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The Role of Training Effectiveness and Human Resource Quality in Enhancing Employee Creativity in the Digitalization Era

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Abstract

Proper training is one of the most critical measures businesses can implement to equip their employees with the necessary skills to confront the obstacles of globalization and digitalization. This investigation investigates the efficacy of training in fostering employee creativity by employing human resource quality as a proxy. An online survey was administered to 121 Kenshusei alums from Indonesia to collect quantitative data. Structural Equation Modeling (SEM) was implemented to ascertain the relationships between variables and the underlying causes. The findings suggest practical training improves human resources quality, fostering employee creativity. It was clear that the quality of human resources fully mediates this relationship, but training had no significant direct effect on creativity. This study uses Resource-Based Theory (RBT) and Goal-Setting Theory (GST) to argue that good training can help people become more creative and adaptable to technological changes and new needs worldwide.

Keywords: training effectiveness, human resource quality, employee creativity, digitalization era, decision-making.

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Introduction

Training has long been recognized as one of the key instruments in human resource development (HRD) to improve organizational performance. Gamage et al. (2020) and Tziner et al. (2007) have both underscored the potential of practical training to improve employee motivation, technical skills, and communication abilities, thereby stimulating productivity. However, organizations are increasingly confronted with various complex challenges in the context of globalization and digitalization. Hazelzet et al. (2022) and McKay et al. (2024) contend that organizations and individuals must become more innovative and creative in response to the rapid advancements in technology. In this context, understanding how training influences employee creativity becomes increasingly essential. Training programs such as Kenshusei in Japan exemplify how structured HRD initiatives can enrich individuals' skills,

knowledge, and adaptability. For organizations in Indonesia, the effectiveness of such training holds the potential to enhance employee creativity and support more rational decision-making in the workplace (Gong et al., 2019). Therefore, this study emphasizes the relevance of training in shaping high-quality human resources as strategic assets to meet innovation demands in the modern era (Amrutha & Geetha, 2020; Hirzel, 2017).

Previous research has underscored the importance of training in strengthening employee motivation and skills. Tziner et al. (2007) demonstrated that practical training enhances learning orientation, skillsets, and a sense of responsibility. Similarly, studies by (Martin, 2010) and Gaye & Nelson (2009) revealed that training fosters more effective communication and better preparedness for change. Furthermore, the Resource-Based Theory (RBT) highlights that high-quality human resources are a competitive asset, providing long-term advantages for organizations (Bhat, 2011; Dash & Mahapatra, 2016). However, research on the relationship between training effectiveness and employee creativity remains limited. (Birdi, 2007) stated that while training improves technical competencies, its impact on creativity is not fully established. Additionally, environmental factors such as leadership support and organizational climate play a significant role in driving innovation (Hon, 2012; Wang et al., 2011). The Goal-Setting Theory (GST) adds that training combined with clear and challenging goals can boost employee motivation and performance but does not always guarantee creativity without adequate environmental support (Madhavan et al., 2023; Robson et al., 2012). Although numerous studies have examined the impact of training on employee performance, there remains a research gap in understanding the mediating role of human resource quality in the relationship between training and employee creativity. Furthermore, limited research has contextualized training programs like Kenshusei on a global scale and connected them to behavioral economics, specifically about rational decision-making within organizations. By investigating the mechanisms by which training effectiveness enhances the quality of human resources and, consequently, influences employees' creativity, this investigation endeavors to resolve these deficiencies.

This study aims to determine the degree to which the effectiveness of training programs encourages employee creativity in the workplace, thereby improving the quality of human resources. This research aims to identify the mechanisms that transform training from a mere tool for technical skill development to a strategic approach to developing more adaptable and innovative individuals by positioning human resource quality as the bridge between training and creativity. This study is anticipated to provide organizations with novel insights into the development of training programs that are sustainable and effective in addressing the dynamic challenges of the modern workforce in the face of the demands of globalization and technological acceleration. The primary contribution of this study is to enhance the behavioral economics literature by concentrating on the efficacy of training in influencing decision-making processes that foster creativity. This investigation offers a more profound comprehension of how training can enhance human resources as strategic assets and cultivate an innovative work environment by incorporating perspectives from resource-based and goal-setting theories. The results of this study are anticipated to serve as a practical guide for organizations in developing sustainable and effective training programs tailored to the demands of global innovation.

Literature Review

Fundamental Concepts and Definitions

Organizations employ training as one of their primary strategies for human resource development (HRD). In addition to improving technical competencies, practical training also strengthens employee motivation, communication skills, and adaptability (Gamage et al., 2020; Tziner et al., 2007). Martin (2010) defines training effectiveness as the capacity of a training program to transfer skills and impart new knowledge to employees, thereby determining their actual performance. Conversely, human resource quality encompasses individual responsibility, communication effectiveness, skill achievement, and motivation (Aziz et al., 2021; Mata et al., 2021). Adaptability and innovation are facilitated by the availability of high-quality human resources, which enable individuals to respond to changes in the work environment effectively. In the interim, employee creativity is defined as the capacity to generate innovative and practical ideas that address issues or develop innovative solutions (Beheshtifar & Zare, 2013; Shilling M., 2008). Creativity is influenced by both internal and external factors, including intrinsic motivation and creative skills (Chahar et al., 2019; Hon, 2012).

Training Effectiveness and Human Resource Quality

Previous studies have consistently highlighted that practical training enhances human resource quality. Tziner et al. (2007) found that training is crucial in motivating employees and improving their learning orientation. Similarly, Martin (2010) demonstrated that appropriate training methods, such as case-based learning and simulations, positively impact skill acquisition and readiness for change. Within the Resource-Based Theory (RBT) framework, high-quality human resources are regarded as strategic assets that provide long-term competitive advantages for organizations (Dash & Mahapatra, 2016; Hirzel, 2017). However, training effectiveness depends not solely on content and methods but also on individual motivation and organizational support post-training. Akther & Rahman (2022) emphasized that the quality of instructors and the readiness of the work environment play critical roles in facilitating knowledge transfer. Therefore, training programs must be systematically designed to enhance human resource quality, considering organizational and employee needs.

Human Resource Quality and Employee Creativity

Human resource quality significantly influences employee creativity. Employee motivation, technical abilities, and communication effectiveness are key elements driving creativity (Bos-Nehles et al., 2017; Gong et al., 2019). Liu et al. (2021) found that competent and motivated individuals are better equipped to face challenges and generate innovative solutions. Maqsoom et al. (2022) highlighted the importance of leadership support in maximizing employee creativity. Under the Goal-Setting Theory (GST) framework, achieving creativity requires clear objectives and a supportive work environment (Madhavan et al., 2023; Robson et al., 2012). When employees possess adequate skills and motivation, they are more likely to adapt and think creatively when handling complex tasks (Malik et al., 2014). Thus, improving human resource quality through training can establish a solid foundation to foster employee creativity within organizations.

Training Effectiveness and Employee Creativity through Human Resource Quality

Training effectiveness does not always have a direct impact on employee creativity. Birdi (2007) noted that while training enhances technical competencies, creativity is often influenced by organizational climate, leadership, and intrinsic motivation. However, recent studies have revealed that human resource quality can mediate the relationship between training and creativity. Practical training enhances individual motivation and skills, which, in turn, drive innovation and creativity (Gamage et al., 2020; Tasevska, 2016). The RBT framework asserts that training focuses on developing internal organizational assets, such as motivation and skills, which strengthen human resources as strategic assets (Udin, 2020).

Meanwhile, GST emphasizes that training combined with challenging goal setting encourages individuals to think more creatively and innovatively (Hon, 2012; Tziner et al., 2007). Based on previous research, training effectiveness not only improves human resource quality but also directly impacts employee creativity. Well-designed training programs create a learning environment that encourages individuals to generate new ideas and creative solutions in their work (Malik & Butt, 2017; McKay et al., 2024). From the literature review, the following research hypotheses are proposed:

H1: Training effectively positively influences human resource quality.
H2: Training effectiveness positively influences employee creativity.
H3: Human resource quality positively influences employee creativity.
H4: Training effectiveness positively influences employee creativity through human resources

Research Design and Method

Research Design

This investigation employs quantitative and survey methods to examine the correlations between employee creativity, human resource (HR) quality, and training effectiveness. Structural Equation Modeling (SEM) is implemented to ascertain direct and indirect relationships among the investigated variables. SEM is selected for its capacity to evaluate intricate conceptual models and guarantee that empirical data and the theoretical framework agree (Kline, 2016).

Research Sample

The research sample comprises 121 alums of the Kenshusei program in Japan currently employed in Indonesia. A simple random sampling technique is applied to ensure proper representation of the population. Individuals must be currently employed in a field relevant to their training and have participated in the Kenshusei training program for a minimum of one year to meet the inclusion criteria. The data were gathered using an online questionnaire using a 5-point Likert scale (Likert, 1932). Table 1 presents the respondents' characteristics, including distribution by gender, alum organization membership, occupation, educational level, and monthly income.

Table 1. Respondent Description

Category	Sub-Category	Total	Percentage (%)
Gender	Male	121	100
Membership	IKAT Jepang	59	48.76
	HAM Japan Nusantara	35	28.93
	IKAPEKSI	27	22.31
Occupation	Civil Servant	11	9.09
	Business Owner	52	42.98
	Director	6	4.96
	Manager/Equivalent	21	17.36
	Section Head/Equivalent	4	3.3
	Employee/Staff	11	9.09
	Freelance Worker	9	7.44
	Others	7	5.78
Education	Bachelor's Degree	57	47.11
	High School	55	45.45
	Master's Degree	11	9.09
	Junior High School	2	1.65
Income	Below IDR 3 million	14	11.57
	IDR 3 million – IDR 5 million	27	22.31
	IDR 5.01 million – IDR 7 million	15	12.4
	IDR 7.01 million – IDR 10 million	14	11.57
	Above IDR 10.01 million	51	42.15

The data presented in this table are also utilized in other publications that form part of this research. Consistent use of data enables more comprehensive and in-depth analysis, providing richer insights into the profiles and conditions of respondents within the research context.

Research Variables and Measurements

This study involves three key variables:

- Training Effectiveness (TrE): Measured using three primary indicators: knowledge acquisition, retention ability, and practical application skills (Perdue et al., 2002; Wilson et al., 2002)
- Human Resource Quality (HRQ): Assessed through employee motivation, skill achievement, communication effectiveness, and responsibility (Nair, 2005).
- Employee Creativity (EmC): Measured using four indicators: creativity-related skills, ability to handle ambiguity, locus of control, and need for achievement (Beheshtifar & Zare, 2013; Shilling M., 2008).

Table 2 below summarizes the variables, indicators, and measurement sources used in this study.

Table 2. Measurement Variabels

Variable	Indicators	Item	Major References
Training Effectiveness (TrE)	Additional knowledge (TrE1)	▪ I acquired additional knowledge after participating in the Kenshusei training program in Japan. ▪ I developed improved work capabilities following the Kenshusei training program in Japan.	(Perdue et al., 2002; Wilson et al., 2002)
	Ability to remember (TrE2)	▪ I can recall activities conducted during the Kenshusei training program in Japan. ▪ I can understand the activities carried out during the	

		Kenshusei training program in Japan.	
	Ability to practice (TrE3)	▪ I am able to apply the outcomes of the Kenshusei training program in my current job. ▪ I can practically implement the experiences gained from the Kenshusei training program in my current work environment.	
Human resource quality (HRQ)	Employee motivation (HRQ1)	▪ I have a high level of enthusiasm at work. ▪ I consistently maintain a strong intention to perform well at all times.	(Nair, 2005)
	Ability and skill attainment (HRQ2)	▪ I have the ability to achieve optimal performance levels. ▪ I possess proficient work skills.	
	Communication efictiveness (HRQ3)	▪ I have the ability to clearly convey ideas. ▪ I can easily understand others' ideas when communicated.	
	Employee responsibility (HRQ4)	▪ I consistently perform tasks effectively. ▪ I always strive to complete tasks on time.	
	Attitude towards change (HRQ5)	▪ I actively keep up with ongoing developments. ▪ I can understand changes and prepare myself accordingly.	
Employee creativity (EmC)	Creativity-related skills (EmC1)	▪ I consistently generate new ideas to make work more efficient, especially during challenging situations such as the COVID-19 pandemic. ▪ I strive to enhance my ability to implement new ideas, even in difficult conditions like the COVID-19 pandemic.	(Beheshtifar & Zare, 2013; Shilling M., 2008)
	Encounter to ambiguity conditions (EmC2)	▪ I can find effective solutions in challenging situations, including those posed by the COVID-19 pandemic. ▪ I am capable of making sound decisions even under difficult conditions like those experienced during the COVID-19 pandemic.	
	Locus of control (EmC3)	▪ I have confidence in my ability to perform well, even in challenging circumstances such as the COVID-19 pandemic. ▪ I believe I can anticipate and overcome external obstacles using my skills, even during adverse conditions like the COVID-19 pandemic.	
	Need for achievement (EmC4)	▪ I always strive to achieve the best outcomes in my work, even under difficult conditions such as the COVID-19 pandemic. ▪ I consistently aim to perform at my best, regardless of challenging circumstances like the COVID-19 pandemic.	

Instruments and Validation

Questions on the questionnaire were changed from ones already tested and found to work in other studies. Tests of construct validity included confirmatory factor analysis (CFA), and reliability tests utilized Cronbach's alpha. A value of > 0.7 was considered reliable (Nunnally & Bernstein, 1994). All indicators met the loading factor threshold of ≥ 0.5, as confirmed by the CFA results, indicating validity. Furthermore, Cronbach's Alpha values illustrated exceptional internal consistency across all variables, ranging from 0.72 to 0.96.

Data Analysis

The data was analyzed in two primary stages:

- The validity and reliability of each construct were verified through the use of CFA in the measurement model testing. GFI, AGFI, TLI, CFI, and RMSEA were indices employed to assess model fit (Kline, 2016).
- Structural Equation Modeling (SEM) was implemented to investigate causal relationships between variables. The mediating role of HR quality between the effectiveness of training and employee creativity was also identified by SEM.

The model fit indices (GFI = 0.92, CFI = 0.96, RMSEA = 0.08) revealed a satisfactory fit with the data. In Figure 1, the conceptual path diagram is depicted.

Informed Consent

This study did not require formal ethical approval as it solely involved collecting participants' perceptions through an online survey without any intervention or experimentation. Prior to participation, participants were provided with an online informed consent form. Participation was voluntary, and respondents were informed about the purpose of the study, their rights to withdraw at any time, and the confidentiality of their data. All responses were anonymized and used exclusively for research purposes.

Results and Discussion

Results

Data Normality Test

The normality test was done with the Bollen-Stine bootstrap method, and a p-value of 0.259 was found. Since this value is higher than 0.0, the data are normally distributed5. Statistics tests used in SEM analysis must be able to handle standard data to be valid.

Validity and Reliability Test

Validity testing was performed using confirmatory factor analysis (CFA) with a loading factor threshold of ≥0.5. All indicators for the variables Training Effectiveness (TrE), Human Resource Quality (HRQ), and Employee Creativity (EmC) met this criterion, confirming their validity.

Reliability was assessed using Cronbach's Alpha coefficient, with the following results:

- Training Effectiveness (TrE): 0.72
- Human Resource Quality (HRQ): 0.96
- Employee Creativity (EmC): 0.94

These values indicate excellent internal consistency across all constructs. Table 3 below presents the results of validity and reliability testing.

Table 3. Statistical Result

Variables	Indicators	Standardized Estimate	Estimate	Standard Error	Critical Ratio	P Value	Construct Reliability	Variance Extracted
Training Effectiveness (TrE)	additional knowledge (TrE1)	**0.79**	1.16	0.22	5.18	***	0.72	0.68
	ability to remember (TrE2)	**0.76**	1.15	0.23	5.11	***		
	ability to practice (TrE3)	**0.53**	1.00					
Human Resource Quality (HRQ)	employee motivation (HRQ1)	**0.75**	0.71	0.07	10.81	***	0.96	0.85
	ability and skill attainment (HRQ2)	**0.92**	1.00					
	communication effectiveness (HRQ3)	**0.88**	1.10	0.07	15.07	***		
	employee responsibility (HRQ4)	**0.88**	0.86	0.06	14.92	***		
	attitude towards change (HRQ5)	**deleted item**						
Employee Creativity (EmC)	creativity-related skills (EmC1)	**deleted item**					0.94	0.90
	encounter to ambiguity conditions (EmC2)	**0.89**	1.18	0.09	13.05	***		
	locus of control (EmC3)	**0.95**	1.31	0.09	14.61	***		
	need for achievement (EmC4)	**0.85**	1.00					

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

Testing of Model Fit

The following indices demonstrate that the measurement model is well-suited to the data, as indicated by the analysis results: The following

- A value of 1.75 (≤ 3.00) for Chi-Square (CMIN/DF) indicates a good fit.
- Goodness of Fit Index (GFI) values of 0.92 and up mean that the two pieces fit together well.
- It's a very good fit if the Comparative Fit Index (CFI) is 0.96 (0.95).
- An RMSEA value of 0.08 (≤ 0.08), which means "acceptable fit," means the model is reasonably accurate.

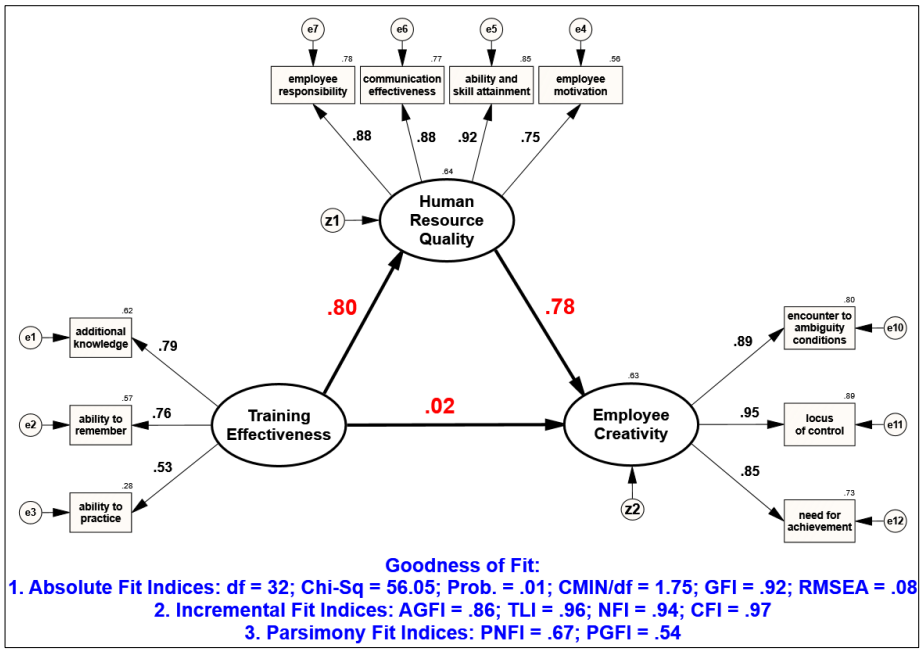

Figure 1. Final Model of SEM-Amos Analysis

Figure 1 presents the path diagram of the structural model used in this study, showing the relationships among the key variables. It visually represents the causal pathways and mediating effects analyzed through Structural Equation Modeling (SEM).

Table 4. Goodness of Fit

Model Fit Testing	Cutoff Points	Result	Remark
1. Absolute Fit Indices:			
Chi-Square	df = 32; X^2 = 46.19	56.05	Marginal
Significance	≥0.05 (Laar & Braeken, 2021)	0.01	Marginal
CMIN/df	≤3.00 (even <5.00) (Dash & Paul, 2021)	1.75	Fit
GFI	≥0.90 (Hair et al., 2010)	0.92	Fit
RMSEA	0.03 - 0.08 (Arbuckle, 2009)	0.08	Fit
2. Incremental Fit Indices:			
AGFI	≥0.90 (Hair et al., 2010)	0.86	Marginal
TLI	≥0.90 (Arbuckle, 2009)	0.96	Fit
NFI	≥0.90 (Dash & Paul, 2021)	0.94	Fit
CFI	≥0.90 (Laar & Braeken, 2021)	0.97	Fit
3. Parsimony Fit Indices:			
PNFI	>0.50 (Dash & Paul, 2021)	0.67	Fit
PGFI	>0.50 (Dash & Paul, 2021)	0.54	Fit

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

Table 4 presents the Goodness of Fit indices used to evaluate the structural model's alignment with empirical data.

Absolute Fit Indices:

- The Chi-Square value (56.05) indicates a marginal fit, as the significance level (0.01) is below the acceptable threshold (≥0.05).
- The CMIN/df value (1.75) falls within the acceptable range (≤3.00), indicating a good fit.

- The GFI (0.92) and RMSEA (0.08) meet their respective cutoff values, confirming an acceptable model fit.

Incremental Fit Indices:

- The AGFI (0.86) suggests a marginal fit as it falls slightly below the threshold (≥0.90).
- TLI (0.96), NFI (0.94), and CFI (0.97) exceed the cutoff (≥0.90), indicating an excellent fit.

Parsimony Fit Indices:

- Both PNFI (0.67) and PGFI (0.54) exceed the recommended value (>0.50), reflecting a parsimonious model fit.

Hypothesis Testing

The results of hypothesis testing using Structural Equation Modeling (SEM) are presented in Table 5. These results provide a comprehensive overview of the relationships between study variables, including their significance and effect sizes.

Table 5. Hypothesis Results

Variable Relationship	Estimate	C.R	p	Remark
H1: Training Effectiveness → Human Resource Quality	**0.80**	5.38	***	Accepted
H2: Training Effectiveness → Employee Creativity	**0.02**	0.10	0.92	Not Accepted
H3: Human Resource Quality → Employee Creativity	**0.78**	5.02	***	Accepted
H4: Training Effectiveness → Human Resource Quality → Hard Skill Competence → Employee Creativity	**0.63**	estimates/bootstrap (two tailed significance-BC)	0.00	Accepted

The primary conclusions of the investigation are as follows:

- The quality of human resources is significantly improved by effective training (Estimate = 0.80, CR = 5.38, $p < 0.001$).
- There isn't a significant direct effect between how well employees are trained and how creative they are (Estimate = 0.02, CR = 0.10, $p = 0.92$).
- Estimate = 0.78, CR = 5.02, $p < 0.001$: The quality of human resources has a big, positive effect on how creative employees are.
- Through human resource quality as a mediator (Estimate = 0.63, $p < 0.01$, using the bootstrap method), training effectiveness has a significant positive effect on employee creativity.

Based on these findings, it appears that the quality of human resources is entirely correlated with the effectiveness of training and the creativity of employees.

Discussion

The findings support the first hypothesis (H1), indicating that training effectiveness significantly affects human resource quality. Practical training enhances employee motivation, skill attainment, and communication effectiveness, aligning with the findings of Tziner et al. (2007) and Gamage et al. (2020). Gaye & Nelson (2009) also emphasized that structured training programs strengthen effective communication, while Mata et al. (2021) highlighted

their impact on self-efficacy and professionalism. From the Resource-Based Theory (RBT) perspective, well-designed training programs are a strategic investment that strengthens human resources as key organizational assets (Dash & Mahapatra, 2016; Hirzel, 2017). Furthermore, Akther & Rahman (2022) noted that instructor quality, workplace readiness, and organizational support are essential for effective knowledge transfer. In comparison, (Chaubey, 2022) found that the success of training programs heavily depends on how well they are contextualized to meet organizational needs. These insights underscore the importance of strategically aligned training programs in developing high-quality human resources.

The second hypothesis (H2), which posits that training effectiveness directly influences employee creativity, is not supported by the findings of this study. While training enhances technical skills, it does not significantly drive creativity without the mediating role of human resource quality. This result aligns with Birdi (2007) and Hon (2012), who argued that creativity is often influenced by other factors such as intrinsic motivation, leadership, and organizational climate. Moreover, McKay et al. (2024) underscored that creativity necessitates more than technical training; a supportive organizational environment is indispensable for optimizing creative potential. Likewise, Wang et al. (2011) discovered that role ambiguity can affect an individual's capacity to generate creative ideas. Hon (2012) and Chahar et al. (2019) also emphasized that an innovative work environment motivates employees to employ their abilities more inventively. These results indicate that innovation is more effective when intrinsic motivation and a supportive organizational culture are present, even though training is a foundation for skill development.

Support is provided for the third hypothesis (H3), which suggests that the quality of human resources positively influences employee creativity. Motivation, communication effectiveness, and skills are all significant factors that contribute to an individual's capacity to generate creative ideas. The significance of HRM practices in developing innovative work behaviors is underscored by Bos-Nehles et al. (2017) and Marin-Garcia & Tomas (2016). These findings are consistent with this perspective. Furthermore, Gong et al. (2019) emphasized that organizations prioritizing innovation are more likely to solve problems with high-quality human resources. Similarly, Jaskyte & Kisieliene (2006) and (Liu et al. (2021) demonstrated that both incremental and radical creativity is facilitated by competence and motivation. Maqsoom et al. (2022) also emphasized the importance of leadership support in establishing an environment conducive to creativity. As such, Chaubey (2022) posited that an innovative work environment is indispensable for optimizing employees' creative capabilities. From the perspective of Resource-Based Theory (RBT), strategic assets that provide a competitive advantage through innovation are high-quality human resources. In addition, Tziner et al. (2007) and Malik et al. (2014) emphasized that individuals can respond to work objectives creatively with high motivation levels.

The fourth hypothesis (H4) reveals that training effectiveness significantly influences employee creativity through human resource quality as a mediator. This finding emphasizes that practical training enhances human resource quality, which serves as a bridge to foster employee creativity. Tasevska (2016) and Gamage et al. (2020) demonstrated that training indirectly improves creativity by strengthening individual competencies. Similarly, Gaye & Nelson (2009) and Gamage et al. (2020) highlighted that practical training enhances employee skills and self-efficacy, essential for creative performance. Malik et al. (2014) also

noted that training can boost intrinsic motivation, a fundamental driver of creative thinking. Meanwhile, Hazelzet et al. (2022) emphasized the role of technology-enhanced training in supporting the application of creative skills in the workplace. These findings suggest that training goes beyond technical skill transfer in the globalization era. It also plays a strategic role in developing human resources that are innovative and adaptable to technological changes. However, the study also indicates that a supportive work environment and effective leadership are equally essential to maximizing employees' creative potential (Chaubey, 2022; Hon, 2012). These insights highlight the importance of integrating training programs with organizational support systems to ensure that the creative outcomes of training are fully realized.

This study provides novel insights into the behavioral economics literature by emphasizing the mediating role of human resource quality in the relationship between employee creativity and training effectiveness. Resource-Based Theory (RBT) and Goal-Setting Theory (GST) are integrated to bolster the argument that well-designed training programs can be a strategic tool for driving workplace innovation. This study offers practical advice to organizations on developing training programs that emphasize developing technical skills and encourage individuals to think creatively. Organizations can optimize employee innovation potential in globalization by fostering a supportive work environment and utilizing technology.

Conclusions

This study emphasizes the significance of training as a strategic human resource development (HRD) approach to improving employee creativity. Research indicates that training effectiveness substantially impacts the quality of human resources, mediating between training and creativity. In the workplace, individuals are encouraged to think creatively and innovatively based on the quality of human resources, which includes communication effectiveness, motivation, and skills.

According to Resource-Based Theory (RBT) and Goal-Setting Theory (GST), well-structured training programs are not merely instruments for the transfer of technical skills; they are also strategic investments designed to develop adaptive human resources capable of addressing the challenges of globalization and digitalization. It is recommended that organizations develop training programs that extend beyond technical development, emphasizing individual motivation and establishing a work environment conducive to applying creative skills.

This study's limitations include the sample size and the Kenshusei program's specific context. Future research should expand the scope by testing similar models across various sectors or countries to understand better the contextual factors that influence employee creativity and training outcomes. Furthermore, additional research is required to improve the relevance and efficacy of technology utilization in training in a global context.

Reference

Akther, S., & Rahman, M. S. (2022). Investigating training effectiveness of public and private banks employees in this digital age: an empirical study. International Journal

of Manpower, 43(2), 542–568. https://doi.org/10.1108/IJM-04-2021-0240

Amrutha, V. N., & Geetha, S. N. (2020). A systematic review on green human resource management: Implications for social sustainability. Journal of Cleaner Production, 247, 119131. https://doi.org/10.1016/j.jclepro.2019.119131

Aziz, S. F. A., Halim, F. W., Rusyda Helma Mohd, Selamat, M. N., Nik Hairi Omar, Ibrahim, A., & Derasol4, M. Y. (2021). Nurturing Organizational Characteristics to Maximize Training Impact on Teamwork Effectiveness: The Malaysian Sample. International Journal of Academic Research in Economics and Management Sciences, 10(1), 206–225. https://doi.org/10.6007/ijarems/v10-i1/9730

Beheshtifar, M., & Zare, E. (2013). Employee Creativity: A compulsory Factor in Organizations. Interdisciplinary Journal of Contemporary Research in Business, 5(2), 242–247.

Bhat, Z. H. (2011). Impact of Training on Employee Performance: A Study of Retail Banking Sector in India. Indian Journal of Applied Research, 3(6), 292–293. https://doi.org/10.15373/2249555x/june2013/97

Birdi, K. (2007). A lighthouse in the desert? Evaluating the effects of creativity training on employee innovation. Journal of Creative Behavior, 41(4), 249–270. https://doi.org/10.1002/j.2162-6057.2007.tb01073.x

Bos-Nehles, A., Renkema, M., & Janssen, M. (2017). HRM and innovative work behaviour: a systematic literature review. Personnel Review, 46(7), 1228–1253. https://doi.org/10.1108/pr-09-2016-0257

Chahar, B., Hatwal, V., & Sen, S. (2019). Employees training and its impact on learning and creativity: Moderating effect of organizational climate. Problems and Perspectives in Management, 17(2), 430–439. https://doi.org/10.21511/ppm.17(2).2019.33

Chaubey, A. (2022). Examining the effect of training and employee creativity on organizational innovation: a moderated mediation analysis. International Journal of Organizational Analysis, 30(2), 499–524. https://doi.org/10.1108/IJOA-06-2020-2271

Dash, S., & Mahapatra, J. (2016). Adopting Training Practices for the Effectiveness of Employee's Attitude and Motivation: An Explorative Study on Indian Industries. Jindal Journal of Business Research, 5(2), 104–130. https://doi.org/10.1177/2278682116680923

Gamage, U. S. H., Mahesh, P. K. B., Schnall, J., Mikkelsen, L., Hart, J. D., Chowdhury, H., Li, H., McLaughlin, D., & Lopez, A. D. (2020). Effectiveness of training interventions to improve quality of medical certification of cause of death: systematic review and meta-analysis. BMC Medicine, 18(1), 1–22. https://doi.org/10.1186/s12916-020-01840-2

Gaye, P. A., & Nelson, D. (2009). Effective scale-up: Avoiding the same old traps. Human Resources for Health, 7(January 2008), 1–4. https://doi.org/10.1186/1478-4491-7-2

Gong, Z., Shan, C., & Yu, H. (2019). The relationship between the feedback environment and creativity: a self-motives perspective. Psychology Research and Behavior Management, Volume 12, 825–837. https://doi.org/10.2147/prbm.s221670

Hazelzet, E., Houkes, I., Bosma, H., & de Rijk, A. (2022). How a steeper organisational

hierarchy prevents change—adoption and implementation of a sustainable employability intervention for employees in low-skilled jobs: a qualitative study. BMC Public Health, 22(1), 1–12. https://doi.org/10.1186/s12889-022-14754-w

Hirzel, A. K. (2017). A systematic review on the role of human resources for process innovation. International Journal of Business Environment, 9(4), 279–300. https://doi.org/10.1504/IJBE.2017.092222

Hon, A. H. Y. (2012). Shaping environments conductive to creativity: The role of intrinsic motivation. Cornell Hospitality Quarterly, 53(1), 53–64. https://doi.org/10.1177/1938965511424725

Jaskyte, K., & Kisieliene, A. (2006). Determinants of employee creativity: A survey of Lithuanian nonprofit organizations. Voluntas, 17(2), 128–136. https://doi.org/10.1007/s11266-006-9008-2

Kline, R. B. (2016). Principles and Practice of Structural Equation Modeling (Fourth Edition). In Guilford Press.

Likert, R. (1932). A Technique for the Measurement of Attitudes. In Archives of Psychology (Vol. 22). Archives of Psychology. https://doi.org/10.4135/9781412961288.n454

Liu, Y., Vriend, T., & Janssen, O. (2021). To Be (Creative), or not to Be (Creative)? A Sensemaking Perspective to Creative Role Expectations. Journal of Business and Psychology, 36(1), 139–153. https://doi.org/10.1007/s10869-019-09669-0

Madhavan, V., Venugopalan, M., Gupta, B., & Sisodia, G. S. (2023). Addressing Agency Problem in Employee Training : The Role of Goal Congruence. 1–27.

Malik, M. A. R., & Butt, A. N. (2017). Rewards and Creativity: Past, Present, and Future. Applied Psychology, 66(2), 290–325. https://doi.org/10.1111/apps.12080

Malik, M. A. R., Butt, A. N., & Choi, J. N. (2014). Rewards and employee creative performance: Moderating effects of creative self-efficacy, reward importance, and locus of control. Journal of Organizational Behavior. https://doi.org/10.1002/job.1943

Maqsoom, A., Zahoor, I., Ashraf, H., Ullah, F., Alsulami, B. T., Salman, A., & Alqurashi, M. (2022). Nexus between Leader–Member Exchange, Paternalistic Leadership, and Creative Behavior in the Construction Industry. Sustainability (Switzerland), 14(12), 1–20. https://doi.org/10.3390/su14127211

Marin-Garcia, J. A., & Tomas, J. M. (2016). Deconstructing AMO framework: A systematic review. Intangible Capital, 12(4), 1040–1087. https://doi.org/10.3926/ic.838

Martin, H. J. (2010). Improving training impact through effective follow ·up: techniques and their application. Journal of Management Development, 29(6), 520–534. https://doi.org/10.1108/02621711011046495

Mata, Á. N. de S., Azevedo, K. P. M. de, Braga, L. P., Medeiros, G. C. B. S. de, Victor Hugo de Oliveira Segundo, Bezerra, I. N. M., Pimenta, I. D. S. F., Nicolás, I. M., & Piuvezam, G. (2021). Training in communication skills for self-efficacy of health professionals: a systematic review. Human Resources for Health, 19(1), 1–9. https://doi.org/10.1186/s12960-021-00574-3

McKay, A. S., Reiter-Palmon, R., Coombes, S. M. T., & Coombs, J. E. (2024). A meta-

analysis of creativity training in organizational settings. Creativity and Innovation Management, 1–16. https://doi.org/10.1111/caim.12605

Nair, K. S. D. (2005). Development of an Instrument To Assess Human Resource Quality (HRQ) and Measuring the Impact of TQM Efforts on HRQ Using the Instrument [School of Management Studies Cochin University of Science and Technology]. https://pdfs.semanticscholar.org/fb1c/42283878f7fd1d2f7dc18848e8699861a200.pdf?_ga=2.57812643.822767494.1591427761-2070874740.1590970828

Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric Theory (Third Edition). In McGraw-Hili, Inc. https://doi.org/10.2307/1161962

Robson, L. S., Stephenson, C. M., Schulte, P. A., Amick, B. C., Irvin, E. L., Eggerth, D. E., Chan, S., Bielecky, A. R., Wang, A. M., Heidotting, T. L., Peters, R. H., Clarke, J. A., Cullen, K., Rotunda, C. J., & Grubb, P. L. (2012). A systematic review of the effectiveness of occupational health and safety training. Scandinavian Journal of Work, Environment and Health, 38(3), 193–208. https://doi.org/10.5271/sjweh.3259

Shilling M. (2008). Strategic Management. Farhangi researches, First edit: 41.

Tasevska, G. (2016). Quality Management (TQM - Total Quality Management) in Order to Improve the Operations Quality of HR. Universal Journal of Management, 4(6), 332–336. https://doi.org/10.13189/ujm.2016.040602

Tziner, A., Fisher, M., Senior, T., & Weisberg, J. (2007). Effects of trainee characteristics on training effectiveness. International Journal of Selection and Assessment, 15(2), 167–174. https://doi.org/10.1111/j.1468-2389.2007.00378.x

Udin, U. (2020). Renewable energy and human resource development: Challenges and opportunities in Indonesia. International Journal of Energy Economics and Policy, 10(2), 233–237. https://doi.org/10.32479/ijeep.8782

Wang, S., Zhang, X., & Martocchio, J. (2011). Thinking outside of the box when the box is missing: Role ambiguity and its linkage to creativity. Creativity Research Journal, 23(3), 211–221. https://doi.org/10.1080/10400419.2011.595661