

INTERNATIONAL JOURNAL OF ORGANIZATIONAL LEADERSHIP

WWW.CIKD.CA journal homepage: https://www.ijol.cikd.ca



Relationship between Managers' Roles in Training Programs and Motivation to Accomplish Work: The Mediating Role of Employee Engagement

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ABSTRACT

Effective leaders have understood that human resource management can help transition from old-style management, based on rigid hierarchy, command and control, to a newstyle, humanistic management style focused on employees, flexibility and collaboration. This paradigm shift has compelled managers to focus on the development and enhancement of employee competencies, enabling them to navigate unforeseen challenges, adapt to rapid organizational changes, and maintain resilience in the face of global competition and economic turbulence. In light of these evolving leadership demands, this study aims to assess the relationship between managers' roles in training programs, employee engagement and motivation to accomplish work effectively. By integrating several leadership theories, a conceptual framework is developed to explore the interconnections between these key variables. A cross-sectional research design was adopted, with data collected from 300 trainees at an established judicial and legal training organization in Malaysia. SmartPLS was employed to assess and test the measurement model and structural model. The findings reveal that employee engagement is crucial to mediating between managers' participation in training programs and employees' motivation to accomplish work. These insights offer valuable implications for practitioners, helping organizations design effective employee engagement strategies and workplace training initiatives to enhance performance and align with strategic business objectives.

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Keywords:

Conflict management, Trust, Managers' roles in training programs, employee engagement, motivation to accomplish work, SmartPLS

Received 21 April 2025 Received in revised form 13 May 2025 Accepted 21 May 2025

*Correspondence: mazzlida@ukm.edu.my Over the past decades, scholars in organizational behavior have emphasized the importance of internal psychological motivation in driving employee dedication, perseverance, and overall job performance (Fan, 2025; Uzkurt et al., 2025). In response, organizations have increasingly implemented leadership development initiatives to equip managers with the skills needed to foster positive outcomes such as productivity, career growth, and innovation (Budiarto et al., 2024; Layek & Koodamara, 2024; Uzkurt et al., 2025). However, these training programs can only deliver their intended benefits if managers actively perform critical roles—particularly in communication and support—which directly influence employees' attitudes and behaviors (Darmawan, 2024; Wardana et al., 2024). Studies show that employee motivation is shaped by both individual (e.g., satisfaction, well-being, personal drive) and workplace factors (e.g., incentives, work conditions, training access) (Abdullah et al., 2025; Bandhu et al., 2024; Dawson et al., 2024; Omer et al., 2025), yet how managerial involvement in training affects motivation is not well understood (Haryono et al., 2020; Iis et al., 2022; Nastenko et al., 2024).

Existing literature highlights two major functions performed by managers in training programs: communication (e.g., conveying goals, expectations, and feedback) and support (e.g., offering emotional and material assistance) (Chatterjee et al., 2025; Hendriati et al., 2024; Jun & Eckardt, 2025; Musheke & Phiri, 2021). These functions are believed to foster employee engagement, which in turn is linked to greater job satisfaction and work motivation (Jaiyeoba & Hazahari, 2025; Khair et al., 2024; Kumar et al., 2024; Sattar et al., 2015). However, recent studies point to a lack of clarity on the mediating role of engagement between managerial actions and motivational outcomes (Azmy, 2021; Chan, 2019; Jain & Khurana, 2017). Many prior works emphasize the importance of engagement and motivation independently, but they often use simplistic causal models and overlook how engagement might serve as a psychological bridge between what managers do and how employees respond (Mustaqim et al., 2024; Yandi & Bimaruci Hazrati Havidz, 2022).

While the limited number of prior studies highlights a clear research gap, the true significance of this study lies in its practical relevance to modern organizational leadership and human capital development. In an era marked by rapid innovation, evolving workforce expectations, and global competition, organizations must rely on more than just technical training—they require proactive, strategically minded managers who can engage and motivate employees effectively. Training programs often fail not because of poor content, but due to a lack of meaningful managerial involvement. By exploring how specific managerial roles in communication and support influence employee motivation through engagement, this study offers practical insights that extend beyond academia, informing leadership practices and training policy in dynamic organizational contexts.

To address this gap, this study examines how employee engagement mediates the relationship between managers' communication and support roles in training programs and employee motivation to accomplish work. It extends current literature in four ways: (1) by focusing specifically on managerial roles in training settings rather than general workplace dynamics (Al-Zoubi et al., 2025; Hartley, 2024); (2) by positioning engagement not just as an outcome but as a mediating factor influencing motivation (Hao et al., 2025; Hosen et al., 2024); (3) by empirically testing the combined effect of communication and support on engagement and motivation (Minani et al., 2025); and (4) by applying Kahn's (1990) Three Dimensions of Employee Engagement theory within a public sector training context (Br Ginting et al., 2025;

Ekhsan et al., 2023). These contributions aim to provide both theoretical insight and practical strategies for enhancing training effectiveness and workforce motivation.

Theoretical Framework

Managers' Roles in Training Programs

In training management literature, managerial roles are typically categorized into communication and support functions (Jaiyeoba & Hazahari, 2025; Kumar et al., 2024). Communication refers to how managers convey training goals, content, and feedback—before, during, and after training (Hendriati et al., 2024; Musheke & Phiri, 2021). This ensures clarity, direction, and alignment of training objectives with organizational goals. Support includes psychological, informational, and logistical assistance to help employees apply new skills and stay motivated (Chatterjee et al., 2025; Jun & Eckardt, 2025).

Recent empirical studies highlight how managerial communication and support have evolved. Tiwow and Sugiarto (2024) identified structured support models for training planning and evaluation. McGuire et al. (2024) linked classroom management to teacher training efficacy. Kuknor and Kumar (2024) demonstrated how inclusive design in training fosters diversity. AI integration into training has enhanced accuracy and engagement (Bin-Nashwan et al., 2025), while personalized learning pathways promote clarity for assistant managers (Alier et al., 2025). Moreover, practices like job rotation (Al-Zoubi et al., 2025) and machine learning in healthcare training (Olalekan Kehinde, 2025) reveal the expanded scope of managerial roles in varied sectors.

Despite these innovations, existing studies largely explore outcomes of communication or support in isolation. Few analyze their combined effect or consider employee engagement as a mediating mechanism. The current study fills this gap by exploring how these managerial functions jointly influence motivation through engagement—offering new insight into the effectiveness of training programs.

Employee Engagement

Engagement involves the use of physical, emotional, and cognitive energy in work (Kahn, 1990). Managers play a central role in shaping engagement during training via coaching, mentoring, feedback, and career guidance (Ekhsan et al., 2023; Ginting et al., 2025). Engagement is not only a desirable state but a strategic asset that drives knowledge acquisition and training transfer.

Schaufeli and Bakker (2003) identified three dimensions of engagement: vigor, dedication, and absorption. These lead to positive actions such as resilience, innovation, and emotional commitment (Gede & Huluka, 2024; Hajjami & Crocco, 2024; Khair et al., 2024; Li et al., 2025; Lins et al., 2023; Malak et al., 2025). In training contexts, high engagement results in sustained attention, effort, and learning effectiveness. It also fosters a deeper organizational commitment that persists beyond the training period.

Meta-analyses confirm engagement as both a predictor and mediator of motivation (Br Ginting et al., 2025; Mustaqim et al., 2024; Yandi & Bimaruci Hazrati Havidz, 2022). However, prior studies often examine it as a static outcome, without recognizing its intermediary role in the dynamic relationship between managerial behavior and motivation.

Motivation to Accomplish Work

Based on Self-Determination Theory (Deci & Ryan, 2000), motivation to accomplish work is driven by intrinsic and extrinsic factors. Intrinsic motivation stems from personal fulfillment and enjoyment, while extrinsic motivation is influenced by external rewards and recognition. Internally motivated employees are guided by personal values and satisfaction, leading them to engage in social and environmental initiatives (Gans, 2024; Nguyen, 2025; Wagner et al., 2025), support green policies, and participate in gamified employer branding efforts (Bhawna et al., 2025). Externally motivated employees are influenced by incentives, leadership, and organizational rewards, which promote sustainable behavior and career development (Czerwińska-Lubszczyk & Jankowiak, 2025; Hardiyana et al., 2024; Karatepe et al., 2025; Nguyen, 2025). Highly motivated employees tend to work harder, meet performance targets, seek growth opportunities, and contribute to organizational success (Ahmad et al., 2024; Chính et al., 2025; Maake, 2024; Putri et al., 2025).

Relationship between Managers' Roles and Employee Outcomes

Leadership theories explain how managerial behavior shapes training outcomes. Path-Goal Theory (House, 1971) emphasizes goal clarity, barrier removal, and support. Transactional Leadership (Downton, 1973) focuses on reward-based exchanges that reinforce positive behaviors. Transformational Leadership (Avolio & Bass, 2004; Bass, 1985) highlights visionary leadership that inspires innovation and shared goals. Organizational Support Theory (Eisenberger et al., 1986) stresses the value of recognizing employee contributions to enhance motivation, while Leader–Member Exchange Theory (Graen & Uhl-Bien, 1995) underscores trust and communication in leader-follower relationships. In training settings, these theories suggest that communication and support foster a safe, engaging environment where engagement acts as a key mechanism linking managerial roles to employee motivation (Hao et al., 2025; Hidayat et al., 2024; Minani et al., 2025).

The Mediating Role of Employee Engagement

Kahn's (1990) Three Dimensions of Engagement—physical, cognitive, and emotional—provide a mechanism to understand how employee behavior is shaped in training. Engaged employees demonstrate stamina (physical), strategic focus (cognitive), and organizational commitment (emotional), leading to improved training application and motivation (Br Ginting et al., 2025; Ekhsan et al., 2023).

Although prior studies acknowledge the importance of engagement, most use simple models and overlook its mediating role (Arwab et al., 2023). This study addresses the gap using Structural Equation Modeling (SEM), allowing for a deeper exploration of how managerial behavior indirectly boosts motivation.

Empirical Support and Research Gaps

Despite growing interest in training-based leadership, empirical literature lacks an integrated view linking managerial communication and support to motivation via engagement. While Kumar et al. (2024) and Wangchuk et al. (2024) highlight open communication strategies like ChatGPT and face-to-face feedback, few studies link these practices to engagement and motivational outcomes in a unified model. Managerial support studies—such as in clinical

education (Hall et al., 2025), green behavior (Mo et al., 2025; Su & Hahn, 2025), and ESL training (Ramzan et al., 2025)—offer strong examples but rarely connect the dots with motivation through engagement.

Hence, this study extends the literature by proposing and testing the following hypotheses:

H1: Managers' communication is positively related to employee engagement.

H2: Managers' communication is positively related to employees' motivation to accomplish work.

H3: Managers' support is positively related to employee engagement.

H4: Managers' support is positively related to employees' motivation to accomplish work.

H5: Employee engagement is positively associated with employees' motivation to accomplish work.

H6: Employee engagement mediates the relationship between managers' communication and employees' motivation.

H7: Employee engagement mediates the relationship between managers' support and employees' motivation.

The conceptual framework of this study, as shown in Figure 1, illustrates the relationship between manager's communication, employee engagement, motivation to accomplish work, manager's support and the related hypotheses.

Figure 1



Method Research Design

This study employed a cross-sectional approach to collect survey questionnaires. This data collection approach may effectively gather accurate, non-biased, and high-quality data in the survey method (Saunders et al., 2021). The study was conducted at the Malaysian judiciary and legislation training institutes. This institute offers training programs to upgrade public and private employees' skills and expertise in five critical areas: legal, litigation, judicial,

counselling, and career development and administration. This initiative aims to upgrade the efficiency and professionalism of the judicial sector in Malaysia.

Sample

The target population comprised trainees at training institutes. Due to confidentiality constraints, the institute's management did not provide a full trainee list, preventing random sampling. Therefore, 500 self-report questionnaires were intentionally distributed to employees who participated in training programs, and 300 usable responses (60%) were returned. SPSS was used to clean the data by removing missing values, straight-lining, outliers, and skewness/kurtosis values beyond ± 2.0 (Hair et al., 2017). The sample met Hair et al.'s (2017) adequacy guideline, which requires a minimum of 200 respondents for reflective measurement models. VIF values were below the 3.30 threshold (Kock, 2015), indicating no common method bias. Thus, the sample was valid for SmartPLS measurement and structural model testing. Most respondents were female (64.7%), aged 21–31 (63.0%), single (62.0%), held a bachelor's degree (37.3%), and had 1–5 years of work experience (55.7%).

Measures

The survey questionnaire was formulated based on the training management literature. The content of the survey questionnaire was translated into English and Malay languages using the back-to-back translation method. This translation method may help preserve the meanings of the original text, identify any phrases or cultural nuances that may not have been adequately conveyed, and highlight areas for improvement in the translation. Thus, it can help improve the quality of the research instrument (Brislin, 1970).

The survey questionnaire has three parts: Firstly, managers' roles consist of two salient dimensions: communication (COMT) and support (SUPR). COMT has four items adapted from the training communication literature (Ko et al., 2025; Mamatova et al., 2022; Obed-Ojukwu & Nwamara, 2025). This variable is measured based on two elements: face-to-face interaction and online interaction. SUPR has four items adapted from the training support literature (Hesters et al., 2025; Hidayat et al., 2024). This variable is measured using three elements: lesson plans, methods and use of technology. Secondly, employee engagement (EMPART) has 5 items adapted from employee engagement literature (Coetzee et al., 2025; Schaufeli et al., 2006; So et al., 2022). This variable is measured using three elements: vigor, dedication and absorption. Third, motivation to accomplish work (JBMT) has five items adapted from the employee performance literature (Furnham et al., 2021; Kohnen et al., 2024; Uzkurt et al., 2025). This variable is measured using five answer choices, ranging from "strongly disagree/dissatisfied" (1) to "strongly agree/satisfied" (5). Respondents' features were used as control variables because this study focused on employees' perceptions.

Data Analysis

The SmartPLS was employed to analyze the survey questionnaire data. This program can support various data types, handle non-normal distributions, perform reliable and meaningful analysis without the need for large amounts of data, and test multiple variables and relationships in reflective and formative research frameworks (Hair et al., 2017). The data analysis procedure

involves two stages: first, the measurement model is conducted using the PLS Algorithm, followed by the structural model analysis, which utilizes Bootstrapping, Blindfolding, PLS Predict, and Importance-Performance Map Analysis (IPMA) (Hair et al., 2017).

Results

Measurement Model

Table 1 suggests that the factor loading in study constructions was more than .70 and the average variance was more than .5 (Henseler et al., 2009). These results meet the norms of convergence validity satisfactorily.

Table 1

0	utcomes	of	Convergent	V	<i>alidity</i>
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Construct/ Indicator	No. of Item	Factor Loadings	Average Variance Explained
COMT	4	.7888	.71
SUPR	4	.8286	.71
EMPT	5	.7388.	.68
JBMT	5	.8086	.64

Table 2 shows that the study constructs had a Heterotrait-Monotrait ratio of correlation values smaller than .90, and the confidential interval values in the parentheses were smaller than 1.0 (Schwab, 2016). This result confirms that they satisfactorily fulfilled the criteria of discriminant analysis. While the composite reliability values for the study constructs were more than .80, confirming that they met high internal consistency (Schwab, 2016).

Table 2

Construct	COMT	SUPR	EMPT	Composite Reliability
COMT				.91
SUPR	.81 (.1337)			.91
EMPT	.64 (.29,.47)	.71 (.32, .55)		.91
JBMT	.80 (.32, .55)	.84 (.38, .56)	.77	.90

Composite Reliability and Discriminant Validity

Note. The value in the parenthesis is the values of confidential interval at 2.5% and 97.5

Table 3 shows that the means for the study constructs are between 4.05 and 4.21, demonstrating that the levels of COMT, SUPR, EMPT and JBMT range from the high (4) to the highest level (5). While the variance inflation factor values for the study constructs are lower than 5.0 (Hair et al., 2017), demonstrating that the sample is not influenced by the collinearity problem.

Table 3

Variance Inflation Factor and Descriptive Statistics

Construct	Maan Standard Deviation Variat	Variance In	ce Inflation Factor	
Construct	Wiean	Mean Standard Deviation	EMPT	JBMT
COMT	4.05	0.16	1.99	1.99
SUPR	4.06	0.62	1.99	1.99
EMPT	4.21	0.61		
JBMT	4.09	0.59		

Structural Model

The overall model fit was assessed using the Standardized Root Mean Square Residual (SRMR). The SRMR value of the model was .07, which is below the recommended threshold of .08, indicating a good fit between the hypothesized model and the observed data (Hair et al., 2017). The results of the structural model test displayed five important outcomes: First, the standardized root mean square residual value was .09, which was lower than .10 (Hair et al., 2017), demonstrating a good fit model. Second, the effect size (f²) is quantified according to the criteria: .02 (small), .15 (medium), and .35 (large) (Cohen, 1998). The effect of COMT on EMPT (f² = .06) was weak. The effect of SUPR on EMPT (f² = .17) was medium. The effect of COMT on JBMT (f² = .12) was weak. The effect of SUPR on JBMT (f² = .16) was medium. Third, the type of mediating effect size in the structural model was a partial mediating effect (Zhao et al., 2010). Fourth, the blindfolding test for exogenous variables (Q²) is measured according to the rules: Q² > 0 (has predictive relevance of a model) and Q² ≤ 0 (does not have predictive relevance of a model) (Hair et al., 2017). The Q² values for EMPT (.28) and JBMT (.39) showed that the study constructs had predictive relevance.

Lastly, the PLS Predict test was used to assess the predictive performance of the model. Table 4 shows that the Q^2 -predict values for all items in the PLS-SEM (.19 to .51) were bigger than zero, demonstrating that the prediction errors were not normally distributed, and the distribution was not highly non-symmetric. Considering this situation, the Root Mean Square Error (RMSE) was used to measure the predictive power of this hypothetical model. All PLS-SEM values (-.02 to -.58) had lower prediction errors than LM RMSE values (.02 to .58), demonstrating that this model had medium predictive power (Shmueli et al., 2019).

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	PLS SEM	LM	LM-PLS	PLS-LM
EMPT4	.58	.57	.00	.00
EMPT9	.66	.66	01	.01
EMPT12	.73	.73	.01	01
EMPT13	.66	.65	.02	.02
EMPT5	.53	.53	01	.01
JBMT4	.44	.43	01	.01
JBMT1	.45	.45	.00	.00
JBMT9	.77	.74	03	.03
JBMT5	.54	.54	01	.01
JBMT6	.76	.75	01	.01

Table 4PLS Predict

Table 5 shows that the overall predictive strength of the model was measured according to the three types of R^2 values: .02 (weak effect), .13 (moderate effect), and .26 (large effect) (Cohen, 1988). The effect of COMT and SUPR on EMPT ($R^2 = .42$), the effect of COMT and SUPR on JBMT ($R^2 = .62$) were large, the effect of EMPT on JBMT ($R^2 = .69$), and effect of COMT, SUPR and EMPT on JBMT ($R^2 = .69$) were large.

The hypothesis testing outcomes displayed seven important findings: Firstly, COMT was positively and significantly correlated to EMPT ($\beta = .26$; t = 4.13). Therefore, H1 is supported. Secondly, SUPR was positively and significantly correlated to EMPT ($\beta = .44$; t = 7.36). Therefore, H2 is supported. Thirdly, COMT was positive and important for JBMT ($\beta = .37$; t = 7.61). Therefore, H3 is supported. Fourthly, SUPR was positively and significantly correlated to JBMT ($\beta = .48$; t = 9.91). Therefore, H4 is supported. Fifthly, EMPT was positively and

significantly correlated to JBMT ($\beta = .69$; t = 12.67). Therefore, H5 is supported. Sixthly, the relationship between COMT and EMPT was positively and significantly correlated to JBMT ($\beta = .57$; t = 10.81). Therefore, H6 is supported. Finally, the relationship between SUPR and EMPT was positively and significantly correlated to JBMT ($\beta = .69$; t = 14.09). Therefore, H7 is supported. These findings confirm that COMT and SUPR directly affect EMPT, COMT and SUPR directly affect JBMT, EMPT directly affects JBMT, and COMT and SUPR can indirectly affect JBMT through EMPT.

Results of Testing Hypotheses for the Direct Effects Model and Mediating Model					
Hypothesis	β	t	\mathbb{R}^2	Decision	
H1: COMT →EMPT	0.26	4.13	0.42	Large Effect	
H2: SUPR \rightarrow EMPT	0.44	7.36			
H3: COMT \rightarrow JBMT	0.37	7.62	0.62	Large Effect	
H4: SUPR \rightarrow JBMT	0.48	9.91			
H5: EMPT \rightarrow JBMT	0.69	12.67	0.69		
H6: COMT \rightarrow EMPT \rightarrow JBSF	0.57	10.81	0.69	Larga Effect	
H7: SUPR \rightarrow EMPT \rightarrow JBMT	0.69	14.09		Large Effect	

Results of Testing Hypotheses for the Direct Effects Model and Mediating Model

Note. Significant at *t value > 1.96 (two tail test)

Lastly, the IPMA test is used to evaluate and visualize the relative performance of constructs in the model. Results show that EMPT (79.60) is the highest performance, followed by SUPR (75.09) and JBMT (75.07). This test identifies that JBMT is a crucial construct that needs to be improved to upgrade the overall performance of the model.

Discussion

Table 5

The results of this study display that the effect of managers' roles in training programs on employees' motivation to accomplish work is mediated by employee engagement. In the context of this study, human resource managers have worked together with professional consultants and internal trainers to plan a series of leadership training programs to enhance the capability of managers to practice people-oriented management principles in handling training programs. Under this management principle, managers have provided communication and support to equip employees with new competencies that are beneficial to achieving their organizations' strategies and goals. Most participants perceived high levels of communication, support, employee engagement, and motivation to accomplish work. This outcome suggests that the competence of managers to properly implement communication and support in administering training programs strongly evokes employee engagement, which may, in turn, drive higher motivation to accomplish work in the examined organizations.

This study provides three essential implications: theoretical contribution, research methodology robustness, and practical contribution. In terms of theoretical contribution, this study presents four important outcomes: First, managers' roles in training programs have been shown to enhance employee engagement and motivation to accomplish work. This supports the essence of Path Goal Theory (House, 1971), Transactional Leadership Theory (Downton, 1973), Transformational Leadership Theory (Avolio & Bass, 2004; Bass, 1985), Organizational Support Theory (Eisenberger et al., 1986), and Leader–Member Exchange Theory (Graen & Uhl-Bien, 1995), which describe that clarifying paths, allocating resources, providing inspiration and facilitation, valuing employees' contributions and well-being, and establishing

quality exchange relationships between managers and members may motivate employees to achieve their organizations' goals. These theories are supported by management support research showing that managers' communication and support predict employee engagement (Kumar et al., 2024; Minani et al., 2025) and motivation to accomplish work (Abrahams et al., 2024; Minani et al., 2025).

Second, employee engagement has been found to predict motivation to accomplish work. This notion is strongly supported by prior workplace studies, which reveal that employees' motivation can be enhanced when they are physically, emotionally, and cognitively engaged with their organizations (Mustaqim et al., 2024; Yandi & Bimaruci Hazrati Havidz, 2022).

Third, employee engagement mediates the relationship between managers' roles in training and motivation. This finding aligns with the Job Demands–Resources Model (Demerouti et al., 2001), which suggests that balancing job demands (e.g., high workloads) and job resources (e.g., managerial support and feedback) foster employee engagement. This result supports workplace well-being literature, which indicates that the impact of managers' communication and support on motivation is indirectly influenced by employee engagement (Arwab et al., 2023; Br Ginting et al., 2025).

Relating to the methodological contribution, the survey data fulfilled the criteria for validity and reliability analysis, which helps enhance the credibility of the findings. For practical contribution, the IPMA results identified motivation to accomplish work as a key managerial issue. To address this, practitioners should consider several strategies: First, improve the structure and delivery of formal and informal training programs to align with employees' roles and development goals, helping them acquire new knowledge, skills, and behaviors. Second, training should be used as a key criterion for job confirmation and promotion to encourage core and non-core skill development and foster innovative behavior.

Third, implement relationship-oriented leadership to enable managers to coach, mentor, and counsel employees before, during, and after training. This can strengthen commitment to organizational and professional goals. Fourth, promote a learning culture that encourages motivation, adaptability, and innovation for long-term success. Finally, prioritize employees with strong competencies, positive personalities, and proven service records for senior roles so they can train junior staff, ensuring adherence to job procedures and performance targets. Adopting these measures may help organizations improve engagement, motivation, and overall performance.

Conclusion

This study tested a framework grounded in management support literature and confirmed that employee engagement mediates the relationship between managers' roles in training programs and motivation to accomplish work. The results align with and extend prior research across Western and Asian contexts. Findings underscore that effective managerial communication and support can foster positive employee outcomes—such as innovation, satisfaction, and commitment—which are vital for achieving organizational goals.

However, the study has several limitations. First, its cross-sectional design captures only participants' perceptions at a single point in time. Second, the study focused on a single public training institute and the purposive sampling limits generalizability. Third, specific indicators within the constructs were not examined in depth.

To enhance future research, several recommendations are proposed: (1) consider participant characteristics (e.g., gender, age, education, position); (2) use longitudinal designs to assess model stability over time; (3) include both public and private training institutes for comparison; (4) examine work environment factors; (5) use larger samples to improve representativeness; (6) explore additional dimensions of engagement (affective, cognitive, behavioral); and (7) include broader indicators of motivation such as continuous improvement and innovation. These directions will help refine the understanding of how training-related managerial practices influence employee motivation.

Declarations Acknowledgements Not applicable.

Disclosure Statement

No potential conflict of interest was reported by the authors.

Ethics Approval

Not applicable.

Funding Acknowledgements

This work was supported by the Graduate School of Business (UKM-GSB) [GSB-2025-015].

Citation to this article

Ismail, A., Arif, A., Mat Deli, M., & Harun, S. N. (2025). Relationship between managers' roles in training programs and motivation to accomplish work: The mediating role of employee engagement. *International Journal of Organizational Leadership*, *14*(2), 378-393. https://doi.org/10.33844/ijol.2025.60511

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