

Unlocking Potential in Crisis: Training to Develop Human Capital, Competencies and Creativity Among Indonesian Interns

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Abstract. This empirical research examines how training effectiveness enhanced human resource quality, hard skills, and creativity for 121 Indonesian alumni of internship programs in Japan during the COVID-19 pandemic. Statistical analysis utilizing PLS-SEM model assessment confirms positive, significant relationships between effectiveness of training and elevations in competencies as well as adaptability. Uniquely for developing economic contexts, results spotlight the inextricable role of continual capability building even amidst crises. As organizations globally restructure operations in disruption aftermath, investment priorities centering holistic human capital development prove integral for engendering resilience.

Keywords: training effectiveness, hard-skill competence, human resource quality, employee creativity, Indonesia

1. Introduction

The current COVID-19 pandemic has led many companies to limit their production activities, resulting in a decline in company performance and a significant increase in job terminations. Companies with employees possessing high-quality human resources (HR), hard-skill competencies, and creativity nurtured through specific training programs have proven more resilient in this pandemic.

The quality of human resources, hard-skill competencies, and creativity are the foundational steps for generating new ideas and innovations. Employees with these attributes can tackle various challenges through diverse approaches, demonstrating optimal performance marked by high productivity and innovation. The Covid-19 pandemic has forced employees to enhance their creativity and productivity.

High-quality human resources, hard-skill competencies, and employee creativity are in high demand during this pandemic. These attributes do not develop spontaneously but require a structured process. Effective training programs catalyze the development of high-quality human resources and employee competencies. Effective training can enhance the quality of human resources, employee competencies, and job creativity, especially during a pandemic. This research addresses gaps in the existing literature concerning the relationship between training effectiveness and the enhancement of human resource quality, hard-skill competencies, and employee creativity. Several studies have highlighted the significance of creativity in driving innovation and growth within organizational contexts. For instance, (Tamsan & Yusriadi, 2022a) investigated the development of creativity through group-based training and found that brief training sessions could enhance employees' creative performance, particularly in generating innovative ideas. Additionally, (Tamsah et al., 2020) emphasized the importance of creativity training in enhancing divergent and convergent creative thinking abilities. Meanwhile, (Umar et al., 2019) underscored the role of training in creating an environment conducive to organizational creativity and innovation.

(Nawaz et al., 2014) revealed that human resource practices involving training can mediate the relationship between human resource practices and employee creativity. Similarly, (Cahaya et al., 2022a; Mustafa et al., 2020) emphasized that training methods and employee competencies can influence employee performance through individual creativity enhancement. (Yusriadi & Hamim, 2022) training is critical in maintaining operational integrity and process safety within an organization. Finally, (Sahni & Mohamed, 2019) discovered that factors such as employee satisfaction, perceived benefits from training, and trainer performance impact training effectiveness and the transfer of training outcomes within an organization. Although these findings illustrate the relationship between training and various aspects of creativity and human resource enhancement, further research is needed better to understand the interconnections between training effectiveness and these elements.

When managed effectively, the Human Capital theory posits that intangible assets within individuals can enhance individual and organizational performance (Shin et al., 2022; Zacharias, Rahawarin, et al., 2021). Human capital encompasses individual capabilities, motivation, organizational climate, workgroup effectiveness, and leadership (Tamsah et al., 2022). This theory has implications for the development of educational systems (Mustika et al., 2023; Tamsah et al., 2021) and emphasizes the importance of individual skills and characteristics as valuable assets for companies (Awaluddin A et al., 2019). This research seeks to unveil how effective training can improve HR quality, hard-skill competencies, and employee creativity during challenging times, such as the COVID-19 pandemic.

This study aims to evaluate how training programs during the COVID-19 pandemic affect the quality of performance and competencies of HR professionals. This includes assessing changes in HR knowledge, attitudes, and behaviors because of training. Another focus is to determine how effective training is in improving employees' technical and job-specific skills. This includes measuring improvements in employees' ability to perform tasks that require technical or specialized expertise following training. The research also wants to explore how training during the pandemic can stimulate and enhance employee creativity. This includes assessing changes in innovative thinking, problem solving and the ability to generate new ideas in response to training. The unique contribution of this

research also lies in its temporal context, which is during the COVID-19 pandemic, a globally challenging period. This research will provide insights into how pandemic conditions affect training effectiveness and acceptability, as well as how training can be adapted to address the unique challenges in this context. Overall, this research aims to provide a deeper understanding of how training can be used as an effective tool to improve HR quality, hard-skill competencies, and employee creativity, particularly in the face of the unique challenges presented by the COVID-19 pandemic.

2. Literature review and Hypothesis Development

Training

The effectiveness of training is crucial in rapidly enhancing the quality of human resources. Efforts at both the individual and organizational levels are essential to cultivate the quality of human resources, with training being a prominent method. However, the mere conduct of training is not a guarantee of success. For training to be considered adequate, it must lead to tangible improvements in employee skills and behavior. As observed in various studies, these measurable enhancements are necessary for training risks to result in stagnant creativity and competency (Sahabuddin et al., 2019; Sukimi et al., 2019; Yusriadi et al., 2020). The accurate measure of a successful training program lies in its ability to achieve the anticipated outcomes and align with the predefined training goals. Only through such practical training can employees reach optimal performance levels, contributing significantly to organizational success and development (Zacharias, Yusriadi, et al., 2021a). This approach underscores the importance of outcome-based training methodologies that focus on delivering content and the practical application and results of the training efforts.

The impact of training effectiveness extends far beyond essential skill enhancement; it is a critical driver in advancing a myriad of competencies in the modern workforce. Specifically, it plays a pivotal role in refining HR management skills, bolstering marketing acumen, and elevating the quality and quantity of production. Furthermore, it significantly enhances overall capabilities, including critical financial management skills. In essence, practical training doesn't just upgrade an individual's existing skills; it broadens their skill set, preparing them for a diverse range of challenges in the professional sphere (Yusriadi et al., 2022a). Moreover, an individual's journey towards proficiency is heavily influenced by their consistent effort and active participation in well-structured training programs. These programs should be designed to impart knowledge and encourage practical application and continuous learning, fostering a culture of perpetual skill development (Misnawati et al., 2023; Romadhoni et al., 2021). This holistic approach to training effectiveness ensures that individuals are equipped with the necessary skills and adaptable to evolving industry trends and practices.

Practical training is a linchpin in enhancing human resource quality, which is fundamental in securing both employee and organizational triumph (Tamsan & Yusriadi, 2022a). Its effectiveness not only amplifies employee competence through increased knowledge and skills but also critically enriches soft-skill capabilities and nurtures creativity. This aspect is particularly significant in fields that demand high levels of creative thinking, such as in teaching professions, where innovative approaches are essential (Umar et al., 2019; Yusriadi & Cahaya, 2022a). The impact of well-executed training extends to the practical application of acquired skills in the workplace, fostering an environment where employees can directly apply their new competencies. This direct application is a powerful motivator, enhancing overall employee performance and contributing to the quality of human resources within the organization. Additionally, practical training is instrumental in sparking employee creativity, encouraging them to think outside the box and approach problems with innovative solutions (Misnawati et al., 2022). By focusing on both the technical and creative aspects of professional development, practical training ensures a well-rounded enhancement of skills, preparing employees for their current roles and future challenges and opportunities in an ever-evolving workplace.

H1: Training effectiveness has a significant positive impact on HR quality.

Human Capital

The influence of human capital on venture performance has been debated by various academic fields (Awaluddin A et al., 2019; Rijal et al., 2019; Sadapotto et al., 2021). The resource-based perspective suggests that human capital serves as a distinct advantage that enables entrepreneurship by minimizing risk and maximizing returns on investments. Additionally, it allows companies to effectively manage this limited resource under their control (Sahabuddin et al., 2019; Zacharias et al., 2021). Recent research has additionally discovered empirical proof indicating that human capital can have a substantial impact on the performance of new ventures. Discovered a positive correlation between the level of human capital possessed by entrepreneurs and the survival and growth of new ventures (Tamsah et al., 2020; Umar et al., 2019).

The concept of human capital orientation focuses on using intellectual capital, skills, abilities, and personal experiences to enhance operational potential and achieve intangible assets (Ahdan et al., 2019; Sahid et al., 2020). Thus, human capital can be regarded as a valuable resource possessed by an individual that remains with them even after they depart from the organization (Ms et al., 2021). The organization should allocate resources to develop its human capital by hiring workers who can effectively carry out value-creating activities. Additionally, this can enable the organization to leverage the collective knowledge, skills, abilities, experience, and expertise of its members, resulting in increased work efficiency and a competitive advantage over rivals amidst changing circumstances (Mustafa et al., 2020; Prakoso et al., 2021; Sahid et al., 2019; Umar, Madani, et al., 2019; Yusriadi et al., 2020).

Human capital refers to the range of skills, knowledge, and abilities that an individual possesses, either through natural talent or acquired through education and training. Increasing the development of human capital will also enhance either tacit knowledge or explicit knowledge. The ability of skilled persons to produce additional value and competitive advantage is typically the key factor in the survival and success of businesses in dynamic environments (Darno et al., 2021; Farida et al., 2019; Gani et al., 2019; Sawitri et al., 2019; Sukimi et al., 2019; Usman et al., 2020; Yusriadi & Hamim, 2022).

H2: Training effectiveness has a significant positive impact on hard-skill competence.

Competencies and Creativity

Employee creativity development refers to the process of fostering innovative and novel ideas in a manner that enhances the efficiency and effectiveness of an organization's activities. Amidst the conditions of swift transformation. Employees that possess creative abilities are frequently valuable assets for firms seeking to enhance operational procedures and gain a competitive edge. Access to efficient operations, skills, knowledge, and organizational abilities are derived from the potential of personnel (Jusuf et al., 2021; Malik et al., 2021; Rasyid et al., 2021; Tamsah et al., 2021, 2022; Yusriadi et al., 2022; Zacharias, Yusriadi, et al., 2021).

Thus, to incentivize innovative people that generate novel ideas, thereby leading to advantageous outcomes for the firm. The pursuit of originality and the sharing of knowledge through collaboration result in the creation of creative products and services. Employee development should prioritize fostering creativity and adaptability to change, thereby encouraging people to think creatively. Granting staff autonomy will leverage their utmost capabilities to enhance the organization's profitability (Fauzi et al., 2021; La Kamalussin et al., 2021; Nongkeng et al., 2021; Tamsah, Nongkeng, et al., 2021; Umar et al., 2021). Encouraging employees' creativity is a beneficial motivator, both in terms of economic benefits and societal cohesion. This includes fostering favorable attitudes towards behavior formation, which is the process of generating novel ideas that enhance the organization's capacity for innovation and ultimately lead to a lasting competitive advantage.

Creativity serves as the initial stage of innovation, involving the generation of novel ideas that may be applied to many operational aspects. The creative contributions of employees play a crucial role in enhancing the effectiveness of the organization and ensuring its long-term survival through continuous innovation (Ilyas et al., 2021; Kasim et al., 2022; Mustika et al., 2023; Tamsah, Ferial, et al., 2021;

Wibowo et al., 2021). Enhancing employee development is crucial for improving the efficiency and effectiveness of the firm, which includes fostering creativity (Farida et al., 2021; Mattalatta et al., 2021; Romadhoni et al., 2021; Sabrang et al., 2021; Zamad et al., 2021).

H3: Training effectiveness has a significant positive impact on employee creativity.

Conceptual framework

The interconnections among the study's variables are visually represented in the conceptual framework depicted in Figure 1, which has been hypothesized and structured based on an extensive review of relevant literature. This framework serves as a crucial tool for understanding the dynamics and interactions between the different variables under investigation. It provides a systematic and theoretical base for the study, illustrating how each variable is expected to relate to and influence the others.



Fig 1: Conceptual Framework

3. Method

Sample Criteria

The sample in this study consisted of 121 individuals who are alumni of the 'Kenshusei' program between Japan and Indonesia. All respondents were male. The members were divided into three groups: 59 (48.76%) were members of IKAT Japan, 35 (28.93%) were members of HAM Japan Nusantara, and 27 (22.31%) were members of IKAPEKSI. Regarding their current occupations, 11 (9.09%) respondents were civil servants (PNS), 52 (42.98%) were business owners, 6 (4.96%) were directors, 21 (17.36%) were managers or equivalent positions, 4 (3.30%) were section heads or equivalent, 11 (9.09%) were employees, 9 (7.44%) were freelancers, and 7 (5.78%) had other job roles. The dominant educational background among respondents was bachelor's degree (S1), with 57 (47.11%) individuals, followed by high school or equivalent (SMA) with 55 (45.45%) individuals, while 11 (9.09%) had a master's degree (S2), and 2 (1.65%) had completed junior high school (SMP). Furthermore, respondents' income ranged from less than Rp3 million for 14 (11.57%) individuals, between IDR 3 million and IDR 5 million for 27 (22.31%) individuals, between IDR 5.01 million and IDR 7 million for 15 (12.40%) individuals, between IDR 7.01 million and IDR 10 million for 14 (11.57%) individuals, and above IDR 10.01 million for 51 (42.15%) individuals.

Measurement

This study applied a quantitative approach and used a stratified random sampling technique in its intake procedure to ensure a balanced representation of the total 473 alumni of the 'Kenshusei' program in

Indonesia. These alumni have attended training programs during the COVID-19 pandemic. The sample size was selected based on statistical calculations to ensure valid and reliable results. From this population, a total of 121 alumni of the 'Kenshusei' program in Indonesia have successfully completed the questionnaire completely to be sampled in this study. For the development and measurement of the instrument, questionnaires were designed to assess the effectiveness of the training, the improvement of hard-skill competencies, and the enhancement of creativity. The instrument was validated by experts in HR and education. Measurements were taken to assess the level of agreement or satisfaction with the given statements. In terms of data analysis tools, descriptive statistics were used to analyze sample characteristics and questionnaire responses. Inferential analysis was applied to determine the relationship between training and outcome variables such as HR quality, hard-skill competencies, and creativity. The use of statistical software was applied to facilitate data analysis. This method will provide valid and accurate insights into the effectiveness of training in improving HR quality, hard-skill competencies, and employee creativity during the COVID-19 pandemic, contributing to the human resource development literature.

The main reason for choosing Partial Least Squares Structural Equation Modeling (PLS-SEM) over other methods in this study is that PLS-SEM is very effective for complex and exploratory conceptual models. PLS-SEM is also suitable for data that does not meet the assumption of normal distribution, which often occurs in social data and human behavior. In addition, PLS-SEM is more flexible in terms of sample size, making it suitable for research with a limited number of respondents and emphasizing the prediction and explanation of latent constructs. Model assessment criteria in PLS-SEM that allow in-depth evaluation of the rigor of the research design involve evaluating the reliability and validity of individual items and constructs, such as internal reliability, convergent, and discriminant. The structural model is evaluated through measuring the quality of the structural model, including hypothesis testing about the relationships between constructs by assessing R-squared, path coefficients, and the statistical significance of the relationships. PLS-SEM also checks for multicollinearity between indicators on formative measures and the strength and significance of path coefficients.

Training effectiveness was measured using indicators such as additional knowledge, ability to remember, and ability to practice. This construct has also been investigated in public organizations (Sam et al., 2021). Hard-skill competence was measured with indicators encompassing HR capability, marketing capability, production capability, management capability, and financial capability (Azis et al., 2021; Nongkeng et al., 2021). HR quality was assessed using indicators related to employee motivation, ability and skill attainment, communication effectiveness, employee responsibility, attitude towards change, and other relevant dimensions. Furthermore, the dimension related to employee creativity was assessed based on indicators like the need for achievement, locus of control, exposure to ambiguity conditions, and creativity-related skills, in accordance with previous studies (Ahdan et al., 2019; Rijal et al., 2019), which emphasized their importance in an organizational context. The detailed measurement of variables in this study, including indicators and items, is presented in Table 1.

Table 1: Measurement of variable

Variable	Indicator	Item
Training Effectiveness (TrE)	▪ Additional knowledge (TrE1)	▪ Gained additional knowledge after training ▪ Enhanced job-related skills after training
	▪ Ability to remember (TrE2)	▪ Ability to remember during training ▪ Ability to comprehend during training
	▪ Ability to practice (TrE3)	▪ Ability to apply training outcomes in work ▪ Ability to practice training outcomes in work
Human Resource Quality (HRQ)	▪ Employee motivation (HRQ1)	▪ High motivation at work ▪ Strong work intentions at all times
	▪ Ability and skill attainment (HRQ2)	▪ Ability to achieve maximum job performance ▪ Proficiency in job-related skills
	▪ Communication effectiveness (HRQ3)	▪ Ability to convey ideas effectively ▪ Ability to understand others' ideas easily and clearly

	▪ Employee responsibility (HRQ4)	▪ Consistently completes tasks well ▪ Always strives to complete tasks on time
	▪ Attitude towards change (HRQ5)	▪ Endeavors to stay updated with developments ▪ Ability to adapt to changes and stay prepared
Hard-skill Competence (HSC)	▪ HR capability (HSC1)	▪ Effective management of work tasks ▪ Ability to excel in assigned tasks ▪ Capability to evaluate activities for improvement
	▪ Marketing capability (HSC2)	▪ Understanding of customer preferences ▪ Extensive networking skills ▪ Ability to market products or services effectively
	▪ Production capability (HSC3)	▪ Technical proficiency in product or service production ▪ Effective production management ▪ Ability to produce high-quality products or services
	▪ Management capability (HSC4)	▪ Skill in work planning ▪ Effective coordination of work tasks ▪ Competence in work control ▪ Ability to implement feedback effectively
	▪ Financial capability (HSC5)	▪ Money-making skills ▪ Efficient and effective money management ▪ Prioritization of financial allocation
Employee Creativity (EmC)	▪ Creativity-related skills (EmC1)	▪ Generating new ideas to ease work during the COVID-19 pandemic ▪ Improving the implementation of new ideas in work during the COVID-19 pandemic
	▪ Encounter to ambiguity conditions (EmC2)	▪ Finding effective solutions during the COVID-19 pandemic ▪ Decision-making ability during the COVID-19 pandemic
	▪ Locus of control (EmC3)	▪ Confidence in executing tasks effectively during the COVID-19 pandemic ▪ Anticipating external challenges effectively during the COVID-19 pandemic
	▪ Need for achievement (EmC4)	▪ Striving for excellence in work during the COVID-19 pandemic ▪ Endeavoring to work to the best of one's ability during the COVID-19 pandemic

In Table 1, the measurement of variables, dimensions, and indicators for all variables is presented. The table includes all statement items.

Pre-Stage: Normality Test

The first step before starting the main analysis stage is the data normality test. The importance of this step lies in the influence of data normality on the accuracy of SEM analysis results. We test this normality by referring to the Critical Ratio (CR) values of skewness and kurtosis of the data (Ullman, 2006). The criterion we use is a CR value that falls within the range of -2.58 to 2.58 at the 1% (0.01) significance level. If the CR value is within this range, it can be concluded that our data is normally distributed, both univariate and multivariate. The results of this normality test show that our data meet the criteria of normal distribution, so it is feasible to run the SEM analysis.

Stage One: Confirmatory Factor Analysis (CFA) Test

After confirming the normality of the data, the first step is the Confirmatory Factor Analysis (CFA) test. The CFA test aims to confirm whether the proposed model fits the data. In this process, we also conduct validity and reliability tests. Validity tests include convergent and discriminant validity to ensure that each measurement item accurately measures the intended construct in accordance with the views of Bernard, (2013). The reliability test aims to assess the internal consistency of the items in the scale as described by Hair et al. (2017) and Sekaran & Bougie, (2016). The results of this stage show that our measurement instruments have a high level of validity and reliability, supporting the proposed model (Table 2).

Second Stage: Model Test with Goodness of Fit (GoF)

The second stage is the evaluation of the overall model fit using Goodness of Fit (GoF). This stage involves examining various fit indices such as RMSEA, CFI, and TLI to determine how well the theoretical model fits the observed data. The results of the GoF test show that our model has a good fit, confirming that the model we developed accurately represents the structure of the data we obtained

(Figure 2). Thus, through a systematic process and based on strong statistical criteria, including normality tests conducted with reference to CR skewness and kurtosis values, our study shows that the SEM-Amos model we used is supported by normal, valid, reliable data, and has a good fit to the data analyzed (Table 2).

4. Result

Table 2 provides an overview of the statistical test results. Overall, the P-values for variables and items are all significant at < 0.01 . The critical ratio values for the items, on average, exceed 5.245. When compared to the estimated values, the standard error (S.E) is also very small. In the standardized estimate section for the item variables, the values are generally above 0.60, except for "ability to practice" (TrE3), which is only 0.54. This indicates that the intervention items have high standardized estimate values. In this analysis, some items were removed due to not meeting validity and standard estimate criteria. For HR Quality (HRQ), "Employee motivation" (HRQ1) and "attitude towards change" (HRQ5) were removed. For Hard-Skill Competence (HSC), "HR capability" (HSC1) was removed, and for Employee Creativity (EmC), "creativity-related skills" (EmC1) were removed.

The dominant item forming the Training Effectiveness (TrE) variable is "additional knowledge" (TrE1). For HR Quality (HRQ), the dominant item is "ability and skill attainment" (HRQ2), while for Hard-Skill Competence (HSC), the dominant item is "management capability" (HSC4). In the Employee Creativity (EmC) variable, the dominant item is "locus of control" (EmC3).

In this study, we conducted two testing stages, namely Confirmatory Factor Analysis (CFA) to assess the measurement of each item in the data, and goodness of fit to examine the model's compatibility with the collected data. The results of the CFA can be found in the following table:

Table 2: Statistical Result

Variables	Items	Loading factor	Estimate	S.E	(C.R)	P-Value	Reliability Test
							CR (> 0,7)
Training Effectiveness (TrE)	additional knowledge	0.645	0.937	0.175	5.356	***	0.63
	ability to remember	0.624	0.902	0.083	10.817	***	
	ability to practice	0.536	1.000	Reference Point			
Human Resource (HR) Quality (HRQ)	ability and skill attainment	0.907	0.870	0.057	15.354	***	0.92
	communication effectiveness	0.897	1.000	Reference Point			
	employee responsibility	0.880	0.757	0.054	14.049	***	
Hard-Skill Competence (HSC)	marketing capability	0.810	0.743	0.064	11.602	***	0.89
	production capability	0.839	0.814	0.064	12.695	***	
	management capability	0.894	1.000	Reference Point			
	financial capability	0.776	0.691	0.064	10.838	***	
Employee Creativity (EC)	encounter to ambiguity conditions	0.895	0.899	0.055	16.494	***	0.96
	locus of control	0.946	1.000	Reference Point			
	need for achievement	0.853	0.764	0.052	14.630	***	

Note: *** (Significant at Level $p < 0.01$)

Table 2 in the study presents a comprehensive analysis of the validity and reliability of the indicators used to measure the respective variables. The table shows that all indicators meet the criteria for validity with loading factors (λ) equal to or greater than 0.5. This indicates a significant relationship between each indicator and its underlying construct, suggesting that the indicators are appropriate measures of their respective variables. Furthermore, the Composite Reliability (CR) values are used to assess the reliability of the constructs. A CR value of greater than or equal to 2.00 and a P-Value of less than or equal to 0.01 for each indicator demonstrate that the constructs are statistically significant. This implies that the indicators consistently represent the constructs across various samples and measurement instances.

It is also noted that while the construct of Training Effectiveness has a CR value slightly less than the conventional threshold of 0.7, it is still within the acceptable range of 0.60-0.70. This is considered

adequate in the context of this study, particularly because the indicators themselves have valid values. The slight deviation from the standard threshold can be attributed to the specific nature of the construct or the context of the study. In such cases, a CR value in the range of 0.60-0.70 is acceptable, provided that the validity of the indicators is established, as demonstrated by their loading factors and statistical significance. Overall, the data presented in Table 2 indicates a strong methodological foundation for the study, with the indicators accurately measuring their respective variables and the constructs demonstrating a reliable internal consistency. This robust statistical validation adds credibility to the findings derived from these variables and constructs.

Therefore, it can be concluded that the indicators in this study are measured by valid and reliable values in assessing the research model. The Structural Model is explained as depicted in Figure 2.

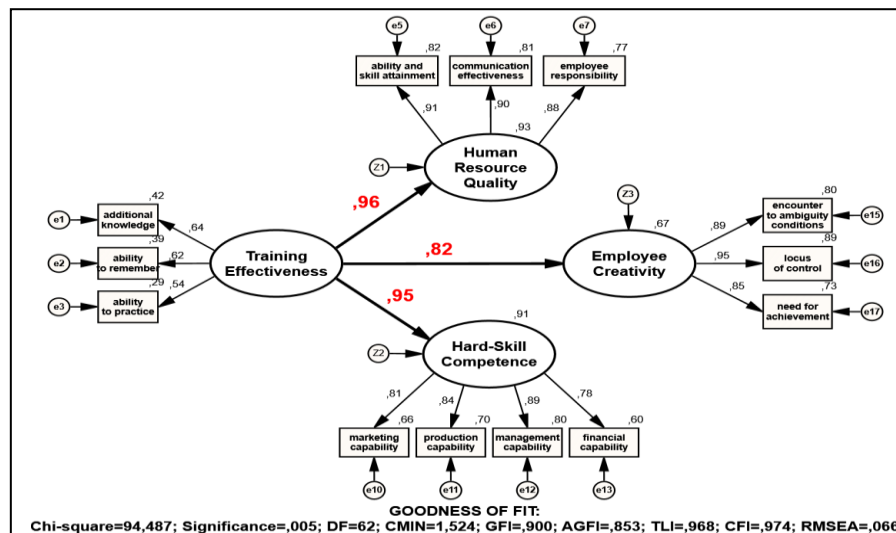


Fig 2: Structural Equation Model

After the first and second stages of the testing process have been completed, the final stage is hypothesis testing through the examination of influence using the Structural Equation Modeling with a comparison between the T-Statistic values and the P-Value with a significance coefficient of <0.05 . The Hypothesis Testing, as explained in Table 3, shows that the relationships explaining the variables Training Effectiveness (TrE) on HR Quality (HRQ), Training Effectiveness (TrE) on Hard-skill Competence (HSC), and Training Effectiveness (TrE) on Employee Creativity (EmC) in their entirety, Hypotheses H1 – H3, have a positive and significant impact with a significance value of <0.05 .

Training effectiveness can be measured by additional knowledge with $\lambda = 0.645$; P-Value < 0.001 , ability to remember with $\lambda = 0.624$; P-Value < 0.001 , and ability to practice with $\lambda = 0.536$. HR Quality is a variable with indicators that have excellent loading factor values, such as ability and skill attainment with $\lambda = 0.907$; P-value < 0.001 , communication effectiveness with $\lambda = 0.897$; P-Value > 0.001 , and employee responsibility with $\lambda = 0.88$. Hard-skill competence is measured by marketing capability with $\lambda = 0.81$; P-Value < 0.001 , production capability with $\lambda = 0.839$; P-value < 0.01 , management capability with $\lambda = 0.894$; P-Value < 0.001 , and financial capability with $\lambda = 0.776$; P-Value < 0.001 . Finally, employee creativity, with its three indicators, provides measurements: encounter to ambiguity conditions with $\lambda = 0.895$; P-Value < 0.895 , locus of control with $\lambda = 0.946$; P-Value < 0.001 , and need for achievement with $\lambda = 0.88$; P-value < 0.000 .

The second measurement in this study uses the standard goodness of fit values to assess the alignment between the predicted model and the observed data (Yusriadi, Siregar, et al., 2023). The results of the AMOS output for the goodness of fit values can be seen in the following table.

Table 3: Goodness of Fit

Model Fit Testing	Cut of Value	Result	Remark
Chi-Square	df = 48, $X^2 = 65.171$	113.586	Marginal
Significance	≥ 0.05	0.000	Marginal
CMIN/DF	≤ 3.00	2.366	Fit
GFI	≥ 0.90	0.918	Fit
AGFI	≥ 0.90	0.867	Marginal
TLI	≥ 0.90	0.922	Fit
CFI	≥ 0.90	0.943	Fit
RMSEA	0.03 - 0.08	0.077	Fit

The analysis presented in Table 3 provides a clear indication that the model developed in this study aligns well with the conceptual framework initially proposed. This alignment is evidenced by several key statistical measures that assess the fit of the structural model to the observed data. Firstly, the CMIN/DF value, which stands for the Chi-square to degrees of freedom ratio, is less than or equal to 3. This suggests that the model is a good fit, as values below 3 are generally considered indicative of a reasonable fit between the hypothesized model and the observed data. Secondly, the Goodness of Fit Index (GFI), with a value of 0.918, falls close to 1. This demonstrates that the model has a high level of fit, as GFI values closer to 1 are desirable and indicate that the model accounts for a large proportion of the variance in the observed data. Thirdly, the Tucker-Lewis Index (TLI) and Comparative Fit Index (CFI) further reinforce the model's validity, with values of 0.922 and 0.943 respectively. Both indices compare the fit of the target model to a null model, with values closer to 1 indicating a better fit. The high values here suggest that the model improves significantly upon a baseline model. Lastly, the Root Mean Square Error of Approximation (RMSEA), standing at 0.077, is within an acceptable range, albeit slightly higher than the ideal value of 0.05 or less. RMSEA values up to 0.08 are often considered acceptable, especially in complex models, indicating a reasonable error of approximation. Although some of these values are marginal, they do not detract significantly from the overall fit of the model. The combination of these fit indices suggests that the model can capture and accurately representing the phenomena intended to be measured in this study. The marginal values in some indices may reflect the complexity and nuances of real-world data, but they do not undermine the overall validity and reliability of the model. Therefore, it can be concluded that the data effectively reflects the conceptualized model, providing a clear and valid depiction of the phenomena under study.

Hypothesis Testing

The results of data analysis and hypothesis testing are presented in the following Table 3.

Table 4: The Hypothesis Result

Hypothesis	Standardized estimate	S.E	Critical Ratio	P-Value	Result
<i>Training Effectiveness → Human Resource Quality</i>	0.963	0.238	6.214	***	Accepted
<i>Training Effectiveness → Employee Creativity</i>	0.952	0.229	5.978	***	Accepted
<i>Training Effectiveness → Hard Skill Competence</i>	0.818	0.402	6.21	***	Accepted

Note: *** (Significant at Level $p < 0.01$)

Table 4 presents compelling evidence supporting the validity of all the hypotheses proposed in this study. The table clearly indicates that each hypothesis is acceptable, as evidenced by p-values below the stringent threshold of 0.01. This statistical significance strongly suggests that the relationships hypothesized to exist in the conceptual framework of the study do indeed occur and are robust. The low

p-values are a critical indicator in quantitative research, as they demonstrate a high level of confidence in the results. In this context, a p-value below 0.01 means there is less than a 1% probability that the observed relationships occurred by chance. This level of significance provides strong empirical support for the initially conceived hypotheses, affirming that the expected positive influences posited in the theoretical framework are not only present but also statistically significant. The confirmation of all hypotheses as per the findings in Table 4 sets a solid foundation for in-depth discussions and interpretations. It allows for a more nuanced understanding of the dynamics at play in the study's subject area. The following discussion section will delve deeper into each of these hypotheses, exploring their implications, the nuances of their relationships, and how they fit within the broader context of the research field. This section will also provide an opportunity to interpret the findings considering existing literature, theoretical frameworks, and practical implications. The discussions will aim to contextualize the results, offering insights into how these findings contribute to the body of knowledge in the field, and potentially, how they could inform practice, policy, or future research. The robust validation of these hypotheses, as shown in Table 4, not only underscores the rigor of the research methodology but also ensures that the ensuing discussions are grounded in empirically verified findings.

5. Discussion

Training Effectiveness on Human Resource Quality

The results from the Amos Output, which clearly indicate a substantial and positive impact of Training Effectiveness on Human Resource Quality ($\beta = 0.963$; P-Value < 0.001), echo and reinforce the conclusions drawn in previous research. For instance, the works of Ilyas et al. (2022a) and Tamsah et al. (2020) have already underscored the pivotal role of training effectiveness in the development and enhancement of human resource quality. This study's findings not only align with these earlier studies but also expand upon them by providing quantitative evidence of the strength of this relationship.

Similarly, the research aligns with the insights of Mustafa et al. (2020) and Awaluddin A et al. (2019), who have highlighted the critical importance of effective training outcomes in driving optimal performance in organizations. This study contributes to this narrative by quantitatively demonstrating how training effectiveness directly influences various managerial and operational abilities, suggesting that effective training is not just beneficial but essential for realizing maximum capabilities within the workforce. Moreover, this research resonates with the findings of Sadapotto et al. (2021), who noted that effective training plays a crucial role in enhancing employee competencies, including both knowledge and skills. This study extends these findings by providing empirical evidence that effective training can have a broad impact, fostering not only skill acquisition but also creativity and innovation among employees.

Furthermore, the effectiveness of training, as demonstrated in this research, goes beyond mere knowledge acquisition. It facilitates the practical application of training outcomes in the workplace, thereby enhancing motivation and competence. This is in line with the assertions of Sahabuddin et al. (2019), who emphasized the role of training in encouraging employee creativity. These findings collectively highlight the multifaceted benefits of effective training programs, illustrating their significance in enhancing human resource quality, particularly in terms of improving employee skills, operational abilities, and creative capacities. Overall, this study contributes significantly to the existing body of literature by providing robust statistical evidence of the positive effects of training effectiveness on human resource quality. It underscores the need for well-designed and effective training programs, especially in the dynamic and ever-evolving business environments of today, where employee skills and creativity are pivotal for organizational success and competitiveness.

Training Effectiveness on Employee Creativity

The results from hypothesis testing in this study provide compelling evidence that Training Effectiveness significantly influences Employee Creativity, as indicated by a high beta value ($\beta=0.952$) and a P-Value of less than 0.001. These findings are in concordance with the research conducted by

Cahaya et al. (2022a), which posited that effective training methodologies play a crucial role in fostering employee creativity. This study not only supports but also builds upon these findings by demonstrating that effective training enhances creativity, particularly through factors such as locus of control, the ability to encounter ambiguous conditions effectively, and the drive for achievement. Moreover, the concept of employee creativity, as rewritten by Ginting et al. (2023), suggests that creativity often intersects with improvisation. This research suggests that creative employees, bolstered by effective training, are better equipped to navigate unforeseen circumstances, and adapt to changing environments. This ability to improvise is increasingly recognized as an asset in today's dynamic work settings.

Furthermore, the findings of this study are bolstered by the research of Saleh et al. (2021), which demonstrates that effective training yields the expected outcomes in terms of employee performance and creativity. This provides additional evidence that training effectiveness is not just a theoretical concept but has practical implications in enhancing workforce capabilities. Additionally, this research aligns with the perspectives of Gani et al. (2019) regarding the critical role of effective training in boosting employee motivation and creativity. The study expands on this by illustrating that when employees are trained effectively, they are not only more motivated but also better prepared to deal with ambiguity and more driven to achieve their goals.

In conclusion, the findings of this study highlight the significant impact of effective training on employee creativity. It demonstrates that through well-structured and effective training programs, employees' abilities to confront ambiguous situations are enhanced, and their motivation and need for achievement are elevated. This underscores the importance of investing in effective training programs to foster a more creative, adaptable, and high-achieving workforce.

Training Effectiveness on Hard Skill Competence

The hypothesis testing results from this study distinctly illustrate that Training Effectiveness has a substantial and positive impact on Hard-skill Competence ($\beta=0.818$; P-Value < 0.001). This finding underscores the notion that effective training can significantly enhance Hard-skill Competence, which in this study is measured through various capabilities: management ($\lambda = 0.894$), production ($\lambda=0.839$), marketing ($\lambda=0.81$), and financial ($\lambda = 0.776$). These capabilities represent critical skill areas in which improvements can lead to more efficient and effective organizational performance.

This research supports the assertions made by Farida et al. (2021) that training is a vital component in the development of Hard-skill Competence, which is directly linked to the enhancement of employee performance. The results from this study, particularly as seen in Table 2, indicate that management capability stands out as a primary indicator in measuring Hard-skill Competence effectively. Similarly, the other indicators - production, marketing, and financial capabilities - also provide strong measurements ($\lambda > 0.7$), indicating that hard skills, especially those that are more technical, can be effectively assessed and developed through training.

In conclusion, the findings of this study align with the perspective that training represents a strategic investment for organizations aiming to achieve their objectives, as argued by Megawati et al. (2022) and Mislija et al. (2021). Training effectiveness not only enhances HR Quality and Employee Creativity but also plays a crucial role in developing Hard-skill Competence. These outcomes are particularly pertinent in the context of a pandemic, where the need for adaptive and skilled human resources is more critical than ever.

However, it is important to note that in this study, the indicators of training effectiveness are based on standardized measurement values. This highlights the need for a more nuanced approach to explore how training programs can be tailored and made more effective to suit specific organizational needs and contexts. A deeper understanding of these aspects will provide valuable insights into optimizing training strategies, thereby maximizing their impact on employee skills and organizational performance.

6. Conclusion

The results of this study, analyzed in the context of Human Capital Theory, significantly emphasize the

critical role of training effectiveness in enhancing the quality of human resources, fostering creativity, and developing hard-skill competencies, especially during challenging times like a pandemic. These insights have practical implications for organizations and suggest directions for future research.

From a practical standpoint, organizations must prioritize the holistic development of their human resources. This involves going beyond just imparting hard-skill competencies to include soft skills, creative thinking, and adaptability. Training programs need to be comprehensive, catering to the all-round development of employees. Adapting training methods to changing work environments is crucial, and this could involve leveraging technology for remote training and focusing on skills that enable employees to work effectively in a digital and physically distanced environment. There is also a need to integrate creativity into training programs, encouraging innovative thinking and problem-solving skills, which are crucial for navigating the complex challenges posed by the pandemic and the evolving business landscape. Additionally, fostering a culture of continuous learning and development through regular training sessions, workshops, and seminars can keep employees updated with the latest trends and technologies in their respective fields.

In terms of future research, exploring the effectiveness of remote training methods that have become prevalent during the pandemic would be valuable. This includes examining the impact of online learning platforms and virtual training sessions on employee skills and productivity. Investigating how training programs can build resilience and adaptability in employees would also be beneficial, especially in the context of rapid changes and uncertainties in the business environment. Longitudinal studies examining the long-term effects of training on employee performance and organizational success would provide deeper insights into the lasting impact of training programs. Research into more personalized and customized training approaches that cater to individual employee needs, learning styles, and career aspirations could lead to the design of more effective and engaging training programs. Additionally, given the global nature of many organizations, studies focusing on the cross-cultural effectiveness of training programs would add valuable insights into how training can be optimized across different cultural contexts.

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