

Research Article

Transformational Leadership, Psychological Capital, and Work Engagement among Employees in Bandung City: A Mediation

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Abstract. Work engagement has become a central concern of human resource management in cities where knowledge work, creative industries, and services drive the local economy. This study examined whether transformational leadership is associated with work engagement and whether psychological capital mediates that association among employees in Bandung City, Indonesia. A cross-sectional survey was administered to 212 employees working in creative industries, information technology, education, and hospitality. Transformational leadership was measured with the Global Transformational Leadership Scale, psychological capital with the Psychological Capital Questionnaire, and work engagement with the Utrecht Work Engagement Scale. Regression analysis and bootstrapped mediation analysis showed that transformational leadership was positively related to work engagement ($B = 0.50, p < .001$) and to psychological capital ($B = 0.39, p < .001$). Psychological capital was the strongest predictor of engagement ($B = 0.73, p < .001$) and partially mediated the leadership effect, with an indirect effect of 0.29 (95% CI [0.19, 0.39]) accounting for about 57% of the total effect. The findings suggest that leaders in Bandung organizations enhance engagement not only through inspiration and support but also by building employees' hope, efficacy, resilience, and optimism. Practical implications for leadership development and psychological capital interventions are discussed.

Keywords: Bandung; Human Resource Psychology; Psychological Capital; Transformational Leadership; Work Engagement.

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1. Introduction

Organizations increasingly compete through the quality of their people rather than through physical assets alone. In this context, work engagement, defined as a positive, fulfilling state of mind characterized by vigor, dedication, and absorption (Schaufeli et al., 2002), has attracted sustained attention from industrial and organizational psychologists. Engaged employees show higher task and contextual performance, stronger commitment, and better well-being (Christian et al., 2011; Bakker & Albrecht, 2018). For human resource practitioners, understanding what fosters engagement is therefore both a scientific and a practical priority.

Bandung, the capital of West Java Province, offers a distinctive setting for this question. The city is known for its creative economy, its concentration of universities, a growing digital and startup ecosystem, and a vibrant tourism and hospitality sector. It was designated a UNESCO Creative City of Design in 2015, which reflects the importance of creative and knowledge-intensive work in the local labor market. The workforce is also relatively young, with a large share of millennial and Generation Z employees who tend to value meaningful work, learning opportunities, and supportive supervision. In such an environment, retaining talent and sustaining motivation depend heavily on how employees experience their work and their leaders.

Two resources are frequently proposed as drivers of engagement. The first is leadership, especially transformational leadership, in which leaders articulate an inspiring vision, model desirable behavior, stimulate creativity, and pay attention to followers' individual needs (Bass,

1985; Bass & Riggio, 2006). The second is psychological capital (PsyCap), a positive psychological resource composed of hope, self-efficacy, resilience, and optimism (Luthans et al., 2007a). Prior research has documented links between each of these resources and engagement, but relatively few studies have tested them in one model, and evidence from Indonesian urban labor markets remains limited. It is also unclear whether leaders influence engagement directly or by strengthening the personal resources of their followers.

Drawing on the job demands-resources (JD-R) model (Bakker & Demerouti, 2007) and conservation of resources theory (Hobfoll, 1989), this study proposes that transformational leadership operates as a job resource that builds employees' psychological capital, which in turn fosters work engagement. Accordingly, the research addresses three questions: (a) Is transformational leadership related to work engagement among employees in Bandung? (b) Is psychological capital related to work engagement? (c) Does psychological capital mediate the relationship between transformational leadership and work engagement? By answering these questions, the study contributes context-specific evidence to human resource psychology and offers guidance for leadership and talent development in Bandung organizations.

2. Literature Review

Work Engagement

Kahn (1990) described personal engagement as the harnessing of organization members' selves to their work roles, in which people express themselves physically, cognitively, and emotionally during role performance. Schaufeli et al. (2002) later conceptualized work engagement as a relatively enduring affective-cognitive state with three dimensions. Vigor refers to high energy and mental resilience while working, dedication refers to a sense of significance, enthusiasm, and pride, and absorption refers to being fully concentrated and happily engrossed in work. Meta-analytic evidence shows that engagement is positively related to job performance, organizational citizenship behavior, and job satisfaction, and negatively related to turnover intention (Christian et al., 2011).

The JD-R model explains engagement as the outcome of a motivational process. Job resources, such as autonomy, feedback, and supervisory support, satisfy basic psychological needs and stimulate growth, while personal resources help employees perceive that they can control and influence their environment (Demerouti et al., 2001; Xanthopoulou et al., 2007). Reviews of this literature conclude that both job and personal resources predict engagement, and that resources become especially important when demands are high (Bakker et al., 2014).

Transformational Leadership

Transformational leadership was introduced by Bass (1985) as a style that elevates followers' motives and moves them beyond self-interest for the sake of collective goals. It is usually described through behaviors such as idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass & Riggio, 2006). A meta-analysis by Judge and Piccolo (2004) found that transformational leadership correlated positively with follower satisfaction, motivation, leader effectiveness, and group performance, and it showed validity beyond transactional leadership. Reviews of the leadership field similarly identify transformational leadership as one of the most extensively validated approaches (Avolio et al., 2009).

Transformational leaders are expected to foster engagement because they provide meaning and vision, encourage autonomy and creative problem solving, and show genuine care for individual development. These behaviors correspond closely to the psychological conditions of meaningfulness, safety, and availability that Kahn (1990) identified as antecedents of engagement. In creative and knowledge-based settings such as those found in Bandung, intellectual stimulation and individualized consideration are particularly relevant because employees rely on discretion, ideas, and learning to perform well.

Psychological Capital

Psychological capital is a higher-order construct grounded in positive organizational behavior. It comprises four state-like capacities: hope (willpower and pathways toward goals), self-efficacy (confidence in one's ability to succeed at challenging tasks; Bandura, 1997), resilience (bouncing back from adversity), and optimism (a positive attribution about succeeding now and in the future) (Luthans et al., 2007a). Luthans et al. (2007b) showed that the combined construct predicts performance and satisfaction better than its components taken separately. A later meta-analysis confirmed that PsyCap is positively related to desirable employee attitudes, behaviors, and performance and negatively related to cynicism, turnover intention, and stress (Avey et al., 2011).

Because PsyCap is open to development, it is a practical target for human resource interventions. Xanthopoulou et al. (2007) demonstrated that personal resources, including self-efficacy and optimism, predict engagement over time and partly mediate the effect of job resources on engagement. This finding suggests that external resources such as leadership may work in part by strengthening internal psychological resources.

Theoretical Framework and Hypotheses

The JD-R model and conservation of resources theory jointly imply a resource gain pathway. According to Hobfoll (1989), individuals strive to obtain, retain, and protect resources, and resource-rich contexts create gain spirals in which resources generate further resources. Transformational leaders provide a resource-rich context by offering vision, feedback, recognition, and developmental support. Employees who receive these resources should feel more hopeful about reaching goals, more confident in their abilities, more resilient in the face of setbacks, and more optimistic about the future. Higher PsyCap should then translate into more energy, dedication, and absorption in work. On this basis, four hypotheses are proposed.

H1: Transformational leadership is positively related to work engagement.

H2: Transformational leadership is positively related to psychological capital.

H3: Psychological capital is positively related to work engagement.

H4: Psychological capital mediates the relationship between transformational leadership and work engagement.

3. Research Method

Research Design

This study used a quantitative, cross-sectional, correlational design. A self-report survey was used to collect data on the three focal variables, and the hypothesized relationships were tested through regression-based path analysis with a bootstrapped indirect effect.

Participants and Setting

Participants were employees working in organizations located in Bandung City. Inclusion criteria were being at least 18 years old, having worked in the current organization for a minimum of six months, and having a direct supervisor. Purposive and snowball sampling were used to reach employees across four sectors: creative industries, information technology and digital services, education, and hospitality and services. The sample size was set following recommendations for regression and mediation analysis (Hair et al., 2019; Tabachnick & Fidell, 2019), which suggest at least 10 to 20 cases per predictor and a total above 200 for stable estimates. A final sample of 212 valid responses was obtained. Table 1 summarizes participant characteristics.

Table 1. Demographic Characteristics of Participants (N = 212).

Characteristic	Category	n	%
Gender	Female	118	55.7
	Male	94	44.3
Age	20 to 25 years	87	41.0
	26 to 30 years	74	34.9
	31 to 40 years	38	17.9
	Above 40 years	13	6.1
Sector	Creative industries	64	30.2
	Information technology and digital	58	27.4
	Hospitality and services	49	23.1
	Education	41	19.3

Measures

Transformational leadership was measured with the seven-item Global Transformational Leadership Scale (Carless et al., 2000), in which employees rate their direct

supervisor on a five-point scale from 1 (strongly disagree) to 5 (strongly agree). A sample item is that the supervisor communicates a clear and positive vision of the future. Higher scores indicate stronger perceived transformational leadership.

Psychological capital was measured with the 24-item Psychological Capital Questionnaire (Luthans et al., 2007b), which covers hope, self-efficacy, resilience, and optimism with six items each. Responses were given on a six-point scale from 1 (strongly disagree) to 6 (strongly agree), and the mean of all items formed the composite score.

Work engagement was measured with the nine-item Utrecht Work Engagement Scale (Schaufeli et al., 2006), which captures vigor, dedication, and absorption. Items are rated on a seven-point frequency scale from 0 (never) to 6 (always). The scales were translated into Indonesian using forward and back translation, and the translations were reviewed by two psychologists for semantic and cultural equivalence. A pilot test with 30 employees indicated that all items were clearly understood.

Procedure

The questionnaire was distributed online through a survey platform, with links shared through professional networks, alumni groups, and company contacts in Bandung. The first page presented the study purpose, stated that participation was voluntary and anonymous, and obtained informed consent. No identifying information about individuals or organizations was collected. To reduce common method bias, items from different scales were presented in separate sections, and respondents were assured that there were no right or wrong answers (Podsakoff et al., 2003).

Data Analysis

Data were analyzed in three stages. First, reliability was evaluated using Cronbach's alpha, with values of .70 or higher considered acceptable. Second, descriptive statistics and Pearson correlations were computed. Third, hypotheses were tested with a series of ordinary least squares regressions, and the indirect effect of transformational leadership on engagement through PsyCap was estimated using a percentile bootstrap with 5,000 resamples (Preacher & Hayes, 2008; Hayes, 2018). An indirect effect was considered significant when the 95% confidence interval did not include zero. Assumptions of normality, linearity, homoscedasticity, and multicollinearity were inspected before interpretation, and the variance inflation factors were below 1.5. Harman's single-factor test showed that one factor explained 31.4% of the total variance, which is below the 50% threshold and suggests that common method bias was not a serious concern.

4. Results and Discussion

Descriptive Statistics and Correlations

All three scales showed good internal consistency, with alpha coefficients of .89 for transformational leadership, .91 for psychological capital, and .88 for work engagement. As shown in Table 2, participants reported moderately high levels of perceived transformational leadership, psychological capital, and work engagement. All variables were positively and significantly correlated. Psychological capital showed the strongest association with engagement ($r = .57$), followed by transformational leadership ($r = .41$), and transformational leadership was moderately related to psychological capital ($r = .48$).

Table 2. Means, Standard Deviations, Reliabilities, and Correlations (N = 212).

Variable	M	SD	α	1	2	3
1. Transformational leadership	3.78	0.71	.89	1		
2. Psychological capital	4.52	0.58	.91	.48	1	
3. Work engagement	4.21	0.87	.88	.41	.57	1

Note. Transformational leadership was rated on a 1 to 5 scale, psychological capital on a 1 to 6 scale, and work engagement on a 0 to 6 scale. $p < .01$ (two-tailed).

Regression Analysis

Table 3 presents the regression results. In Model 1, transformational leadership significantly predicted work engagement ($B = 0.50$, $\beta = .41$, $p < .001$) and explained 17% of its variance, $F(1, 210) = 42.4$, $p < .001$, which supports H1. In Model 3, transformational leadership significantly predicted psychological capital ($B = 0.39$, $\beta = .48$, $p < .001$) and explained 23% of its variance, $F(1, 210) = 62.9$, $p < .001$, which supports H2. In Model 2,

when both predictors were entered, psychological capital was a strong predictor of engagement ($B = 0.73$, $\beta = .48$, $p < .001$), which supports H3, while the effect of transformational leadership was reduced but remained significant ($B = 0.22$, $\beta = .18$, $p = .006$). The full model explained 35% of the variance in engagement, $F(2, 209) = 56.3$, $p < .001$.

Table 3. Regression Results for Work Engagement and Psychological Capital.

Predictor	B	SE B	β	t	p
<i>Model 1: DV = Work engagement ($R^2 = .17$)</i>					
Transformational leadership	0.50	0.08	.41	6.51	< .001
<i>Model 2: DV = Work engagement ($R^2 = .35$)</i>					
Transformational leadership	0.22	0.08	.18	2.79	.006
Psychological capital	0.73	0.10	.48	7.63	< .001
<i>Model 3: DV = Psychological capital ($R^2 = .23$)</i>					
Transformational leadership	0.39	0.05	.48	7.93	< .001

Note. B = unstandardized coefficient; β = standardized coefficient; DV = dependent variable.

Mediation Analysis

The bootstrapped mediation results are shown in Table 4. The indirect effect of transformational leadership on work engagement through psychological capital was significant ($B = 0.29$, 95% CI [0.19, 0.39]), because the interval excluded zero. The direct effect remained significant after controlling for psychological capital, indicating partial mediation. The indirect pathway accounted for approximately 57% of the total effect, which supports H4.

Table 4. Total, Direct, and Indirect Effects of Transformational Leadership on Work Engagement.

Effect	B	SE	95% CI
Total effect (c)	0.50	0.08	[0.35, 0.65]
Direct effect (c')	0.22	0.08	[0.06, 0.37]
Indirect effect via psychological capital (a × b)	0.29	0.05	[0.19, 0.39]

Note. Confidence intervals are percentile bootstrap intervals based on 5,000 resamples.

Discussion

The results confirm all four hypotheses. First, employees who perceived their supervisors as more transformational reported higher work engagement. This is consistent with earlier meta-analytic evidence on the effectiveness of transformational leadership (Judge & Piccolo, 2004) and with Kahn's (1990) argument that meaningful, supportive work contexts foster engagement. In Bandung, where much of the workforce is employed in creative, digital, and service roles that depend on initiative and discretionary effort, leaders who provide vision and encourage new ideas appear to create conditions in which employees invest more energy and enthusiasm in their work.

Second, psychological capital was the strongest correlate of engagement. This aligns with research showing that personal resources are closely tied to engagement (Xanthopoulou et al., 2007) and that PsyCap predicts positive employee attitudes and performance (Avey et al., 2011). Employees who are hopeful, confident, resilient, and optimistic seem better able to sustain vigor and dedication in the face of the deadlines, client demands, and rapid market changes common in urban creative and service sectors.

Third, the mediation result clarifies how leadership matters. Leadership shaped engagement partly through its association with employees' psychological capital, which is consistent with the resource gain logic of conservation of resources theory (Hobfoll, 1989) and with the JD-R view that job resources stimulate personal resources (Bakker & Demerouti, 2007). The partial nature of the mediation implies that leaders also affect engagement through other routes, for example by clarifying roles, giving meaning to tasks, or fostering a positive

team climate. Leadership should therefore not be seen as merely a source of motivation but also as a mechanism for developing the psychological strengths of followers.

Practical Implications

For human resource practitioners in Bandung, the findings point to two complementary strategies. The first is leadership development. Training programs for supervisors and team leaders should emphasize communicating a compelling vision, coaching, giving individualized feedback, and encouraging creative problem solving. The second is the deliberate development of psychological capital. Short, structured workshops that build goal-setting skills (hope), mastery experiences (efficacy), coping with setbacks (resilience), and realistic positive thinking (optimism) can be integrated into onboarding and talent programs. Organizations can also embed PsyCap-supportive routines, such as regular strengths-based feedback and recognition, in day-to-day management. Because a large proportion of the local workforce is young, such investments may also support retention and career growth.

Limitations and Future Research

Several limitations should be acknowledged. The cross-sectional design prevents causal conclusions, and the mediation model reflects a theoretically grounded but not experimentally verified ordering of variables. Reverse and reciprocal relations are plausible, since engaged employees may also perceive their leaders more positively and gain in PsyCap over time. All variables were self-reported, which raises the possibility of shared method variance despite the procedural and statistical checks used. The non-probability sample was limited to four sectors in one city, so generalization to other regions or industries should be made with care. Future studies should use longitudinal or multi-source designs, include leader-rated or team-level data, examine the four PsyCap components separately, and test boundary conditions such as organizational culture, job demands, and remote or hybrid work arrangements. Field experiments evaluating PsyCap interventions in Bandung organizations would also be valuable.

5. Conclusions

This study showed that transformational leadership is positively associated with work engagement among employees in Bandung City and that this association operates partly through psychological capital. Leaders who inspire, stimulate, and support their followers appear to strengthen employees' hope, efficacy, resilience, and optimism, and these resources in turn sustain higher levels of vigor, dedication, and absorption. The findings extend the JD-R and conservation of resources perspectives to an Indonesian urban context characterized by creative and knowledge-intensive work. For organizations in Bandung, investing simultaneously in leadership capability and in employees' psychological capital is a promising route to a more engaged, resilient, and productive workforce.

References

- Avey, J. B., Reichard, R. J., Luthans, F., & Mhatre, K. H. (2011). Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors, and performance. *Human Resource Development Quarterly*, 22(2), 127–152. <https://doi.org/10.1002/hrdq.20070>
- Avolio, B. J., Walumbwa, F. O., & Weber, T. J. (2009). Leadership: Current theories, research, and future directions. *Annual Review of Psychology*, 60, 421–449. <https://doi.org/10.1146/annurev.psych.60.110707.163621>
- Bakker, A. B., & Albrecht, S. (2018). Work engagement: Current trends. *Career Development International*, 23(1), 4–11. <https://doi.org/10.1108/CDI-11-2017-0207>
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328. <https://doi.org/10.1108/02683940710733115>
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD-R approach. *Annual Review of Organizational Psychology and Organizational Behavior*, 1, 389–411. <https://doi.org/10.1146/annurev-orgpsych-031413-091235>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. Free Press.

- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership* (2nd ed.). Lawrence Erlbaum Associates.
<https://doi.org/10.4324/9781410617095>
- Carless, S. A., Wearing, A. J., & Mann, L. (2000). A short measure of transformational leadership. *Journal of Business and Psychology*, 14(3), 389–405. <https://doi.org/10.1023/A:1022991115523>
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, 64(1), 89–136. <https://doi.org/10.1111/j.1744-6570.2010.01203.x>
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512. <https://doi.org/10.1037/0021-9010.86.3.499>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (2nd ed.). Guilford Press.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524. <https://doi.org/10.1037/0003-066X.44.3.513>
- Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89(5), 755–768. <https://doi.org/10.1037/0021-9010.89.5.755>
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692–724. <https://doi.org/10.2307/256287>
- Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology*, 60(3), 541–572. <https://doi.org/10.1111/j.1744-6570.2007.00083.x>
- Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). *Psychological capital: Developing the human competitive edge*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780195187526.001.0001>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891. <https://doi.org/10.3758/BRM.40.3.879>
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, 66(4), 701–716. <https://doi.org/10.1177/0013164405282471>
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two-sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71–92. <https://doi.org/10.1023/A:1015630930326>
- Tabachnick, B. G., & Fidell, L. S. (2019). *Using multivariate statistics* (7th ed.). Pearson.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the job demands-resources model. *International Journal of Stress Management*, 14(2), 121–141. <https://doi.org/10.1037/1072-5245.14.2.121>