

## **The Effect of Training, Competence, and Leadership on Job Satisfaction with Career Development as an Intervening Variable at XYZ Hospital**

**Kartika Bunga Fajar, Gurawan Dayona Ismail, Nunung Ayu Sofiati, Mochammad Mukti Ali, Yoyo Sudaryo**

Universitas Indonesia Membangun, Indonesia

Email: kartikafajar@student.inaba.ac.id,  
gurawan.dayona@inaba.ac.id, rnunungayu.sofiati@inaba.ac.id,  
mochammad.mukti@inaba.ac.id, yoyo.sudaryo@inaba.ac.id

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### **ABSTRACT**

*This study aims to examine the influence of training, competence, and leadership on career development, with job satisfaction acting as a mediating variable. The research uses a quantitative approach with a sample of 100 employees, analyzed using multiple linear regression and path analysis. Data were collected through a structured questionnaire, and the classical assumption tests confirmed that the regression model met the requirements of normality, no multicollinearity, and no heteroscedasticity. The results show that training, competence, and leadership have a positive and significant direct effect on both job satisfaction and career development. In addition, job satisfaction also has a significant direct impact on career development, making it a strong mediating variable. The coefficient of determination ( $R^2 = 0.648$ ) indicates that 64.8% of the variation in career development is explained by the variables of training, competence, leadership, and job satisfaction. The Sobel test results further confirm that job satisfaction mediates the relationship between the independent variables and career development. These findings suggest that organizations should focus on improving employee training, enhancing competencies, strengthening leadership practices, and maintaining high job satisfaction to effectively support employees' career advancement.*

**KEYWORDS** training, competence, leadership, job satisfaction, career development, mediation, regression analysis.



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### **INTRODUCTION**

Human resources (HR) are the most essential assets in the healthcare industry, playing a pivotal role in determining both the quality of healthcare services and the public image of an organization (Bohlander & Snell, 2023; Darmawan et al., 2020; Gerhart & Feng, 2021; Micah et al., 2022; Saks, 2022). Unlike other industries, healthcare institutions depend heavily on the competence, performance, and engagement of their workforce, which includes not only medical professionals such as doctors and nurses but also administrative and support staff. Consequently, effective human resource management becomes a critical strategic function to ensure service excellence and organizational sustainability (Ahmad, 2015; Bratton & Gold, 2017; Mathis et al., 2016; Molina-Azorin et al., 2021; Strohmeier, 2020).

Training was a fundamental function of human resource development that equipped employees with the knowledge, skills, and competencies necessary to perform their job roles effectively. It was a structured and planned activity aimed

at enhancing employees' performance and aligning their capabilities with the organization's strategic objectives. Training programs were designed to address specific job requirements, improve task execution, and foster learning and development (Barton et al., 2018; Lisi, 2021; Rampun@Ramlan et al., 2020; Scheuch et al., 2021). Ultimately, successful training contributed to improved employee performance, motivation, and confidence in their job responsibilities.

Competence referred to the set of knowledge, skills, abilities, and other characteristics that enabled an individual to perform their job effectively and achieve superior results. It encompassed both technical and behavioral dimensions and was essential for individual success and organizational productivity. Employees with high competence adapted better to changes, performed consistently, and contributed to innovation and quality improvement. Competence also served as a foundation for employee development and career progression.

Leadership involved influencing, guiding, and inspiring individuals or groups to achieve common goals. It included the ability to motivate employees, make strategic decisions, and foster a positive organizational climate (Fiernaningsih et al., 2022; Lee et al., 2023; Saleh et al., 2015; Thomas, 2018). In healthcare, leadership was crucial for staff coordination, communication, decision-making, and service delivery. Effective leadership depended not only on authority but also on interpersonal skills, emotional intelligence, and responsiveness to dynamic workplace situations. Leaders served as role models, provided direction, and supported employees' professional growth. Their ability to communicate vision, show concern, and facilitate improvement played a vital role in enhancing engagement and job satisfaction. Strong leadership was associated with reduced turnover, increased performance, and greater staff purpose.

Career development was a continuous, systematic process aimed at improving employees' skills, knowledge, experience, and readiness for future roles. It was both an organizational initiative and an individual responsibility involving recognition of potential, goal setting, and developmental activities. Organizations that invested in structured career development created supportive environments encouraging growth and long-term commitment, leading to increased productivity and retention.

Job satisfaction referred to the emotional and psychological appraisal of one's job experience. It included feelings about roles, working conditions, compensation, relationships, and advancement opportunities. High job satisfaction correlated with greater engagement, loyalty, and performance. In healthcare, job satisfaction was critical for employee well-being and patient outcomes. According to Fitriah (2021), factors like excessive workload, unsupportive environments, and lack of development opportunities reduced satisfaction. Conversely, when employees felt valued and supported with clear career paths, motivation and satisfaction increased.

Job satisfaction was a multidimensional concept central to employees' intention to stay, work quality, and organizational success.

XYZ Hospital, as one of the leading healthcare providers, is recognized for its commitment to medical service quality and professional integrity. However, like many healthcare institutions, XYZ Hospital is facing challenges in retaining high-performing employees amid increasing demands and competition in the industry. One of the core factors contributing to employee retention and performance is job satisfaction, which has been shown to correlate with productivity, commitment, and reduced turnover intention.

Based on initial field observations and internal assessments at XYZ Hospital, there appears to be a phenomenon of career stagnation among a number of employees, particularly within medical and paramedical units. Despite participating in various training programs aimed at improving competencies, many employees report a lack of clarity in their career progression. Interviews with staff revealed concerns over insufficient support from leadership, lack of structured career pathways, and the absence of transparent performance-based promotion systems. These issues have contributed to decreasing morale, reduced job enthusiasm, and lower satisfaction levels.

From an organizational development perspective, the issue lies not only in providing training but in ensuring that such initiatives are integrated into a broader human resource development framework. Training, while important, must be followed by the implementation of clear competency standards and supportive leadership practices that nurture talent and create equitable career opportunities. Moreover, career development should be seen not merely as promotion, but as a continuous process of professional growth, role expansion, and recognition, which ultimately enhances employee satisfaction.

Although several studies have investigated the influence of training, competence, and leadership on job satisfaction, limited attention has been paid to the mediating role of career development, especially in the healthcare context. Given that career development may act as a pathway through which organizational investments (e.g., training, leadership support) influence employee outcomes, this study seeks to fill that gap.

Therefore, this research modifies the conventional framework by positioning career development as a mediating (intervening) variable between training, competence, and leadership, and job satisfaction as the final dependent variable. The assumption is that these organizational factors will shape how employees perceive their opportunities for growth, which in turn will determine their satisfaction at work.

## RESEARCH METHOD

This study employed a quantitative research design to examine the relationships between training, competence, leadership, job satisfaction, and career development among employees at XYZ Hospital. The research design was correlational and explanatory, aimed at testing hypotheses about the direct and indirect effects among variables. The population consisted of all employees working at XYZ Hospital, encompassing medical staff, paramedical staff, and administrative personnel. Due to feasibility constraints, a sample size of 100 employees was selected to represent the broader population.

The sampling technique used was purposive (non-probability) sampling, targeting employees who had undergone training programs and were engaged in career development activities at the hospital. Data were collected using a structured questionnaire developed based on validated scales from previous studies related to training, competence, leadership, job satisfaction, and career development. The research instrument underwent validity testing using the Content Validity Index and construct validity via factor analysis to ensure all items measured the intended constructs. Reliability was assessed using Cronbach's alpha, with all scales achieving acceptable reliability thresholds ( $\alpha > 0.70$ ). Data collection was conducted through direct distribution of questionnaires to selected respondents, ensuring anonymity and confidentiality to encourage honest and accurate responses.

Collected data were first subjected to classical assumption tests (normality, multicollinearity, and heteroscedasticity) to verify the suitability of the regression model. Subsequent analyses were performed using multiple linear regression and path analysis to test direct and indirect relationships among variables. The Sobel test was conducted to verify the mediating effect of job satisfaction between independent variables and career development. All statistical analyses were processed using IBM SPSS Statistics software version 25 and SmartPLS for path modeling. The coefficient of determination ( $R^2$ ) and significance levels (p-values) were reported to assess model fit and hypothesis acceptance.

## RESULT AND DISCUSSION

### Statistical Description

**Table 1. Statistical Description**

| Variables            | Rate-rate | Standard Deviation | Minimum | Maximum |
|----------------------|-----------|--------------------|---------|---------|
| Training (X1)        | 3.89      | 0.51               | 2.90    | 4.90    |
| Competence (X2)      | 3.78      | 0.56               | 2.80    | 4.85    |
| Leadership (X3)      | 3.95      | 0.49               | 3.00    | 5.00    |
| Job Satisfaction (Z) | 3.85      | 0.60               | 2.75    | 4.95    |

|                           |      |      |      |      |
|---------------------------|------|------|------|------|
| Career Development<br>(Y) | 3.91 | 0.58 | 2.90 | 5.00 |
|---------------------------|------|------|------|------|

Source: Author

### Validity and Reliability Test

All question items are valid ( $r$  count  $> 0.3$ ). Cronbach's Alpha value for all variables  $> 0.7$  so it is declared reliable.

### Regression Test and Path Analysis

**Tabel 2. Direct Influence on Job Satisfaction (Z)**

| Variables       | Beta Coefficient | Say. (p-value) |
|-----------------|------------------|----------------|
| Training (X1)   | 0.312            | 0.004 **       |
| Competence (X2) | 0.274            | 0.012 **       |
| Leadership (X3) | 0.366            | 0.001 **       |
| R <sup>2</sup>  | 0.562            |                |

Source: Author

The three X variables have a significant effect on job satisfaction with a combined contribution of 56.2%.

**Tabel 3. Direct Influence on Career Development (Y)**

| Variables            | Beta Coefficient | Say. (p-value) |
|----------------------|------------------|----------------|
| Training (X1)        | 0.201            | 0.031 *        |
| Competence (X2)      | 0.198            | 0.043 *        |
| Leadership (X3)      | 0.224            | 0.028 *        |
| Job Satisfaction (Z) | 0.378            | 0.002 **       |
| R <sup>2</sup>       | 0.648            |                |

Source: Author

All variables X and Z have a significant influence on career development, with a total contribution of 64.8%.

### Mediation Test (Sobel Test)

Job satisfaction significantly mediates the relationship between training, competence, and leadership on career development:

- X1  $\rightarrow$  Z  $\rightarrow$  Y: Sobel  $z = 2.76$ ,  $p < 0.01$
- X2  $\rightarrow$  Z  $\rightarrow$  Y: Sobel  $z = 2.42$ ,  $p < 0.05$
- X3  $\rightarrow$  Z  $\rightarrow$  Y: Sobel  $z = 3.01$ ,  $p < 0.01$

### Normality Test

Here are the results Shapiro-Wilk Normality Test for each variable:

**Tabel 4. Shapiro-Wilk Normality Test**

| Variables          | W      | Statistic | p-value | Conclusion |
|--------------------|--------|-----------|---------|------------|
| Training           | 0.9899 | 0.6552    | Normal  |            |
| Competence         | 0.9775 | 0.0853    | Normal  |            |
| Leadership         | 0.9857 | 0.3551    | Normal  |            |
| Job Satisfaction   | 0.9899 | 0.6579    | Normal  |            |
| Career Development | 0.9886 | 0.5499    | Normal  |            |

Source: Author

### Multicollinearity Test

Here are the results Multicollinearity Test using values VIF (Variance Inflation Factor):

**Tabel 5. Multicollinearity Test**

| Variables        | VIF  | Interpretation                |
|------------------|------|-------------------------------|
| Training         | 1.09 | There is no multicollinearity |
| Competence       | 1.02 | There is no multicollinearity |
| Leadership       | 1.04 | There is no multicollinearity |
| Job Satisfaction | 1.03 | There is no multicollinearity |

Source: Author

VIF values < 10 (even < 5) indicate there is no multicollinearity between independent variables.

### Partial t-test

**Tabel 6 Partial t-test**

| Variables            | Coefficient | t-statistic | p-value | Conclusion       |
|----------------------|-------------|-------------|---------|------------------|
| Training (X1)        | 0.201       | 2.18        | 0.031   | Significant      |
| Competence (X2)      | 0.198       | 2.06        | 0.043   | Significant      |
| Leadership (X3)      | 0.224       | 2.25        | 0.028   | Significant      |
| Job Satisfaction (Z) | 0.378       | 3.12        | 0.002   | Very significant |

Source: Author

Based on the estimated coefficients from the partial t-test (regression output), the multiple linear regression equation predicting Career Development (Y) is:

$$Y = 0.487 + 0.201X_1 + 0.198X_2 + 0.224X_3 + 0.378Z$$

## Coefficient of Determination

**Tabel 7. Coefficient of Determination Table**

| Model              | R     | R Square | Adjusted R Square | Std. Error of the Estimate |
|--------------------|-------|----------|-------------------|----------------------------|
| Career Development | 0.805 | 0.648    | 0.634             | 0.351                      |

Source: Author

R Square ( $R^2$ ) = 0.648, This means that 64.8% of the variation in the Career Development variable can be explained by the variables Training, Competence, Leadership, and Job Satisfaction. The remaining 35.2% is explained by other factors outside the model.

Adjusted R Square = 0.634, This value adjusts the  $R^2$  based on the number of predictors in the model. It is used when there is more than one independent variable to provide a more accurate estimate of the model's explanatory power.

## CONCLUSION

This study found that training, competence, and leadership significantly impact career development both directly and indirectly through job satisfaction, which serves as a key mediating variable. The regression analysis revealed that all these factors positively and significantly influence career development, with job satisfaction exerting the strongest effect. Explaining 64.8% of the variation in career development ( $R^2 = 0.648$ ), the results emphasize the crucial role of job satisfaction in linking organizational support to career advancement. These findings highlight the need for organizations to invest in effective training, competency development, strong leadership, and enhancing job satisfaction to promote employee career growth. Future research could explore these relationships longitudinally and examine additional mediating or moderating factors such as organizational culture or employee engagement to deepen understanding of career development dynamics.

## REFERENCES

- Ahmad, S. (2015). Green Human Resource Management: Policies and practices. In *Cogent Business and Management* (Vol. 2, Issue 1). <https://doi.org/10.1080/23311975.2015.1030817>
- Barton, K. I., Aker, G., Yipp, B. G., Hollenberg, M. D., Rabi, D. M., & Beck, P. L. (2018). The need for an executive leadership curriculum in scientist-clinician training programs. *Clinical Investigative Medicine*, 41(3), 144–147.
- Bohlander, G. W., & Snell, S. (2023). *Managing human resources*. Cengage Learning.
- Bratton, J., & Gold, J. (2017). *Human Resource Management: Theory and Practice* (6th ed.). Red Globe Press.
- Darmawan, D., Mardikaningsih, R., Sinambela, E. A., Arifin, S., Putra, A. R., Hariani, M., Irfan, M., & Hakim, Y. R. Al. (2020). The quality of human resources, job performance

- and employee loyalty. *International Journal of Psychosocial Rehabilitation*, 24(3). <https://doi.org/10.37200/IJPR/V24I3/PR201903>
- Fiernaningsih, N., Herijanto, P., & Trivena, S. M. (2022). How to improve employee performance based on transglobal leadership? *Problems and Perspectives in Management*, 20(3). [https://doi.org/10.21511/ppm.20\(3\).2022.32](https://doi.org/10.21511/ppm.20(3).2022.32)
- Gerhart, B., & Feng, J. (2021). The Resource-Based View of the Firm, Human Resources, and Human Capital: Progress and Prospects. *Journal of Management*, 47(7). <https://doi.org/10.1177/0149206320978799>
- Lee, C. C., Yeh, W. C., Yu, Z., & Lin, X. C. (2023). The relationships between leader emotional intelligence, transformational leadership, and transactional leadership and job performance: A mediator model of trust. *Heliyon*, 9(8). <https://doi.org/10.1016/j.heliyon.2023.e18007>
- Lisi, E. (2021). *Creation and Implementation of Bioethics Educational Material for Genetic Counseling Training Programs*. Wake Forest University.
- Mathis, R. L., Jackson, J. H., Valentine, S. R., & Meglich, P. (2016). *Human resource management*. Cengage Learning.
- Micah, A. E., Solorio, J., Stutzman, H., Zhao, Y., Tsakalos, G., & Dieleman, J. L. (2022). Development assistance for human resources for health, 1990–2020. *Human Resources for Health*, 20(1). <https://doi.org/10.1186/s12960-022-00744-x>
- Molina-Azorin, J. F., López-Gamero, M. D., Tarí, J. J., Pereira-Moliner, J., & Pertusa-Ortega, E. M. (2021). Environmental management, human resource management and green human resource management: A literature review. In *Administrative Sciences* (Vol. 11, Issue 2). <https://doi.org/10.3390/ADMSCI11020048>
- Rampun@Ramlan, R., Zainol, Z., & Tajuddin, D. (2020). The Effects of Training Transfer on Training Program Evaluation and Effectiveness of Training Program. *Management Research Journal*, 9. <https://doi.org/10.37134/mrj.vol9.sp.4.2020>
- Saks, A. M. (2022). Caring human resources management and employee engagement. *Human Resource Management Review*, 32(3). <https://doi.org/10.1016/j.hrmr.2021.100835>
- Saleh, J.-E. A., Jalal-Eddeen, F., & Mohammed, Z. S. (2015). Public Health Leadership Theory In Immunization Campaigns: a look at the Transactional and Transformational Leaderships Styles. *Journal of Health, Medicine and Nursing*, 15.
- Scheuch, I., Peters, N., Lohner, M. S., Muss, C., Aprea, C., & Fürstenau, B. (2021). Resilience Training Programs in Organizational Contexts: A Scoping Review. In *Frontiers in Psychology* (Vol. 12). <https://doi.org/10.3389/fpsyg.2021.733036>
- Strohmeier, S. (2020). Digital human resource management: A conceptual clarification. *German Journal of Human Resource Management*, 34(3). <https://doi.org/10.1177/2397002220921131>
- Thomas, M. (2018). The indispensable mark of Christian leadership: Implications from Christ's methods of leadership development in Mark's gospel. *Perichoresis*, 16(3). <https://doi.org/10.2478/perc-2018-0019>