

Employee Engagement as a Mediator of the Effects of Perceived Organizational Support and Self-Efficacy on Employee Performance: The Moderating Role of Organizational Commitment

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Abstract

This study aims to examine the associations of perceived organizational support and self-efficacy with employee performance, with employee engagement as a mediating mechanism and organizational commitment as a moderator of the employee engagement–performance relationship. A quantitative cross-sectional survey was conducted among 255 employees working in R&D and supporting functions within the electronics manufacturing industry in Tangerang Regency, Indonesia. Data were analyzed using partial least squares structural equation modeling (PLS-SEM) with SmartPLS 4.0. The results showed that perceived organizational support and self-efficacy were not significantly associated with employee performance directly, whereas both were positively and significantly associated with employee engagement. Employee engagement was positively and significantly associated with employee performance and significantly mediated the relationships of perceived organizational support and self-efficacy with performance. Organizational commitment did not significantly moderate the employee engagement–performance relationship. These findings indicate that organizational and personal resources are linked to performance primarily through employee engagement, underscoring engagement as a central explanatory mechanism. However, the cross-sectional design precludes causal and temporal inference, and reverse or reciprocal relationships cannot be excluded. Future longitudinal or experimental studies should test the temporal ordering of these relationships and examine whether alternative organizational conditions strengthen the engagement–performance link. Managerially, the findings support practices that foster engagement through supervisor support, recognition, autonomy, coaching, and meaningful work design.

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Introduction

Human resources (HR) are strategic assets that determine the productivity, competitiveness, and sustainability of the organization. Unlike physical resources that are relatively easy to obtain or imitate, the knowledge, competence, experience, creativity, and psychological attachment of employees are capabilities formed through long-term processes. Organizations that are able to develop and maintain quality human resources have a greater chance of adapting to change, creating innovation, and achieving goals in a sustainable manner (Muktamar & Sahibuddin, 2021; Shobirin & Erawati, 2022). Therefore, HR management does not focus enough on administrative functions, but needs to include psychological conditions that encourage employees to use their best abilities at work. This urgency is getting stronger amid technological transformation and digitalization. The Future of Jobs Report 2023 estimates that structural changes in the labor market in the 2023–2027

period will create around 69 million jobs while eliminating around 83 million jobs, resulting in a net decrease of around 14 million jobs in the data coverage analyzed (World Economic Forum, 2023). These changes require organizations to update technical competencies while strengthening employees' psychological readiness. Employees must not only master new technologies, but also need to have confidence in their abilities, resilience to pressure, willingness to learn, and high engagement at work.

Employee performance is an important indicator of the success of HR management because it reflects the quality, quantity, timeliness, and effectiveness of work execution. However, performance is not only determined by technical skills. The way employees assess organizational support and their own abilities also affect their choice of actions, effort intensity, and perseverance when facing difficulties. In this study, perceived organizational support (POS) and self-efficacy are positioned as two important resources that can drive performance through employee engagement. POS refers to employees' general beliefs about the extent to which the organization values contributions and cares about their well-being (Eisenberger et al., 2020). This perception develops through experiences of organizational fairness, supervisor support, rewards, job security, development opportunities, and the organization's attention to employee needs. Based on Social Exchange Theory, the positive treatment of an organization can give rise to a psychological obligation to reciprocate. Employees who feel valued and supported tend to show a positive work attitude, increase contributions, and invest more energy in their work.

In addition to organizational support, self-efficacy is an individual psychological resource that plays a role in determining employees' response to job demands. This concept describes an individual's belief that he or she is able to organize and carry out the actions necessary to produce certain achievements (Bandura, 1997). Employees with high self-efficacy tend to set more challenging goals, maintain efforts when encountering obstacles, and be more effective in controlling stress. On the other hand, low self-efficacy can lead to doubt, anxiety, avoidance of complex tasks, and decreased perseverance. The influence of POS and self-efficacy on performance does not have to take place directly. These two resources need to be translated into energy, dedication, and concentration in the execution of work. This mechanism is represented by employee engagement, which is a positive psychological state characterized by vigor, dedication, and full appreciation of work (absorption) (Schaufeli et al., 2002). Engaged employees invest physical, cognitive, and emotional resources in their work so that they are more proactive, diligent, and quality-oriented.

This relationship is relevant in the electronics manufacturing industry. The sector faces strict production targets, international quality standards, short innovation cycles, and the need to respond quickly to technological changes. This pressure is increasingly high on the Research and Development (R&D) department, which is responsible for product development, testing, technical problem solving, and innovation creation. Research on the Electronics Manufacturing Industry shows that time pressure and psychological demands are important components of employees' mental load; the time factor contributes 48.55%, while psychological pressure contributes 28.81% to the context of the work analyzed (Basumerda & Sunarto, 2019). These findings show that high work demands can hinder performance achievement if not balanced with adequate organizational support and psychological resources. The issue of employee engagement is also a global problem. Gallup (2026) reported that the global employee engagement rate fell to 20% in 2025 data; 64% of employees were in the unengaged category and 16% were classified as actively disengaged. The data shows that the

majority of employees have not invested their best capacity in work. For the electronics manufacturing industry, low engagement can increase the risk of errors, decrease productivity, slow innovation, and strengthen employees' desire to leave the organization.

In the context of the electronics manufacturing company that was the object of the study, early phenomena show that some employees experience doubts when faced with complex work and tight deadlines. Anxiety and low confidence in meeting standards can encourage hasty completion of work, increase the potential for errors, and lower the quality of results. These conditions indicate that technical competence does not necessarily produce optimal performance without strong self-efficacy. Another problem relates to organizational support. Some employees do not fully feel a commensurate appreciation for contributions, attention to workload, supervisor support, and career development opportunities. In the R&D department, such support is not only in the form of facilities and technology, but also training, access to information, autonomy, open communication, and recognition of innovative ideas. When support is deemed inadequate, employees may limit their contributions to formal obligations and reduce their psychological involvement.

The phenomenon of organizational commitment can be seen from the emergence of the intention of some employees to look for other job opportunities due to the perception of career stagnation and the unclear of long-term development. Organizational commitment reflects employee attachment, acceptance of organizational goals, and desire to maintain membership (Herrera & De las Heras-Rosas, 2021). Low commitment can increase the risk of losing experienced employees and strategic knowledge, especially in R&D departments that require specialized expertise and long-term learning. Previous research has shown that POS is associated with a wide range of positive work outcomes, but the pattern of influence is not yet completely uniform. Ariarni and Afrianty (2017) found that employee engagement bridges the influence of POS on employee performance. Pratiwi and Muzakki (2021) It also shows that POS is related to organizational commitment and performance. Meanwhile, Diana and Frianto (2021) found that POS and employee engagement have a positive effect on performance. These findings reinforce the importance of organizational support, but differences in research design and sample characteristics mean that the mechanisms of POS' influence on performance still need to be tested in different industry contexts.

Theoretically, perceived organizational support (POS) and self-efficacy represent distinct but complementary resources that can foster employee engagement. POS reflects an external organizational resource through which employees perceive that their contributions are valued and their well-being is supported, whereas self-efficacy represents an internal personal resource reflecting employees' beliefs in their capability to successfully perform work-related tasks. From a resource-based perspective, these two resources may converge through employee engagement because both can strengthen employees' psychological readiness to invest energy, attention, and persistence in their work. Empirical evidence supports this proposition. Alkasim and Prahara (2019) found a positive relationship between POS and employee engagement, while Firnanda and Wijayati (2021) demonstrated that POS and self-efficacy contribute to explaining employee engagement. These findings suggest that although POS and self-efficacy originate from different resource domains, they may operate through a common motivational mechanism in which employees become more psychologically and behaviorally invested in their work.

However, the existence of a common mediator does not imply that POS and self-efficacy should have identical relationships with employee performance. POS primarily represents an organizational condition that may facilitate engagement by providing support, recognition, and a sense of organizational care, whereas self-efficacy may influence engagement by strengthening employees' confidence, persistence, and willingness to invest effort in challenging tasks. Consequently, their direct associations with performance may differ from their indirect associations through engagement. This distinction is important because employees may possess strong organizational support or confidence in their capabilities without necessarily translating these resources into higher performance unless they are accompanied by sufficient psychological involvement in their work. Consistent with this reasoning, Santri et al. (2023) reported positive relationships involving self-efficacy, self-esteem, employee engagement, and employee performance, Sutyawan et al. (2020) found that self-efficacy was associated with performance and that organizational commitment strengthened this relationship. Organizational commitment may therefore represent an important boundary condition rather than simply another antecedent of performance. Employees who are strongly committed to their organization may be more likely to sustain the effort and persistence generated through engagement, potentially strengthening the extent to which engagement is associated with performance. Conversely, when organizational commitment is weaker, high levels of engagement may not necessarily be accompanied by an equivalent level of performance because employees may have less motivation to sustain their effort toward organizational goals. Thus, POS and self-efficacy can reasonably be expected to share employee engagement as a mediating mechanism while differing in the strength or nature of their direct associations with performance and in how their engagement-related effects operate under different levels of organizational commitment. Despite these theoretical distinctions, previous studies have predominantly examined direct relationships or isolated conditional mechanisms. Limited attention has been given to the integrated process through which an external organizational resource (POS) and an internal personal resource (self-efficacy) are associated with employee performance through a common motivational mechanism employee engagement while considering organizational commitment as a potential boundary condition of the engagement–performance relationship. This study addresses this gap by integrating these relationships into a single framework, thereby providing a more nuanced explanation of how organizational and personal resources are associated with employee performance through employee engagement and under what commitment conditions this association may vary.

Employee engagement represents a proximal motivational mechanism through which organizational and personal resources may be associated with employee performance. Previous studies provide empirical support for this relationship. Savitri et al. (2023) found that dimensions of employee engagement were associated with employee performance, while Kurniawati and Mulyanto (2024) positioned employee engagement as a mediating mechanism in explaining employee performance. From a theoretical perspective, employees who experience high levels of energy, dedication, and absorption are more likely to invest sustained cognitive and behavioral effort in their work, which may be reflected in higher levels of performance. However, the extent to which employee engagement is associated with performance may depend on employees' attachment to the organization. Employee engagement and organizational commitment represent related but conceptually distinct constructs. Engagement concerns the degree to which employees invest

themselves in their work, whereas organizational commitment concerns their psychological attachment to and identification with the organization. Thus, an employee may be highly engaged in particular work activities without necessarily having a strong commitment to the organization. This distinction provides a theoretical basis for treating organizational commitment as a boundary condition of the engagement–performance relationship, rather than as a moderator of the antecedent-to-performance paths.

From this perspective, organizational commitment may condition the extent to which employee engagement is associated with performance. Employees who are strongly committed to their organization may be more likely to direct their energy, dedication, and cognitive attention toward organizational objectives and sustain these efforts over time. Consequently, the positive association between employee engagement and performance may be stronger when organizational commitment is high. Conversely, when organizational commitment is relatively low, employee engagement may not be as strongly connected with performance because employees may invest their energy in work activities without a comparable level of attachment to organizational goals. Importantly, this proposition concerns the strength of the engagement–performance relationship, not the direct relationships of perceived organizational support or self-efficacy with performance. This boundary-condition perspective also provides a consistent explanation for the proposed indirect relationships. Perceived organizational support and self-efficacy may be associated with employee performance through employee engagement, while organizational commitment may determine the strength of the final stage of this process, namely the association between engagement and performance. Accordingly, the conditional indirect effect of perceived organizational support on performance through employee engagement and the conditional indirect effect of self-efficacy on performance through employee engagement can be examined under different levels of organizational commitment. Previous evidence linking organizational commitment with engagement and performance (Tarmizi & Anggiani, 2022), together with evidence that organizational commitment can condition the relationship between psychological resources and performance while (Sutyawan et al., 2020), provides empirical motivation for testing this boundary condition. Nevertheless, because the present study uses cross-sectional data, the proposed moderation and indirect effects should be interpreted as conditional associations consistent with the theoretical model rather than as evidence of temporal causality.

Recent international evidence published between 2020 and 2025 strengthens the resource-based explanation of employee engagement. Al-Hamdan and Bani Issa (2022) found that perceived organizational support and self-efficacy were both positively associated with work engagement, directly supporting the treatment of organizational support and efficacy beliefs as distinct but complementary resource domains. Bonaiuto et al. (2022) similarly demonstrated that organizational support processes, including supervisor and coworker support, organizational trust, and identification, are closely connected with work engagement during organizational change. In a large sample of working adults, Mori et al. (2024) reported that perceived organizational support was positively associated with work engagement and that employees' focus on future opportunities partially explained this relationship. Albrecht et al. (2021) further showed that job resources and meaningful work contribute to stronger employee engagement. At the meta-analytic level, Mazzetti et al. (2023), drawing on 113 independent samples, concluded that job, social, development, and personal resources are consistently related to work engagement. Together, these studies indicate

that organizational support and self-efficacy should not be treated as interchangeable predictors; rather, they represent external and internal resources that can converge in a common motivational state of engagement.

Recent research also clarifies why employee engagement is theoretically important as a mechanism linking resources to performance. Corbeanu and Iliescu (2023), in a meta-analysis of 174 organizational studies, identified a positive overall relationship between work engagement and job performance. Reig-Botella et al. (2024) extended this evidence by showing that work engagement contributes to multiple dimensions of performance, including task, contextual, and adaptive performance. In a high-demand health-care context, Zhang et al. (2022) found that work engagement mediated important relationships with job-performance outcomes while perceived organizational support operated as a relevant boundary resource. Katsaros (2024) likewise demonstrated that work engagement mediated the association between perceived organizational support during change and firm financial performance. A systematic review by Kossyva et al. (2023) further mapped work, employee, and job engagement to a wide range of individual- and organizational-level outcomes. These findings collectively suggest that the performance relevance of organizational and personal resources often operates through a psychological mechanism, strengthening the rationale for positioning employee engagement as a proximal mediator rather than assuming that perceived organizational support or self-efficacy automatically produces higher performance.

The 2020-2025 literature also points to conditional mechanisms that justify examining organizational commitment as a boundary condition. Mussagulova (2021) showed that the relationship between job resources and work engagement varies with motivational conditions, whereas Rai and Chawla (2022) demonstrated a moderated-mediation process in which job resources operate through work engagement under different levels of job demands. Katou et al. (2022) similarly found that job and personal resources and work engagement form important mechanisms linking organizational conditions with performance. In Indonesia, Nabhan and Munajat (2023) reported that work engagement and organizational commitment both play important roles in explaining job performance, reinforcing the need to distinguish employees' involvement in work from their attachment to the organization. More recent evidence also indicates that self-efficacy and work engagement can function sequentially as psychological pathways in employees' positive work outcomes (Lu et al., 2025). Read together with Sutyawan et al. (2020), these studies move beyond isolated direct effects and support analytical frameworks that simultaneously consider resource antecedents, engagement mechanisms, and contextual or commitment-related conditions.

Complementary evidence from recent Indonesian social-science research also emphasizes the importance of motivational and contextual conditions, although this evidence comes from educational rather than workplace settings. Putri et al. (2025) found that the effectiveness of a cooperative intervention varied according to participants' motivational conditions, illustrating how motivation can operate as a boundary condition of an intervention-outcome relationship. Rasyid et al. (2025) reported that an interactive digital learning environment increased learners' interest and active involvement. These studies are not treated as direct evidence about employee performance; instead, they provide cross-domain support for the broader proposition that engagement-related states are responsive to contextual support, motivational conditions, and opportunities for active involvement. This perspective is consistent with the present study's attempt to explain when and

through which psychological mechanism organizational and personal resources are associated with performance.

Based on the study, there are three research gaps. First, the results of previous research have not provided an integrated explanation of the psychological pathways that link POS and self-efficacy with performance. Second, employee engagement mediation and organizational commitment moderation are generally tested separately. Third, the testing of integrated models in the electronics manufacturing industry, especially in Tangerang Regency and in jobs with high innovation pressure, is still limited. This study fills the gap through a moderation mediation model. POS and self-efficacy are placed as independent variables, employee engagement as mediators, employee performance as dependent variables, and organizational commitment as moderators on the relationship between employee engagement and performance. This model examines whether POS and self-efficacy improve performance through employee engagement, as well as determining whether the power of indirect influence changes according to the level of organizational commitment. Thus, the novelty of the research lies in the integration of organizational resources, individual psychological resources, engagement mechanisms, and commitment conditions in one analytical framework. Theoretically, the research is expected to expand the application of Social Exchange Theory and self-efficacy theory in explaining work behavior in a high-pressure manufacturing environment (Eisenberger et al., 2020). In practical terms, the results of the research are expected to help companies design support policies, develop self-efficacy, increase engagement, and strengthen commitments to sustain performance.

Theoretically, employee performance reflects the level of success of individuals in carrying out their responsibilities and achieving organizational standards, whether based on the quality of results, quantity of work, timeliness, and work initiatives (Ratnasari et al., 2020; Roring et al., 2023). Performance achievement is not only determined by technical ability, but also influenced by individual, organizational, and psychological factors. One of the relevant organizational factors is perceived organizational support (POS), which is employees' beliefs about the extent to which the organization values contributions and pays attention to their well-being (Eisenberger et al., 2020). POS is formed through procedural fairness, supervisor support, appreciation for contributions, and the provision of adequate resources and working conditions. Based on the principle of reciprocity in Social Exchange Theory, employees who feel supported will be encouraged to reciprocate the organization's positive treatment through increased engagement and work contribution (Diana & Frianto, 2021; Pratiwi & Muzakki, 2021). In this study, employee performance was measured through work quality, punctuality, and initiative, while POS was represented by superiors' concern, appreciation for contributions, and resource support.

Self-efficacy is a psychological resource that plays an important role in shaping employee behavior and performance. Self-efficacy refers to an individual's belief in his or her ability to organize and carry out the actions necessary to complete tasks and achieve certain results (Bandura, 1997). Self-efficacy is formed through success experiences, observation of others' successes, social persuasion, and physiological and emotional conditions. This construct includes the dimensions of task difficulty (magnitude/level), breadth of application of belief (generality), and strength of belief (strength). Employees with high self-efficacy tend to be more confident in facing complex tasks, more diligent when encountering obstacles, and able to maintain work quality in stressful situations. Conversely, low self-efficacy can increase anxiety, avoidant behavior, and doubt in decision-making.

Empirical evidence shows that self-efficacy has a positive effect on employee performance and engagement ((Firnanda & Wijayati, 2021; Santri et al., 2023). Therefore, this study measures self-efficacy through confidence in completing difficult tasks, confidence in dealing with pressure, and the ability to maintain quality of work under pressure.

The influence of POS and self-efficacy on performance is estimated to take place through employee engagement, which is a positive psychological state characterized by enthusiasm and mental resilience (vigor), enthusiasm and pride in work (dedication), and deep concentration and involvement in work (Schaufeli et al., 2002). Engaged employees tend to devote their best energy, attention, and abilities so that they are able to produce higher performance (Kurniawati & Mulyanto, 2024; Savitri et al., 2023). However, the power of this influence can depend on organizational commitment, which is a psychological condition that reflects an employee's attachment to the organization and his desire to maintain membership (Herrera & De Las Heras-Rosas, 2021). Organizational commitment consists of affective commitment, namely emotional attachment; continuity commitment, which is consideration of the consequences of leaving the organization; and normative commitment, which is a feeling of obligation to remain part of the organization. Employees who are engaged in work and at the same time have high commitment are expected to be able to maintain contributions more consistently and sustainably. Thus, this study places employee engagement as a mediator of the influence of POS and self-efficacy on performance, while organizational commitment measured through emotional loyalty, persistent intention, and moral obligation is positioned as a moderator of the relationship between employee engagement and employee performance.

The role of resource availability can also create a sense of security and strengthen employee emotional and cognitive engagement. Thus, POS is estimated to not only have a direct effect on performance, but also increase employee engagement (Alkasim & Prahara, 2019; Diana & Frianto, 2021; Firnanda & Wijayati, 2021; Pratiwi & Muzakki, 2021). In addition to POS, self-efficacy is a psychological resource that determines how employees set goals, face difficulties, and maintain their business. Employees with high self-efficacy tend to be more confident, diligent, adaptive, and able to manage pressure so that they can show higher engagement and performance (Bandura, 1997; Santri et al., 2023). In the context of the Electronics Manufacturing Industry, organizational support and belief in self-worth are essential as employees work in an environment with strict targets, high quality standards, technological change, and continuous innovation demands.

Employee engagement is a positive psychological state characterized by enthusiasm and mental resilience (vigor), pride and enthusiasm for work (dedication), and deep concentration in carrying out tasks (absorption) (Schaufeli et al., 2002). Engaged employees tend to invest their physical energy, cognitive abilities, and emotional involvement so that they are able to produce more quality, timely, and proactive work (Kurniawati & Mulyanto, 2024; Savitri et al., 2023). Therefore, employee engagement is thought to be a mechanism that translates POS and self-efficacy into performance improvement. However, the power of this influence can depend on organizational commitment, namely psychological attachment, acceptance of organizational goals, and employees' desire to maintain their membership (Herrera & De Las Heras-Rosas, 2021). Employees with high commitment will be more responsive to organizational support and more motivated to use their beliefs and abilities to support the company's goals. On the other hand, low commitment can weaken the change of organizational support and self-efficacy to sustainable work contribution. Thus,

organizational commitment is estimated to strengthen the positive influence of POS and self-efficacy on employee performance (Sutyawan et al., 2020).

Therefore, the following hypotheses are proposed: H1, perceived organizational support has a positive and significant effect on employee performance; H2, self-efficacy has a positive and significant effect on employee performance; H3, perceived organizational support has a positive and significant effect on employee engagement; H4, self-efficacy has a positive and significant effect on employee engagement; H5, employee engagement has a positive and significant effect on employee performance; H6, perceived organizational support is indirectly associated with employee performance through employee engagement, such that higher perceived organizational support is expected to enhance employee engagement, which in turn is associated with higher employee performance; H7, self-efficacy is indirectly associated with employee performance through employee engagement, such that higher self-efficacy is expected to strengthen employee engagement, which subsequently contributes to higher employee performance; H8, organizational commitment moderates the relationship between employee engagement and employee performance, such that the strength of this relationship varies across different levels of organizational commitment; and H9, organizational commitment strengthens the positive effect of self-efficacy on employee performance.

The development of the relationship between variables in this study can be seen in the following figure:

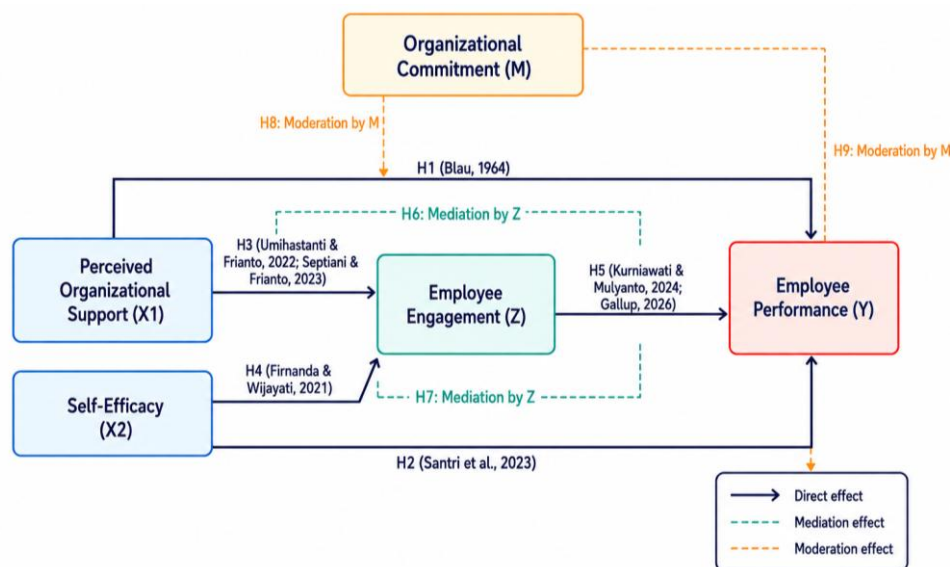


Figure 1. Conceptual Framework model penelitian

This study aims to analyze the direct influence of POS and self-efficacy on employee engagement and employee performance; examine the mediating role of employee engagement; and analyze the role of organizational commitment moderation in the relationship between employee engagement and performance.

Method

This study employed a quantitative cross-sectional survey design. The research examined the structural associations among perceived organizational support, self-efficacy, employee engagement, organizational commitment, and employee performance. The cross-sectional design enables the examination of relationships among variables at a particular point in time; however, it does not establish temporal precedence. Therefore, the findings are interpreted as associations consistent

with the theoretical model rather than definitive evidence of causal relationships. Alternative explanations, including reverse or reciprocal relationships among engagement, performance, and perceptions of organizational support, cannot be excluded. The research was conducted among employees working in R&D and supporting functions of electronics manufacturing companies located in Tangerang Regency, Indonesia. These functions were selected because their work requires employees to demonstrate initiative, problem solving, coordination, technical capability, work quality, and timely task completion.

A total of 255 usable responses were obtained. Because the participating organizations were covered by confidentiality agreements, the names and identifying information of the companies are not disclosed in this article. This confidentiality arrangement was respected throughout the data collection and reporting process. The respondents' organizational and functional information was collected for methodological purposes, while company-specific identifying information was excluded from reporting. Because POS, SE, EE, OC, and self-reported employee performance were collected from the same respondents using the same survey instrument, common method bias represents a potential methodological concern. Podsakoff et al. (2003) emphasized that common method variance may arise when predictor and criterion variables are obtained from the same source and through similar measurement procedures. Several procedural remedies were therefore incorporated into the research process. The questionnaire used clear and neutral wording, separated the measurement sections of different constructs, provided standardized instructions, and emphasized confidentiality of responses. These procedures were intended to reduce respondents' tendency to infer the expected relationships and to minimize social desirability concerns. In addition to procedural remedies, statistical assessment should be reported using the specific method actually conducted in SmartPLS. If full-collinearity VIF was employed, the results should be reported following Van Lancker et al., (2022) full-collinearity approach. Importantly, common method bias should not be described as completely absent merely because the statistical test does not exceed a threshold. Rather, the appropriate conclusion is that the assessment did or did not indicate evidence of severe common method bias under the adopted criterion.

The measurement model was assessed through indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. The assessment followed established PLS-SEM procedures Hair et al. (2024) The outer loadings ranged from 0.813 to 0.920, indicating satisfactory indicator reliability. The AVE values ranged from 0.745 to 0.796, exceeding the recommended minimum value of 0.50. Internal consistency reliability was also satisfactory. Cronbach's alpha values ranged from 0.976 to 0.982, rho_A values ranged from 0.976 to 0.982, and composite reliability values ranged from 0.978 to 0.983. These results indicate that the indicators adequately represent their respective latent constructs. Discriminant validity was assessed using the heterotrait–monotrait ratio (HTMT). Henseler et al. (2021) proposed HTMT as an effective criterion for evaluating whether constructs are empirically distinct in variance-based structural equation modeling. The HTMT values in this study ranged from approximately 0.413 to 0.659, with all observed values below the commonly applied threshold of 0.85. These findings indicate satisfactory discriminant validity and suggest that POS, SE, EE, OC, and employee performance represent empirically distinguishable constructs. The structural model was evaluated using path coefficients, bootstrapping, coefficient of determination (R^2), predictive relevance, and indirect effects. The mediation analysis was conducted using bootstrapping because the sampling distribution of indirect

effects may not be normally distributed. The structural model explained 53.8% of the variance in employee engagement ($R^2 = 0.538$; adjusted $R^2 = 0.534$). For employee performance, the model explained 49.9% of the variance ($R^2 = 0.499$; adjusted $R^2 = 0.486$). The Q^2_{predict} values were 0.531 for employee engagement and 0.403 for employee performance, indicating predictive relevance under the adopted assessment procedure.

Result and Discussion

Result

The measurement-model assessment was conducted in two stages. The first stage involved estimating the complete theoretical measurement model containing 75 indicators. The purpose of this initial estimation was to identify indicators requiring further assessment based on their empirical performance. Following this assessment, two indicators, X1.15 and X2.14, were excluded from the measurement model. The second stage involved re-estimating the PLS-SEM model using the remaining 73 indicators. Figure 1 presents the resulting re-estimated model, in which all retained indicators demonstrate satisfactory outer loadings.

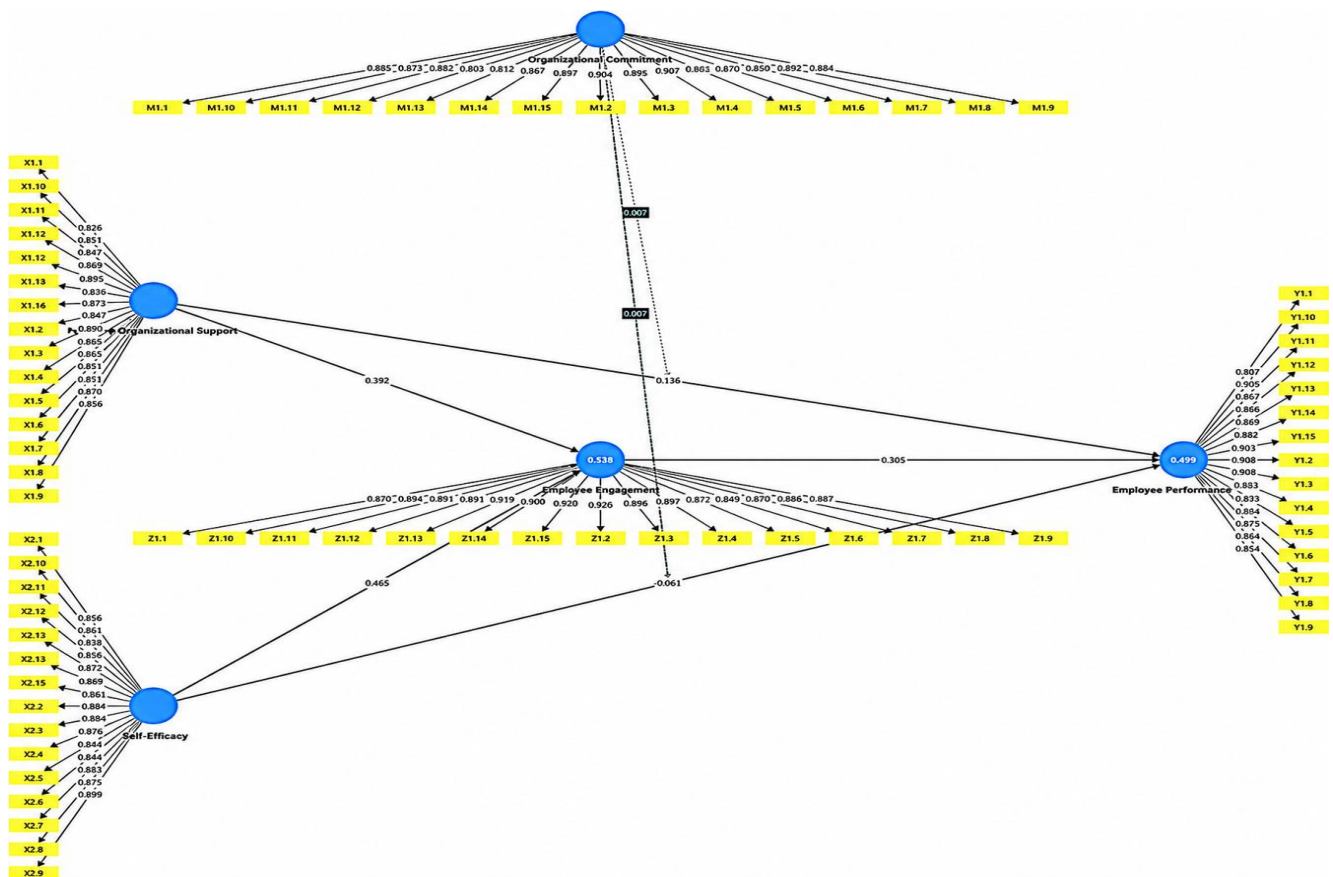


Figure 2. Outer Model before Re-Estimation

The evaluation of the measurement model was carried out through testing for convergent validity, discriminant validity, and construct reliability. As presented in Table 1, all indicators had an outer loading value above 0.70, while the average variance extracted (AVE) value of each construct exceeded 0.50. Cronbach's alpha, rho_A, and composite reliability values were also greater than 0.70. These results showed that all indicators were able to represent their constructs validly and consistently (Hair et al., 2021). The measurement model was evaluated sequentially through indicator reliability, convergent validity, internal consistency reliability, and discriminant validity.

The initial measurement specification comprised 75 indicators, with 15 indicators for each of the five constructs: perceived organizational support, self-efficacy, employee engagement, organizational commitment, and employee performance. The initial model was estimated before model refinement to assess the empirical performance of each indicator. Based on the initial assessment, two indicators, X1.15 and X2.14, were excluded prior to final re-estimation. The deletion decision considered the indicators' empirical performance as well as their theoretical relevance and contribution to the content coverage of the respective constructs. After re-estimation, 73 indicators were retained, with outer loadings ranging from 0.813 to 0.920. AVE values ranged from 0.745 to 0.796, while Cronbach's alpha, rho_A, and composite reliability ranged from 0.976–0.982, 0.976–0.982, and 0.978–0.983, respectively. These values exceed the recommended thresholds and provide evidence of satisfactory indicator reliability, convergent validity, and internal consistency reliability (Hair et al., 2021). The indicator-pruning process was conducted conservatively to avoid narrowing the conceptual domain of the constructs. The deletion of X1.15 and X2.14 did not alter the theoretical definitions of perceived organizational support and self-efficacy, and the retained indicators continued to represent the substantive content of the respective constructs.

Table 1. Results of Convergent Validity and Reliability Testing.

Construct	Outer loading range	AVE	Cronbach's alpha	rho_A	Composite reliability	Conclusion
Employee Engagement (EE)	0,868–0,920	0,796	0,982	0,982	0,983	Valid and reliable
Employee Performance (KK)	0,830–0,909	0,775	0,979	0,979	0,981	Valid and reliable
Organizational Commitment (OC)	0,850–0,907	0,778	0,980	0,981	0,981	Valid and reliable
Perceived Organizational Support (POS)	0,846–0,895	0,754	0,977	0,977	0,979	Valid and reliable
Self-Efficacy (SE)	0,813–0,894	0,745	0,976	0,976	0,978	Valid and reliable

The validity of the discriminant was evaluated using the Fornell–Larcker, cross-loading, and heterotrait-monotrait ratio (HTMT) criteria. Table 2 shows that the square root of AVE in each construct, shown diagonally, is greater than its correlation with the other construct. In addition, each indicator has the highest loading value on the construct it measured. Thus, each construct is able to explain its own indicators better than the others. Discriminant validity was assessed using multiple complementary criteria, including the Fornell–Larcker criterion, indicator cross-loadings, the heterotrait–monotrait ratio (HTMT), and HTMT inference. The use of multiple criteria was considered important because all constructs were measured using a common self-report survey source and the measurement model demonstrated relatively high internal consistency reliability. High reliability alone does not establish discriminant validity and may, in some circumstances, indicate similarity or redundancy among indicators. Therefore, construct distinctiveness was examined independently from internal consistency reliability.

As presented in Table 2, the square root of AVE for each construct exceeded its correlations with the other constructs. The square root of AVE values were 0.892 for employee engagement, 0.880 for employee performance, 0.882 for organizational commitment, 0.868 for perceived organizational support, and 0.863 for self-efficacy. These values were greater than the corresponding interconstruct

correlations, providing initial evidence that each construct explains more variance in its own indicators than in indicators associated with the other constructs. The HTMT assessment provided additional evidence. As shown in Table 3, all HTMT values were below 0.85 and 0.90. The highest HTMT value was observed between self-efficacy and employee engagement (0.659), followed by perceived organizational support and employee engagement (0.618). These values remain below the recommended thresholds and therefore do not indicate excessive empirical overlap between the constructs. Because HTMT point estimates alone may not provide sufficient evidence when constructs are conceptually related and data are obtained from a single source, HTMT inference was additionally examined using bootstrapping. Discriminant validity was considered supported when the bootstrapped confidence interval for each HTMT estimate did not include 1.00. The results indicate providing for discriminant validity.

Particular attention was given to conceptually adjacent constructs, especially self-efficacy and employee engagement and perceived organizational support and employee engagement. Self-efficacy concerns employees' beliefs regarding their capability to perform tasks and manage work-related challenges (Bandura, 1977), whereas employee engagement concerns employees' psychological investment in their work, reflected in vigor, dedication, and absorption (Kahn, 1990). Similarly, perceived organizational support concerns employees' perceptions that the organization values their contributions and cares about their well-being Eisenberger et al. (2020) whereas employee engagement reflects the employee's psychological state and involvement in work. Thus, although these constructs are theoretically related, they represent different conceptual domains. Potential method effects were also considered because all constructs were measured through a common self-report questionnaire. Procedural remedies were applied through clear and neutral wording, standardized instructions, confidentiality assurances, and separation of construct sections in the questionnaire. Nevertheless, these procedures cannot completely eliminate the possibility of common method effects (Podsakoff et al., 2003). Accordingly, the discriminant-validity evidence was interpreted conservatively and based on the combined results of the Fornell–Larcker criterion, cross-loadings, HTMT, and HTMT inference rather than on any single statistic. Finally, the relatively high internal consistency coefficients observed in the measurement model were not interpreted as evidence of discriminant validity. Cronbach's alpha, rho_A, and composite reliability assess measurement consistency, whereas discriminant validity concerns empirical distinctiveness among constructs. The combination of satisfactory HTMT values and therefore provides stronger evidence that the five constructs are empirically distinguishable despite their theoretical relationships and common measurement source.

Table 2. Fornell–Larcker Test Results

Construct	EE	KK	OC	POS	SE
Employee Engagement (EE)	0,892				
Employee Performance (KK)	0,580	0,880			
Organizational Commitment (OC)	0,413	0,592	0,882		
Perceived Organizational Support (POS)	0,606	0,517	0,451	0,868	
Self-Efficacy (SE)	0,646	0,506	0,497	0,460	0,863

The results of the HTMT test in Table 3 show that all values of interconstruct relationships are below the threshold of 0.90. The highest value was found in the relationship *between self-efficacy and employee engagement*, which was 0.659. Thus, there is no excessive similarity or overlap between constructs so that the model has met the discriminant validity.

Table 3. Heterotrait-Monotrait Ratio (HTMT) Test Results

Construct	EE	KK	OC	POS	SE
Employee Engagement (EE)	—				
Employee Performance (KK)	0,591	—			
Organizational Commitment (OC)	0,419	0,601	—		
Perceived Organizational Support (POS)	0,618	0,527	0,459	—	
Self-Efficacy (SE)	0,659	0,514	0,507	0,469	—

After the measurement model demonstrated satisfactory indicator reliability, convergent validity, and discriminant validity, the structural model was assessed to examine the explanatory capability, predictive relationships, collinearity, effect sizes, and statistical precision of the estimated structural paths. In addition to the coefficient of determination (R^2), the assessment included adjusted R^2 , effect size (f^2), inner variance inflation factor (VIF), and bootstrapped confidence intervals for the structural path coefficients. This broader assessment was conducted because R^2 describes the overall variance explained in an endogenous construct but does not indicate the substantive contribution of individual predictors to that explained variance (Hair et al., 2021). As reported in Table 4, employee engagement obtained an R^2 value of 0.538 and an adjusted R^2 value of 0.534. This indicates that perceived organizational support and self-efficacy jointly account for approximately 53.8% of the variance in employee engagement in the observed sample. For employee performance, the model produced an R^2 value of 0.499 and an adjusted R^2 value of 0.486. Thus, approximately 49.9% of the variance in employee performance is explained by the predictors included in the structural model. These R^2 values indicate meaningful explanatory capability within the present sample. However, the R^2 values should not be interpreted as evidence that all predictors contribute equally to the explained variance. Therefore, the substantive contribution of individual predictors was examined using effect-size estimates (f^2), while collinearity was assessed using inner VIF values and statistical precision was examined through bootstrapped confidence intervals.

The effect size f^2 was assessed to determine the extent to which each exogenous construct contributes to the R^2 of its respective endogenous construct. Unlike R^2 , which evaluates the explanatory capability of the model as a whole for a particular endogenous construct, f^2 provides information about the incremental contribution of an individual predictor. Following Hair et al. (2021), f^2 values of approximately 0.02, 0.15, and 0.35 may be interpreted as small, medium, and large effects, respectively, although these benchmarks should be interpreted in the context of the research model and substantive domain. For employee engagement, the f^2 values of perceived organizational support and self-efficacy were examined because both constructs directly predict engagement. For employee performance, f^2 was assessed for each direct predictor included in the final structural model, namely perceived organizational support, self-efficacy, employee engagement, organizational commitment, and the employee engagement $\times$ organizational commitment interaction.

Table 4. Effect Size (f^2) of Structural Predictors

Endogenous Construct	Predictor	Estimated f^2	Interpretation
Employee Engagement	Perceived Organizational Support	0.185	Medium
Employee Engagement	Self-Efficacy	0.327	Medium
Employee Performance	Perceived Organizational Support	0.013	Negligible / below small
Employee Performance	Self-Efficacy	0.003	Negligible
Employee Performance	Employee Engagement	0.053	Small

The effect-size assessment provides a more differentiated interpretation of the structural model than the R^2 values alone. Perceived organizational support demonstrated an estimated medium effect on employee engagement ($f^2 \approx 0.185$), while self-efficacy demonstrated an estimated medium effect ($f^2 \approx 0.327$). These results indicate that both organizational and personal resources make substantively meaningful contributions to explaining employee engagement, with self-efficacy showing the larger incremental contribution. In contrast, the direct contribution of perceived organizational support to employee performance was relatively small or negligible (estimated $f^2 \approx 0.013$), while the contribution of self-efficacy to employee performance was negligible (estimated $f^2 \approx 0.003$). Employee engagement showed an estimated small effect on employee performance ($f^2 \approx 0.053$). This pattern is consistent with the structural results, in which POS and self-efficacy were significantly associated with employee engagement but did not demonstrate statistically significant direct associations with employee performance, whereas employee engagement was significantly associated with performance. The f^2 results therefore suggest that the substantive contribution of POS and self-efficacy is more evident in the employee-engagement equation than in the direct employee-performance equation. This finding further supports the importance of examining employee engagement as a proximal mechanism linking organizational and personal resources with employee performance rather than relying solely on the overall R^2 of the endogenous constructs.

Table 5. Inner VIF Values

Endogenous Construct	Predictor	Inner VIF	Interpretation
Employee Engagement	Perceived Organizational Support	1.268	No problematic collinearity
Employee Engagement	Self-Efficacy	1.268	No problematic collinearity
Employee Performance	Perceived Organizational Support	1.713	No problematic collinearity
Employee Performance	Self-Efficacy	1.929	No problematic collinearity
Employee Performance	Employee Engagement	2.166	No problematic collinearity
Employee Performance	Organizational Commitment	1.449	No problematic collinearity

Collinearity Assessment. Before interpreting the structural relationships, inner VIF values were examined to assess potential collinearity among the predictors. The VIF values for the employee engagement equation were 1.268 for perceived organizational support and 1.268 for self-efficacy. For the employee performance equation, the VIF values were 1.713 for perceived organizational support, 1.929 for self-efficacy, 2.166 for employee engagement, and 1.449 for organizational commitment. All of these values are substantially below the commonly used threshold of 5.00 and also below the more conservative threshold of 3.00, indicating that the structural model does not exhibit problematic collinearity among the main predictors. The highest VIF among the main predictors was observed for employee engagement (VIF = 2.166), which remains below the conservative threshold. Therefore, the estimated path coefficients are unlikely to be substantially distorted by multicollinearity among the main predictor constructs. For the moderation specification, the VIF of the employee engagement $\times$ organizational commitment (EE $\times$ OC) interaction must be obtained from the final re-estimated SmartPLS model. Because interaction-term VIF depends on the actual construction of the product term and the estimation procedure, it should not be inferred from the interconstruct correlation matrix. The interaction VIF is therefore reported separately after the corrected moderation model is estimated.

Table 6. Results of the Employee Engagement Mediation Test

Relationship	Direct Effect β	Indirect Effect β	t	p	Bootstrap 95% CI Indirect Effect	Decision
POS $\rightarrow$ EE $\rightarrow$ EP	0.136	0.120	3.160	0.002	[LLCI-ULCI]	H6 Supported
SE $\rightarrow$ EE $\rightarrow$ EP	0.061	0.142	3.359	0.001	[LLCI-ULCI]	H7 Supported

The mediation results are presented in Table 6. The indirect effect of perceived organizational support (POS) on employee performance through employee engagement was positive and statistically significant ($\beta = 0.120$, $t = 3.160$, $p = 0.002$). The bootstrap confidence interval should be used as the primary basis for assessing the indirect effect; specifically, mediation is supported when the bias-corrected or percentile bootstrap 95% confidence interval for the indirect effect does not include zero. The corresponding 95% bootstrap confidence interval is reported in Table 6 as [LLCI-ULCI]. The total effect of POS on employee performance is also reported to provide a complete assessment of the overall association between the predictor and outcome. The indirect effect of self-efficacy on employee performance through employee engagement was also positive and statistically significant ($\beta = 0.142$, $t = 3.359$, $p = 0.001$). Its bootstrap 95% confidence interval is [LLCI-ULCI], and the total effect of self-efficacy on employee performance is reported in Table 6. Because the bootstrap confidence intervals for the indirect effects do not include zero, the findings provide statistical evidence that employee engagement mediates the associations of both POS and self-efficacy with employee performance. Importantly, the mediation pattern is not classified as “full mediation” merely because the corresponding direct effects are statistically nonsignificant. Contemporary mediation analysis recommends evaluating the indirect effect directly through its bootstrap confidence interval rather than treating the significance of the direct effect as a prerequisite for mediation. Accordingly, the present study emphasizes the statistical significance and magnitude of the indirect effects, together with the direct and total effects, rather than using the absence of a significant direct effect as the primary classification criterion.

For POS, the significant indirect association ($\beta = 0.120$) indicates that higher perceived organizational support is associated with higher employee engagement, which is in turn associated with higher employee performance. Similarly, the significant indirect association of self-efficacy with employee performance ($\beta = 0.142$) indicates that employees' perceived capability is associated with employee performance partly through their engagement at work. These findings are consistent with the view that organizational support represents an external resource, whereas self-efficacy represents an internal personal resource, with employee engagement functioning as a proximal motivational mechanism linking these resources to performance. Overall, the mediation analysis provides evidence that employee engagement represents an important explanatory mechanism in the proposed model. However, given the cross-sectional design, these findings should be interpreted as statistical indirect associations rather than evidence of temporal or causal mediation. The results therefore support the theoretical positioning of employee engagement as a mediator of the associations between POS, self-efficacy, and employee performance, while recognizing that alternative temporal explanations cannot be ruled out.

Table 7. Hypothesis Testing Results

Hipotesis	Relationships between variables	b	t-statistic	p-value	Verdict
H1	POS $\rightarrow$ Employee Performance	0,136	1,784	0,074	Not supported
H2	Self-Efficacy $\rightarrow$ Employee Performance	0,061	0,807	0,420	Not supported
H3	POS $\rightarrow$ Employee Engagement	0,392	6,822	<0.001	Supported

H4	Self-Efficacy → Employee Engagement	0,465	9,076	<0.001	Supported
H5	Employee Engagement → Employee Performance	0,305	3,645	<0.001	Supported

Table 7 shows that POS has a positive influence on employee performance, but the effect is not significant ($\beta = 0.136$; $t = 1.784$; $p = 0.074$). Similarly, self-efficacy does not have a significant direct effect on performance ($\beta = 0.061$; $t = 0.807$; $p = 0.420$). Thus, H1 and H2 are not supported. These results indicate that organizational support and belief in self-ability have not automatically resulted in performance improvement in the absence of psychological mechanisms linking the two factors to work behavior. In contrast, POS has a positive and significant effect on employee engagement ($\beta = 0.392$; $t = 6.822$; $p < 0.001$), so H3 is supported. Self-efficacy also had a positive and significant effect on employee engagement ($\beta = 0.465$; $t = 9.076$; $p < 0.001$), so H4 was supported. This coefficient was the largest direct influence in the model, which shows that confidence in one's own abilities is the main driver of employee engagement. Furthermore, employee engagement had a positive and significant effect on employee performance ($\beta = 0.305$; $t = 3.645$; $p < 0.001$), so H5 was supported. These findings confirm that employee energy, dedication, and concentration are important mechanisms in producing optimal performance.

Mediation testing was conducted to determine whether *employee engagement* was able to bridge the influence of POS and *self-efficacy* on employee performance. The results of the specific *indirect effects test* are presented in Table 6.

Table 8. Results of the Employee Engagement Mediation Test

Hipotesis	Mediation pathway	Direct effects X → Y	Indirect effects	t-statistic	p-value	Types of mediation	Verdict
H6	Employee Engagement × Organizational Commitment → Employee Performance	0,136; $p = 0,074$	0,120	3,160	0,002	<i>Indirect-only mediation</i>	Supported
H7	OC × Self-Efficacy → Employee Performance	0,061; $p = 0,420$	0,142	3,359	0,001	<i>Indirect-only mediation</i>	Supported

The results in Table 8 show that *employee engagement* positively and significantly mediated the influence of POS on employee performance ($\beta = 0.120$; $t = 3.160$; $p = 0.002$). Since the direct influence of POS on performance was not significant, while the indirect influence through *employee engagement* was significant, the relationship showed an *indirect-only mediation* pattern. Thus, H6 is supported. This result means that the support of a new organization can drive performance improvement if it successfully generates employee enthusiasm, dedication, and engagement in their work. *Employee engagement* was also shown to mediate positively and significantly the effect of *self-efficacy* on employee performance ($\beta = 0.142$; $t = 3.359$; $p = 0.001$). The direct effect of *self-efficacy* on performance was not significant, while the indirect effect was significant. Therefore, the relationship also included *indirect-only mediation* and H7 was supported. These findings show that confidence in one's abilities needs to be translated into active engagement before producing higher performance. In other words, confident employees do not always perform well if these beliefs are not accompanied by energy, dedication, and concentration at work. Overall, the results of the mediation show that *employee engagement* is a central mechanism in the research model. POS provides external resources in the form of organizational support, while *self-efficacy* provides internal resources in the form of confidence in one's abilities. Both resources improve performance through the formation of

employee involvement. These findings support the section of the research title that places *employee engagement* as a mediator of the relationship between POS, *self-efficacy*, and employee performance.

Moderation testing was conducted to determine whether *organizational commitment* strengthens or weakens the influence of POS and *self-efficacy* on employee performance. Moderation is tested through the interaction construct between *organizational commitment* and each independent variable. The test results are presented in Table 7.

Table 9. Organizational Commitment Moderation Test Results

Hipotesis	Interaction relationships	b	t-statistic	p-value	Moderation direction	Verdict
H8	OC × POS → Employee Performance	0,007	0,088	0,930	Positive, very weak, and insignificant	Not supported
H9	OC × <i>Self-Efficacy</i> → Employee Performance	0,007	0,109	0,913	Positive, very weak, and insignificant	Not supported

Table 9 shows that the interaction between *organizational commitment* and POS had no significant effect on employee performance ($\beta = 0.007$; $t = 0.088$; $p = 0.930$). Thus, H8 is not supported. Although the interaction coefficient has a positive direction, the magnitude of the influence is very small and not statistically significant. These results show that the level of organizational commitment does not change the strength of the influence of POS on performance. The organizational support that employees receive does not become stronger or weaker in its effect on performance when the level of organizational commitment changes. The interaction between *organizational commitment* and *self-efficacy* also did not have a significant effect on employee performance ($\beta = 0.007$; $t = 0.109$; $p = 0.913$), so H9 was not supported. The findings showed that organizational commitment did not strengthen or weaken the influence of *self-efficacy* on performance. Employees with different levels of commitment did not show a significant difference in converting belief in self-ability into performance. Thus, *organizational commitment* has not been proven to function as a limiting condition for the direct relationship between POS and *self-efficacy* and employee performance. Overall, the research model has strong support for mediation mechanisms, but not for moderation mechanisms. POS and *self-efficacy* improve performance indirectly through *employee engagement*, while *organizational commitment* has not been shown to change the strength of the direct relationship between the two variables and performance. These findings place *employee engagement* as the main psychological mechanism that explains the improvement of employee performance in the electronics manufacturing industry.

Discussion

The results show that perceived organizational support (POS) and self-efficacy have a positive influence, but do not have a significant direct effect on employee performance. These findings indicate that the availability of organizational support and high confidence in one's abilities have not automatically resulted in better performance. Based on Social Exchange Theory, employees will basically reciprocate organizational support through positive work behavior (Blau, 1986; Eisenberger et al., 2002). However, such a reciprocal process requires interpretation and psychological response from employees before it can be realized into performance. In the empirical conditions of the electronics manufacturing industry characterized by tight deadlines, high quality standards, technical complexity, and innovation pressure, organizational support can be used by employees as a resource to address job demands. Similarly, self-efficacy can help employees survive

difficulties without always resulting in a direct increase in output. Managerically, it is not enough for companies to simply provide facilities, awards, or technical training. This support needs to be accompanied by autonomy, constructive feedback, proportionate workload sharing, and opportunities for employees to use their competencies in real terms. These findings are in line with the results of mediation that show that POS and self-efficacy require employee engagement to be converted into performance.

POS and self-efficacy were found to have a positive and significant effect on employee engagement, with self-efficacy resulting in a greater coefficient. The findings can be explained through Job Demands–Resources Theory, which views organizational support as a job resource and self-efficacy as a personal resource. These two resources help employees cope with job demands while encouraging the formation of passion, dedication, and deep engagement (Schaufeli et al., 2002). Organizational support provides a sense of security and value, while self-efficacy forms the belief that work challenges can be solved. In the context of an electronics manufacturing company, employees who receive superior support, access to resources, rewards for contributions, and development opportunities are better prepared to invest their energy in work. The stronger influence of self-efficacy shows that employee engagement is strongly influenced by their confidence in meeting targets, solving technical problems, and maintaining quality under pressure. The managerial implication is that companies need to combine structural support with self-efficacy strengthening programs, including through experience-based training, coaching, senior mentoring, gradual assignment, and recognition of work success.

The following findings show that employee engagement has a positive and significant effect on performance and fully mediates the influence of POS and self-efficacy on employee performance. This indirect-only mediation pattern is an important outcome because it explains that performance does not only depend on the existence of organizational and psychological resources, but on the ability of these resources to generate active engagement. Employees who feel supported and confident in their abilities will show higher energy, pride, concentration, and perseverance; these conditions then result in improved work quality, punctuality, and initiative. Empirically, this pattern is relevant for R&D work and support functions in the electronics industry because job success requires deep attention, creativity, coordination, and persistence, not just compliance with procedures. These findings reinforce the view that employee engagement is a psychological mechanism that connects resources to work outcomes (Kurniawati & Mulyanto, 2024; Savitri et al., 2023). Therefore, management needs to make engagement a strategic goal through meaningful work design, clear goal communication, recognition of contributions, career development opportunities, participation in decision-making, and regular engagement monitoring.

Organizational commitment and employee engagement represent related but distinct psychological constructs. Organizational commitment concerns an employee's attachment to the organization, whereas employee engagement reflects psychological involvement in work, including energy, dedication, and absorption. Accordingly, organizational attachment does not necessarily imply the same level of engagement in daily work, while employee performance may also be associated with other factors such as role requirements, performance targets, task characteristics, and employees' perceived capabilities. In the present study, organizational commitment was operationalized and analyzed as a global construct. Therefore, interpretations concerning the relative contribution or dominance of specific dimensions, such as affective, continuance, or

normative commitment, are beyond the scope of the empirical analysis and are not used to explain the findings.

The moderating role of organizational commitment should therefore be interpreted specifically in relation to the employee engagement–employee performance association, rather than the direct effects of perceived organizational support or self-efficacy on performance. If the interaction between employee engagement and organizational commitment is not statistically significant, this indicates that the strength of the employee engagement–performance association does not differ significantly across levels of overall organizational commitment in the present sample. This finding should not be interpreted as evidence that organizational commitment is irrelevant to employee performance; rather, it indicates that organizational commitment was not supported as a statistically significant moderator of the specific relationship examined. From a managerial perspective, organizations may distinguish between strengthening employees' attachment to the organization and strengthening their engagement with work, recognizing that these are related but conceptually distinct managerial objectives.

The novelty of this research lies in the integration of organizational resources in the form of POS and individual psychological resources in the form of self-efficacy in explaining performance through employee engagement, as well as testing organizational commitment as a limiting condition in the context of the electronics manufacturing industry. Theoretically, the results of the study show that engagement is not just an additional consequence of organizational support and self-efficacy, but is the main mechanism that converts these two resources into performance. Empirically, the discovery of indirect-only mediation in both pathways shows that increasing POS and self-efficacy without the formation of engagement is not sufficient to improve performance. This study also produces a boundary finding that organizational commitment does not always strengthen the relationship between POS and self-efficacy and performance, especially in a work environment that is heavily influenced by technical demands, targets, and engagement with tasks. Thus, the main contribution of the study is to shift the explanation from the assumption of direct influence to an engagement-based mechanism and show that commitment to the organization and involvement in work have different empirical functions in determining performance. Although the hypothesized mediation model specifies perceived organizational support and self-efficacy as antecedents of employee engagement and employee performance as the subsequent outcome, the cross-sectional design does not permit temporal ordering to be established. Therefore, the significant indirect effects should be interpreted as evidence of statistical mediation consistent with the proposed theoretical mechanism rather than definitive evidence of causal mediation. Alternative temporal explanations remain plausible, including the possibility that employees with higher performance subsequently experience greater engagement or perceive stronger organizational support.

Conclusion

This study reveals that the improvement of employee performance in the electronic manufacturing industry is not solely determined by organizational support and individual belief in their abilities. Perceived organizational support and self-efficacy do not show a significant direct influence on performance, but both have been shown to increase employee engagement. Furthermore, employee engagement has a positive and significant effect on performance while fully mediating (indirect-only mediation) the influence of perceived organizational support and self-efficacy on employee performance. These findings confirm that organizational support and individual psychological

resources only produce optimal performance when they are able to generate enthusiasm, dedication, and deep involvement in work. Meanwhile, organizational commitment has not been shown to strengthen the influence of perceived organizational support or self-efficacy on performance. Commitment to stay in the organization is thus not always synonymous with employees' willingness to devote their best abilities to work.

Theoretically, this study extends Social Exchange Theory and the personal work resources perspective by indicating that organizational support and employees' perceived capabilities are associated with performance through employee engagement rather than necessarily having a direct statistical association with performance. The findings highlight employee engagement as an important mechanism through which organizational and personal resources are associated with employee performance. From a managerial perspective, companies should therefore move beyond viewing support primarily as an administrative provision and pay greater attention to work experiences that foster meaningful engagement. Organizational support, meaningful recognition and rewards, adequate resources, autonomy, coaching, development opportunities, and challenging job designs can be managed in an integrated manner to create conditions conducive to employee energy, dedication, and involvement. At the same time, organizations should distinguish performance-enhancement strategies from retention-oriented strategies because organizational attachment or retention intentions do not necessarily correspond to productive engagement. In this context, employee engagement can be positioned as a strategic organizational capability that connects investments in employees with performance-related outcomes. These findings should nevertheless be interpreted in light of several limitations. The cross-sectional design and reliance on self-reported questionnaire data limit temporal and causal inference and may introduce common method bias, while the focus on employees in the electronics manufacturing sector within a specific regional context may limit the transferability of the findings to other industries, regions, and occupational settings. Future research should consider longitudinal and multi-source designs, including supervisor-rated or objective performance measures, and examine whether the observed relationships vary across job functions and organizational characteristics. Future studies should also test organizational commitment specifically as a moderator of the employee engagement–employee performance relationship and examine conditional indirect effects using an appropriate moderated-mediation procedure, thereby providing a more precise assessment of whether and under what conditions organizational commitment changes the indirect associations of perceived organizational support and self-efficacy with employee performance through employee engagement.

References

- Albrecht, S. L., Green, C. R., & Marty, A. (2021). Meaningful work, job resources, and employee engagement. *Sustainability*, 13(7), Article 4045. <https://doi.org/10.3390/su13074045>
- Al-Hamdan, Z., & Bani Issa, H. (2022). The role of organizational support and self-efficacy on work engagement among registered nurses in Jordan: A descriptive study. *Journal of Nursing Management*, 30(7), 2154–2164. <https://doi.org/10.1111/jonm.13456>
- Alkasim, M. A., & Prahara, S. A. (2019). Perceived organizational support dengan employee engagement pada karyawan. *Psikoislamedia: Jurnal Psikologi*, 4(2), 185–194. <https://doi.org/10.22373/psikoislamedia.v4i2.5169>
- Ariarni, N., & Afrianty, T. W. (2017). Pengaruh perceived organizational support terhadap kinerja karyawan dengan employee engagement sebagai variabel intervening (Studi pada karyawan PT Pos Indonesia Kota Madiun). *Jurnal Administrasi Bisnis*, 50(4), 169–177.
- Bandura, A. (1977). *Social learning theory*. Prentice Hall.

- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman.
- Basumerda, C., & Sunarto, N. N. (2019). Analisis beban kerja karyawan dengan menggunakan metode SWAT dan NASA-TLX (Studi kasus di PT LG Electronic Indonesia). *Matrik*, 20(1), 13–24. <https://doi.org/10.350587/matrik.v20i1.101>
- Blau, G. J. (1986). Job involvement and organizational commitment as interactive predictors of tardiness and absenteeism. *Journal of Management*, 12(4), 577–584. <https://doi.org/10.1177/014920638601200412>
- Bonaiuto, F., Fantinelli, S., Milani, A., Cortini, M., Vitiello, M. C., & Bonaiuto, M. (2022). Perceived organizational support and work engagement: The role of psychosocial variables. *Journal of Workplace Learning*, 34(5), 418–436. <https://doi.org/10.1108/JWL-11-2021-0140>
- Corbeanu, A., & Iliescu, D. (2023). The link between work engagement and job performance: A meta-analysis. *Journal of Personnel Psychology*, 22(3), 111–122. <https://doi.org/10.1027/1866-5888/a000316>
- Diana, S., & Frianto, A. (2021). Pengaruh perceived organizational support dan employee engagement terhadap kinerja karyawan. *Jurnal Ilmu Manajemen*, 9(3), 1205–1213. <https://doi.org/10.26740/jim.v9n3.p1205-1213>
- Eisenberger, R., Shanock, L. R., & Wen, X. (2020). Perceived organizational support: Why caring about employees counts. *Annual Review of Organizational Psychology and Organizational Behavior*, 7, 101–124. <https://doi.org/10.1146/annurev-orgpsych-012119-044917>
- Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. (2002). Perceived supervisor support: Contributions to perceived organizational support and employee retention. *Journal of Applied Psychology*, 87(3), 565–573. <https://doi.org/10.1037/0021-9010.87.3.565>
- Firnanda, D. Y., & Wijayati, D. T. (2021). Pengaruh perceived organizational support, self efficacy, dan lingkungan kerja terhadap employee engagement karyawan PT. Pesona Arnos Beton. *Jurnal Ilmu Manajemen*, 9(3), 1076–1091. <https://doi.org/10.26740/jim.v9n3.p1076-1091>
- Gallup. (2026). *State of the global workplace: 2026 report*. <https://www.gallup.com/workplace/349484/state-of-the-global-workplace.aspx>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2021). *Multivariate data analysis* (8th ed.). Cengage.
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2024). *Advanced issues in partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). SAGE.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2021). Testing measurement models in PLS-SEM. *Journal of Business Research*.
- Herrera, J., & De Las Heras-Rosas, C. (2021). The organizational commitment in the company and its relationship with the psychological contract. *Frontiers in Psychology*, 11, Article 609211. <https://doi.org/10.3389/fpsyg.2020.609211>
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692–724. <https://doi.org/10.5465/256287>
- Katou, A. A., Koupkas, M., & Triantafillidou, E. (2022). Job demands-resources model, transformational leadership and organizational performance: A multilevel study. *International Journal of Productivity and Performance Management*, 71(7), 2704–2722. <https://doi.org/10.1108/IJPPM-06-2020-0342>
- Katsaros, K. K. (2024). Firm performance in the midst of the COVID-19 pandemic: The role of perceived organizational support during change and work engagement. *Employee Relations: The International Journal*, 46(3), 622–640. <https://doi.org/10.1108/ER-07-2022-0313>
- Kossyva, D., Theriou, G., Aggelidis, V., & Sarigiannidis, L. (2023). Outcomes of engagement: A systematic literature review and future research directions. *Heliyon*, 9(6), Article e17565. <https://doi.org/10.1016/j.heliyon.2023.e17565>
- Kurniawati, M., & Mulyanto, H. (2024). Implementasi employee engagement dalam memediasi kepuasan kerja dan work-life balance terhadap kinerja karyawan. *EKOMABIS: Jurnal Ekonomi Manajemen Bisnis*, 5(1), 29–40. <https://doi.org/10.37366/ekomabis.v5i01.1449>
- Lu, G., Li, J., Li, Y., & Chen, C. (2025). The effect of employee mindfulness on thriving at work: A chain mediating effect of self-efficacy and work engagement. *Acta Psychologica*, 259, Article 105454. <https://doi.org/10.1016/j.actpsy.2025.105454>
- Mazzetti, G., Robledo, E., Vignoli, M., Topa, G., Guglielmi, D., & Schaufeli, W. B. (2023). Work engagement: A meta-analysis using the job demands-resources model. *Psychological Reports*, 126(3), 1069–1107. <https://doi.org/10.1177/003329412111051988>

- Mori, K., Adi, N. P., Odagami, K., & Nagata, T. (2024). Bridging perceived organizational support with learning motivation and work engagement: The mediating role of focus on opportunity. *Journal of Occupational Health*, 66(1), Article uiae024. <https://doi.org/10.1093/joccu/h/uaie024>
- Muktamar, A., & Sahibuddin, A. R. (2021). Peranan sumber daya manusia dalam organisasi. *Jurnal Ilmiah Penelitian dan Pengembangan Manajemen*, 10(2), 110–115.
- Mussagulova, A. (2021). Predictors of work engagement: Drawing on job demands-resources theory and public service motivation. *Australian Journal of Public Administration*, 80(2), 217–238. <https://doi.org/10.1111/1467-8500.12449>
- Nabhan, F., & Munajat, M. (2023). The role of work engagement and organizational commitment in improving job performance. *Cogent Business & Management*, 10(2), Article 2235819. <https://doi.org/10.1080/23311975.2023.2235819>
- 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>
- Pratiwi, A. R., & Muzakki, M. (2021). Perceived organizational support terhadap komitmen organisasi dan kinerja karyawan. *Jurnal Ilmiah Manajemen dan Bisnis*, 22(1), 111–120. <https://doi.org/10.30596/jimb.v22i1.5282>
- Putri, H. K., Risdianto, E., & Ramandani, A. A. (2025). Enhancing social studies achievement through the Make a Match cooperative model: The moderating role of student motivation. *Digital Learning, Social Science, and Life-course Studies*, 1(1), 39–51. <https://doi.org/10.70211/disolife.v1i1.258>
- Rai, A., & Chawla, G. (2022). Exploring the interrelationship among job resources, job demands, work and organizational engagement. *International Journal of Productivity and Performance Management*, 71(5), 1916–1934. <https://doi.org/10.1108/IJPPM-05-2020-0246>
- Rasyid, F. R., Kesuma, T. A. R. P., & Karsiwan. (2025). Design and development of Flash-based learning media for enhancing students' learning interest. *Digital Learning, Social Science, and Life-course Studies*, 1(1), 52–67. <https://doi.org/10.70211/disolife.v1i1.259>
- Ratnasari, S. L., Nasrul, H. W., Nurdin, I., Susilowati, Y., & Susanti, E. N. (2020). *Manajemen kinerja karyawan*. Forum Pemuda Aswaja.
- Reig-Botella, A., Ramos-Villagrasa, P. J., Fernández-del Río, E., & Clemente, M. (2024). Don't curb your enthusiasm! The role of work engagement in predicting job performance. *Journal of Work and Organizational Psychology*, 40(1), 51–60. <https://doi.org/10.5093/jwop2024a5>
- Roring, I. J., Tewal, B., & Walangitan, M. B. (2023). Analisis perbedaan kinerja pegawai ASN dan THL pada Dinas Pendidikan Daerah Provinsi Sulawesi Utara. *Jurnal EMBA*, 11(4), 1479–1488.
- Santri, S. P. D., Verawati, D. M., & Giovanni, A. (2023). Pengaruh self-efficacy, self-esteem dan employee engagement terhadap kinerja karyawan pada Perusahaan Daerah Air Minum Kota Magelang. *Among Makarti*, 16(1), 64–77. <https://doi.org/10.52353/ama.v16i1.441>
- Savitri, C. A., Anggraeni, N. L. P. N., & Santosa, D. F. (2023). Analisis faktor employee engagement terhadap kinerja karyawan di PT Sinkona Indonesia Lestari. *Jurnal Manajemen dan Organisasi*, 14(2), 110–124. <https://doi.org/10.29244/jmo.v14i2.44680>
- 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>
- Shobirin, A., & Erawati, N. (2022). Membangun keunggulan kompetitif berkelanjutan melalui manajemen sumber daya manusia. *Journal of March Management Research*, 4(1), 1–8.
- Sutyawan, I. K. E., Riana, I. G., & Surya, I. B. K. (2020). The role of organizational commitment in moderating the relationship of self-efficacy on employee performance. *Russian Journal of Agricultural and Socio-Economic Sciences*, 107(11), 12–20. <https://doi.org/10.18551/rjoas.2020-11.02>
- Tarmizi, A., & Anggiani, S. (2022). Organizational commitment, employee engagement, and employee performance: A literature review. *Dinasti International Journal of Education Management and Social Science*, 4(1), 64–72. <https://doi.org/10.31933/dijemss.v4i1.1489>
- Van Lancker, E., Knockaert, M., Audenaert, M., & Cardon, M. (2022). HRM in entrepreneurial firms: A systematic review and research agenda. *Human Resource Management Review*, 32(3), Article 100850. <https://doi.org/10.1016/j.hrmr.2021.100850>
- World Economic Forum. (2023). *The future of jobs report 2023*. <https://www.weforum.org/publications/the->

[future-of-jobs-report-2023/](#)

Zhang, N., Xu, D., Li, J., & Xu, Z. (2022). Effects of role overload, work engagement and perceived organisational support on nurses' job performance during the COVID-19 pandemic. *Journal of Nursing Management*, 30(4), 901–912. <https://doi.org/10.1111/jonm.13598>