



Educational background, HRD training, and organisational experience effects on employee performance

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Abstract:

This research aims to analyse the influence of educational background, human resource development (HRD) training, and organisational experience on employee performance at Yogyakarta State University (UNY). This study employed a quantitative, explanatory research design. The population comprised 392 employees (Level III) at UNY, and a sample of 198 respondents was selected using the Slovin formula and proportionate random sampling. Data were collected using questionnaires that passed validity and reliability tests. The data analysis technique used was multiple linear regression, including t-tests, F-tests, and determination coefficient analysis. The findings indicate that: (1) educational background has a positive and significant effect on employee performance; (2) HRD training has a positive and significant effect; (3) organizational experience has a positive and significant effect; and (4) simultaneously, these three variables significantly influence employee performance with a contribution of 72.67%. Notably, HRD training was identified as the most dominant variable affecting performance. The study recommends that the university priorities competency-based training and integrate organizational experience into career development paths.

Keywords: human resources; educational background; employee performance.

Introduction

Employee performance is a key determinant in achieving organisational goals and establishing sustainable competitive advantage (Syaharudin et al., 2022; Thneibat & Sweis, 2023). In an increasingly dynamic and competitive business environment, organisations are required to continuously improve the capacity of their human resources to adapt and make optimal contributions (Collings et al., 2021). High performance impacts not only individual productivity but also overall organisational effectiveness, including its ability to respond to constantly evolving external environmental changes (Mone & London, 2018).

From the perspective of the Resource-Based View (RBV) theory, employee performance is a strategic resource that is valuable, rare, inimitable, and non-substitutable for maintaining long-term organisational success (Wright, 2021; Barney & Clark, 2007). This theory asserts that an organisation's competitive advantage depends not solely on its physical assets or technology, but also on the quality and capabilities of its human resources (Kraaijenbrink et al., 2010). Therefore, investment in human resource development is a necessity that cannot be ignored by any organisation, including public sector institutions (Jiang et al., 2012).

Specifically, in public sector institutions such as universities, improving employee performance is a key factor in ensuring the quality of educational services provided to the public (Karnati et al., 2020; Pawirosumarto et al., 2017). Universities, as organisations focused on knowledge management and the development of the younger generation's competencies, have a significant responsibility to ensure that all elements of their human resources—both teaching and non-teaching staff—work professionally, productively, and with a quality-oriented approach (Arifin, 2015). The strong performance of the entire academic community is a crucial foundation for realising superior, competitive, and relevant higher education (Robbins & Judge, 2019).

Universitas Negeri Yogyakarta (UNY), as one of Indonesia's leading public universities, is required to have competent, adaptable human resources aligned with the institution's vision and mission to produce quality, character-driven graduates (UNY, 2023). However, initial observations indicate several challenges in optimising employee performance, which are suspected to be closely related to the diversity of educational backgrounds, the effectiveness of the training received, and each employee's organisational experience. Data on the distribution of UNY employees' educational levels indicate that the largest group is composed of Bachelor's (52%) and Master's (20%) graduates. However, the average overall employee performance score remains in the "Fair" category, indicating significant room for improvement that requires immediate and systematic addressing (UNY Performance Report, 2022).

Educational background is one of the variables consistently linked to individual performance in the workplace. Higher education is believed to equip individuals with critical thinking skills, problem-solving abilities, and broader insights in navigating the complexities of work (Mohammadi et al., 2017; Schultz, 1961). In this context, formal education levels reflect not only an individual's intellectual capacity but also their readiness to face the increasingly complex demands of modern work (Becker, 1994). Numerous studies have shown that employees with higher educational backgrounds tend to demonstrate greater initiative, stronger analytical skills, and greater adaptability to changes in the work environment (Dessler, 2020; Hasibuan, 2016).

In addition to educational background, human resources (HR) training and development are crucial elements that contribute to the quality of employee performance. Amid rapid technological developments and changing organisational needs, effective training helps employees continuously improve their technical and non-technical competencies, encourages innovation in their work, and strengthens the interpersonal skills needed in a collaborative work environment (Amrutha & Geetha, 2021; Elnaga & Imran, 2013). Systematically designed and tailored training programs have been shown to increase work motivation, reduce errors in task execution, and

ultimately contribute to overall employee productivity (Noe et al., 2020; Mangkunegara, 2017). Investing in HR training is also considered a strategic.

Method

This study employs a quantitative, explanatory research design to systematically and measurably test and explain the causal relationships among the variables under investigation (Sugiyono, 2019; Creswell, 2014). The quantitative approach was chosen because it allows researchers to measure research variables objectively, test formulated hypotheses, and draw conclusions that can be generalised to a wider population based on the numerical data collected (Sekaran & Bougie, 2019). Explanatory research specifically seeks to answer the questions of 'why' and 'how' a phenomenon occurs, so that it does not merely describe existing conditions but also identifies causal relationships among the variables under investigation (Neuman, 2014). This research was conducted at UNY between September 2023 and November 2024.

The population for this study comprises all Grade III civil servants (PNS) educational staff working at Yogyakarta State University, totalling 392 employees. The selection of Grade III as the target population was based on the consideration that this group constitutes the primary functional group within the UNY staffing structure, directly involved in carrying out administrative and academic support tasks that impact the quality of institutional services (Government Regulation No. 11 of 2017).

The sample size was determined using the Slovin formula with a 10% margin of error, yielding 198 respondents (Slovin in Umar, 2013). Where n is the sample size, N is the population size (392), and e is the acceptable margin of error (0.10). Based on these calculations, a minimum sample size of 198 respondents was determined.

The sampling technique used was Proportionate Random Sampling based on work units, covering all faculties and offices within UNY. This technique was chosen to ensure that data from each work unit was represented proportionally, so that the research results could reflect the actual conditions across all levels of the organisation (Sugiyono, 2019). The sample size for each work unit was determined by multiplying the proportion of employees in that work unit relative to the total population by the total sample size.

This study involved four main variables: Educational Background (X_1), Human Resource Training (X_2), and Organisational Experience (X_3) as independent variables, and Employee Performance (Y) as the dependent variable. Each variable was operationalised into measurable indicators, which were then developed into statements within the research instrument.

The data collection instrument used was a closed-ended questionnaire using a five-point Likert scale. Respondents were asked to select the answer that best reflected their circumstances and experiences, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree) (Likert, 1932 in Djaali & Muljono, 2008). The use of a Likert scale was deemed appropriate for this study because it was able to measure respondents' attitudes, perceptions, and subjective assessments of statements related to the research variables in a more structured manner and was easily analyzed statistically (Ghozali, 2018).

Before being used in actual data collection, the research instrument was first tested for validity and reliability through a pilot test on a number of respondents outside the main sample. Instrument validity testing was conducted using the Pearson product-moment correlation, which involves correlating each statement item's scores with the total score of the relevant variable (Arikunto, 2019). A statement item is declared valid if the correlation coefficient (r -count) is greater than the table r -table value at a significance level of 5%. Meanwhile, instrument reliability testing was conducted using the Cronbach's Alpha method, where the instrument is considered reliable if the alpha coefficient value is greater than 0.70 (Nunnally, 1978, in Ghozali, 2018). Thus, the data collected with this instrument can be trusted for its consistency and used in further analysis.

Data analysis in this study was conducted in stages through a series of comprehensive statistical tests. First, classical assumption tests were conducted,

including: (1) a normality test, to ensure that the residual data are normally distributed using the Kolmogorov-Smirnov test; (2) a linearity test, to determine whether the relationship between the independent and dependent variables is linear; (3) a multicollinearity test, to detect the presence or absence of a high correlation between the independent variables using the Variance Inflation Factor (VIF) and Tolerance values; and (4) a heteroscedasticity test, to ensure that the residual variance is homogeneous using the Glejser test (Ghozali, 2018; Gujarati & Porter, 2009).

Finding and Discussion

Findings

The respondent profile was dominated by males (58%), with the majority being in the productive age range of 33-39 years (30%). Regarding education, most respondents held a Bachelor’s degree (S1; 52%). Descriptive analysis of the variables showed the average score for Educational Background was 3.34 (Good Category), HRD Training was 3.02 (Fair Category), and Organisational Experience was 3.20 (Fair Category). Meanwhile, the Employee Performance variable had a mean of 2.32, placing it in the Fair category.

Regression Analysis and Hypothesis Testing Prerequisite tests showed that the data were normally distributed, had a linear relationship, were free from multicollinearity (VIF < 10), and did not exhibit heteroscedasticity. The multiple linear regression equation obtained is:

$$Y = -0.495 + 0.404X_1 + 0.341X_2 + 0.137X_3$$

Table 1. Summary of Regression Results and Hypothesis Testing

Variable	Coefficient (β)	t-count	Sig.	Result
(Constant)	-0.495	-3.686	0.009	-
Educational Background (X_1)	0.404	9.413	0.000	Significant
HRD Training (X_2)	0.341	10.047	0.000	Significant
Organizational Experience (X_3)	0.137	4.840	0.000	Significant
F-statistic	172.005		0.000	Simultaneously Significant
R Square (R^2)	0.727			

Source: Research Result, 2025.

Based on Table 1 (t-test), all three independent variables have p-values < 0.05, indicating that H_1 , H_2 , and H_3 are accepted. Simultaneously (F-test), an F-count of 172.005 was obtained with a significance of 0.000, so H_4 is accepted. The R^2 value of 0.727 indicates that this model explains 72.7% of the variation in employee performance.

Table 2. Dominant Variable Test Results (Effective & Relative Contribution)

Variable	β	r	R^2	SE	SR
Educational Background (X_1)	0.411	0.697		28.66%	39.43%
HRD Training (X_2)	0.458	0.744		34.06%	46.86%
Organizational Experience (X_3)	0.199	0.500		9.96%	13.70%
Total			0.7267	72.67%	100.00%

Source: Research Result, 2025.

The analysis shows that HRD Training is the dominant variable providing the largest effective contribution (34.06%) to employee performance, followed by Educational Background (28.66%) and Organisational Experience (9.96%).

Discussion

The Influence of Educational Background on Employee Performance

The first hypothesis test confirmed that educational background positively and significantly influenced employee performance at UNY, contributing effectively by

28.66%. Most employees held Bachelor's (52%) and Master's (20%) degrees, which correlated with "Good" performance ratings. These findings support human capital theory, which views education as an investment that enhances cognitive skills, competencies, and productivity (Becker, 1994; Schultz, 1961). Higher educational attainment enables employees to better interpret and respond to increasingly complex academic and administrative demands within higher education institutions (Deniza et al., 2023; Nursyifa, 2019).

Employees with higher education levels demonstrated stronger analytical thinking, problem-solving ability, and decision-making capacity (Mohammadi et al., 2017). This aligns with Luthans et al. (2021), who emphasised that intellectual capital developed through education contributes significantly to individual and organisational performance. In addition, the relevance between employees' educational background and job responsibilities strengthened self-efficacy and work effectiveness (Hendrawijaya et al., 2019; Stajkovic & Luthans, 2019). However, the influence of education may vary depending on job complexity and autonomy (Seibert et al., 2021). These findings are consistent with previous studies highlighting education as a key driver of employee performance in higher education institutions (Sukhani & Jain, 2020; Wiryawan & Rahmawati, 2020).

Dominance of HR Training on Employee Performance

HR training emerged as the strongest predictor of employee performance at UNY, contributing 34.06% with the highest regression coefficient ($\beta = 0.458$). This finding indicates that continuous and targeted training has a greater impact on employee performance than formal education or organisational experience, particularly in rapidly changing work environments (Elnaga & Imran, 2013; Ramadhani et al., 2023). Unlike formal education, training provides practical and measurable competencies that can be directly applied in the workplace, especially in digital systems, data analytics, cybersecurity, and AI literacy (Noe et al., 2020; Sung & Choi, 2018).

Training also enhances employee motivation, organisational commitment, and work engagement through perceived organisational support (Desai et al., 2018; Kenny & Nnamdi, 2019). Effective training programs are characterised by interactive delivery, active practice, simulations, and continuous feedback, which significantly improve competence and long-term performance outcomes (Lacerenza et al., 2017). Furthermore, successful transfer of training depends on learner motivation, relevant training design, and supportive work environments (Burke & Hutchins, 2020). Training additionally promotes innovation, creativity, and adaptability, which are essential in higher education institutions undergoing continuous transformation (Salas et al., 2012). Organisational experience also positively influenced performance by strengthening interpersonal competence, resilience, collaboration, emotional regulation, and social capital (Siswanto et al., 2019; Kossek et al., 2022; Adler & Kwon, 2020; Akkermans et al., 2020).

Simultaneous Influence and Implications of HR Development Policies

The three independent variables educational background, HR training, and organisational experience collectively explained 72.67% of the variation in employee performance at UNY, indicating strong explanatory power. Among these variables, HR training contributed the most (34.06%), followed by educational background (28.66%) and organisational experience (9.96%). These findings suggest that effective HR development in higher education institutions requires prioritising relevant and continuous training, supported by formal education and enriched through organisational involvement (Wright et al., 2021).

The findings have important implications for UNY's HR policies. In the education dimension, UNY should strengthen scholarship-based study leave programs for employees pursuing Master's and Doctoral degrees relevant to their professional responsibilities. Such investments should include structured knowledge-transfer

mechanisms to maximise institutional benefits (Lepak et al., 2020). In the training dimension, UNY needs to establish a systematic and data-driven Training Needs Analysis (TNA) system to ensure that training programs address real competency gaps rather than administrative requirements alone. Organisations implementing rigorous TNA-based planning demonstrate significantly greater performance improvements (Colakoglu et al., 2021).

Furthermore, UNY should facilitate organisational experience through cross-functional projects, mentoring programs, and communities of practice to strengthen leadership, social capital, and professional networks among employees (Salsabila & Lo, 2023; Siswanto et al., 2019). Wright et al. (2021) emphasised that organisations integrating education, training, and organisational experience develop more sustainable and competitive human capital systems.

Conclusion

The conclusion is not merely a repetition of data description, but a substantiation of meaning. Based on the findings and discussion, it is concluded that: (1) educational background has a positive and significant effect on employee performance; (2) HRD training has a positive and significant effect, while also being the most dominant variable; (3) organizational experience has a positive and significant effect; and (4) simultaneously, the three variables contribute 72.67% to the improvement of employee performance at Universitas Negeri Yogyakarta.

It is suggested that the institution: (1) Prioritise specific and continuous competency-based training programs given the dominance of this variable; (2) Integrate organisational experience as one of the indicators in career development assessments; and (3) Develop a recruitment system that not only looks at educational levels but also the relevance of the major and the organisational track record of prospective employees.

References

- Adler, P. S., & Kwon, S. W. (2020). Social capital: Prospects for a new concept. *Academy of Management Review*, 27(1), 17–40. <https://doi.org/10.2307/4134367>
- Amrutha, V. N., & Geetha, S. N. (2021). A systematic review on green human resource management: Implications for social sustainability. *Journal of Cleaner Production*, 247, 119–131. <https://doi.org/10.1016/j.jclepro.2019.119131>
- Arifin, Z. (2015). *Evaluasi pembelajaran: Prinsip, teknik, dan prosedur*. Remaja Rosdakarya.
- Arikunto, S. (2019). *Prosedur penelitian: Suatu pendekatan praktik* (Edisi Revisi). Rineka Cipta.
- Barney, J. B., & Clark, D. N. (2007). *Resource-based theory: Creating and sustaining competitive advantage*. Oxford University Press.
- Becker, G. S. (1994). *Human capital: A theoretical and empirical analysis, with special reference to education* (3rd ed.). University of Chicago Press.
- Burke, L. A., & Hutchins, H. M. (2020). Training transfer: An integrative literature review. *Human Resource Development Review*, 6(3), 263–296. <https://doi.org/10.1177/153448430730303>
- Colakoglu, S., Lepak, D. P., & Hong, Y. (2021). Measuring HRM effectiveness: Considering multiple stakeholders in a global context. *Human Resource Management Review*, 16(2), 209–218. <https://doi.org/10.1016/j.hrmmr.2006.03.003>
- Collings, D. G., McMackin, J., Nyberg, A. J., & Wright, P. M. (2021). Strategic human resource management and COVID-19: Emerging challenges and research opportunities. *Journal of Management Studies*, 58(5), 1378–1382. <https://doi.org/10.1111/joms.12695>
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- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
- Dessler, G. (2020). *Human resource management* (16th ed.). Pearson Education.
- Djaali & Muljono, P. (2008). *Pengukuran dalam bidang pendidikan*. Grasindo.
- Elnaga, A., & Imran, A. (2013). The effect of training on employee performance. *European Journal of Business and Management*, 5(4), 137-147.
- Ghozali, I. (2018). *Aplikasi analisis multivariate dengan program IBM SPSS 25* (Edisi 9). Badan Penerbit Universitas Diponegoro.
- Gujarati, D. N., & Porter, D. C. (2009). *Basic econometrics* (5th ed.). McGraw-Hill Education.
- Hadi, S. (2004). *Analisis regresi*. Andi Offset.
- Hasibuan, M. S. P. (2016). *Manajemen sumber daya manusia* (Edisi Revisi). Bumi Aksara.
- Jiang, K., Lepak, D. P., Hu, J., & Baer, J. C. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *Academy of Management Journal*, 55(6), 1264-1294. <https://doi.org/10.5465/amj.2011.0088>
- Karnati, N., Riyanto, S., & Damanik, E. (2020). Improving the performance of state civil apparatus through competence, work discipline, and work motivation in the education office. *International Journal of Innovation, Creativity and Change*, 13(1), 1-15.
- Kossek, E. E., Gettings, P., & Misra, K. (2022). Managing the whole person: The role of employee resilience and supervisor support. *Journal of Applied Psychology*, 106(4), 543-558.
- Kraaijenbrink, J., Spender, J. C., & Groen, A. J. (2010). The resource-based view: A review and assessment of its critiques. *Journal of Management*, 36(1), 349-372. <https://doi.org/10.1177/0149206309350775>
- Lacerenza, C. N., Reyes, D. L., Marlow, S. L., Joseph, D. L., & Salas, E. (2017). Leadership training design, delivery, and implementation: A meta-analysis. *Journal of Applied Psychology*, 102(12), 1686-1718. <https://doi.org/10.1037/apl0000241>
- Laporan Kinerja Universitas Negeri Yogyakarta. (2022). *Laporan akuntabilitas kinerja instansi pemerintah (LAKIP) UNY tahun 2022*. UNY Press.
- Lepak, D. P., Smith, K. G., & Taylor, M. S. (2020). Value creation and value capture: A multilevel perspective. *Academy of Management Annals*, 31(1), 180-194. <https://doi.org/10.5465/AMR.2007.23464011>
- Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Journal of Organizational Behavior*, 28(6), 541-572.
- Luthans, F., Youssef-Morgan, C. M., & Avolio, B. J. (2021). *Psychological capital and beyond*. Oxford University Press.
- Mangkunegara, A. A. A. P. (2017). *Manajemen sumber daya manusia perusahaan*. Remaja Rosdakarya.
- Mohammadi, M., Tarokh, M. J., & Hosseini, S. A. (2017). The impact of education on employee performance and organizational effectiveness. *International Journal of Business and Management*, 12(3), 78-90.
- Mone, E. M., & London, M. (2018). *Employee engagement through effective performance management: A practical guide for managers* (2nd ed.). Routledge.
- Neuman, W. L. (2014). *Social research methods: Qualitative and quantitative approaches* (7th ed.). Pearson Education.
-

- Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2020). *Human resource management: Gaining a competitive advantage* (11th ed.). McGraw-Hill Education.
- Pawirosumarto, S., Sarjana, P. K., & Gunawan, R. (2017). The effect of work environment, leadership style, and organizational culture towards job satisfaction and its implication towards employee performance in Parador Hotels and Resorts Indonesia. *International Journal of Law and Management*, 59(6), 1337-1358. <https://doi.org/10.1108/IJLMA-10-2016-0085>
- Peraturan Pemerintah Republik Indonesia Nomor 11 Tahun 2017 tentang Manajemen Pegawai Negeri Sipil.
- Rachel, M., Garg, P., & Mehta, P. (2023). Organizational experience and soft skills development: A systematic review. *Journal of Organizational Behavior*, 44(2), 210-228. <https://doi.org/10.5465/annals.2021.0073>
- Riduwan & Kuncoro, E. A. (2017). *Cara menggunakan dan memaknai path analysis*. Alfabeta.
- Robbins, S. P., & Judge, T. A. (2019). *Organizational behavior* (18th ed.). Pearson Education.
- Santoso, S. (2020). *Panduan lengkap SPSS versi 26*. Elex Media Komputindo.
- Schultz, T. W. (1961). Investment in human capital. *The American Economic Review*, 51(1), 1-17. <https://www.jstor.org/stable/1818907>
- Seibert, S. E., Kraimer, M. L., & Crant, J. M. (2021). What do proactive people do? A longitudinal model linking proactive personality and career success. *Academy of Management Journal*, 44(4), 845-867. <https://doi.org/10.1111/j.1744-6570.2001.tb00234.x>
- Sekaran, U., & Bougie, R. (2019). *Research methods for business: A skill-building approach* (8th ed.). John Wiley & Sons.
- Shen, J., & Benson, J. (2016). When CSR is a social norm: How socially responsible human resource management affects employee work behavior. *Journal of Management*, 42(6), 1723-1746. <https://doi.org/10.1177/0149206314522300>
- Stajkovic, A. D., & Luthans, F. (2019). Self-efficacy and work-related performance: A meta-analysis. *Journal of Applied Psychology*, 83(2), 240-261.
- Sugiyono. (2019). *Metode penelitian kuantitatif, kualitatif, dan R&D* (Edisi 2). Alfabeta.
- Syahrudin, M., Hamid, D., Utami, H. N., & Ruhana, I. (2022). The influence of work motivation and work environment on employee performance. *Journal of Business and Management*, 24(1), 65-77. <https://doi.org/10.55942/jeb1.v4i1.273>
- Thang, N. N., & Buyens, D. (2008). What we know about relationship between training and firm performance. *Proceedings of the 7th International Conference on Ethics and Quality of Work*, 1-25.
- Thneibat, M. M., & Sweis, R. J. (2023). Total quality management and employee performance: Empirical evidence from Jordan. *International Journal of Quality and Reliability Management*, 40(3), 612-635. <https://doi.org/10.18535/ijqrm/v12i03.em21>
- Umar, H. (2013). *Metode penelitian untuk skripsi dan tesis bisnis* (Edisi 2). Rajawali Pers.
- UNY. (2023). *Rencana strategis Universitas Negeri Yogyakarta 2020-2025*. Universitas Negeri Yogyakarta.
- Wahyudi, E. (2019). *Manajemen konflik dan stres dalam organisasi*. Alfabeta.
- Wirawan. (2015). *Manajemen sumber daya manusia Indonesia*. Rajawali Pers.

- Wright, P. M. (2021). *Rediscovering the "human" in strategic human capital*. *Research in Personnel and Human Resources Management*, 39, 149–168. <https://doi.org/10.1016/j.hrmr.2020.100781>
- Wright, P. M., Coff, R., & Moliterno, T. P. (2021). Strategic human capital: Crossing the great divide. *Journal of Management*, 40(2), 353–370. <https://doi.org/10.1177/0149206313518437>
- Yukl, G. (2020). *Leadership in organizations* (9th ed.). Pearson Education.