping procedure. A t-value above 1.96 together with a p-value below

0.05 indicated statistical significance. The corresponding direct effect results are shown in Table 6.

Table 6. Direct Effect Test

Hypothesis	Track	Original Sample	T Statistics	P value	Results
H1	Perceived Leadership Support → Work Engagement	0.682	7,911	0,000	Supported
H2	Perceived Leadership Support → Psychological Capital	0.705	11,471	0,000	Supported
H3	Perceived Leadership Support → Work Productivity	0.515	6,725	0,000	Supported
H4	Work Engagement → Work Productivity	0.245	2,174	0.030	Supported
H5	Psychological Capital → Work Productivity	0.493	4,649	0,000	Supported

Source: Processed data, 2026.

As shown in Table 6, all direct hypotheses (H1-H5) were supported. Perceived leadership support significantly and positively influenced work engagement ($t = 7.911$, $p < 0.001$), psychological capital ($t = 11.471$, $p < 0.001$), and work productivity ($t = 6.725$, $p < 0.001$). In addition, work engagement ($t = 2.174$, $p = 0.030$) and psychological capital ($t = 4.649$, $p < 0.001$) both had significant positive effects on work productivity.

Mediation Test Results

The mediating effects of work engagement and psychological capital were assessed, and the results are summarized in Table 7.

Table 7. Indirect Effect Test

Hypothesis	Track	Original Sample	T Statistics	P value	Results
H6	Perceived Leadership Support → Psychological Capital → Work	0.348	4.115	0,000	Supported

Hypothesis	Track	Original Sample	T Statistics	P value	Results
	Productivity				
H7	Perceived Leadership Support → Work Engagement → Work Productivity	0.167	1,979	0.048	Supported

Source: Processed data, 2026

As presented in Table 7, both mediation hypotheses (H6 and H7) were supported. Psychological capital significantly mediated the relationship between perceived leadership support and work productivity ($t = 4.115$, $p < 0.001$), while work engagement also served as a significant mediator ($t = 1.979$, $p = 0.048$). These findings indicate that perceived leadership support enhances work productivity by strengthening employees' psychological capital and work engagement.

Hypothesis Testing Summary

Table 8. Summary of Hypothesis Testing

Hypothesis	Statement	Results
H1	Perceived Leadership Support Has a Significant Positive Effect on Work Engagement	Supported
H2	Perceived Leadership Support Has a Significant Positive Effect on Psychological Capital	Supported
H3	Perceived leadership support from superiors has a significant positive effect on work productivity.	Supported
H4	Work Engagement has a significant positive effect on Work Productivity.	Supported
H5	Psychological Capital has a significant positive effect on Work Productivity.	Supported
H6	Psychological Capital Mediates the Relationship between Perceived Leadership Support and Work Productivity	Supported

Hypothesis	Statement	Results
H7	Work Engagement Mediates the Relationship Between Perceived Leadership Support and Work Productivity	Supported

Source: Processed primary data, 2026.

Overall, the findings demonstrate that perceived leadership support is a key determinant of work productivity among cleaning service employees at PT UNP Mandiri Berkarya. Perceived leadership support positively influences work engagement, psychological capital, and work productivity, while both work engagement and psychological capital significantly enhance work productivity. Moreover, both variables act as significant mediators, indicating that stronger leadership support fosters employees' psychological resources and work engagement, which subsequently improve work productivity.

DISCUSSION

The Significant Effect of Perceived Leadership Support on Work Engagement (H1)

Perceived leadership support was enhances employees' work engagement by encouraging greater enthusiasm, dedication, and involvement in their jobs. This finding supports COR heory, which explains that organizational resources reinforce personal resources and strengthen work engagement. It also confirms previous evidence that leadership support contributes positively to employee engagement (Hamzah & Nordin, 2022; Heyns et al., 2022).

The Significant Effect of Perceived Leadership Support on Psychological Capital (H2)

Perceived leadership support promotes employees' psychological capital, equipping them with the confident, optimistic, and resilient in challenging work situations. This finding supports COR Theory and corroborates earlier findings. (Um-e-Rubbab et al., 2021; Sun et al., 2023).

The Significant Effect Perceived Leadership Support on Work Productivity (H3)

Perceived leadership support contributes to higher employee productivity promotes employee productivity by helping employees perform their duties more effectively through guidance, appreciation, encouragement, and practical assistance. This finding also corroborates earlier empirical evidence (Heyns et al., 2022; Suhardoyo, 2022) .

The Significant Effect of Work Engagement on Work Productivity (H4)

Employees with stronger work engagement tend to achieve higher productivity. Their energy, commitment, and deep involvement in work encourage consistent performance and effective task completion. This result is consistent with earlier studies linking work engagement to improved productivity (Abdelwahed & Doghan, 2023; Ngwenya & Pelser, 2020). In the

cleaning service context, higher work engagement contributes to better service quality, consistent task performance, and greater productivity..

The Significant Effect of Psychological Capital on Work Productivity (H5)

Greater psychological capital equips employees with the confidence, optimism, resilience, and motivation needed to maintain high levels of work productivity despite workplace challenges. This finding also corroborates earlier empirical evidence (Nanasa & Fatmala, 2022; Luthans et al., 2007). Among cleaning service employees, these psychological strengths improve adaptation to demanding tasks and contribute to better work performance.

The Significant Mediating Role of Psychological Capital (H6)

The results demonstrate that psychological capital plays a mediating role in translating perceived leadership support into higher work productivity. Employees who developed stronger confidence, hope, optimism, and resilience performed their work more effectively. This finding supports COR Theory and This finding also corroborates earlier empirical evidence (Sun et al., 2023; Um-e-Rubbab et al., 2021) .

The Significant Mediating Role of Work Engagement (H7)

The findings indicate that work engagement serves as an important mechanism linking perceived leadership support to higher work productivity. Employees who perceived greater supervisory support were more engaged in their work and consequently performed more effectively. This finding supports COR Theory and This finding also corroborates earlier empirical evidence (Khuram et al., 2023; Tian et al., 2023).

Overall Discussion

The results suggest that perceived leadership support plays a pivotal role in improving the work productivity of cleaning service employees at PT UNP Mandiri Berkarya. Besides its direct contribution to work productivity, leadership support also improves performance by strengthening employees' work engagement and psychological capital.

These findings are consistent with the COR Theory, which explains that organizational resources encourage the development of personal resources. When employees receive adequate support from their supervisors, they become more engaged, psychologically stronger, and better equipped to achieve higher levels of performance. Accordingly, organizations should cultivate supportive leadership practices to reinforce employee engagement, build psychological capital, and sustain productivity.

CONCLUSION AND RECOMMENDATIONS

This study confirms that perceived leadership support contributes positively to work productivity among cleaning service employees at PT UNP Mandiri Berkarya. Leadership support was found to increase work engagement, psychological capital, and employee productivity. In addition,

work engagement and psychological capital partially explain how leadership support translates into better work performance.

Based on these findings, the company is encouraged to strengthen supervisory practices by promoting open communication, recognizing employee contributions, providing constructive feedback, and offering practical assistance in daily work. Organizations should also invest in employee development initiatives that enhance engagement and psychological capital to support continuous productivity improvement.

FURTHER STUDY

This study has several limitations that should be acknowledged. The participants were drawn from a single organization, limiting the broader application of the results. Second, the cross-sectional research design did not capture changes in employee behavior over time. Future research could involve multiple organizations, adopt longitudinal designs, and examine additional variables such as job satisfaction, workload, and etc to obtain a broader understanding of employee productivity.

ACKNOWLEDGMENT

The authors express their gratitude to the cleaning service employees of PT UNP Mandiri Berkarya for their valuable participation in this study. The authors also thank the supervisors, academic advisors, reviewers, and colleagues for their valuable guidance and constructive feedback. This research received no external funding.

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