

Employee Performance as a Result of Psychological Resources and Perceived Organizational Support in Indonesian Technology Startups

Misra Yeni¹, Amran², Khairun A Roni³, Muhammad Asman⁴, Ronald N Girsang⁵,
Rio Putra⁶

Universitas Muara Bungo, Indonesia

Email: yenimisra@gmail.com

Input : December 01, 2025
Accepted: December 28, 2025

Revised : December 14, 2025
Published : January 06, 2025

ABSTRACT

This study aims to analyze the role of psychological resources (Psychological Capital/PsyCap) and perceived organizational support (Perceived Organizational Support/POS) in explaining employee performance at technology startups in Indonesia. The dynamic, flexible, and digitally collaborative work environment of startups requires employees to not only possess technical skills, but also psychological readiness and adequate organizational support in order to remain productive amid high work pressure. This study uses an explanatory quantitative approach with SEM-PLS analysis of data collected through an online questionnaire from 150 technology startup employees in Indonesia using the Psychological Capital Questionnaire (PCQ), Survey of Perceived Organizational Support (SPOS), and employee performance scales based on task performance and contextual performance. Validity, reliability, and hypothesis testing were conducted through outer model and inner model evaluation as well as bootstrapping procedures. The analysis results show that POS ($\beta = 0.260$; $p < 0.05$) and PsyCap ($\beta = 0.174$; $p < 0.05$) have a positive and significant effect on employee performance, with POS having a stronger effect than PsyCap. The R^2 value of 0.130 indicates that the contribution of both variables is at a moderate level, opening up the possibility of other psychological mechanisms such as engagement, readiness for change, motivation, and well-being that have the potential to mediate this relationship. These findings confirm that the performance of technology startup employees in Indonesia is the result of the interaction between external organizational support and internal psychological strengths of individuals, so startup management needs to simultaneously strengthen organizational support and develop employee psychological capital to encourage sustainable performance.

Keywords: Organizational support; Employee performance; Psychological capital; Technology startups; Work engagement

INTRODUCTION

The tech startup ecosystem in Indonesia is characterized by fast work rhythms, dynamic targets, and intense digital collaboration. In a context like this, employee performance is no longer solely determined by technical competence, but is greatly influenced by internal psychological resources and perceived support from the organization. The organizational behavior literature confirms that performance in a high-pressure work environment is strongly influenced by an individual's psychological capacity to survive, adapt, and remain optimistic Luthans (2011), as well as by employees' perceptions that the organization cares about their well-being (Eisenberger et al., 1986).



The concept of Psychological Capital (PsyCap) introduced by Fred Luthans emphasizes the four main dimensions of hope, efficacy, resilience, and optimism as an inner psychological resource that allows individuals to remain productive in the midst of pressure. Meanwhile, Perceived Organizational Support (POS) developed by Robert Eisenberger represents the most tangible form of social support in the modern workplace.

Various studies in Indonesia show that PsyCap and POS are positively related to performance (Astuty & Udin, 2020; Bramantya & Muafi, 2022; Sabir et al., 2021). However, consistent empirical patterns suggest that these influences are more predominantly indirect. In the context of Indonesian IT startups, POS is not directly significant to performance, but has a strong effect through work engagement (Yanuar, 2019). Similar findings in the fintech sector show that POS increases employee engagement which in turn improves performance (Ramadani et al., 2025).

On the other hand, PsyCap improves performance through increased work comfort, adaptability, and attachment to work (Astari et al., 2023; Avianti & Wangi, 2024). The dimensions of resilience and optimism have proven to be most relevant for millennials in Bandung digital startups (Avianti & Wangi, 2024). These findings lead to one important pattern that performance in startups is more a result of psychological conditions and work attitudes that are formed.

However, these studies are still testing the relationship separately. There has been no study that integrates the POS → PsyCap pathway → engagement/well-being → performance in one complete model in the context of Indonesian technology startups (Hermawan et al., 2022b; Ramdhani & Desiana, 2021). Therefore, this study aims to analyze how Psychological Capital and Perceived Organizational Support simultaneously affect Employee Performance in Indonesian technology startups.

METODE

This study employed an explanatory quantitative approach to examine the causal relationships between Psychological Capital (PsyCap), Perceived Organizational Support (POS), and Employee Performance among employees of technology startups in Indonesia. This approach was chosen to enable objective hypothesis testing based on theoretical foundations and prior empirical findings, as well as to analyze the direction and magnitude of relationships among variables within the dynamic context of technology-based organizations. The population of this study comprised employees working in technology startups in Indonesia, particularly in the software development, fintech, edutech, e-commerce, and digital services sectors. Given the absence of a definitive sampling frame and the heterogeneous nature of startups, purposive sampling was applied. Respondents were selected based on the criteria of having at least one year of work experience, being involved in team-based and target-oriented tasks, and holding active employment status (permanent or contract). A total of 150 respondents were deemed adequate for analysis using SEM-PLS.

The study examined two independent variables, namely PsyCap and POS, and one dependent variable, Employee Performance. PsyCap was measured using the Psychological Capital Questionnaire (PCQ), which captures four dimensions: hope, efficacy, resilience, and optimism. POS was operationalized using the Survey of Perceived Organizational Support (SPOS). Employee Performance was measured through task performance and contextual performance indicators adjusted to the characteristics of startup work environments. All constructs were measured using a five-point Likert scale ranging from strongly disagree to strongly agree. Data were collected through online questionnaires distributed via Google Forms, professional networks, startup

communities, and LinkedIn, allowing flexible participation without disrupting respondents' work activities.

Data analysis was conducted using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with SmartPLS software. Prior to hypothesis testing, convergent validity was assessed through outer loadings (>0.70) and Average Variance Extracted (AVE > 0.50), discriminant validity through HTMT (<0.90), and construct reliability through Cronbach's Alpha and Composite Reliability (>0.70). The evaluation comprised outer model and inner model assessments, followed by bootstrapping to test the significance of path coefficients. Hypotheses were accepted when t-statistics exceeded 1.96 and p-values were below 0.05, while the magnitude of effects was interpreted using path coefficients and R² values.

RESULTS AND DISUSSION

Results

This section presents the results of data analysis using the SEM-PLS approach to test the influence of Psychological Capital and Perceived Organizational Support on Employee Performance in technology startup employees in Indonesia. The presentation of the results began with the evaluation of the measurement model (outer model) to ensure the validity and reliability of the instrument, then continued with the evaluation of the structural model (inner model) and hypothesis testing through the analysis of the path coefficient of bootstrapping results.

The first evaluation in SEM-PLS is the testing of the outer model to ensure that each indicator is able to reflect the latent construct being measured. This test was carried out through the outer loading, t-statistic, and p-value values of each indicator in the variables Psychological Capital, Perceived Organizational Support, and Employee Performance.

Table 1. Outer Loadings (Convergent Validity)

Variabel	Indicator	Outer Loading	T-Statistic	P-Value	Remarks
POS (X2)	X2.1	0.921	45.852	0.000	Valid
POS (X2)	X2.2	0.920	46.766	0.000	Valid
POS (X2)	X2.3	0.908	47.025	0.000	Valid
POS (X2)	X2.4	0.931	52.518	0.000	Valid
POS (X2)	X2.5	0.889	42.166	0.000	Valid
EP (Y)	Y.1	0.936	64.502	0.000	Valid
EP (Y)	Y.2	0.962	107.349	0.000	Valid
EP (Y)	Y.3	0.938	63.287	0.000	Valid
EP (Y)	Y.4	0.964	71.061	0.000	Valid
EP (Y)	Y.5	0.942	82.057	0.000	Valid
PsyCap (X1)	X1.1	0.946	28.752	0.000	Valid
PsyCap (X1)	X1.2	0.920	25.731	0.000	Valid
PsyCap (X1)	X1.3	0.917	28.483	0.000	Valid
PsyCap (X1)	X1.4	0.903	23.089	0.000	Valid
PsyCap (X1)	X1.5	0.882	18.494	0.000	Valid

Table 1 shows that all indicators in the three variables have an outer loading value above 0.70 with a very high t-statistic and a p-value of 0.000. This indicates that all statement items have a very strong convergent validity and are significantly capable of representing the constructed being measured. There are no indicators that need to be eliminated, so the entire item is worth using in the next stage of analysis.

Once the validity of the indicator is ascertained, the next stage is to test the reliability of the construct and the validity of the discriminant through Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE) values.

Tabel 2. Construct Reliability and Validity

Variabel	Cronbach's Alpha	Composite Reliability	AVE	Remarks
POS (X2)	0.951	0.962	0.835	Reliabel & Valid
EP (Y)	0.972	0.978	0.900	Reliabel & Valid
PsyCap (X1)	0.951	0.962	0.835	Reliabel & Valid

Table 2 shows that all variables have Cronbach's Alpha and Composite Reliability values above 0.90 and AVE above 0.80. This value is well above the required minimum limit (>0.70 for reliability and >0.50 for AVE). Thus, it can be concluded that the constructs of Psychological Capital, Perceived Organizational Support, and Employee Performance have a very high internal consistency and are able to explain the variance of the indicators very well.

After the measurement model is declared valid and reliable, the evaluation continues on the inner model by looking at the R-Square value to find out how much the independent variable is able to explain the dependent variable.

Table 3. R-Square

Variable endogenous	R-Square	R-Square Adjusted	Remarks
Employee Performance (Y)	0.130	0.118	Moderate influence

The R-Square value of 0.130 indicates that 13% of the variation in Employee Performance can be explained by Psychological Capital and Perceived Organizational Support. Although moderate, this value suggests that psychological factors and perceptions of organizational support have a real contribution in explaining employee performance in a complex tech startup environment, where many other factors outside the model also play a role.

Hypothesis testing was carried out through *path coefficient analysis* as a result of *bootstrapping* to determine the direction, magnitude of influence, and significance of the relationship between variables.

Table 4. Path Coefficient (Hypothesis Test)

Jalur	Coeficin	T-Statistic	P-Value	Verdict
POS (X2) → EP (Y)	0.260	3.071	0.002	Signifikan
PsyCap (X1) → EP (Y)	0.174	1.973	0.049	Signifikan

Table 4 shows that both pathways of influence are statistically significant. POS has a greater influence (0.260) than PsyCap (0.174) on employee performance. A *t-statistic* value exceeding 1.96 and a *p-value* below 0.05 confirms that both independent variables have a positive and significant effect on Employee Performance.

In summary, the results of hypothesis testing are summarized to provide a final overview of the status of acceptance of the research hypothesis.

Table 5. Summary of Hypothesis Testing Results

Hipotesis	Statement	Results
H1	Psychological Capital affects Employee Performance	Accepted
H2	Perceived Organizational Support Affects Employee Performance	Accepted
H3	PsyCap and POS simultaneously affect Employee Performance	Accepted

Table 5 confirms that all research hypotheses are accepted. Psychological Capital and Perceived Organizational Support have been proven to partially or simultaneously affect Employee Performance. These results reinforce the theoretical finding that

employee performance in tech startups is strongly influenced by a combination of internal psychological strength and perceived organizational support.

Discussion

The results of SEM-PLS show that Psychological Capital (PsyCap) and Perceived Organizational Support (POS) have a positive and significant effect on Employee Performance in technology startup employees in Indonesia, with the influence of POS ($\beta=0.260$) being stronger than PsyCap ($\beta=0.174$). This pattern is consistent with many findings in the technology/startup context that place POS as an early trigger for healthy work psychological conditions before it boils down to performance (Aulia et al., 2022; Ramadani et al., 2025; Yanuar, 2019).

The dominance of the role of POS is in line with the theory put forward by Robert Eisenberger that when employees feel valued and supported, they are driven to reciprocate through increased work contributions. In Indonesian IT startups, this relationship is even proven to be indirect, but through work engagement Yanuar (2019) dan employee engagement (Ramadani et al., 2025). Another study in the hybrid workforce era also shows that POS along with subjective well-being explains startup employee performance Iman et al. (2023), as well as increase post-pandemic motivation (Ayu & Ghazali, 2023). This confirms that POS works by generating employees' psychological energy (engagement, motivation, well-being), not just directly increasing performance.

On the other hand, PsyCap's significant influence confirms that internal psychological resources remain an important foundation in the startup's work environment. Fred Luthans' PsyCap concept (hope, efficacy, resilience, optimism) has been proven to increase engagement in startup employees (Astari et al., 2023; Avianti & Wangi, 2024), encouraging readiness for change that has an impact on task performance (Ramdhani & Desiana, 2021), as well as triggering OCB that contributes to performance (Bramantya & Muafi, 2022). In fact, PsyCap also improves psychological well-being and psychological empowerment which leads to performance (Suadnyana & Putra, 2023). These findings explain why PsyCap is significant, even though its coefficient is smaller than POS.

A number of studies have also shown a chain link between POS and PsyCap. POS is proven to improve PsyCap, especially the optimism dimension which then improves performance (Hermawan et al., 2022a). This pattern is reinforced by cross-country studies showing POS \rightarrow PsyCap \rightarrow OCB \rightarrow performance (Cao et al., 2025) and mediation-moderation models involving organizational justice (Patnaik et al., 2023). In addition, POS also increases PsyCap which then strengthens engagement (Gumilang & Indrayanti, 2022; Sihag, 2020). This means that organizational support forms internal psychological forces, and this force triggers a positive work attitude that results in performance.

The R-Square value of 0.130 is very meaningful when read together with these findings. Many studies show that in the context of technology/startups, the influence of POS and PsyCap on performance is mediated by variables such as engagement (Cahya et al., 2023; Efandi & Indrayeni, 2025; Ramadani et al., 2025; Yanuar, 2019), readiness for change (Ramdhani & Desiana, 2021), motivation (Ayu & Ghazali, 2023), serta well-being (Iman et al., 2023). Since these mediators have not been included in the model, the direct contribution of PsyCap and POS appears to be moderate. In other words, the results of this study are in line with the literature: the effects are real, but the intermediate psychological pathways have not yet been modeled.

Specific evidence in Indonesian tech startups also reinforces this interpretation. Startup performance is influenced by engagement, digital work culture, and

organizational support (Leonard & Satrya, 2023). PsyCap is very important because it increases engagement (Astari et al., 2023), and the most dominant resilience dimension in Bandung digital startup millennials (Avianti & Wangi, 2024). POS also plays a big role in the contextual performance of startup employees (Aulia et al., 2022). All of these findings form a common thread that engagement is the main bridge between POS, PsyCap, and performance.

Thus, this discussion emphasizes that in Indonesian tech startups, employee performance is the result of a combination of external organizational support and internal psychological strength of individuals who work through psychological mechanisms such as engagement, well-being, motivation, OCB, and readiness for change. These findings also strengthen the research gap that the integrated model of POS → PsyCap → engagement/well-being → performance is still a very relevant follow-up research opportunity.

CONCLUSION

This study concludes that Psychological Capital (PsyCap) and Perceived Organizational Support (POS) are proven to have a positive and significant effect on Employee Performance in technology startup employees in Indonesia. The results of the SEM-PLS analysis show that POS has a stronger influence than PsyCap, which confirms that in a dynamic, flexible, and digital collaboration-based startup work environment, the organizational support felt by employees is a key factor in driving work performance.

On the other hand, PsyCap remains an important internal psychological resource that allows employees to remain adaptive, optimistic, resilient, and confident in the face of high work pressure. It is this combination of the organization's external support and the individual's internal psychological strength that simultaneously explains employee performance in the context of a tech startup.

However, the moderate value of the determination coefficient (R^2) shows that the influence of PsyCap and POS on performance is not entirely direct. These findings are in line with previous studies that indicate the existence of intermediary psychological mechanisms such as work engagement, readiness for change, motivation, and well-being that bridge these relationships. Thus, startup employee performance is more accurately understood as a result of the psychological process formed from organizational support and employee psychological capital.

This research provides a theoretical contribution by strengthening the evidence that PsyCap and POS are important predictors of performance in the context of Indonesian technology startups. In practical terms, these results imply that startup management needs to focus not only on work targets, but also on creating a supportive work environment as well as developing employees' psychological capital.

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