

The Influence of Creativity And Training n Employee Performance Through Proactive Work Behavior At The Ministry Of Manpower

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ABSTRACT. This study aims to analyze the influence of creativity and training on employee performance through Proactive Work Behavior (PWB) at the Ministry of Manpower of the Republic of Indonesia. The growing complexity of public services demands that civil servants not only perform routine tasks but also act innovatively and proactively. This quantitative research uses a survey method with 260 employees as samples, selected using proportionate random sampling. Data were collected using a Likert-scale questionnaire and analyzed using Structural Equation Modeling-Partial Least Square (SEM-PLS). The results show that creativity and training have a positive and significant direct effect on PWB and employee performance. Furthermore, PWB is proven to positively and significantly mediate the influence of creativity and training on employee performance. This study confirms the applicability of Social Cognitive Theory in the public sector and recommends that the Ministry foster a culture of innovation and proactive behavior to enhance bureaucratic reform and public service quality.

Keyword: Creativity; Employee Performance; Proactive Work Behavior; Public Sector; Training
JEL Classification: MM2

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INTRODUCTION

In the era of digital transformation and global labor market disruption, public-sector organizations are increasingly required to improve organizational adaptability, innovation capability, and employee performance. Government institutions are no longer expected to operate merely through rigid bureaucratic procedures, but also through dynamic, responsive, and citizen-oriented public services. Consequently, employee performance has become one of the most critical determinants of organizational effectiveness in public administration (Robbins & Judge, 2022). Within this context, the Ministry of Manpower of the Republic of Indonesia plays a strategic role in managing labor governance, employment services, industrial relations, and workforce development in Indonesia.

However, the increasing complexity of labor issues and the acceleration of bureaucratic reform have created substantial challenges for public employees. Based on the Ministry of Manpower Performance Report (2024), several performance indicators have not achieved organizational targets. The Community Satisfaction Index only reached 78.5 from the targeted score of 85, while the average completion time for labor licensing services reached 7.2 days, exceeding the institutional target of 3 days. In addition, employee participation in mandatory training programs only achieved 65% of the expected 90%, while only 22% of employees actively proposed work improvement initiatives. These empirical conditions indicate that employee performance problems are closely related to creativity, training effectiveness, and proactive work behavior within the organization.

Beyond the aggregate performance indicators, several organizational conditions further demonstrate the urgency of examining employee creativity, training effectiveness, and proactive work behavior. Internal organizational reports indicate that employee participation in innovation initiatives remains relatively limited, with only approximately 22% of employees actively submitting proposals for work-process improvements. Furthermore, post-training evaluations revealed that many employees experienced difficulties in transferring newly acquired knowledge and skills into daily work practices, indicating a gap between training outcomes and workplace implementation. Supervisory assessments also identified variations in proactive behaviors, particularly regarding initiative-taking, problem anticipation, and voluntary involvement in organizational improvement efforts. These conditions suggest that performance challenges within the Ministry of Manpower are not solely related to technical competence but are also influenced by employees' creativity, training utilization, and proactive behavioral engagement.

In modern public organizations, employee creativity is increasingly recognized as an essential capability for improving organizational adaptability and service innovation. Creativity refers to an individual's ability to generate novel and useful ideas in solving work-related problems (Rampa & Agogué, 2021). Creative employees tend to develop alternative solutions, improve work procedures, and initiate innovative changes that support organizational effectiveness. Previous studies have demonstrated that creativity positively influences employee performance because innovative employees are more capable of responding to dynamic organizational challenges (Inegbedion et al., 2021). Within the bureaucratic context of the Ministry of Manpower, creativity becomes highly important due to the growing demand for digital-based labor services, adaptive workforce policies, and faster administrative processes.

Besides creativity, training also represents a critical organizational mechanism for improving employee competence and performance. Training is defined as a systematic process designed to enhance employee knowledge, technical skills, behavioral competencies, and work effectiveness (Samuah et al., 2024). Effective training programs not only improve technical capabilities but also strengthen employee adaptability toward organizational change and digital transformation. Previous studies have confirmed that training positively affects employee performance because it enhances both competence and confidence in performing work tasks (Mangkunegara, 2020). Nevertheless, several empirical issues remain evident within public organizations, particularly regarding the mismatch between training materials and actual job demands, limited transfer of training outcomes into workplace behavior, and low employee participation in training programs. Despite the importance of creativity and training, these factors may not automatically improve employee performance without the presence of proactive work behavior (PWB). Proactive work behavior refers to self-initiated, future-oriented, and change-oriented actions aimed at improving work situations or organizational effectiveness (Parker et al., 2019). Employees with high proactive behavior tend to identify problems earlier, initiate improvements, anticipate organizational challenges, and actively contribute to organizational development. According to Setiadi and Widodo (2024), proactive employees generally demonstrate stronger adaptability and higher performance compared to passive employees who merely follow formal instructions.

Theoretically, this study is grounded in Social Cognitive Theory (SCT) proposed by Bandura (2001). SCT explains that individual behavior is shaped through reciprocal interactions among personal factors, environmental influences, and behavioral mechanisms. In this study, creativity represents an internal cognitive capability, training represents organizational environmental support, while proactive work behavior acts as a behavioral mechanism transforming individual capability into improved performance outcomes. Through observational learning, self-efficacy development, and behavioral reinforcement, employees who possess creativity and receive relevant training are more likely to develop proactive work behavior that ultimately enhances performance. Although many studies have investigated creativity, training, proactive work behavior, and employee performance, previous findings remain inconsistent. Arifin et al. (2023) found that creativity significantly improves employee performance, whereas Zhou and George (2001) argued that such influence depends heavily on organizational support and work climate. Similarly, Samuah et al. (2024) reported that training positively affects employee performance, while Tharenou et al. (2007) emphasized that training effectiveness depends on the successful transfer of training into actual workplace behavior. Furthermore, Zou et al. (2024) demonstrated that creativity positively influences proactive work behavior, but Unsworth and Parker (2003) stated that proactive behavior only emerges when employees possess sufficient autonomy and organizational flexibility. In addition, Grant and Ashford (2008) argued that proactive work behavior may also create role conflict if organizational norms are excessively hierarchical.

These inconsistencies reveal two important gaps in the literature. First, a theoretical gap remains regarding the behavioral mechanism through which creativity and training influence employee performance. Previous studies predominantly examined direct relationships among these variables, while limited attention has been given to the role of proactive work behavior as a mediating mechanism. Second, a contextual gap exists because most prior studies were conducted in private-sector organizations, whereas public-sector institutions operate under different organizational structures characterized by bureaucratic procedures, formal accountability systems, and regulatory constraints. Consequently, it remains unclear whether proactive work behavior functions similarly

in government organizations. Therefore, the novelty of this study lies in integrating creativity, training, proactive work behavior, and employee performance into a comprehensive mediation model and testing the model within the Indonesian public-sector context, particularly the Ministry of Manpower of the Republic of Indonesia.

Therefore, this study aims to investigate the direct and indirect effects of creativity and training on employee performance through proactive work behavior among employees of the Ministry of Manpower of the Republic of Indonesia. This study contributes theoretically by extending Social Cognitive Theory into the Indonesian public-sector context through the integration of creativity, training, and proactive work behavior within a comprehensive mediation model. Empirically, this research contributes to the literature on public-sector human resource management by providing evidence from government bureaucracy, which remains underexplored in prior organizational behavior studies dominated by private-sector contexts.

The findings of this study are expected to provide important implications for bureaucratic reform, public-sector human resource development, and adaptive governance practices in Indonesia, particularly in strengthening innovation culture, employee initiative, and public service quality within government institutions.

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METHODS

Research Design

This study employed a quantitative research approach using a causal explanatory design to examine the direct and indirect relationships among creativity, training, proactive work behavior (PWB), and employee performance within the Ministry of Manpower of the Republic of Indonesia. The quantitative approach was considered appropriate because this study aimed to test theoretical relationships among variables and evaluate the structural model empirically using statistical analysis.

The study adopted a cross-sectional survey design in which data were collected from respondents at a single point in time. According to Hair et al. (2022), cross-sectional survey research is appropriate for organizational behavior studies that investigate employee perceptions, attitudes, and behavioral mechanisms within organizational settings.

This study specifically examined the mediating role of proactive work behavior in the relationship between creativity, training, and employee performance. Therefore, Structural Equation Modeling-Partial Least Squares (SEM-PLS) was employed because it is capable of simultaneously testing

complex causal relationships involving mediation effects and latent constructs measured through multiple indicators.

Population and Sample

The population of this study consisted of employees working at the Ministry of Manpower of the Republic of Indonesia. The target respondents included administrative employees, technical staff, and managerial employees involved in organizational operations and public service activities.

The sampling technique used in this study was purposive sampling. Respondents were selected based on several criteria, namely: Permanent employees of the Ministry of Manpower, Employees who had worked for at least one year; Employees who had participated in organizational training programs and Employees actively involved in operational or administrative work activities.

A total of 260 respondents participated in this study. The sample size was considered adequate for SEM-PLS analysis. According to Hair et al. (2022), the recommended minimum sample size for SEM-PLS ranges between five to ten times the number of indicators used in the research model. Since this study used 51 indicators, the minimum required sample size ranged from 255 to 510 respondents. Therefore, the obtained sample size fulfilled the statistical requirements for structural model estimation.

Data Collection Procedure

Primary data were collected using a structured questionnaire distributed directly and electronically to employees of the Ministry of Manpower. The questionnaire employed a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. Before distributing the questionnaire, a pilot test was conducted to ensure the clarity, readability, and relevance of the questionnaire items. Several revisions were made based on respondents' feedback to improve item comprehension and measurement consistency.

To ensure respondent confidentiality and ethical compliance, participants were informed that: Participation was voluntary, Responses would remain anonymous, Data would only be used for academic purposes and Respondents could withdraw at any stage of the survey process. These procedures were implemented to minimize response bias and maintain research ethics standards in organizational behavior research.

Measurement of Variables

This study consisted of four variables, namely creativity, training, proactive work behavior (PWB), and employee performance. Creativity was measured using indicators adapted from previous organizational creativity studies, including the ability to generate innovative ideas, problem-solving flexibility, work innovation, and adaptive thinking capability (Zhou & George, 2001; Rampa & Agogué, 2021). The creativity construct consisted of 12 measurement items.

Training was measured through indicators related to training relevance, knowledge improvement, skill enhancement, training effectiveness, and competency development (Samuah et al., 2024). The training variable consisted of 12 indicators. Proactive work behavior was measured using indicators related to initiative-taking, problem anticipation, work improvement behavior, organizational contribution, and future-oriented action (Parker et al., 2019). The PWB variable consisted of 12 indicators. Employee performance was measured using indicators including productivity, work quality, discipline, communication ability, initiative, and task completion effectiveness (Sakti et al., 2023). The employee performance construct consisted of 15 indicators.

Table 1. Operational Definition of Variables

Variables	Indicators	Items	Source
Creativity	Originality	3	

Variables	Indicators	Items	Source
Training	Eleborasi	3	Zhou & George (2001); Rampa & Agogu� (2021)
	Smoothness	3	
	Flexibility	3	
	Training Objectives to improve employee Capabilities	3	Samuah et al. (2024)
	Training Materials	3	
	Methods used	3	
	Qualifications Coaches master the material provided	3	
Proactive Work Behavior	Problem Prevention	3	Parker et al. (2019)
	Individual innovation	3	
	Sound	3	
	Takeover	3	
Employee Performance	Quantity of work	3	Parker et al. (2019)
	Quality of Work	3	
	Punctuality	3	
	Effectiveness	3	
	Responsibilities	3	

Data Analysis Technique

The data analysis technique employed in this study was Structural Equation Modeling-Partial Least Squares (SEM-PLS) using SmartPLS 4 software. SEM-PLS was selected because it is suitable for predictive research models, mediation analysis, and complex latent variable relationships involving reflective indicators (Hair et al., 2022). The analysis process consisted of two major stages: Evaluation of the measurement model (outer model); Evaluation of the structural model (inner model).

Measurement Model Evaluation

The outer model evaluation aimed to assess the validity and reliability of the research constructs. Convergent validity was evaluated using outer loading values and Average Variance Extracted (AVE). Indicators were considered valid if outer loading values exceeded 0.70 and AVE values exceeded 0.50 (Hair et al., 2022).

Discriminant validity was assessed using: Cross-loading analysis and Fornell-Larcker Criterion. Construct reliability was evaluated using: Composite Reliability (CR) and Cronbach's Alpha. A construct was considered reliable if CR and Cronbach's Alpha values exceeded 0.70.

Structural Model Evaluation

The structural model evaluation aimed to examine the relationships among latent variables and test the proposed hypotheses. The evaluation included: Coefficient of determination (R^2); Predictive relevance (Q^2); Effect size (f^2); Path coefficient analysis; and Hypothesis testing using bootstrapping procedures. Hypothesis testing was conducted using a bootstrapping resampling method with 5,000 subsamples. Hypotheses were accepted if the t-statistic value exceeded 1.96 and the p-value was below 0.05. In addition to the coefficient of determination (R^2), predictive relevance (Q^2) and model fit were also evaluated. The blindfolding procedure generated Q^2 values greater than zero for both endogenous variables, indicating that the model possesses adequate predictive relevance. Furthermore, the Standardized Root Mean Square Residual (SRMR) value

was below the recommended threshold of 0.08, suggesting that the proposed model demonstrates acceptable overall fit according to SEM-PLS criteria.

Common Method Bias

Since this study relied on self-reported questionnaire data, common method bias (CMB) was assessed to ensure the robustness of the findings. Harman's single-factor test was conducted to examine whether a single factor dominated the explained variance. The results indicated that the total variance explained by a single factor was below the threshold of 50%, suggesting that common method bias was not a serious concern in this study. Additionally, procedural remedies were implemented by ensuring respondent anonymity, randomizing question order, and minimizing ambiguous wording to reduce potential measurement bias.

Ethical Consideration

This study adhered to ethical principles in social science research. Respondents voluntarily participated in the study after receiving explanations regarding the purpose of the research and confidentiality assurance. No personal identifying information was collected during the data collection process. The research was conducted solely for academic purposes and complied with ethical standards for organizational and behavioral research.

RESULT AND DISCUSSION

RESULTS

Respondent Characteristics

This study involved 260 employees of the Ministry of Manpower of the Republic of Indonesia as respondents. Based on gender distribution, the majority of respondents were male employees accounting for 56.9%, while female employees represented 43.1%. In terms of age, most respondents were between 31–35 years old (35.4%), followed by employees aged above 36 years (28.5%). This finding indicates that the majority of respondents were within productive working age and possessed sufficient professional experience to understand organizational dynamics and bureaucratic work systems.

Regarding educational background, most respondents held undergraduate degrees (53.5%), followed by postgraduate degrees (26.2%). This condition reflects that employees generally possess adequate educational qualifications to support adaptive capability, creativity, and organizational learning processes. In terms of work tenure, most respondents had worked between 6–10 years (31.2%), indicating that respondents had substantial experience in understanding organizational culture, work procedures, and institutional policies within the Ministry of Manpower.

Descriptive Statistics

The descriptive analysis revealed that all research variables were categorized at a very high level. Creativity obtained a mean score of 4.34, training scored 4.28, proactive work behavior (PWB) scored 4.28, and employee performance scored 4.32. These findings indicate that employees generally perceive themselves as highly adaptive, innovative, proactive, and capable of performing organizational tasks effectively.

The high creativity score suggests that employees possess flexibility in generating ideas, identifying work-related problems, and developing innovative solutions within bureaucratic systems. Similarly, the high training score indicates that organizational training programs have been perceived positively in improving employee competence and technical capability.

Furthermore, the high level of proactive work behavior demonstrates that employees tend to actively initiate improvements, anticipate organizational problems, and contribute beyond formal job requirements. This condition reflects the emergence of adaptive behavioral patterns among public-sector employees amid bureaucratic transformation and digital governance reforms.

The high employee performance score also indicates that respondents were able to complete work responsibilities effectively, maintain work quality, and support organizational objectives efficiently. Overall, the descriptive findings suggest that the Ministry of Manpower has developed a relatively adaptive human resource environment characterized by high creativity, organizational learning, proactive behavior, and performance orientation.

Measurement Model Evaluation

Convergent Validity

The convergent validity test results demonstrate that all indicators used in this study achieved outer loading values above the recommended threshold of 0.70, indicating satisfactory construct validity. Specifically, the creativity variable showed loading values ranging from 0.764 to 0.809, while the training variable ranged from 0.764 to 0.809. Furthermore, the employee performance variable demonstrated loading values between 0.729 and 0.809, and the proactive work behavior variable ranged from 0.739 to 0.831. According to Hair et al. (2022), indicators with outer loading values exceeding 0.70 are considered capable of adequately representing their respective latent constructs. Therefore, all indicators in this study were declared valid and suitable for further structural model evaluation using SEM-PLS analysis

In addition, the Average Variance Extracted (AVE) values for all variables exceeded the minimum criterion of 0.50. Creativity obtained an AVE value of 0.614, training 0.661, proactive work behavior 0.619, and employee performance 0.579. These findings indicate that the constructs explained more than 50% of indicator variance, thereby confirming adequate convergent validity.

Reliability Analysis

The reliability test results indicate that all research constructs achieved Cronbach's Alpha, and Composite Reliability values above the recommended threshold of 0.70, demonstrating satisfactory internal consistency and construct reliability. The creativity variable obtained Cronbach's Alpha and rho_c values of 0.790, and 0.791, respectively. Meanwhile, the training variable achieved values of 0.829 and 0.829 indicating strong reliability. Furthermore, employee performance demonstrated reliability values of 0.818 and 0.819, while proactive work behavior obtained values of 0.796 and 0.810. According to Hair et al. (2022), constructs with reliability coefficients exceeding 0.70 are considered reliable and capable of consistently measuring their respective latent variables. Therefore, all constructs in this study were declared reliable and suitable for further structural model analysis using SEM-PLS.

Tabel 2 Result of the measurement model

Variables	Indicators	Factor Loading	CA	CR	AVE
Creativity	Originality	0.764	0.790	0.791	0.614
	Eleborasi	0.809			
	Smoothness	0.778			
	Flexibility	0.783			
Training	Training Objectives to improve employee Capabilities	0.807	0.829	0.829	0.661
	Training Materials	0.809			

	Methods used	0.836			
	Qualifications Coaches master the material provided	0.800			
Proactive Work Behavior	Problem Prevention	0.831			
	Individual innovation	0.796	0.796	0.810	0.619
	Sound	0.776			
	Takeover	0.739			
Employee Performance	Quantity of work	0.766			
	Quality of Work	0.773			
	Punctuality	0.774	0.818	0.819	0.579
	Effectiveness	0.763			
	Responsibilities	0.729			

Discriminant Validity

As shown in Table 3, all HTMT values were below the conservative threshold of 0.85, indicating satisfactory discriminant validity among the latent constructs. Likewise, the Fornell-Larcker assessment demonstrated that the square root of AVE for each construct exceeded the correlations with other constructs. Collectively, these findings confirm that the constructs used in this study are empirically distinct and free from discriminant validity concerns.

Discriminant validity was assessed using cross-loading analysis and the Fornell-Larcker Criterion. The results indicated that all indicators possessed higher loading values on their respective constructs compared to other constructs. This finding confirms that each construct was empirically distinct and capable of measuring unique conceptual dimensions.

Furthermore, the square root values of AVE for all constructs were higher than the correlations among latent variables, satisfying the Fornell-Larcker Criterion. Therefore, all constructs demonstrated satisfactory discriminant validity.

Table 3 HTMT and Fornel Lecker Test Results

Variable	1	2	3	4
Creativity	0.784	0.582*	0.590*	0.634*
Training	0.472	0.813	0.619*	0.749*
Proactive Work Behavior	0.476	0.618	0.786	0.720*
Employee Performance	0.510	0.618	0.587	0.761

*HTMT

Structural Model Evaluation

Coefficient of Determination (R^2)

The coefficient of determination (R-square) results indicate that the structural model possesses moderate explanatory power in predicting endogenous variables. The proactive work behavior (PWB) variable obtained an R-square value of 0.335 and an adjusted R-square value of 0.330, indicating that creativity and training jointly explain 33.5% of the variance in proactive work behavior, while the remaining 66.5% is influenced by other variables outside the research model. Furthermore, employee performance achieved an R-square value of 0.506 and an adjusted R-square value of 0.500, suggesting that creativity, training, and proactive work behavior collectively explain 50.6% of the variance in employee performance. According to Hair et al. (2022), R-square values ranging between 0.25 and 0.50 are categorized as moderate explanatory power in SEM-PLS analysis.

In addition, the predictive relevance of the model was assessed using the Stone-Geisser Q-square (Q^2) statistic obtained through the blindfolding procedure. The results showed Q^2 values of 0.316 for proactive work behavior and 0.427 for employee performance. Since both Q^2 values are substantially greater than zero, the model demonstrates satisfactory predictive relevance and possesses adequate predictive capability for the endogenous constructs. These findings indicate that the proposed structural model not only explains the variance of the endogenous variables but also exhibits meaningful predictive power in forecasting employee behavioral and performance outcomes.

Furthermore, the Standardized Root Mean Square Residual (SRMR) was employed to assess the overall model fit. The obtained SRMR value of 0.062 falls below the recommended cutoff value of 0.08, indicating a satisfactory level of model fit. This finding demonstrates that the proposed model exhibits a relatively small residual difference between the observed and estimated correlations, thereby supporting the adequacy of the structural model in explaining the relationships among creativity, training, proactive work behavior, and employee performance.

All data were collected using a self-reported questionnaire, Harman's Single-Factor Test was conducted to assess the potential presence of common method bias (CMB). The results indicated that the first unrotated factor accounted for 40.1% of the total variance, which is below the commonly accepted threshold of 50% (Podsakoff et al., 2003). This finding suggests that no single factor dominated the variance explained by the measurement items and that common method bias is unlikely to pose a serious threat to the validity of the study's results. Therefore, it can be concluded that common method bias is not a significant concern in the present study.

Therefore, the structural model in this study can be considered sufficiently capable of explaining and predicting employee behavioral and performance mechanisms within the public-sector organizational context.

Hypothesis Testing

The bootstrapping results demonstrated that all proposed hypotheses were statistically significant.

Table 4. Structural Model and Hypothesis Testing Results

Relationship Between Variables	Path Coefficient $t(\beta)$	t-Statistic	P-Value	Result	f^2	R^2	Q^2
Creativity → Proactive Work Behavior	0.300	4.013	0,000	Supported	0.105	0.335	0.316
Training → Proactive Work Behavior	0.374	5.978	0,000	Supported	0.163		
Creativity → Employee Performance	0.190	2.678	0,007	Supported	0.051	0.506	0.427
Training → Employee Performance	0.371	4.889	0,000	Supported	0.186		
Proactive Work Behavior → Employee Performance	0.306	3.817	0,000	Supported	0.126		
Creativity → Proactive Work Behavior → Employee Performance	0.092	3.298	0,001	Supported	-	-	-
Training → Proactive Work Behavior → Employee Performance	0.114	3.074	0,002	Supported	-	-	-

Creativity → Proactive Work Behavior

The findings revealed that creativity positively and significantly influenced proactive work behavior. This result indicates that employees possessing higher creativity levels tend to demonstrate stronger initiative, problem anticipation, and work improvement behavior.

The effect size analysis further indicates that creativity exerts a small effect on proactive work behavior ($f^2 = 0.105$). Although the contribution is not substantial, the result demonstrates that employees who possess higher levels of creativity tend to exhibit greater initiative in identifying opportunities for improvement and proposing innovative solutions within the workplace.

This finding supports Social Cognitive Theory (Bandura, 2001), which explains that cognitive capability plays a crucial role in shaping proactive behavioral responses. Employees who are capable of generating innovative ideas are more likely to initiate constructive organizational changes because they possess greater self-efficacy and adaptive confidence.

Within the context of the Ministry of Manpower, employees frequently encounter dynamic labor governance issues requiring flexible and responsive solutions. Therefore, creative employees are more likely to proactively identify inefficiencies, improve service procedures, and contribute innovative ideas to organizational development.

This finding is consistent with previous studies conducted by Zhou and George (2001) and Zou et al. (2024), which reported that creativity positively encourages proactive and change-oriented behavior in organizational settings.

Training → Proactive Work Behavior

Training was also found to positively and significantly influence proactive work behavior. This finding suggests that organizational training programs contribute not only to technical competence enhancement but also to behavioral activation and employee initiative development.

In addition to its statistical significance, training demonstrated a medium effect size on proactive work behavior ($f^2 = 0.163$). This finding suggests that structured training programs play an important role in encouraging employees to engage in self-initiated and future-oriented behaviors. Within public-sector organizations, training appears to serve not only as a mechanism for competency development but also as a catalyst for proactive action.

From the perspective of Social Cognitive Theory, training functions as a social learning mechanism through which employees acquire new knowledge, behavioral models, and confidence in performing organizational tasks. Employees who receive relevant and practical training are more likely to initiate work improvements and respond proactively toward organizational challenges.

In the Ministry of Manpower context, training programs related to digital administration, labor policy implementation, and public service improvement may encourage employees to become more adaptive and initiative-oriented.

This finding supports previous studies by Samuah et al. (2024), which concluded that training effectiveness significantly contributes to proactive work behavior and organizational adaptability.

Creativity → Employee Performance

The results showed that creativity positively influenced employee performance. Creative employees tend to demonstrate better problem-solving capability, work flexibility, and innovation in completing organizational tasks effectively.

The effect size of creativity on employee performance was categorized as small ($f^2 = 0.051$). This result indicates that creativity contributes to performance improvement; however, its influence is

relatively limited compared with other organizational factors. In bureaucratic environments, creative ideas often require institutional support and implementation mechanisms before they can generate measurable performance outcomes.

This finding indicates that creativity serves as an important psychological resource for improving work effectiveness in bureaucratic organizations. Employees capable of generating innovative approaches are more likely to improve work quality, efficiency, and service responsiveness.

In public-sector organizations characterized by rigid procedures and administrative complexity, creativity becomes increasingly important because employees are often required to adapt formal systems to rapidly changing environmental demands.

This finding is aligned with the studies of Inegbedion et al. (2021), which found that employee creativity contributes positively to organizational effectiveness and performance improvement.

Training → Employee Performance

Training significantly affected employee performance. Employees who participated in organizational training programs demonstrated improved knowledge, technical capability, and work effectiveness.

Training exhibited a medium effect size on employee performance ($f^2 = 0.186$), representing the strongest direct effect within the model. This finding highlights the strategic importance of competency development programs in enhancing employee effectiveness, productivity, and service quality within government institutions.

Training contributes to employee performance because it enhances job competence, strengthens work confidence, and improves employees' ability to adapt to technological and organizational changes. Effective training programs also reduce operational errors and improve service quality.

Within the Ministry of Manpower, training activities focusing on labor administration systems, digital governance, and public service procedures appear to strengthen employee capability in completing organizational responsibilities more efficiently.

This finding supports previous studies conducted by Tharenou et al. (2007) and Samuah et al. (2024), which emphasized the importance of training effectiveness in improving employee productivity and organizational performance.

Proactive Work Behavior → Employee Performance

Proactive work behavior positively influenced employee performance. Employees demonstrating proactive behavior tend to complete tasks more effectively, anticipate organizational problems earlier, and actively contribute to organizational improvement.

Although proactive work behavior demonstrated a statistically significant effect on employee performance, the effect size was classified as small ($f^2 = 0.126$). This finding indicates that proactive behaviors contribute meaningfully to performance enhancement, particularly through employee initiative and continuous improvement efforts, although additional organizational factors also influence performance outcomes.

This finding confirms that proactive behavior represents an important behavioral mechanism transforming employee competence into performance outcomes. Employees who actively initiate improvements and anticipate future challenges are more capable of maintaining organizational effectiveness amid environmental uncertainty.

Within bureaucratic organizations, proactive employees are especially valuable because they contribute not only through task completion but also through organizational innovation and continuous improvement initiatives.

This finding is consistent with Parker et al. (2019), who argued that proactive behavior significantly contributes to individual and organizational performance enhancement.

Mediating Role of Proactive Work Behavior

The mediation analysis demonstrated that proactive work behavior significantly mediated the relationships between creativity and employee performance as well as between training and employee performance.

This finding suggests that creativity and training do not automatically improve performance directly. Instead, these factors first stimulate proactive behavior, which subsequently enhances employee performance. In other words, proactive work behavior acts as a behavioral transformation mechanism linking cognitive capability and organizational support to performance outcomes.

Theoretically, this finding strengthens Social Cognitive Theory by confirming that employee behavior serves as an important intermediary mechanism through which environmental support and individual capability are translated into organizational performance.

Empirically, this study contributes to public-sector human resource management literature by demonstrating that proactive work behavior plays a central role in bureaucratic performance improvement, particularly within Indonesian government institutions.

The stronger influence of training on employee performance compared with creativity reflects the characteristics of public-sector organizations, where formal competency development mechanisms play a central role in shaping employee behavior and performance outcomes. Unlike private-sector organizations that often emphasize flexibility and innovation, government institutions operate within formal regulatory frameworks that require employees to align their actions with established procedures. Consequently, training serves not only as a competence-enhancement mechanism but also as a means of legitimizing behavioral change. Nevertheless, the significant mediating role of proactive work behavior indicates that training effectiveness depends on employees' willingness to apply acquired knowledge proactively in workplace situations

Discussion and Theoretical Implications

The findings of this study provide important theoretical implications for organizational behavior and public-sector human resource management literature. First, this study strengthens Social Cognitive Theory by confirming that creativity and training influence employee performance through proactive behavioral mechanisms. The findings support Bandura's argument that human behavior is shaped through reciprocal interactions among cognitive capability, environmental learning, and behavioral activation.

Second, this study extends proactive work behavior literature within the context of Indonesian public-sector bureaucracy. Previous studies largely focused on private-sector organizations, whereas this study demonstrates that proactive behavior is equally important within government institutions undergoing bureaucratic reform and digital transformation.

Third, this study highlights the strategic importance of creativity and adaptive training systems in improving public employee performance. Bureaucratic organizations increasingly require employees who are not only technically competent but also proactive, innovative, and responsive toward organizational change.

From a practical perspective, the Ministry of Manpower should strengthen employee creativity development programs, improve training relevance, and establish organizational cultures that support proactive initiative and innovation. Organizational leaders should also encourage

psychological safety and employee autonomy to foster sustainable proactive behavior within bureaucratic environments.

More specifically, the Ministry of Manpower may establish innovation-based performance programs that encourage employees to submit work-improvement proposals regularly. Post-training evaluation systems should also be strengthened through mandatory action plans that require employees to demonstrate how newly acquired competencies are implemented within their respective units. Furthermore, indicators related to proactive behavior, such as initiative-taking, process improvement participation, and problem-prevention activities, may be incorporated into employee performance appraisal systems to support bureaucratic reform and service excellence initiatives.

CONCLUSION

This study examined the direct and indirect effects of creativity and training on employee performance through proactive work behavior among employees of the Ministry of Manpower of the Republic of Indonesia. The findings demonstrated that creativity and training significantly influenced proactive work behavior and employee performance. Furthermore, proactive work behavior was proven to significantly affect employee performance and successfully mediate the relationships between creativity, training, and employee performance.

The findings indicate that creativity serves as an important cognitive capability enabling employees to develop innovative ideas, adaptive problem-solving strategies, and work flexibility within bureaucratic environments. Employees with higher creativity levels tend to demonstrate stronger initiative and organizational contribution, which subsequently improves work effectiveness and performance outcomes.

In addition, training was found to play a strategic role in improving employee competence, behavioral adaptability, and organizational responsiveness. Effective training programs not only strengthen technical capability but also encourage employees to become more proactive in identifying problems, initiating improvements, and responding to organizational challenges. Therefore, organizational training should not merely focus on technical knowledge transfer but also emphasize behavioral development and adaptive capability enhancement.

This study also confirmed the important mediating role of proactive work behavior in transforming individual capability and organizational support into employee performance. The findings suggest that creativity and training do not automatically improve performance unless employees demonstrate proactive initiative and behavioral engagement within organizational processes. Thus, proactive work behavior acts as a behavioral mechanism linking cognitive resources and organizational learning toward higher performance achievement.

From a theoretical perspective, this study strengthens Social Cognitive Theory by confirming that employee behavior is shaped through reciprocal interactions among cognitive capability, environmental support, and behavioral activation. Creativity represents an internal cognitive factor, training reflects environmental learning support, while proactive work behavior functions as the behavioral mechanism that translates capability and organizational intervention into performance outcomes.

This study also contributes to the literature on public-sector human resource management by extending proactive work behavior research into the Indonesian government bureaucracy context,

which remains relatively underexplored in previous organizational behavior studies dominated by private-sector settings.

From a managerial perspective, the Ministry of Manpower should strengthen organizational systems that support employee creativity, adaptive learning, and proactive initiative. Management should provide innovation-oriented training programs, strengthen participative leadership practices, and establish organizational cultures that encourage employee autonomy, psychological safety, and continuous improvement behavior. Such efforts are essential to support bureaucratic reform, digital transformation, and public service quality improvement within government institutions.

Despite its contributions, this study has several limitations. First, the study employed a cross-sectional research design, which limits the ability to observe behavioral changes over time. Second, the research focused only on one government institution, thereby limiting the generalizability of findings to other public-sector organizations. Third, this study relied primarily on self-reported questionnaire data, which may potentially contain response bias despite procedural efforts to minimize common method bias.

Therefore, future studies are recommended to employ longitudinal research designs to examine the dynamic development of proactive work behavior over time. Future research may also expand the research scope by involving multiple government institutions or conducting comparative studies between public and private organizations. Additionally, future studies are encouraged to integrate other organizational variables such as leadership style, organizational culture, psychological empowerment, and digital transformation capability to develop a more comprehensive understanding of employee performance mechanisms within modern public organizations.

Overall, this study highlights that employee performance improvement within public-sector organizations requires not only competence enhancement but also the development of proactive and adaptive behavioral capabilities. In the context of bureaucratic reform and digital governance transformation, organizations increasingly require employees who are innovative, initiative-oriented, and capable of contributing actively toward organizational sustainability and public service excellence.

Beyond the context of the Ministry of Manpower, the findings contribute to the growing body of public-sector human resource management literature by demonstrating that employee competence alone is insufficient to achieve sustainable performance improvement. Government institutions facing digital transformation and bureaucratic reform must also cultivate proactive behavioral capabilities that enable employees to anticipate challenges, initiate improvements, and actively contribute to organizational effectiveness. Therefore, proactive work behavior represents a critical mechanism through which human resource development initiatives can be translated into meaningful organizational outcomes.

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