

THE EFFECT OF CAREER DEVELOPMENT ON TURNOVER INTENTION MEDIATED BY JOB SATISFACTION AMONG HEALTHCARE WORKERS IN YOGYAKARTA

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Abstract

This study aims to analyze the effect of career development on turnover intention mediated by job satisfaction among healthcare workers in Yogyakarta. The research employs a quantitative approach with a causal research design. The study examines career development as the independent variable, turnover intention as the dependent variable, and job satisfaction as the mediating variable. The population of this study consists of healthcare workers in Yogyakarta, with a sample of 130 respondents. Data were collected using a questionnaire instrument measured on a Likert scale. Data analysis was conducted using Structural Equation Modeling (SEM) with the Partial Least Squares (PLS) approach, processed using SmartPLS version 3.0 software. The results indicate that career development has a positive and significant effect on job satisfaction, career development has a negative and significant effect on turnover intention, and job satisfaction has a negative and significant effect on turnover intention. Furthermore, the indirect effect analysis demonstrates that career development has a negative and significant effect on turnover intention through job satisfaction, confirming the mediating role of job satisfaction in the relationship between career development and turnover intention among healthcare workers in Yogyakarta.

Keywords: *career development, job satisfaction, turnover intention, healthcare*

Introduction

Career development is one of the strategic aspects of human resource management, particularly in the healthcare sector, which is characterized by high work demands, task complexity, and sustained professional pressure (Sinaga et al., 2024). For healthcare workers, the presence of a clear and sustainable career development system not only serves as a means of enhancing competence but also plays an important role in shaping positive perceptions of their jobs and organizations. Career development provides direction and certainty in healthcare workers' professional journeys, enabling them to feel valued, supported, and to perceive long-term career prospects within their organizations (Zhang et al., 2021). Career development is closely related to job satisfaction, as opportunities to participate in training, receive professional recognition, and access transparent career pathways can enhance healthcare workers' job satisfaction (Aziz, 2023). Job satisfaction that is fostered through effective career development plays a crucial role in maintaining motivation and emotional attachment to work. At the same time, career development also has direct implications for turnover intention, as limited opportunities for self-development and uncertainty regarding future career prospects often trigger intentions to leave the organization (Alzamel et al., 2020).

In 2024, Yogyakarta City had 4,803 healthcare workers, comprising 1,095 doctors and 2,967 nurses, according to data from the Yogyakarta City Health Office and the Central Bureau of Statistics. This figure represents an increase from 4,115 healthcare workers in 2022, reflecting efforts to meet the growing healthcare needs of the population (BPS Yogyakarta, 2024). Although the increase in the number of healthcare workers indicates greater service capacity, it simultaneously presents new challenges for healthcare organizations, particularly with regard to the risk of employee turnover. The large number and strategic role of healthcare workers make the risk of employee turnover a critical issue that can directly affect the sustainability and quality of healthcare services. The loss of healthcare workers, especially doctors and nurses with high levels of competence and experience, not only creates workforce shortages but also has the potential to increase workload, reduce service quality, and raise recruitment and

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training costs (Pattali et al., 2024). Therefore, analyzing factors that influence job satisfaction and turnover intention, particularly from a career development perspective, is highly relevant as part of employee turnover risk management efforts. This study is expected to provide empirical evidence for policymakers and healthcare facility managers in Yogyakarta in designing preventive strategies to maintain the stability and sustainability of healthcare human resources

Method

This study employs a quantitative approach with a causal research design. It examines the effect of career development as the independent variable, turnover intention as the dependent variable, and job satisfaction as the mediating variable. The population of the study consists of healthcare workers in Yogyakarta. The sample size was determined using the formula proposed by Hair et al. (2024), namely the number of indicators multiplied by ten. Accordingly, the sample comprised 130 respondents (13 indicators \times 10). Data were collected using a questionnaire instrument measured on a Likert scale. Career development was measured based on the framework proposed by Subedi & Bhandari (2024) using five items, job satisfaction was measured using five items adapted from Al-refaei et al. (2023), and turnover intention was measured using three items adapted from Suárez-albanchez et al. (2022). Data analysis was conducted using Structural Equation Modeling (SEM) with the Partial Least Squares (PLS) approach, processed using SmartPLS version 3.0 software. The SEM-PLS approach was selected because it is capable of simultaneously analyzing causal relationships among latent variables and is suitable for studies with predictive objectives and complex models (Hair et al., 2024).

The data analysis process began with the evaluation of the measurement model (outer model) to ensure that the indicators used were able to measure the research constructs in a valid and reliable manner. Convergent validity was assessed by examining outer loading values and the Average Variance Extracted (AVE), where indicators were considered valid if the outer loading values exceeded 0.70 and the AVE values were greater than 0.50. Subsequently, discriminant validity was evaluated to confirm that each construct was distinct from the others, using the Fornell–Larcker criterion. Meanwhile, reliability testing was conducted to assess the internal consistency of the constructs using Composite Reliability and Cronbach's Alpha, with constructs considered reliable if both values exceeded the minimum recommended thresholds (Ghozali & Latan, 2020). After the measurement model met the required criteria, the analysis proceeded to the evaluation of the structural model (inner model). This stage was conducted to assess the strength and direction of the relationships among latent variables. The inner model was evaluated using the coefficient of determination (R^2) to determine the explanatory power of the independent variable on the dependent variable. Hypothesis testing was then performed by examining the path coefficients and P-values, where hypotheses were accepted if the P-values were below the significance level of 0.05 (Ghozali & Latan, 2020).

Result and Discussion

This study analyzes the impact of career development on turnover intention, mediated by job satisfaction, among healthcare workers in Yogyakarta. Based on the sample size calculation and the distribution of questionnaires, 130 respondents were obtained with the following characteristics:

Table 1. Respondent Descriptive

Characteristics	Amount	Percentage (%)
Gender		
Male	42	32,3
Female	88	67,7
Age		
< 25 Years Old	18	13,8
25 – 30 Years Old	46	35,4
31 – 40 Years Old	39	30,0
> 40 Years Old	27	20,8
Position		
Nurse	52	40,0
Midwives	28	21,5
Doctors	20	15,4
Medical Support Personnel	18	13,8
Other Healthcare Professionals	12	9,3
Education		
D3	34	26,2

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Characteristics	Amount	Percentage (%)
S1	61	46,9
Profession	21	16,2
S2	14	10,7
Length of work		
< 3 Years Old	29	22,3
3 – 5 Years Old	41	31,5
6 – 10 Years Old	37	28,5
>10 Years Old	23	17,7

Source: Questionnaire, Processed Data (2026)

Based on the data collected from 130 healthcare workers in the Yogyakarta region, the majority of respondents were female, totaling 88 individuals (67.7%), while male respondents accounted for 42 individuals (32.3%). This reflects the characteristics of the healthcare sector, which is predominantly staffed by women, particularly in nursing and midwifery professions. In terms of age, most respondents were in the 25–30 age range, with 46 individuals (35.4%), followed by those aged 31–40 years, totaling 39 individuals (30.0%). This condition indicates that the majority of healthcare workers are in their productive age, with high potential for career development. Based on job position or profession, nurses constituted the largest group, with 52 respondents (40.0%), followed by midwives with 28 respondents (21.5%) and doctors with 20 respondents (15.4%). This composition reflects the general structure of healthcare personnel in health service facilities. In terms of educational background, most respondents held a bachelor's degree or applied bachelor's degree (S1/D4), totaling 61 individuals (46.9%), while those with a diploma (D3) accounted for 34 individuals (26.2%). This indicates an improvement in the educational qualifications of healthcare workers in line with increasing demands for professionalism and work competence. Regarding length of service, most respondents had worked for 3–5 years, totaling 41 individuals (31.5%), indicating that they possess sufficient work experience to evaluate organizational conditions and career development opportunities. Meanwhile, more than half of the respondents worked in hospitals, amounting to 68 individuals (52.3%), followed by those working in community health centers and private clinics. This study employed a questionnaire containing statements representing the variables examined, namely career development, job satisfaction, and turnover intention. The following section presents a description of respondents' answers.

Table 2. Variables Descriptive

Career Development		
Item	Statement	Mean
CD1	The facility/organization where I work provides adequate opportunities for the career growth and development of healthcare workers	3,17
CD2	I have access to training, continuing education, or competency development programs that support my career development as a healthcare professional	3,74
CD3	There are clear career paths and hierarchical career structures for healthcare workers at my workplace	3,50
CD4	I receive support, coaching, and guidance from supervisors or leaders regarding my career development as a healthcare worker	3,48
CD5	I believe that the institution where I work has a strong commitment to the professional development of healthcare workers	3,63
Job Satisfaction		
JS1	I am satisfied with the friendliness of my coworkers in daily interactions within the work environment	3,55
JS2	I feel that I am treated well and fairly by my coworkers while carrying out my job duties and responsibilities	3,53
JS3	I experience appreciation and respect from people in my workplace	3,56
JS4	I feel that the work I accomplish has a meaningful impact on the organization	3,55
JS5	The salary I receive is appropriate and fair in relation to the effort and contributions I provide	3,55
Turnover Intention		
TI1	I often consider leaving my current job as a healthcare worker at my present workplace	3,47
TI2	I feel frustrated when I am not given opportunities to achieve my personal and professional goals as a healthcare worker	3,52
TI3	I often imagine moving to another workplace that better aligns with my interests and career goals as a healthcare worker	3,60

Source: Questionnaire, Processed Data (2026)

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Based on the descriptive analysis, the career development variable shows that the indicator with the highest mean value is access to training, continuing education, and competency development, with an average score of 3.74. This finding indicates that healthcare workers in Yogyakarta generally perceive that they have opportunities to enhance their professional competencies through various training and development programs provided by their institutions. For the job satisfaction variable, the indicator with the highest mean value is the feeling of being valued and respected by people in the workplace, with an average score of 3.56. This suggests that healthcare workers' job satisfaction is primarily influenced by interpersonal relationships and the social climate within the work environment. Regarding turnover intention, the indicator with the highest mean value is the desire to move to another workplace that better aligns with personal interests and career goals, with an average score of 3.60. These results indicate that turnover intention among healthcare workers is more strongly driven by the pursuit of career fit and self-actualization rather than merely a desire to leave their current job. To address the research problems, data analysis was conducted using the Structural Equation Modeling (SEM) method with the Partial Least Squares (PLS) approach. The analysis began with the evaluation of the outer model to assess convergent validity, discriminant validity, and reliability (Ghozali & Latan, 2020)

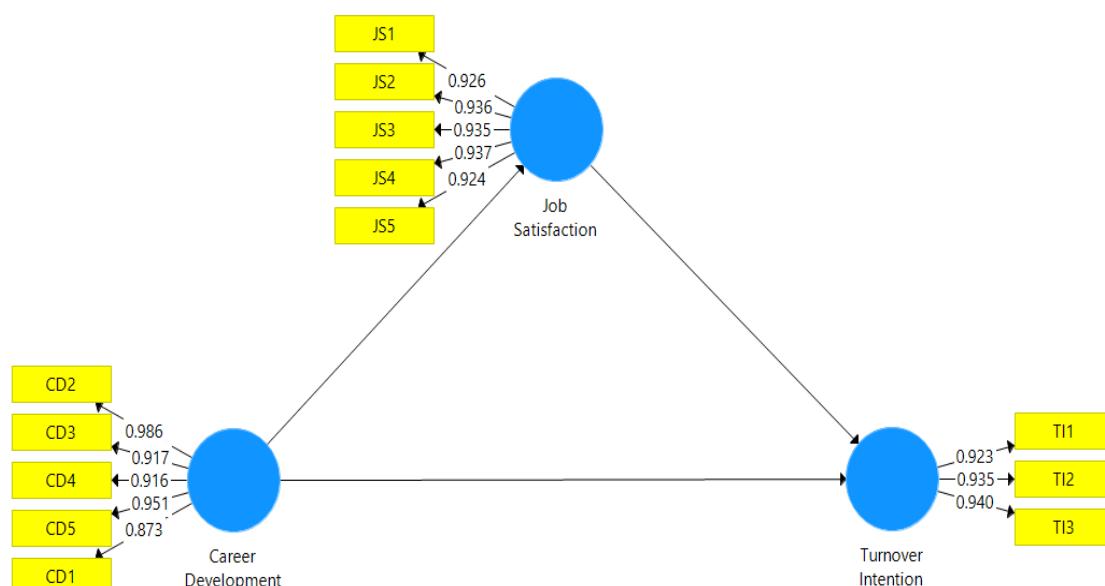


Figure 1. Outer Model
Source: PLS Output, Processed Data (2026)

Tabel 3. Convergent Validity

Item	Outer Loading	AVE	Remarks
CD1	0.873	0.864	Valid
CD2	0.986		Valid
CD3	0.917		Valid
CD4	0.916		Valid
CD5	0.951		Valid
JS1	0.926	0.868	Valid
JS2	0.936		Valid
JS3	0.935		Valid
JS4	0.937		Valid
JS5	0.924		Valid
TI1	0.923	0.870	Valid
TI2	0.935		Valid
TI3	0.940		Valid

Source: PLS Output, Processed Data (2026)

Based on Table 3, it is known that all statement items across all variables produce outer loading values above 0.70. This indicates that all measurement items are declared valid (Ghozali & Latan, 2020). The validity of the variables is further assessed using the Average Variance Extracted (AVE), with the required threshold being above

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0.50 (Ghozali & Latan, 2020). The analysis results show that all AVE values exceed 0.50; therefore, all variables are also declared valid.

Table 4. Discriminant Validity

	Career Development	Job Satisfaction	Turnover Intention
Career Development	0.972		
Job Satisfaction	0.959	0.962	
Turnover Intention	0.929	0.932	0.963

Source: PLS Output, Processed Data (2026)

Based on Table 4, the discriminant validity values indicate that the correlation of each variable with its own construct is higher than its correlation with other, non-related constructs (Ghozali & Latan, 2020). This finding indicates that the research variables are empirically distinct and demonstrate adequate discriminant validity, meaning that each construct is independent and not overlapping with the others

Table 5. Reliability

Variable	Cronbach's Alpha	Composite Reliability	Remarks
Career Development	0.960	0.969	Reliable
Job Satisfaction	0.962	0.971	Reliable
Turnover Intention	0.925	0.952	Reliable

Source: PLS Output, Processed Data (2026)

Referring to Table 5, it can be concluded that all variables produce Cronbach's Alpha and Composite Reliability values above 0.70. This indicates that all constructs are reliable, thereby allowing the analysis to proceed to the inner model testing stage.

Table 6. Coefficient Determination

Variable	R Square	R Square Adjusted
Job Satisfaction	0.945	0.945
Turnover Intention	0.926	0.925

Source: PLS Output, Processed Data (2026)

The coefficient of determination test shows that the R-square value for job satisfaction is 0.945, indicating that career development contributes 0.945 or 94.5% to job satisfaction. Meanwhile, the R-square value for turnover intention is 0.926, indicating that career development and job satisfaction together explain 0.926 or 92.6% of the variance in turnover intention.

Table 7. Hypothesis Test

Path	Coefficient	T Statistics	P Values	Remarks
Career Development → Job Satisfaction	0.972	215.202	0.000	Accepted
Career Development → Turnover Intention	-0.602	-6.172	0.000	Accepted
Job Satisfaction → Turnover Intention	-0.367	-3.703	0.000	Accepted
Career Development → Job Satisfaction → Turnover Intention	-0.357	-3.703	0.000	Accepted

Source: PLS Output, Processed Data (2026)

The results of hypothesis testing are indicated by P-values below 0.05 (Ghozali & Latan, 2020). Therefore, all hypotheses are accepted, with a positive direction of influence from career development on job satisfaction. Meanwhile, the effects of career development on turnover intention and job satisfaction on turnover intention are negative. The indirect effect through job satisfaction as a mediating variable indicates the presence of an indirect relationship that bridges the influence of career development on turnover intention. The results show that career development has a positive and significant effect on job satisfaction, with a coefficient value of 0.972, a t-statistic of 215.202, and a p-value of 0.000. This finding indicates that the better the career development perceived by healthcare workers, the higher the level of job satisfaction they experience. The availability of training, clarity of career paths, and leadership support for professional development play key roles in shaping positive perceptions of work and the organization. From an employee turnover risk management perspective, career development can be viewed as a preventive risk control mechanism. When organizations consistently invest in the competency and career development of healthcare workers, they not only enhance job satisfaction but also reduce psychological risks such as disengagement and dissatisfaction that may trigger turnover intentions. Thus, career development functions as an

internal risk mitigation strategy that strengthens healthcare worker retention through increased job satisfaction. These findings are consistent with previous studies showing that career development has a positive and significant effect on job satisfaction (Mohamed et al., 2023; Mahar et al., 2025) The hypothesis testing results also show that career development has a negative and significant effect on turnover intention, with a coefficient value of -0.602 , a t-statistic of -6.172 , and a p-value of 0.000 . This finding indicates that the better healthcare workers perceive the career development provided by the organization, the lower their intention to leave their job. Clear career progression and opportunities for self-development provide a sense of security and long-term prospects that reduce the tendency of healthcare workers to seek alternative employment outside the organization. Within the employee turnover risk management framework, turnover intention serves as an early warning signal of the risk of losing strategic human resources. Career development acts as a risk mitigation strategy that can reduce the probability of actual turnover. By providing clear and sustainable career pathways, healthcare organizations can reduce career uncertainty, which is often a primary source of turnover risk, especially among healthcare workers in their productive age and career exploration phase. These results are in line with previous studies indicating that career development has a negative and significant effect on turnover intention (Al Balushi et al., 2022; Wu & Liu, 2022).

Furthermore, the results indicate that job satisfaction has a negative and significant effect on turnover intention, with a coefficient of -0.367 , a t-statistic of -3.703 , and a p-value of 0.000 . This suggests that higher levels of job satisfaction among healthcare workers are associated with lower tendencies to intend to leave the organization. Satisfaction with work relationships, recognition, and the meaningfulness of work contributes to the creation of emotional attachment to the organization. In the context of employee turnover risk management, job satisfaction functions as a psychological buffer that mitigates the impact of work pressure and the high demands of the healthcare profession. When job satisfaction is maintained, the risk of turnover due to emotional exhaustion and dissatisfaction can be minimized. Thus, managing job satisfaction is an integral part of human resource risk control strategies, particularly in the healthcare sector, which is characterized by relatively high levels of burnout. These findings are consistent with previous research showing that job satisfaction has a negative and significant effect on turnover intention (Chen et al., 2023; Ariawan et al., 2023; Pratama et al., 2022).

The indirect effect analysis shows that career development has a negative and significant effect on turnover intention through job satisfaction, with a coefficient value of -0.357 , a t-statistic of -3.703 , and a p-value of 0.000 . This finding confirms that job satisfaction acts as a mediating variable that bridges the relationship between career development and turnover intention. In other words, career development not only reduces turnover intention directly but also indirectly through increasing job satisfaction. From the perspective of employee turnover risk management, this mediation mechanism reflects a risk pathway management approach, in which organizations control risk not only at the final outcome (turnover intention) but also at intermediate factors (job satisfaction) that can strengthen or weaken the risk. By strengthening career development that enhances job satisfaction, healthcare organizations can build a more layered and sustainable risk mitigation system, thereby more effectively reducing the risk of losing strategic healthcare workers. These results are consistent with previous studies indicating that career development has a negative and significant effect on turnover intention through job satisfaction (Arta, 2022; Rezeki et al., 2023).

Conclusions

Based on the results of the analysis, it can be concluded that career development plays a highly strategic role in shaping job satisfaction and reducing turnover intention among healthcare workers. Career development has been proven to have a positive and significant effect on job satisfaction, as well as a negative and significant effect on healthcare workers' intention to leave. In addition, job satisfaction also has a negative effect on turnover intention, reinforcing the notion that job satisfaction is a crucial factor in maintaining the retention of healthcare workers. Furthermore, job satisfaction is shown to mediate the effect of career development on turnover intention, indicating that career development not only has a direct impact but also an indirect one through the enhancement of job satisfaction. Overall, these findings emphasize that the management of career development and job satisfaction is a key determinant in reducing the risk of losing strategic healthcare personnel.

The findings of this study imply that healthcare service organizations need to position career development as a core strategy in managing employee turnover risk. The establishment of clear career pathways, the provision of continuous training, and leadership support for professional development must be managed systematically to enhance healthcare workers' job satisfaction. As job satisfaction increases, organizations can suppress turnover intention as an early indicator of turnover risk, thereby better safeguarding the sustainability of healthcare services. Practically, these results encourage hospital management, public health centers, and other healthcare facilities to integrate career development programs with human resource retention policies. Career development programs should not only be

viewed as an investment in competency enhancement but also as a preventive instrument for controlling turnover risk, particularly among healthcare workers of productive age and high potential

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