The Influence of Pre-Training Factors on Training Effectiveness Mediated by Motivation to Learn, Motivation to Transfer, and Self-Efficacy – Case Study on Non-Ministerial Government Institutions

Kristianto Saputro* & Muhammad Irfan Syaebani

Department of Management, Faculty of Economics and Business, Universitas Indonesia, Depok, Indonesia 16424

Abstract

While acknowledging the importance of training, the challenge lies in understanding and optimizing its effectiveness, especially in the context of the government institution's ever-changing landscape and the associated budgetary considerations. It examines whether pre-training factors—organizational support, training environment, trainer quality, and training need analysis—influence training effectiveness directly or are mediated by motivation to learn, motivation to transfer, and self-efficacy in non-ministerial government institutions in Indonesia. Data were collected from 202 respondents across 19 institutions using purposive sampling and analyzed with Covariance Based-Structural Equation Modeling (CB-SEM) using Lisrel 8.80. The findings reveal that trainer quality significantly affects motivation to learn, motivation to transfer, and self-efficacy but does not directly impact training effectiveness. Instead, its influence is mediated by motivation to transfer and self-efficacy. This underscores the crucial role of trainers in enhancing training effectiveness by boosting participants' motivation and self-efficacy. The study highlights the need for organizations to invest in high-quality trainers through ongoing professional development, robust evaluation systems, and incentives to improve training outcomes and achieve organizational goals more efficiently.

Keywords: Training effectiveness, pre-training factors, motivation to learn, motivation to transfer, self-efficacy, government institutions.

Received: 24 February 2024 Revised: 23 May 2024 Accepted: 21 June 2024

1. Introduction

Organizations operate in a dynamic environment characterized by rapid technological advances, demographic shifts, and increasing complexity. These changes necessitate a more flexible and efficient workforce to meet emerging challenges ((Sharif, Braimah, & Dogbey, 2023; Kodwani & Prashar, 2021). Consequently, training becomes essential for enhancing innovative attitudes (Tan, van Dun, & Wilderom, 2023), updating skills and knowledge, improving performance, and preparing employees for new job requirements and career development (El-Said, Al Hajri, & Smith, 2020; Gautam & Basnet, 2021).

Improving individual competencies directly contributes to overall organizational performance. Training helps organizations address talent shortages (Wassel & Bouchard, 2020; Cooke, Xiao, & Chen, 2021), meet specific human resource needs (Chang & Busser, 2017), and enhance productivity and performance (Rigolizzo & Zhu, 2020; Kim & Ployhart, 2014). Hence, training activities have gained increasing attention in strategic human resource practices (Chowdhury, Chowdhury, Hossain, & Yesmin, 2016). Furthermore, according to Indonesian labor law (Law No. 13 of 2003), companies are responsible for developing employee competencies through training (Indonesia, 2003).

In the constantly evolving landscape of government institutions, training and development programs are crucial for ensuring competent human resources. Law No. 5 of 2014 on Civil Servants emphasizes the importance of competencies in the profession and management of civil servants (Indonesia, 2014). Managerial and structural competencies, often measured by training participation, are necessary for specific positions, enhancing governance, task execution, and work

E-mail address: kristianto.saputro@ui.ac.id



ISSN: 2722-6247 (online)

^{*} Corresponding author.

ethic (Rostiawati, 2020). Participation in training is also a key indicator in assessing the Professionalism Index of civil servants (Badan Kepegawaian Nasional, 2022).

Despite the recognized importance of training, organizations often grapple with the perceived costs of implementation (Friedman & Ronen, 2015). In the 2023 Training Industry Report, 142,829 U.S. companies spent over \$100 billion on training (Freifeld, 2023). Similarly, the Indonesian government allocated 5 trillion rupiah for the 2023 Pre-Employment Program (Prakerja) aimed at skill and productivity enhancement (Moegiarso, 2022). Bank Indonesia mandates banks to allocate at least 5% of the previous year's human resource budget for education and training (Bank Indonesia, 2012). This highlights the need to evaluate the return on investment (ROI) of training initiatives (Keating, 2022; Mara & Govender, 2017).

Training effectiveness is paramount, determining the ROI of training programs (Keating, 2022; Yang, 2022; Yoo, Lee, Kim, Jang, & Cho, 2022). It is measured not only by the number of participants or completion rates but by its impact on individual performance (Whysall, Owtram, & Brittain, 2019) and, ultimately, organizational performance (Ployhart & Hale, 2014). Despite its importance, many organizations fail to understand how training effectiveness contributes to organizational goals (Lacerenza, Reyes, Marlow, & Joseph, 2017).

Motivation to learn (Kodwani & Kodwani, 2021; Kodwani & Prashar, 2019) and motivation to transfer (Gautam, Gautam, & Basnet, 2023; Akther & Rahman, 2022) are critical predictors of training effectiveness. In the Indonesian public sector, incentives, accommodations, and allowances are commonly used to boost motivation (Dwiyanto, 2018; Efendi, et al., 2022). For instance, regional officials prefer training in major cities for the additional travel allowances. The high costs associated with such training underscore the importance of organizational support in motivating participation.

Self-efficacy also significantly influences training effectiveness. Trainees with higher self-efficacy demonstrate greater training effectiveness (Vignoli, Mariani, Guglielmi, & Violante, 2018). Self-efficacy, along with motivation and authentic leadership, positively affects training effectiveness both directly and as a mediator of pre-training factors (Akther & Rahman, 2022).

Pre-training factors such as organizational support, training environment, trainer quality, and training needs analysis are crucial. Organizational support significantly impacts the effective application of training by enhancing practical skills and motivating employees to transfer newly acquired knowledge (Zumrah & Boyle, 2015). It influences training effectiveness both directly and through mediators like motivation to learn and motivation to transfer (El-Said, Al Hajri, & Smith, 2020). However, its mediation through motivation is debated, as some studies do not support this link (Sharif, Braimah, & Dogbey, 2023).

Creating a supportive training environment is crucial for training effectiveness, influencing participants' acceptance and learning transfer (Beinicke & Kyndt, 2020). Inadequate training conditions can reduce attention and motivation (Getachew & Elantheraiyan, 2023). Trainer quality is also pivotal in training effectiveness. Effective trainers positively impact trainees' perceptions and training outcomes (Akther & Rahman, 2022; Sahni, 2020). Trainers who motivate and engage participants enhance the learning experience and facilitate knowledge transfer (El Hajjar & Alkhanaizi, 2018).

Training needs analysis is crucial for enhancing training effectiveness (Kodwani & Prashar, 2021; 2019). Despite this, many training programs are conducted without it, treating training as a mere organizational requirement (Anita, Lestari, & Lituhayu, 2013). While mandated 20 hours of annual training aims to reduce competency gaps (Kementerian Pendayagunaan Aparatur Negara dan Reformasi Birokrasi, 2017), often these programs fail to meet actual needs, focusing instead on promotion criteria rather than competency improvement (Nugroho, 2023).

Based on the background described earlier, the research questions can be formulated as follows:

- a) Do pre-training factors such as organizational support, training environment, trainer quality, and training needs analysis affect training effectiveness in non-ministerial government institutions?
- b) Do motivation to learn, motivation to transfer, and self-efficacy mediate the pre-training factors and training effectiveness in non-ministerial government institutions?

2. Methods

The research model and hypotheses were developed based on a synthesis of previous studies. Akhter and Rahman (2022) explored the role of trainer quality as a supporting factor influencing self-efficacy and motivation to transfer, ultimately contributing to training effectiveness. Their study did not incorporate the training environment variable due

to differing operational definitions and lack of significant impact on training effectiveness. The current model integrates concepts from Yaqoot, Wan Mohd Noor, and Mohd Isa (2021), who defined the training environment similarly and demonstrated its significant impact on training effectiveness. Kodwani and Kodwani (2021) confirmed that trainer quality significantly affects pre-training motivation (motivation to learn) and training effectiveness.

Sharif, Braimah, and Dogbey (2023) showed that organizational support impacts training effectiveness, although it does not influence motivation to learn or motivation to transfer. Their research also highlighted the influence of trainers on motivation to learn, motivation to transfer, and training effectiveness. El-Said, Al Hajri, and Smith (2020) indicated that organizational support affects training effectiveness through motivation to learn and motivation to transfer, and showed self-efficacy impacts training effectiveness both directly and mediated by motivation to learn. Additionally, this study references Kodwani and Prashar (2019), which explored the relationship between training needs analysis, motivation to learn, and training effectiveness, providing evidence for the interconnectedness of four of the eight variables examined in this research.

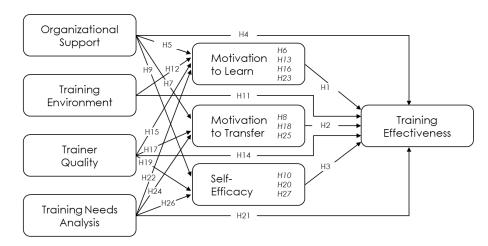


Figure 1. Research Model and Hypotheses

The followings are the hypotheses to be tested further:

- H1: Motivation to learn positively affects training effectiveness.
- H2: Motivation to transfer positively affects training effectiveness.
- H3: Self-efficacy positively affects training effectiveness.
- H4: Organizational support positively affects training effectiveness.
- H5: Organizational support positively affects motivation to learn.
- H6: Organizational support positively affects training effectiveness through motivation to learn.
- H7: Organizational support positively affects motivation to transfer.
- H8: Organizational support positively affects training effectiveness through motivation to transfer.
- H9: Organizational support positively affects self-efficacy.
- H10: Organizational support positively affects training effectiveness through self-efficacy.
- H11: Training environment positively affects training effectiveness.
- H12: Training environment positively affects motivation to learn.
- H13: Training environment positively affects training effectiveness through motivation to learn.
- H14: Trainer quality positively affects training effectiveness.
- H15: Trainer quality positively affects motivation to learn.
- H16: Trainer quality positively affects training effectiveness through motivation to learn.
- H17: Trainer quality positively affects motivation to transfer.
- H18: Trainer quality positively affects training effectiveness through motivation to transfer.
- H19: Trainer quality positively affects self-efficacy.
- H20: Trainer quality positively affects training effectiveness through self-efficacy.
- H21: Training needs analysis positively affects training effectiveness.
- H22: Training needs analysis positively affects motivation to learn.
- H23: Training needs analysis positively affects training effectiveness through motivation to learn.
- H24: Training needs analysis positively affects motivation to transfer.

H25: Training needs analysis positively affects training effectiveness through motivation to transfer.

H26: Training needs analysis positively affects self-efficacy.

H27: Training needs analysis positively affects training effectiveness through self-efficacy.

This study utilized a cross-sectional research design to determine the relationships between variables and can also explain the magnitude of alternative explanations for these relationships (Spector, 2019). The population in any research refers to the entire group of interest. It includes individuals who understand and respond to the survey, allowing for inferences to be drawn (Hanlon & Larget, 2011). In this study, the population consisted of employees from all non-ministerial government institutions across Indonesia who have participated in training programs provided by their respective institutions. The study focused on twenty-two such institutions.

Table 1. Validity and Reliability Analysis

 Variable	Item	SLF	t-value	Error	Result	CR	VE	Result
Training Effectiveness	EP1	0.84	14.29	0.3	Valid	0.871	0.540	Reliable
	EP2	0.85	14.67	0.28	Valid			
	EP3	0.67	10.39	0.56	Valid			
	EP4	0.89	15.81	0.21	Valid			
	EP5	0.56	8.33	0.69	Valid			
	EP6	0.52	7.71	0.73	Valid			
Motivation to Learn	MB1	0.78	12.77	0.39	Valid		0.648	Reliable
	MB2	0.77	12.46	0.41	Valid	0.880		
	MB3	0.83	14.03	0.31	Valid			
	MB4	0.84	14.15	0.30	Valid			
	MT1	0.73	11.54	0.47	Valid		0.587	Reliable
Motivation to	MT2	0.75	12.07	0.44	Valid	0.810		
Transfer	MT3	0.82	13.61	0.33	Valid			
	ED1	0.78	13.00	0.38	Valid		0.653	Reliable
	ED2	0.72	11.49	0.48	Valid			
Self-Efficacy	ED3	0.89	15.79	0.21	Valid	0.903		
Sen Emeacy	ED4	0.83	14.03	0.32	Valid	. 0.703		
	ED5	0.81	13.59	0.34	Valid	-		
	DO1	0.66	10.07	0.56	Valid	- _ 0.876 -	0.589	Reliable
Organizational Support	DO2	0.75	11.82	0.44	Valid			
	DO3	0.78	12.50	0.39	Valid			
	DO4	0.65	9.65	0.57	Valid			
	DO5	0.85	14.26	0.27	Valid			
	LP1	0.81	12.72	0.34	Valid	- - 0.924 -	0.752	Reliable
Training	LP2	0.88	12.42	0.22	Valid			
Environment	LP3	0.90	14.04	0.20	Valid			
	LP4	0.88	14.16	0.23	Valid			
	KP1	0.82	14.14	0.32	Valid	- - - 0.919 -	0.655	Reliable
	KP2	0.82	13.98	0.33	Valid			
T O. 11:	KP3	0.78	13.01	0.39	Valid			
Trainer Quality	KP4	0.84	14.47	0.3	Valid			
	KP5	0.81	13.71	0.35	Valid			
	KP6	0.79	13.22	0.38	Valid			
Training Needs Analysis	AKP1	0.86	15.29	0.25	Valid	0.944 0	0.739	Reliable
	AKP2	0.84	14.68	0.29	Valid			
	AKP3	0.85	14.90	0.28	Valid			
	AKP4	0.86	15.11	0.26	Valid			
	AKP5	0.87	15.45	0.24	Valid			
	AKP6	0.87	15.49	0.24	Valid			
	AKP7	0.86	15.15	0.26	Valid			

Source: Researcher (2024)

The minimum sample size required is five times the number of research indicators (Hair, Black, Babin, & Anderson, 2009). With forty indicators in this study, the sample size needed is minimum 200. Due to time and cost constraints, purposive sampling was employed. The questionnaire was distributed to the target population via an online survey, resulting in 202 responses from 19 institutions, which were then used for empirical analysis.

To collect data on various training variables, the researcher used a questionnaire consisting of forty survey items using a five-point Likert scale (1 means strongly disagree and 5 means strongly agree). The items included: six for training effectiveness (Xiao, 1996), four for motivation to learn (Yi & Davis, 2003), three for motivation to transfer (Holton, 2005), five for self-efficacy (Guthrie & Schwoerer, 1994), five for organizational support (Tracey & Tews, 2005), four for training environment (Alsalamah & Callinan, 2021), six for trainer quality (Leach, 1996), and seven for training needs analysis (van Eerde, Tang, & Talbot, 2008).

The researcher conducted validity and reliability tests using LISREL 8.80. Validity was assessed by examining the t-value and standardized loading factor (SLF) for each indicator. Indicators were considered valid if they had an SLF \geq 0.50 and a t-value \geq 1.96. Reliability was evaluated using Composite Reliability (CR) and Variance Extracted (VE) values, with a threshold of CR \geq 0.70 and VE \geq 0.50. The study analyzed eight variables with a total of 40 indicators. Results showed all indicators were valid and reliable, meeting the required thresholds for t-value, SLF, CR, and VE, as shown in Table 1.

3. Result and Discussions

The study surveyed 202 respondents characterized by age, gender, education, work tenure, position, and employing institution. Most respondents were in their productive years, with 21.29% aged 26-30 and 23.27% aged 31-35. There was a slight female majority (52.97%), and most had higher education, with 49.01% holding a bachelor's degree and 32.18% a master's degree. The predominant work tenure was 5-15 years, indicating career stability and potential for further development. Functional positions were the majority (73.76%), while senior leadership roles were minimal (0.99%). The distribution of respondents across institutions was uneven, with the highest representation from the *Badan Pusat Statistik*, or Central Statistics Agency (11.88%). This demographic and professional background provides insights into the training effectiveness among Indonesian civil servants.

Table 2. Structural Model Fit Analysis

GOF Measures	Value	Note	
Absolute Fit Measures			
Chi-Square	1397.75 (P = 0.0)	Poor Fit	
Goodness-of-Fit Index (GFI)	0.74	Poor Fit	
Standardized Root Mean Square Residual (SRMR)	0.067	Poor Fit	
Root Mean Square Error of Approximation (RMSEA)	0.069	Good Fit	
Expected Cross-Validation Index (ECVI)	8.02		
ECVI for Saturated Model	8.16	Good Fit	
ECVI for Independence Model	179.30		
Incremental Fit Measures			
Non-Normed Fit Index (NNFI)	0.98	Good Fit	
Normed Fit Index (NFI)	0.96	Good Fit	
Adjusted Goodness of Fit Index (AGFI)	0.70	Poor Fit	
Relative Fit Index (RFI)	0.96	Good Fit	
Incremental Fit Index (IFI)	0.98	Good Fit	
Comparative Fit Index (CFI)	0.98	Good Fit	
Parsimonious Fit Measures			
Akaike Information Criterion (AIC)	1611.75		
Saturated AIC	1640.00	Good Fit	
Independence AIC	36040.22		
Consistent Akaike Information Criterion (CAIC)	2072.74		
Saturated CAIC	5172.78	Good Fit	
Independence CAIC	36212.55		
Other GOFI			
Critical "N"	115.07	Poor Fit	

Source: Researcher (2024)

Before conducting test of hypotheses, the overall model fit was assessed using various goodness-of-fit (GOF) indices from LISREL 8.80. The results were divided into several sections, as shown in Table 2. In the absolute fit measures, RMSEA indicated a good fit with a value of 0.067, and ECVI was close to the saturated model, suggesting acceptable model fit. However, GFI and SRMR values, at 0.74 and 0.067 respectively, indicated a poor fit. In the incremental fit measures, five indices showed good fit: NNFI (0.98), NFI (0.96), RFI (0.96), IFI (0.98), and CFI (0.98). These high values suggest that the model fits well in comparison to a null model. However, AGFI had a value of 0.70, which indicates a poor fit.

In the parsimonious fit measures, both AIC and CAIC indices were close to the values for the saturated model, indicating a good fit. Lastly, in other GOFI indices, the Critical N value was 121.73, which did not meet the criterion of being greater than or equal to 200, indicating a poor fit. Despite some indices showing poor fit, nine GOF indices indicated a good fit overall. Therefore, it can be concluded that the measurement model in this study is generally satisfactory.

Next, the causal relationship analysis aimed to determine the associations between variables in the study, or in other words, the test of hypotheses. With a confidence level of 95% or an alpha value of 0.05, the critical value from the t-distribution table was 1.645. Thus, a relationship between variables was considered positive if the t-value \geq 1.645 and negative if the t-value \leq -1.645. Table 3 displayed the t-values and structural associations between latent variables. Out of the structural relationships examined, five were found to be significant, while twelve were deemed non-significant. Those are motivation to transfer to training effectiveness (H2), self-efficacy to training effectiveness (H3), trainer quality to motivation to learn (H15), trainer quality to motivation to transfer (H17), trainer quality to self efficacy (H19).

Hypotheses Path t-values **Decision** H1 Motivation to learn → Training effectiveness -0.70 Not Significant H2 Motivation to transfer → Training effectiveness 5.55 Significant Self-efficacy → Training effectiveness Significant H3 2.60 Organizational support → Training effectiveness H4 0.25 Not Significant Organizational support → Motivation to learn H5 -1.39 Not Significant Organizational support → Motivation to transfer H7 -0.47 Not Significant Organizational support → Self-efficacy Not Significant H9 -1.40 Training environment → Training effectiveness Not Significant H11 0.39 Training environment → Motivation to learn Not Significant H12 -1.07Trainer quality → Training effectiveness Not Significant H14 -0.91Trainer quality → Motivation to learn H15 5.60 Significant H17 Trainer quality → Motivation to transfer 7.21 Significant H19 Trainer quality → Self-efficacy 8.64 Significant Training needs analysis → Training effectiveness 0.80 Not Significant H21 Training needs analysis → Motivation to learn Not Significant H22 -0.63 H24 Training needs analysis → Motivation to transfer 0.10 Not Significant H26 Training needs analysis → Self-efficacy -0.68 Not Significant

Table 1. T-Values for Direct Effects

Source: Researcher (2024)

The result of this study aligns with Kodwani & Kodwani's (2021) study, where trainer reputation, perceived from trainer quality, did not directly impact training effectiveness. Moreover, Laberge, MacEachen, & Calvet (2014) and Chatzoglou, Chatzoudes, Vraimaki, & Diamantidis (2013) also found no significant impact of trainers on training effectiveness. Further data analysis reveals that trainer quality significantly influences all three mediating variables: learning motivation (5.60), transfer motivation (7.21), and self-efficacy (8.64). These results support previous studies indicating the trainer's pivotal role in enhancing learning motivation (El Hajjar & Alkhanaizi, 2018; Diamantidis & Chatzoglou, 2012), transfer motivation (Akther & Rahman, 2022), and self-efficacy (Getachew & Elantheraiyan, 2023; Chukwu, 2016). The study underscores the importance of trainer quality in motivating participants to learn and transfer, as well as enhancing their self-efficacy, particularly in the context of civil servants.

The research findings also align with previous studies, indicating that organizational support and motivation to learn do not always directly impact training effectiveness. In Oman, a study found that employee motivation did not directly influence training effectiveness (El-Said, Al Hajri, & Smith, 2020). In Afghanistan, a research discovered that despite high learning motivation among civil servants, training effectiveness was limited by practical relevance and content application (Ghafoori, Marat, & Rezaie, 2019). Additionally, organizational spending on training support, such as transportation and daily allowances (Kementerian Keuangan Indonesia, 2023; Bank Indonesia, 2012; Efendi, et al.,

2022), may not significantly influence training effectiveness. Moreover, while organizational support may affect training transfer, it may not always be effective due to its rigid nature and lack of assistance (Gautam, Gautam, & Basnet, 2023; Sharif, Braimah, & Dogbey, 2023). These findings suggest a need for organizations to reassess their training strategies and allocate resources more effectively.

Table 4. Z-Score for Indirect Effects (Mediation)

Hypotheses	Path	a	b	Sa	Sb	Sobel Test (Z- Score)	Decision
Н6	Organizational support → Motivation to learn → Training effectiveness	-0.19	-0.07	0.13	0.098	0.641	Not Significant
Н8	Organizational support → Motivation to transfer → Training effectiveness	-0.06	0.81	0.12	0.15	-0.497	Not Significant
H10	Organizational support → Self-efficacy → Training effectiveness	-0.16	0.29	0.12	0.11	-1.189	Not Significant
H13	Training environment → Motivation to learn → Training effectiveness	-0.18	-0.07	0.17	0.098	0.592	Not Significant
H16	Trainer quality → Motivation to learn → Training effectiveness	1.12	-0.07	0.20	0.098	-0.708	Not Significant
H18	Trainer quality → Motivation to transfer → Training effectiveness	0.85	0.81	0.12	0.15	4.294	Significant
H20	Trainer quality → Self- efficacy → Training effectiveness	1.00	0.29	0.12	0.11	2.513	Significant
H23	Training needs analysis → Motivation to learn → Training effectiveness	-0.10	-0.07	0.15	0.098	0.487	Not Significant
H25	Training needs analysis → Motivation to transfer → Training effectiveness	0.01	0.81	0.15	0.15	0.066	Not Significant
H27	Training needs analysis → Self-efficacy → Training effectiveness	-0.09	0.29	0.14	0.11	-0.624	Not Significant

Source: Researcher (2024)

In this study, the Sobel Test was utilized to identify the significance level of variables acting as mediators with a confidence level of 95% or an alpha value of 0.05. A mediating relationship between variables was considered significant if the Z-value ≥ 1.645 or ≤ -1.645 . The table below displays the Z-values and the mediating effects within the research. Z-values for each mediating relationship in the path diagram can be seen in Table 4. The results indicate two significant mediating relationships and eight non-significant ones. These include motivation to transfer (H18) and self-efficacy (H20), both mediating trainer quality and training effectiveness.

The result of this study aligns with Kodwani & Kodwani's (2021) study, where trainer reputation, perceived from trainer quality, did not directly impact training effectiveness. Moreover, Laberge, MacEachen, & Calvet (2014) and Chatzoglou, Chatzoudes, Vraimaki, & Diamantidis (2013) also found no significant impact of trainers on training effectiveness. Further data analysis reveals that trainer quality significantly influences all three mediating variables: learning motivation (5.60), transfer motivation (7.21), and self-efficacy (8.64). These results support previous studies indicating the trainer's pivotal role in enhancing learning motivation (El Hajjar & Alkhanaizi, 2018; Diamantidis & Chatzoglou, 2012), transfer motivation (Akther & Rahman, 2022), and self-efficacy (Getachew & Elantheraiyan, 2023; Chukwu, 2016). The study underscores the importance of trainer quality in motivating participants to learn and transfer, as well as enhancing their self-efficacy, particularly in the context of civil servants.

Trainer quality does not influence training effectiveness through learning motivation (z-score = -0.708), contradicting Kodwani & Kodwani's (2021) findings. However, trainer quality significantly affects training effectiveness through transfer motivation (z-score = 4.294) and self-efficacy (z-score = 2.513). Hence, H18 and H20 in this study are accepted. Transfer motivation and self-efficacy fully mediate between trainer quality and training effectiveness. The study suggests comprehensive evaluation and improvement approaches to training programs, emphasizing the importance of regular, thorough evaluations not only on training outcomes but also on trainer quality (Akther & Rahman, 2022). While trainer quality may not directly impact learning motivation, its significant influence on transfer motivation and self-efficacy necessitates a holistic approach to training program evaluation and enhancement.

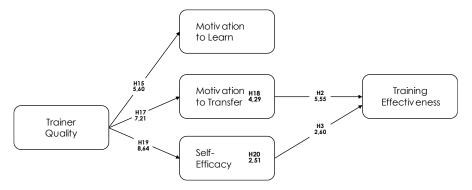


Figure 2. Final Model with Accepted Hyphotheses

4. Conclusions

This study investigates the pre-training factors' influence on training effectiveness, both directly and mediated by learning motivation, transfer motivation, and self-efficacy. The pre-training factors examined include organizational support, training environment, trainer quality, and training needs analysis, focusing on Indonesian civil servants within non-ministerial government institutions. Data collected from 202 respondents across 19 institutions nationwide were analyzed using Lisrel 8.80 for comprehensive analysis. The findings reveal that high-quality trainers significantly influence participants' learning motivation, transfer motivation, and self-efficacy. They create conducive learning environments, deliver engaging and relevant training materials, and employ effective teaching methods, thus enhancing participants' learning motivation. Additionally, competent trainers facilitate transfer motivation by assisting participants in applying acquired knowledge and skills to their work and boosting self-efficacy by building their confidence in learning and achieving training goals.

Despite the absence of a direct impact, the study highlights the crucial role of high-quality trainers in enhancing training effectiveness through motivation to transfer and self-efficacy mediation. While learning motivation may not be directly influenced, trainer quality significantly drives motivation to transfer and self-efficacy, which ultimately positively impacts training effectiveness. Additionally, organizational support, training environment, and training needs analysis do neither directly nor indirectly affect training effectiveness. While crucial, these factors primarily serve as background elements facilitating training but do not directly interact with participants in the learning process. Organizational support can provide training-friendly elements but may also be misused for other purposes. Similarly, a conducive training environment and thorough needs analysis cannot influence training effectiveness if not properly prepared and implemented.

This study underscores the pivotal role of trainers in shaping training effectiveness, portraying them as facilitators rather than mere instructors. It emphasizes how training effectiveness hinges on each participants' motivation to transfer and self-efficacy. Hence, trainers who can inspire and persuade participants are deemed indispensable for the success of training initiatives. By prioritizing the development of trainers, particularly internal ones, organizations can significantly enhance their return on investment (ROI) from training programs while aligning them more effectively with organizational objectives. Achieving this entails a multifaceted approach, including ongoing training and development for trainers, the implementation of robust performance evaluation systems, recognition and incentives for outstanding trainers, and fostering a collaborative community where best practices are shared among trainers.

Redirecting resources from ancillary training support to more impactful areas emerges as a strategic recommendation. This involves shifting the focus from expenditures on accommodations, per diems, and training incentives to investments in developing tailored training content, its practical application within the organizational context, and

regular evaluations of training effectiveness. While such a shift may entail initial costs, it promises greater long-term benefits compared to traditional support mechanisms. Moreover, organizations are advised to concentrate efforts on strategies that enhance training effectiveness holistically, stressing the importance of peer support and cultivating a conducive work environment. This may involve fostering a culture of collaboration, promoting peer mentoring and learning, and providing supervisors with training on facilitating the transfer of training skills to the workplace.

Furthermore, organizations should consider reevaluating their approach to training environments, shifting away from luxurious settings to more practical ones conducive to learning. Embracing webinar-based training emerges as a viable and efficient alternative, proven to sustain employee engagement and learning outcomes. By reallocating training budgets from extravagant offsite venues to improving workplace facilities and support systems, organizations can bolster training transfer and overall effectiveness while optimizing resource utilization. Lastly, organizational policies must ensure objectivity and integrity in needs analysis processes to ensure that training programs are tailored to real organizational needs and yield tangible impacts on individual and organizational performance. This comprehensive approach ensures that investments in training yield optimal returns for both the organization and its workforce.

This study faces several limitations that may impact its findings and effectiveness. Time and budget constraints made it challenging to evaluate all employees in non-ministerial government institutions across Indonesia. Purposive sampling resulted in uneven respondent representation from each institution, limiting the generalizability of findings. The study's quantitative approach using closed-ended questionnaires restricted in-depth insights into the researched phenomenon. Being cross-sectional, it couldn't establish causality among variables over time. Future research should conduct longitudinal studies to address this. Additionally, no similar studies were found in the context of Indonesian civil servants. Lack of classification regarding respondents' positions, training types, and numbers attended hindered comprehensive analysis, suggesting avenues for improvement.

Future research should delve deeper into the complexity of independent and mediating variables and identify additional factors affecting training effectiveness. Exploring other training factors, organizational contexts like company culture and leadership, and employing multi-level and multi-method approaches would enrich understanding. Expanding sample scope to encompass all government agencies, detailed descriptive analyses of respondent characteristics, and longitudinal studies are recommended for a broader representation and enhanced reliability. Moreover, continuous monitoring of employee training involvement could evaluate long-term impacts and identify strengthening or weakening factors. Ultimately, holistic approaches can significantly contribute to training theory and practice enrichment in Indonesia.

Acknowledgements

Extending heartfelt gratitude to all individuals and organizations who contributed to the completion of this study. First and foremost, acknowledgment goes to the participants, whose valuable insights and cooperation were essential for this research. Sincere appreciation is also expressed to the non-ministerial government institutions and their employees for their support during the data collection phase. Additionally, gratitude is extended to Dr. Irfan Syaebani as the supervisor and colleagues for their invaluable guidance and feedback. Finally, thanks are offered to the academic community for their contributions to the field, which have enriched this study.

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