



Determinant Factors to Improve Quality Education in The Faculty of Manufacturing Technology General Achmad Yani University

A. Oviyan Patra, B. Tuti Leni Suaningsih, C. Zaenal Muttaqien and D. Hendy Suryana

¹ Magister Management Technology, *Faculty of Manufacturing Technology UNJANI*, Bandung, Indonesia

² Magister Management Technology, *Faculty of Manufacturing Technology UNJANI*, Bandung, Indonesia

³ Magister Management Technology, *Faculty of Manufacturing Technology UNJANI*, Bandung, Indonesia

⁴ Magister Management Technology, *Faculty of Manufacturing Technology UNJANI*, Bandung, Indonesia

Abstract

To make UNJANI into an outstanding university requires individuals who can think and act quickly, withstand difficulties, and succeed in competition. To become an excellent university, it must meet the criteria for achieving the Main Performance Indicators set by the Directorate of Higher Education. UNJANI has consistently strived to improve its compensation structure, as it is believed to enhance company performance. The Faculty of Manufacturing Technology implements policies for teaching staff through a compensation structure to improve the quality of education, including educational and teaching performance, research performance, and community service performance. This study aims to explore the influence of compensation structure on employee performance and the improvement of educational quality at the Faculty of Manufacturing Technology, Universitas Jenderal Achmad Yani (UNJANI). This research uses a quantitative method with a survey approach. Data were collected through questionnaires distributed to faculty staff, supplemented with supporting data and interviews to gain a deeper understanding. The data analysis utilized descriptive and inferential statistical techniques to examine the relationships between the variables in the study. The results show that the compensation structure has a significant effect on employee performance, which in turn positively impacts the quality of education. These findings provide practical implications for university management in designing and implementing effective compensation policies to enhance employee performance and educational quality. As a recommendation from this study, management should conduct regular reviews of the compensation structure and develop training programs to improve employee performance.

KEYWORDS: *compensation structure; employee performance; higher education quality; Faculty of Manufacturing Technology UNJANI*

INTRODUCTION

Building a developed Indonesia, as envisioned by the government, depends on the existence of high-quality human resources, which can only be nurtured by excellent higher education institutions. Universitas Jenderal Achmad Yani (UNJANI), as a leading private university, is committed to realising this, and strives to be an institution of excellence supported by strong teaching and administrative staff. The achievement of this excellence depends on several factors, including well-selected student input, effective teaching systems, adequate educational facilities, and strong teaching and administrative staff. To achieve this goal, UNJANI's efforts are aligned with criteria set by the Directorate of Higher Education, which includes eight Key performance Indicators (KPIs): graduate employment, off-campus student experience, off-campus lecturer engagement, practitioners teaching on campus,

Article info

Received (03/02/2025)

Revised (20/06/2025)

Accepted (28/08/2025)

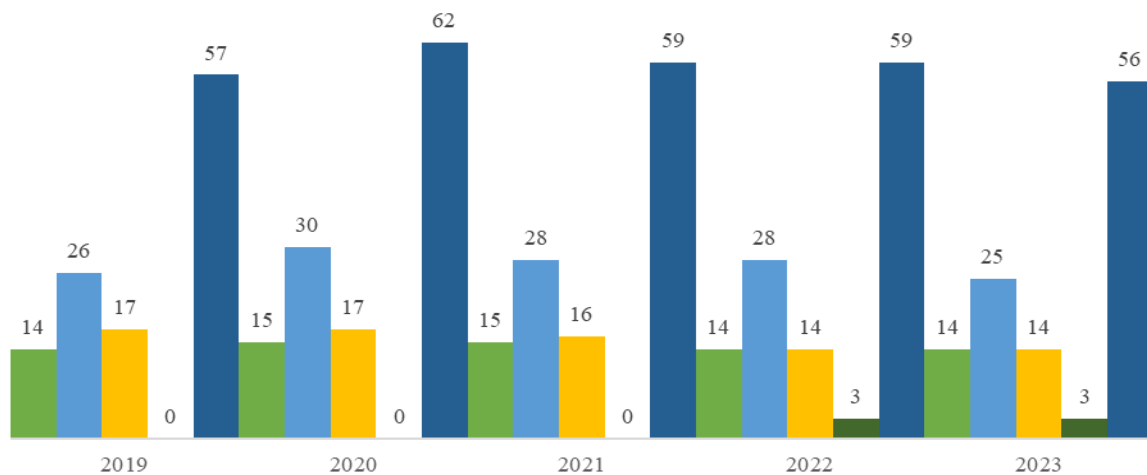
Corresponding oviyan.patra@lecture.unjani.ac.id

DOI: 10.25124/jmi.v25i1.8889

Copyright©2025. Published by School of Economics and Business – Telkom University

community use of lecturers' work, global partnerships for study programmes, collaborative and participatory classes, and international standard programmes [1].

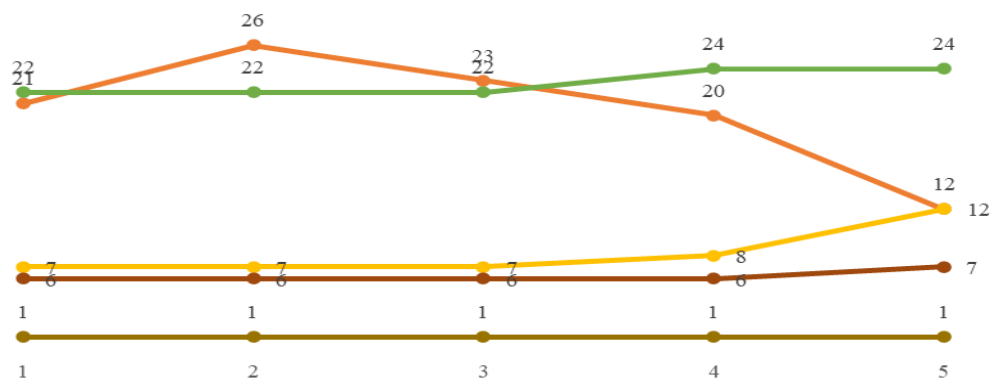
These eight KPIs can only be realised if UNJANI has strong faculty and staff. Therefore, improving employee welfare through effective compensation policies is a major focus of UNJANI. The Faculty of Technology and Manufacturing (FTM), which consists of three undergraduate programmes (Industrial Engineering, Metallurgical Engineering and Mechanical Engineering) and one postgraduate programme (Master of Technology Management), is an integral part of this mission. FTM aims to excel and actively contribute to national development through education, research, and community service, supported by a curriculum that is aligned with the needs of industry and external stakeholders. Figures 1 and 2 illustrate the changes in the number of faculty members and the increase in academic titles from 2019 to 2023, highlighting the impact of UNJANI policies on faculty development. Despite these efforts, there remains a disconnect between compensation increases and measurable improvements in accreditation scores and student enrolment. This study aims to analyse the effect of compensation structure on lecturer performance and education quality in UNJANI's FTM.



green - industrial engineering; blue- mechanical engineering; yellow - metallurgical engineering; dark green - technology management, navy - total

Figure 1. Changes in the number of lecturers in 2019-2023

A critical issue identified was the mismatch between increased compensation for lecturers and staff and expected outcomes, such as accreditation scores and student enrolment figures. Despite strategic improvements in lecturer welfare, important performance metrics have not shown the expected improvement. This situation underscores the need for a deeper understanding of how compensation impacts lecturer motivation and productivity [2,3].



orange - teaching staff; yellow - assistant experts; green – lecturers; red - head lecturers; brown - professors

Figure 2. Improvement of lecturers' academic positions in 2019-2023

The objectives of this study are to determine the effect of compensation on lecturer performance, to assess how lecturer performance affects education quality, and to explore the overall impact of compensation through lecturer performance on education quality at FTM, UNJANI. The significance of this study lies in its potential to provide actionable insights for policy makers and educational administrators, thereby enhancing institutional effectiveness.

UNJANI has implemented various measures to improve the quality of teaching staff and administrative staff, such as career acceleration for teaching staff, support for obtaining external scholarships, bridging further studies to partner universities abroad, competency tests for administrative staff, and performance-based allowances through KPI and IKD assessments. For four years, these policies and programmes have resulted in an increase in the number and academic rank of teaching staff. However, it is necessary to evaluate the performance of FTM Unjani employees, because changes in compensation have not been accompanied by measurable performance improvements such as accreditation scores, student interest, KPI achievements, and functional position promotions. Table 1 provides an overview of the accreditation status of study programmes under FTM, showing the qualitative and quantitative measures of accreditation of each study programme. This research is poised to make a significant contribution to the human resource management discourse in education, particularly in the context of private universities striving to be the best. By identifying the key factors linking compensation and performance, the findings can provide practical guidance for improving lecturer satisfaction and educational standards.

Table 1. position of accreditation value of study programme in FTM Unjani

No.	Study Program	Qualitative Rating	Accreditation Score	Accreditation Decree Number
1	Industrial Engineering (S1)	Accredited B	343	6583/SK/BAN-PT/Akred/S/X/2020
2	Metallurgical Engineering (S1)	Accredited B	329	4702/SK/BAN-PT/Akred/S/VIII/2020
3	Mechanical Engineering (S1)	Accredited B	348	5509/SK/BAN-PT/Akred/S/IX/2020
4	Technology Management (S2)	Accredited Very Good	-	1749/DE/A.5/AR.10/XI/2024

I. LITERATURE REVIEW

1. Human Resources

Human Resources (HR) play a vital role in initiating and running all company activities. Effective HR management is essential, which is achieved through Human Resource Management (HRM). According to [4], HRM is the science and art of regulating the relationship and role of the workforce to be effective and efficient, thus helping to realise the goals of the company, employees and society. Desseler (2015) defines HRM as the process of getting, training, evaluating, and compensating employees, as well as managing labour relations, occupational health and safety, and issues related to justice. Thus, HRM is the activity of managing the relationships and roles of the workforce effectively and efficiently to help achieve organisational goals and overcome various challenges. The purpose of HRM is to increase employee contributions to achieve company productivity goals. According to Malayu S.P. Hasibuan (2016: 250), the general objectives of HRM are: determine the quality and quantity of employees for all positions; ensure the availability of manpower at this time and in the future; avoid mismanagement and overlapping tasks; facilitate coordination, integration, and synchronisation to increase productivity; prevent employee shortages or excesses; guide recruitment, selection, development, compensation, integration, maintenance, discipline, and termination programs; provide a basis for employee transfers and retirements; and become the basis for employee appraisals.

2. Employee Performance

Employee performance is defined as the level of achievement of specific tasks. [5] describes performance as the extent of the results achieved in carrying out a particular task, while Putri (2020) sees it as the result of the job functions of a person or group in a certain period, which reflects its effectiveness in meeting job requirements and organisational goals. [6] added that performance is the completion of tasks and responsibilities given within a certain period of time, and [7] emphasised on its role in achieving the goals, vision, and mission of the organisation. [8] consider performance as the results achieved in accordance with job standards, and [9] highlight performance as a willingness to complete responsibilities with the expected results.

Several factors affect employee performance, including abilities and skills, job knowledge, job design, personality traits, motivation, leadership behaviour and style, organisational culture, job satisfaction, work environment, loyalty, commitment, discipline, and compensation (Putri, 2020). The purpose of performance evaluation is to

provide managers with an objective assessment for future HR decisions, help employees improve performance, plan work, develop skills for career growth, and strengthen the relationship between managers and employees [5]. Mangkunegara (2020) adds that performance appraisals measure job completion, become the basis for rewarding and dismissing, identify strengths and weaknesses, and motivate employees by recognising their achievements. In addition, lecturers have unique performance dimensions, focusing on education, research, and community service (Prokofyeva et al., 2019; Surasmi et al., 2019; Law No. 14 of 2005 Article 60). Simanjuntak (2018) identified Figures

key performance measures: work quality, output quantity, timeliness, effectiveness, and independence. [5] provides performance indicators such as quantity and quality of work, efficiency, discipline, initiative, accuracy, leadership, honesty, and creativity, which offer a comprehensive framework for evaluating employee contributions and organisational success.

3. *Quality of Education*

Quality of education refers to the ability of educational services to meet the needs and satisfaction of internal customers (students) and external customers (society and industry). According to Pfeffer and Coote, quality is an absolute and relative concept, often seen as an ideal standard. In education, this relates to the quality of the educational process and the outcomes achieved. The process involves inputs such as teaching materials, methodology, facilities, administrative support and a conducive learning environment. Outcomes achieved refer to academic and other achievements over time. Educational quality includes inputs, processes, outputs and impacts (Danim, 2018). Good inputs involve well-qualified staff and students, adequate teaching materials, effective organisational structures and aspirational goals. The quality of the learning process is assessed by how well resources are used to add value to students. High-quality education results in academic and extracurricular excellence, demonstrated through graduation and successful programme completion. The benefits of education quality include increased accountability, ensuring competent graduates, encouraging professionalism, fostering competition and continuous improvement (Permendiknas No. 63, 2009). The ultimate goal is to maintain high standards of education on an ongoing basis. According to Minister of Education and Culture Regulation No. 3/M/2021, key quality dimensions include graduate employment, off-campus student experiences, off-campus faculty activities, international recognition of faculty work, collaboration with world-class partners, active and participatory classes, and international standard programmes.

4. *Compensation*

Compensation is very important for employees because it can fulfil their financial needs and motivate them to work better. Enny (2019) defines compensation as a form of remuneration given to employees in return for their contribution and work. Compensation can be financial, either direct or indirect, or non-financial. [10] describe compensation as all forms of financial returns and benefits that employees receive as part of their employment relationship. [11] highlights that compensation is an important function in human resource management (HRM). There are various types of compensation. Mangkunegara (2017) categorises them into direct compensation, such as wages and salaries, and indirect compensation, such as allowances and services. Edison et al. (2017) further divide compensation into normative and policy-based, while [10] distinguish between extrinsic rewards, such as recognition and promotion opportunities, and intrinsic rewards. The purpose of compensation is to foster co-operation, job satisfaction, effective recruitment, motivation, employee stability, discipline, trade union influence, and compliance with government regulations [12]. Dimensions and indicators of compensation include wages and salaries, incentives, allowances, and facilities. According to [1], wages and salaries are the basic salary level, while incentives are additional salaries beyond the basic salary. Allowances include health insurance, pensions, and other benefits, and facilities can include company-provided transport or housing. An effective compensation system is designed to reward employees fairly and motivate them to achieve higher performance and productivity.

5. *Structured Equation Modelling (SEM)*

Structural Equation Modeling (SEM) is a statistical method that examines the relationships between variables in a conceptual model, integrating measurement and multivariate analysis. This method includes factor analysis, path analysis, and regression, making it a powerful alternative to traditional regression by considering complex interactions, nonlinearities, and multiple latent variables. SEM functions include allowing flexible assumptions, reducing measurement error through confirmatory factor analysis, and providing a graphical modelling interface. SEM tests the entire model, accommodates multiple dependent variables, and manages intermediate variables and error terms effectively.

Its main applications are causal modelling, confirmatory factor analysis, second-order factor analysis, and regression models. SEM assumes multivariate normal distribution, linearity, indirect measurement, and multiple indicators. Recursive models without feedback loops and interval data are generally required, with a recommended sample size between 200-400. Model fit indices, such as Chi-Square, RMSEA, GFI, AGFI, and CFI, evaluate the fit of the theoretical model to the observed data. A proper model shows minimal residuals and uncorrelated errors. Identify the model to ensure that it is sufficiently identified, overidentified, or saturated for parameter estimation. Path diagrams represent variable relationships, which incorporate observed, latent, endogenous, and exogenous variables. SEM aims to validate a particular theoretical model against empirical data.

1. Research Framework

The research framework (Figure 3) of this study is designed to examine the relationship between research variables in order to develop a relevant paradigm model that is aligned with the purpose and direction of the research, in accordance with the problem under study. This framework will explore the interaction between compensation, employee performance and education quality at UNJANI's Faculty of Manufacturing Technology.

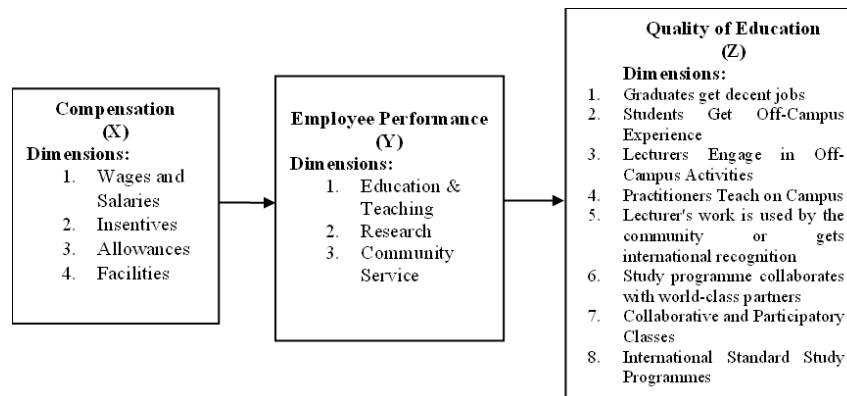


Figure 3. Research Framework

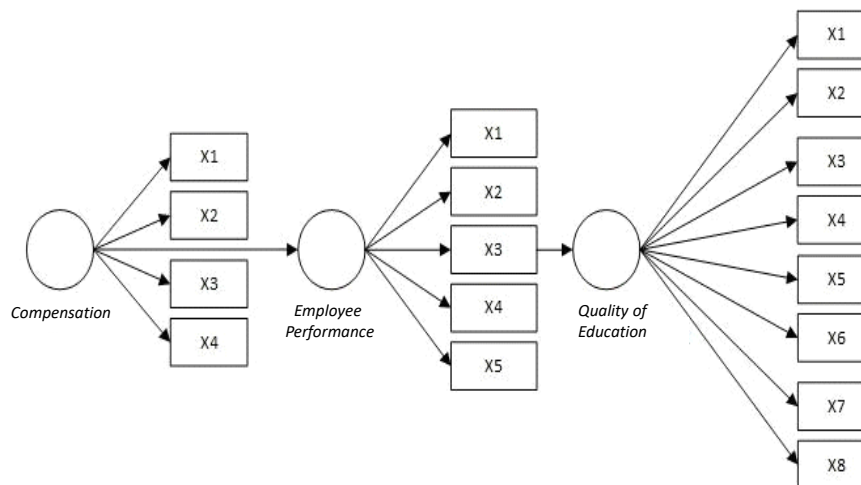


Figure 4. Research Structured

Then based on the conceptual framework, a hypothesis is formulated which serves as a temporary answer to the formulated problem. The hypotheses for this study are as follows:

H1: There is an effect of compensation on employee performance at the Faculty of Manufacturing Technology, UNJANI.

H2: There is an effect of employee performance on improving the quality of education at the Faculty of Manufacturing Technology, UNJANI.

H3: There is an effect of compensation restructuring on improving the quality of education through employee performance at the Faculty of Manufacturing Technology, UNJANI.

This framework and hypotheses will guide the analysis of how compensation affects employee performance and, in turn, how this performance impacts education quality, thus providing a comprehensive understanding of the dynamics taking place at UNJANI's Faculty of Manufacturing Technology.

II. RESEARCH METHODOLOGY

A. Research Design

The research design for this study adopted a quantitative approach, as defined by [13], which emphasises scientific methods to obtain data with specific purposes and benefits. Quantitative research, according to Purwanto (2012:164) and [14], views truth as something single, objective, universal, and verifiable, examining the relationship between variables through statistical procedures. This research uses descriptive and verification methods. Descriptive research, as explained by [13], is analysing data by describing or describing the data that has been collected as it is without making conclusions that apply to the public. In this study, descriptive methods were used to explore issues related to compensation, quality of education, and employee performance within the Faculty of Manufacturing Technology, UNJANI. Verification research, on the other hand, aims to test the validity of theories by testing hypotheses using statistical calculations. This study specifically investigates the effect of compensation on improving education quality through employee performance at the Faculty of Manufacturing Technology, UNJANI. In addition, this research process includes several stages to achieve the research objectives. The preparation stage involved identifying the research topic, reviewing the state of the art through literature study, and establishing the basic foundation of the research. The conceptualisation stage developed the research model and hypotheses, detailing the operationalisation of variables to facilitate the design of a valid and reliable questionnaire.

B. Data Collection

Data collection in this study uses quantitative methods, as explained by [13], which uses scientific procedures to obtain data with specific purposes and uses. Data for this study was collected using a questionnaire, which was distributed online via Google Forms to respondents along with a cover letter explaining the purpose of the study and instructions for completion. In order to effectively examine the relationship between compensation, employee performance and education quality, it is imperative to clearly define and operationalise the variables involved in this study. Table 2 outlines the key variables, dimensions, indicators and related questions used in the questionnaire. Questionnaire responses were measured using a Likert scale, with scores ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Table 2. operationalization of variables

Variable	Dimension	Indicator	Question
Compensation (X)	Base Salary	Exceeds UMR	Salary exceeds UMR
		Meets living needs	Salary meets living needs
		Health insurance	Institution provides BPJS
		Retirement benefits	Provides adequate retirement benefits
	Allowance	Family allowance	Family allowance meets needs
		Performance bonuses	Annual bonuses are beneficial
		Education scholarships	Provides study scholarships
		Advisory honorarium	Monthly advisory honorarium is adequate
	Honorarium	Seminar and thesis defense honorarium	Honorarium is timely and appropriate
	Facilities	Transportation costs	Transport facilities are sufficient
Employee Performance (Y)	Education & Teaching	Quality	Teaching matches expertise
		Quantity	Conducts academic advising regularly
		Timeliness	Punctuality in teaching
		Effectiveness & Efficiency	Follows semester teaching plan (RPS)
	Research	Independence	Encourages student participation
		Published research	Research published in reputable journals
Quality of Education (Z)	Community Service	Beneficial service	Community service is impactful
	Graduate Employment	Meets minimum wage	Employment meets provincial minimum wage (UMP)

	National/International company	Employment in national/multinational companies
Off-campus Experience	Participates in MBKM	Experience in Merdeka Belajar Kampus Merdeka
Faculty Activities	Academic competition	Achievements outside academics
Practitioners Teach	Industry practice	Faculty has industry experience
	Industry professionals teaching on campus	University provides opportunities for practitioners to teach
Research Utilization	Research used by society	University supports faculty research
		Faculty research is beneficial to society and knowledge
Program Study Partnerships	Collaborates with world-class partners	University collaborates with national/international partners
Collaborative Classes	Active discussions	Collaborative and participative classes
International Standards	Accredited programs	Programs accredited by recognized institutions

The population for this study included 53 faculty members from the Faculty of Manufacturing Technology at UNJANI. Due to the manageable size of the population, this study used the census sampling method, in which all members of the population were included as respondents (Sugiyono, 2015: 80-81; Rudiwan, 2012: 64; Arikunto, 2006: 134). To ensure the validity and reliability of the questionnaire, a pilot study was conducted with ten respondents to refine the questions and ensure clarity. Validity and reliability tests confirmed that the questionnaire was valid and reliable. Using Pearson product-moment correlation with SPSS v21, all items showed validity coefficients (r -count) greater than the r -table value of 0.361, indicating validity. Reliability tests using Cronbach's Alpha showed coefficients of 0.956 for compensation, 0.921 for employee performance, and 0.942 for education quality, all exceeding the critical value of 0.7. Therefore, the questionnaire items are valid and reliable for this study.

C. Data Analysis

Data analysis in this study used Structural Equation Modeling (SEM) to explore the complex relationship between compensation indicators and university quality through employee performance. SEM analyses measurement models to test the relationship between latent variables and their indicators, and structural models to evaluate the significance of the relationship between independent and dependent variables. The theoretical model is first developed through a literature review to justify the hypothesised relationships, then visualised in a path diagram to illustrate the causal relationships between constructs. These path diagrams were converted into structural equations representing causal relationships and measurement models, which were then analysed using SEM. SEM analysis follows the steps outlined by Hair et al. (2010), including input matrix selection and model estimation techniques, such as Maximum Likelihood Estimation (ML). Potential identification issues are addressed to ensure unique estimates, and model fit is evaluated using criteria such as Chi-square and RMSEA tests. Descriptive analysis was conducted to describe the object of study, calculating the mean of the answers to facilitate judgement using the specified intervals.

The verification analysis of this study used SEM to test the hypothesised relationships between compensation, employee performance, and university quality. The outer model evaluates the validity and reliability of each construct, using tests such as convergent and discriminant validity, composite reliability, and Cronbach's Alpha. The inner model involves creating path diagrams to illustrate the relationships between compensation (X), employee performance (Y), and university quality (Z), and performing estimation using SmartPLS software. The R-square value assesses the explanatory power of the independent variables, while the predictive relevance Q-square evaluates the predictive ability of the model.

III. RESULT/FINDING

1. Outer Model

Outer model evaluation is essential to determine the specification of the relationship between latent variables and their manifest variables, including tests of convergent validity, discriminant validity, and reliability. Convergent validity relates to the principle that the manifest variables of a construct should be highly correlated. Convergent validity tests using PLS software assess the loading factor value for each construct indicator. Indicators are considered valid if they have a loading factor greater than 0.70 and Average Variance Extracted (AVE) greater

than 0.5 [15]. The results, as shown in Table 7, indicate that all manifest variables have met the convergent validity criteria, with loading factor and AVE values exceeding the required thresholds.

Table 7. loading factor result

Latent Variable	Manifest	Loading Factor	AVE	Conclusion
Compensation (X)	X1	0.806	0.797	Valid
	X2	0.942		Valid
	X3	0.959		Valid
	X4	0.856		Valid
Employee Performance (Y)	Y1	0.944	0.893	Valid
	Y2	0.932		Valid
	Y3	0.960		Valid
	Z1	0.829		Valid
Quality of Education (Z)	Z2	0.927	0.715	Valid
	Z3	0.819		Valid
	Z4	0.863		Valid
	Z5	0.919		Valid
	Z6	0.845		Valid
	Z7	0.768		Valid
	Z8	0.781		Valid

Furthermore, discriminant validity is assessed through the measurement of factor cross-loadings and comparison of AVE with variable correlations. The criteria require that each manifest indicator loading must be higher than its cross loading. The cross-loading results in Table 8 show that all manifest indicators fulfil the discriminant validity criteria. In addition, the Fornell-Larcker Criterion compares the square root of the AVE with the correlation between variables. Table 9 confirms that the model has good discriminant validity, as the square root of the AVE for each latent variable is higher than its correlation with other variables.

Table 8. cross loading results

Latent Variable	Manifest	Variable X	Variable Y	Variable Z
Compensation (X)	X1	0.806	0.581	0.557
	X2	0.942	0.712	0.737
	X3	0.959	0.819	0.786
	X4	0.856	0.703	0.663
Employee Performance (Y)	Y1	0.784	0.944	0.752
	Y2	0.676	0.932	0.759
	Y3	0.791	0.960	0.822
	Z1	0.752	0.645	0.829
Quality of Education (Z)	Z2	0.705	0.825	0.927
	Z3	0.615	0.708	0.819
	Z4	0.674	0.716	0.863
	Z5	0.749	0.801	0.919
	Z6	0.597	0.627	0.845
	Z7	0.550	0.611	0.768
	Z8	0.583	0.588	0.781

Table 9. fornell lacker criterion results

Latent Variable	Variable X	Variable Y	Variable Z
Compensation (X)	0.893		
Employee Performance (Y)	0.796	0.945	
Quality of Education (Z)	0.775	0.824	0.846

reliability measures the consistency of the measurement. It is tested using Composite Reliability and Cronbach's Alpha, which require values greater than 0.70. The results in Table 10 show that all variables have high reliability, with Composite Reliability and Cronbach's Alpha values exceeding the critical value of 0.70. In conclusion, all manifest variables fulfil the requirements of convergent validity, discriminant validity, and reliability, indicating that they are valid and reliable measures for their respective latent variables.

Table 10. reliability results

Latent Variable	Composite Reliability	Cronbach's Alpha	Critical Value	Conclusion
Compensation (X)	0.940	0.914	0.70	Reliable

Employee Performance (Y)	0.962	0.940	Reliable
Quality of Education (Z)	0.952	0.942	Reliable

2. Inner Model

The evaluation of the structural model (inner model) aims to test hypotheses regarding the influence of other latent variables. It involves examining the path values to determine the significance of the effect, which is displayed through the t-statistic values obtained through bootstrapping in SmartPLS 3. Structural model evaluation includes determining the coefficient of determination (R-Square) and predictive relevance Q-Square for each endogenous variable to assess the predictive power of the structural model. Changes in the R-Square value help explain the impact of a particular exogenous latent variable on the endogenous latent variable. R-Square analysis is performed on each endogenous latent variable to show the extent of influence received from each contributing exogenous latent variable. A higher R2 value indicates a greater influence on the endogenous variable. The results are presented in Table 11, which shows that the R-Square for employee performance (Y) is 0.633 (63.3%), influenced by compensation (X), while the R-Square for education quality (Z) is 0.678 (67.8%), influenced by employee performance (Y). In addition, the total effect of compensation on education quality through employee performance is 0.429 (42.9%), indicating that employee performance can mediate or increase the effect of compensation on education quality by 42.9%, and the remaining 57.1% is explained by other factors.

Table 11. analysis of determination coefficient (R-Square)

Latent Variable	Path Coefficient	R Square
Compensation (X) → Employee Performance (Y)	0.796	0.633
Employee Performance (Y) → Quality of Education (Z)	0.824	0.678
Compensation (X) → Employee Performance (Y) → Quality of Education (Z)	0.655	0.429

Q-Square predictive relevance measures how well the model and parameter estimates predict the observed values. A Q-Square value greater than 0 indicates predictive relevance. The calculation for Q2 based on the R-Square values from the combined table yields $Q^2 = 0.882$, which is greater than 0, confirming that the model has relevant predictive value.

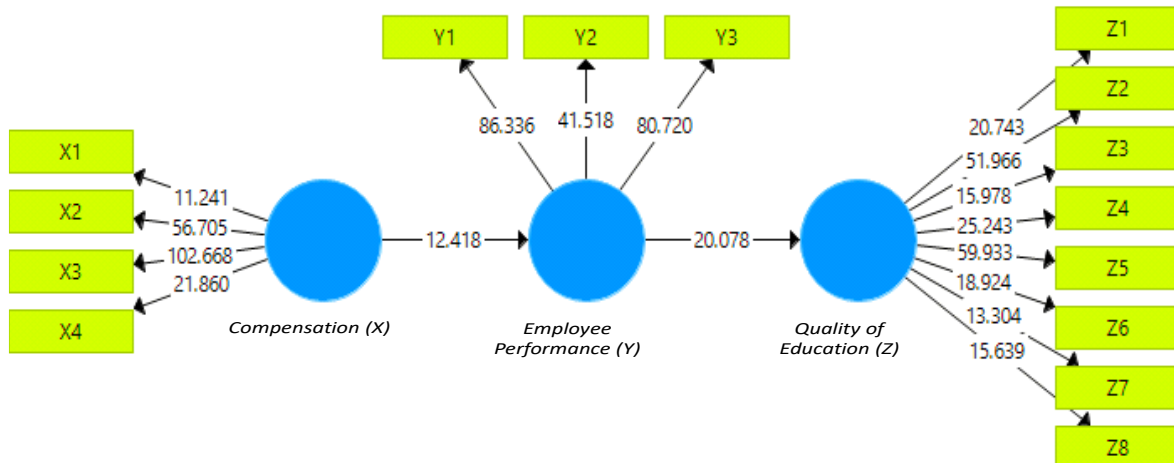


Figure 4. Path Diagram Structured Model,
(Result of SMART PLS 3)

A. Hypothesis

Hypothesis testing in this study uses a t-test to determine the significance of the relationship between latent variables. The significance level used is alpha of 5% (t-value 1.96). The results of hypothesis testing are shown in Table 12, with path coefficients, t-statistics, and p-values obtained through bootstrapping in SmartPLS 3.

Table 12. hypothesis testing

Latent Variable	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
Compensation (X) → Employee Performance (Y)	0.796	0.801	0.064	12.418	0.000
Employee Performance (Y) → Quality of Education (Z)	0.824	0.827	0.041	20.078	0.000
Compensation (X) → Employee Performance (Y) → Quality of Education (Z)	0.655	0.664	0.076	8.593	0.000

Hypothesis 1: The effect of compensation on employee performance. The hypothesis testing criteria are H0: Compensation has no significant effect on employee performance at the Faculty of Manufacturing Technology, General Achmad Yani University, and H1: Compensation has a significant effect on employee performance. With a calculated t-value of 12.418 (greater than 1.96) and a p-value of 0.000 (smaller than 0.05), H0 is rejected and H1 is accepted. Thus, compensation has a significant effect on employee performance, which indicates that better compensation will improve employee performance.

Hypothesis 2: The effect of employee performance on the quality of education. Hypothesis testing criteria are H0: Employee performance does not significantly affect the quality of education, and H1: Employee performance significantly affects the quality of education. With a t-value of 20.078 (greater than 1.96) and a p-value of 0.000 (smaller than 0.05), H0 is rejected and H1 is accepted. Thus, employee performance has a significant effect on education quality, which indicates that better employee performance will improve education quality.

Hypothesis 3: The effect of compensation on education quality through employee performance. The hypothesis testing criteria are H0: Compensation has no significant effect on education quality through employee performance, and H1: Compensation has a significant effect on education quality through employee performance. With a t-value of 8.593 (greater than 1.96) and a p-value of 0.000 (smaller than 0.05), H0 is rejected and H1 is accepted. Thus, compensation has a significant effect on education quality through employee performance, which indicates that employee performance mediates the effect of compensation on education quality, with a strength of influence of 42.9%.

The results of comprehensive hypothesis testing confirm the significant effect of compensation on employee performance, employee performance on education quality, and the mediating role of employee performance on the relationship between compensation and education quality at the Faculty of Manufacturing Technology, Universitas Jenderal Achmad Yani.

IV. DISCUSSION

A. Respondent Characteristics

The detailed characteristics of respondents can be seen in Table 3. Based on the table, it is known that most respondents are male (72%), aged between 50-60 years (41.7%), and the majority have a master's degree (68%). Most respondents had worked for 20-30 years (46.4%), were permanent employees (100%), and earned more than IDR 5,000,000 per month (55.6%).

Table 3. operationalization of variables

Category	Frequency	Percentage (%)
Gender		
Male	38	72%
Female	15	28%
Age		

< 30 years	6	11.2%
30-40 years	10	19.4%
40-50 years	10	19.4%
50-60 years	22	41.7%
> 60 years	4	8.3%
Last Education		
Master's Degree (S2)	36	68%
Doctoral Degree (S3)	17	32%
Years of Service		
< 5 years	5	10.3%
5-10 years	17	32.9%
10-20 years	6	10.4%
20-30 years	25	46.4%
> 30 years	0	0%
Employment Status		
Permanent	53	100%
Non-permanent	0	0%
Monthly Income		
< Rp. 3,000,000	0	0%
Rp. 3,000,000 – Rp. 4,000,000	6	11.1%
Rp. 4,000,000 – Rp. 5,000,000	15	27.8%
> Rp. 5,000,000	29	55.6%
Total Respondents	53	100%

B. Descriptive Analysis

Descriptive analysis aims to describe respondents' perceptions of the variables studied using the mean approach and class interval range as described by Natawira and Ridwan (2014: 24-25). The average score criteria with a score of 1.00 to 1.80 are considered "Less Good", and a score of 4.21 to 5.00 is considered "Very Good". Analysis of the compensation variable, which includes four dimensions with 18 items, showed that the mean scores for the dimensions ranged from 3.76 (benefits) to 3.88 (facilities), with an overall mean score of 3.80. This indicates that respondents viewed compensation at the Faculty of Manufacturing Technology UNJANI as "Good" (Table 4).

Table 4. recapitulation of respondents' responses to compensation

Dimension	Items	Total Score	Mean	Criteria
Wages and Salary	2	402	3.79	Good
Incentives/Honor	4	820	3.87	Good
Allowances	10	1994	3.76	Good
Facilities	2	411	3.88	Good
Total Score and Mean	18	3627	3.80	Good

Similarly, the employee performance variable, which consists of three dimensions with 13 items, showed mean scores ranging from 3.48 (research) to 3.68 (teaching), resulting in an overall mean score of 3.59. This indicates that respondents view employee performance positively, categorising it as "Good" (Table 5).

Table 5. recapitulation of respondents' responses to employee performance

Dimension	Items	Total Score	Mean	Criteria
Teaching	6	1169	3.68	Good
Research	4	738	3.48	Good
Community Service	3	564	3.55	Good
Total Score and Mean	13	2471	3.59	Good

For the education quality variable, which includes eight dimensions with 11 items, the mean scores varied from 3.30 (collaborative and participatory classes) to 3.62 (international standards), resulting in an overall mean score of 3.54. This reflects that respondents perceive the quality of education as "Good" (Table 6).

Table 6. recapitulation of respondents' responses to education quality

Dimension	Items	Total Score	Mean	Criteria
Graduates Obtain Suitable Jobs	2	382	3.60	Good
Students Gain Off-campus Experience	2	382	3.60	Good
Faculty Activities Off-campus	1	190	3.58	Good

Practitioners Teaching on Campus	1	181	3.42	Good
Faculty Work Utilized by the Community	2	373	3.52	Good
Programs Collaborate with Global Partners	1	191	3.60	Good
Collaborative and Participative Classes	1	175	3.30	Quite Good
Programs Meet International Standards	1	192	3.62	Good
Total Score and Mean	11	2066	3.54	Good

Overall, the descriptive analysis showed that respondents generally viewed compensation, employee performance and education quality at UNJANI's Faculty of Manufacturing Technology as "Good". This indicates positive feedback across these variables, indicating a favourable view of the institution's efforts in these areas.

C. Verificative Analysis

The verification analysis in this study aims to test the hypothesis regarding the effect of compensation structure on improving the quality of education through improving employee performance at the Faculty of Manufacturing Technology, Universitas Jenderal Achmad Yani. Hypothesis testing uses the Structural Equation Modelling (SEM) method with the Partial Least Square (PLS) approach assisted by SmartPLS 3 software. SEM PLS analysis evaluates the measurement model (outer model) and structural model (inner model) to validate the hypothesized relationship between these variables.

V. CONCLUSION AND RECOMMENDATION

Based on the research results, some conclusions that can be drawn in accordance with the research objectives are as follows: First, compensation has a significant effect on employee performance, with a contribution of 63.3%, indicating that the better the compensation, the better the employee performance at the Faculty of Manufacturing Technology, Jendral Achmad Yani University. Second, employee performance has a significant effect on the quality of education with a contribution of 67.8%, indicating that the better employee performance, the better the quality of education in the faculty. Third, compensation has a significant effect on education quality through employee performance, with a contribution of 42.9%, indicating that employee performance strengthens the effect of compensation on education quality.

Based on the research findings, some relevant suggestions for the Faculty of Manufacturing Technology, Universitas Jenderal Achmad Yani are: First, increase employee compensation including salaries, bonuses, allowances, and non-financial incentives to motivate performance improvement. Second, provide continuous training and development programmes to improve employees' skills and knowledge. Third, implement a structured and transparent performance appraisal system to provide constructive feedback. Fourth, paying attention to employee welfare by providing work-life balance, a supportive work environment, and wellness programmes. Fifth, continue to improve the quality of education through initiatives such as a curriculum that is relevant to industry developments, improved educational facilities, and collaboration with industry and other educational institutions. Sixth, conduct continuous measurement and evaluation of the effectiveness of compensation and performance improvement programmes to make better decisions in the future. Finally, encourage a positive, collaborative and innovative work culture to increase employee motivation and morale, which in turn will improve performance and education quality. The implementation of these suggestions is expected to improve employee performance and the overall quality of education at the Faculty of Manufacturing Technology, Universitas Jenderal Achmad Yani.

ACKNOWLEDGEMENT

Based on the research results that have been presented, there are several important points that can be used as a basis for providing relevant suggestions for the Faculty of Manufacturing Technology, Jenderal Achmad Yani University:

1. Given that compensation has a significant influence on employee performance, it is recommended that the faculty consider reviewing and improving the compensation system. This can include salary, bonuses, allowances, and non-financial incentives such as recognition and awards. Increasing compensation on an ongoing basis can motivate employees to work better and improve their performance.

2. **Structured Performance Appraisal:** Implementing a structured and transparent performance appraisal system can help identify areas that need improvement and provide constructive feedback to employees. This assessment should cover various aspects of performance, from technical skills to soft skills.
3. **Focus on Employee Well-being:** In addition to financial compensation, employee well-being is also important. Faculties can pay attention to aspects such as work-life balance, supportive work environment, and health and wellness programs. Employees who feel cared for tend to perform better.
4. **Improving the Quality of Education:** Since there is a significant relationship between employee performance and the quality of education, faculties should continuously strive to improve the quality of education through various initiatives, such as industry-relevant curriculum, improving educational facilities, and collaborating with industry and other educational institutions.
5. **Encourage a Positive Work Culture:** Faculties should also encourage a positive, collaborative, and innovative work culture. A positive work environment can increase employee motivation and morale, which in turn will improve performance and the quality of education.

REFERENCES

1. Simamora Henry. 2015. *Manajemen Sumber Daya Manusia*. Yogyakarta : SIE YKPN.
2. Efendi, R., Rifa'i, M. N., Bahrin, K., Milla, H., & Suharmi, S. (2020). The Mediation of Work Motivation on the Effects of Work Discipline and Compensation on Performance Batik MSMEs Employees in Yogyakarta City, Indonesia. *International Journal of Multicultural and Multireligious Understanding*, 7(1), 689-703
3. Kim, H. S., & Jang, S. S. (2020). The effect of increasing employee compensation on firm performance: Evidence from the restaurant industry. *International Journal of Hospitality Management*, 88, 102513
4. Hasibuan, Malayu S.P. 2016. *Manajemen Sumber Daya Manusia*. Edisi Revisi. Jakarta: Penerbit PT Bumi Aksara
5. Nurjaya, N., Sunarsi, D., Effendy, A. A., Teriyan, A., & Gunartin, G. (2021). Pengaruh Etos Kerja Dan Disiplin Kerja Terhadap Kinerja Pegawai Pada Dinas Kehutanan Dan Perkebunan Kota Bogor. *JENIUS (Jurnal Ilmiah Manajemen Sumber Daya Manusia)*, 4(2), 172-184
6. Lilyanana, Besti., Yusa, Viola De., Yutami, Irma. (2021). Pengaruh Lingkungan Kerja Fisik dan Kompensasi Non Finansial terhadap Kinerja Karyawan Bagian Produksi pada PT. Rudant Maju Selaras. *Jurnal Manajemen Mandiri Saburai*
7. Aziz, A., & Fauzah, Y. N. (2018). Pengaruh Kompensasi Finansial Dan Non Finansial Melalui Motivasi Terhadap Kinerja Karyawan PT. Reska Multi Usaha (Rmu) Cirebon. *Jurnal Ekonomi Manajemen*, 1(2).
8. Farisi, Salman, Juli Irnawati, and Muhammad Fahmi. 2020. "Pengaruh Motivasi Dan Disiplin Kerja Terhadap Kinerja Karyawan Pada PT Perkebunan Nusantara V (Persero) Kebun Tanah Putih Provinsi Riau." *Jurnal Humaniora* 4 (1): 15–33
9. Arisanti, K. D., Santoso, A., & Wahyuni, S. (2019). Pengaruh Motivasi Kerja Dan Disiplin Kerja Terhadap Kinerja Karyawan Pada PT Pegadaian (Persero) Cabang Nganjuk. *JIMEK: Jurnal Ilmiah Mahasiswa Ekonomi*, 2(1), 101-118.
10. Akbar, Mada Faisal, et al. 2021. *Seminar Manajemen Sumber Daya Manusia*. Solok : Insan Cendekia Mandiri
11. Sutrisno, E. (2017). *Manajemen Sumber Daya Manusia*. Jakarta : Kencana.
12. Batjo, N dan Shaleh, M. 2018. *Manajemen sumber daya manusia (1st ed.)*. Aksara Timur.
13. Sugiyono. (2017). *Metode Penelitian Kualitatif: Untuk Penelitian yang Bersifat: Eksploratif, Enterpretif, Interaktif, dan Konstruktif*. Bandung: Alfabeta.
14. Creswell, J. W. (2010). *Research design: pendekatan kualitatif, kuantitatif, dan mixed*. Yogyakarta: PT Pustaka Pelajar

15. Ghozali, Imam. 2013. Aplikasi Analisis Multivariate dengan Program IBM SPSS 21 Update PLS Regresi. Semarang: Badan Penerbit Universitas Diponegoro.