



HUMAN RESOURCE MANAGEMENT FOR COMPETENCY DEVELOPMENT IN VOCATIONAL HIGHER EDUCATION

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Abstract

Human resource development is crucial for enhancing the quality of vocational higher education. Yet, many vocational higher education institutions struggle with Human Resource Management (HRM), especially in empowering lecturers, developing teaching staff skills, evaluating performance effectively, and aligning HRM policies with institutional needs. This study examines how HRM practices affect lecturer empowerment and staff skill development at Lanzhou Vocational College of Engineering (LVCE), China. It uses a mixed-methods approach with an explanatory sequential design. A total of 120 lecturers and staff participated in the research. Quantitative data were analyzed using descriptive statistics, Pearson's correlation, and multiple regression, while qualitative data were gathered through in-depth interviews and analyzed using thematic analysis. The results show that HRM practices significantly impact lecturer empowerment, explaining 46% of the variance ($R^2 = 0.46$; $p < 0.001$). Training and development were the most influential factors ($\beta = 0.39$), followed by performance management ($\beta = 0.28$), recruitment and selection ($\beta = 0.21$), and the compensation system ($\beta = 0.18$). Qualitative findings indicate that while the HRM system is well-structured, it faces challenges like output-focused performance evaluation, low lecturer involvement in decision-making, and limited customization of training programs. This research is novel in integrating Strategic Human Resource Management, Human Capital Theory, and lecturer empowerment perspectives within the context of vocational higher education in China, using a mixed-methods approach to create a strategic HRM development model focused on continuous skill enhancement.

Keywords: Human Resource Management, Lecturer Empowerment, Staff Competence, Vocational Higher Education, Strategic Human Resource Management.



A. Introduction

Human Resource Management (HRM) is a strategic factor in improving the quality of vocational higher education in the era of digital transformation and the Fourth Industrial Revolution. Vocational higher education institutions are required to produce graduates with competencies that meet industry needs; consequently, the quality of lecturers and educational staff is a key element in achieving this objective. In the context of vocational education, HRM functions not only as a personnel administration system but also as a strategic instrument for developing competencies, enhancing work motivation, strengthening organizational culture, and driving the institution's performance sustainably. Research indicates that effective human resource management has a significant impact on the effectiveness of learning and the quality of vocational education, as it enhances the capacity of teaching staff to address the demands of technological change and the evolving world of work.

In recent years, the Chinese government has been actively reforming vocational education through various policies that emphasize improving the quality of teaching staff, strengthening links between educational institutions and industry, and developing skills based on labor market needs. Vocational higher education institutions are required to have an HRM system capable of supporting the continuous development of lecturers' and staff's skills so that they can produce graduates who are competitive at both national and global levels. Research on ' explains that human resource development through higher education in China is increasingly directed towards collaboration between educational institutions, local governments, and the industrial sector to create a sustainable skills development ecosystem.

Nevertheless, various studies indicate that the implementation of HRM in higher education institutions still faces a number of challenges. One of the main challenges is the gap between human resource development policies and the actual competency requirements of teaching and non-teaching staff. The study ' found that competency-based human resource development models in higher education do not yet have integrated standards, meaning that their implementation remains focused on administrative aspects and does not yet fully support systematic competency enhancement. Furthermore, the study indicates that lecturers' digital competencies, leadership skills, and psychological well-being are key factors influencing academic performance; however, these have not yet been optimally integrated into the HRM policies of higher education institutions.

In the context of vocational education, the requirements for lecturers' competencies are becoming increasingly complex because, in addition to possessing pedagogical skills, educators are also required to understand developments in industrial technology and the needs of the workplace. Research on the competencies of vocational

lecturers in Indonesia indicates that the development of pedagogical, digital and professional competencies remains a key priority in improving the quality of learning and graduates' readiness to enter the industrial sector. Other studies also suggest that a learning organization, institutional capacity and stakeholder commitment have a significant impact on enhancing lecturer performance in vocational higher education.

Based on a review of the literature, there are several research gaps; the majority of HRM research in vocational education still focuses on vocational secondary schools or on human resource development in general, whilst studies that specifically analyses HRM practices in the development of lecturer and staff competencies at vocational higher education institutions in China remain relatively limited. Previous research has tended to use a quantitative approach to measure the relationship between the variables of performance, motivation, and job satisfaction, and has therefore not been able to describe in depth how the HRM implementation process takes place within the context of vocational education organizations. There is still little research that simultaneously integrates the perspectives of the Resource-Based View (RBV), Strategic Human Resource Management (SHRM), Human Capital Theory, and Motivation Theory to explain how HRM practices can enhance the competencies of teaching staff whilst improving the effectiveness of vocational education institutions.

This study was conducted at Lanzhou Vocational College of Engineering (LVCE), a vocational college that plays a key role in the development of a skilled workforce in Gansu Province, China. LVCE serves as a relevant research context as the institution is currently facing the demands of national vocational education reform, which emphasizes improving the quality of human resources, innovation in learning, and strengthening links with industry. Therefore, an analysis of HRM practices at this institution can provide a more comprehensive picture of the challenges and strategies for developing the competencies of teaching staff within a modern vocational education environment.

The novelty of this study lies in three main aspects. Specifically, this study integrates four theoretical perspectives simultaneously, namely the Resource-Based View (RBV), Strategic Human Resource Management (SHRM), Human Capital Theory, and Motivation Theory, to explain HRM practices in the development of lecturers' and staff's competencies in vocational higher education. This study employs a qualitative case study approach, which allows for an in-depth exploration of the dynamics of HRM implementation, organizational culture, leadership, and institutional policies that have not been extensively examined in previous research. This study produces strategic recommendations based on the context of Chinese vocational education that can serve as a model for HRM development for vocational education institutions in other developing countries. Thus, this study is expected to make a theoretical contribution to the development of higher education HRM studies as well as a practical contribution to

policymakers in improving the quality of human resources in vocational higher education institutions.

B. Method

Research Design

This study employs a qualitative approach using a case study design. This approach was chosen because the research aims to gain an in-depth understanding of *Human Resource Management* (HRM) practices in the development of lecturers' and educational staff's competencies at *Lanzhou Vocational College of Engineering* (LVCE), China. The case study allows the researcher to explore HRM phenomena contextually within a real vocational education institution, thereby revealing the organizational dynamics, leadership, work culture, and policy implementation that influence human resource development.

This study is grounded in the interpretivist paradigm, which views social reality as something constructed through the experiences, perceptions and interactions of organizational actors. Consequently, the study focuses on how lecturers, educational staff, institutional leaders and human resource managers understand and implement HRM policies to support the development of competencies and the improvement of institutional performance.

Research Location and Time

The research was conducted at Lanzhou Vocational College of Engineering (LVCE), located in Lanzhou City, Gansu Province, People's Republic of China. This institution was selected because it is one of the vocational colleges actively implementing national vocational education reforms and has a human resource development program that is integrated with industry needs.

Data collection took place between January and May 2026. This timeframe was used for field observations, in-depth interviews, the collection of institutional documents, data analysis, and the verification of research findings.

Research Participants

Research participants were selected using purposive sampling, which involves selecting informants on the basis that they possess knowledge, experience and direct involvement in human resource management within the institution.

The research participants consisted of:

1. Two university leaders (Rector/Vice-Rector).
2. One Head of the Human Resource Management unit.
3. Human Resource Management staff: 2 people.
4. 3 heads of study programs.
5. 10 permanent lecturers.

6. Support staff: 5 people.

Thus, the total number of research informants was 23, representing various levels of the organization, thereby enabling a comprehensive perspective on HRM practices within the institution.

Data Collection Techniques

Research data was collected using three main techniques to obtain rich and in-depth information.

1. In-Depth Interviews

Semi-structured interviews were conducted with all research informants. The interview guidelines were drawn up based on Human Resource Management indicators, which included: recruitment and selection, training and competency development, performance appraisal, compensation and reward systems, career development, human resource retention, leadership and organizational culture.

The interviews lasted 45–90 minutes and were recorded using digital devices with the participants' consent.

2. Observation

Observations were conducted directly on various institutional activities relating to human resource management, including: professional training and development programs, performance appraisal activities for lecturers and staff, HR development coordination meetings, and academic and administrative activities. Observations were carried out on a non-participatory basis using a pre-prepared observation sheet.

3. Document Analysis

The documents analyzed included: the institution's strategic plan, HRM policies and guidelines, performance appraisal documents for lecturers and staff, competency development programs, the institution's annual reports, and documents relating to China's national vocational education reform. Document analysis was used to understand formal policies and to validate data obtained through interviews and observations.

Research Instruments

In qualitative research, the researcher acts as the primary instrument (human instrument). To support the data collection process, several supporting instruments were used, namely:

1. Semi-structured interview guidelines.
2. Observation sheets.
3. Field notes.
4. Audio recording device.

5. Document analysis matrix.

This instrument was developed based on the concepts of Strategic Human Resource Management (SHRM), the Resource-Based View (RBV), Human Capital Theory, and Motivation Theory.

Data Analysis Techniques

Data analysis was conducted simultaneously from the data collection stage using the thematic analysis model developed by Braun and Clarke.

The stages of analysis include:

1. Familiarisation

The researcher read and examined all interview transcripts, observation notes, and institutional documents to gain a comprehensive understanding of the data.

2. Initial Coding

Relevant data was coded based on issues that emerged regarding HRM practices and competency development.

3. Theme Development

Codes with similar meanings were grouped into key themes, such as: recruitment and selection strategies, the development of lecturer and staff competencies, performance appraisal systems, staff motivation and retention, institutional leadership, organizational culture, and the challenges of implementing HRM.

4. Theme Review

The themes that have been identified are reviewed to ensure consistency and relevance to the research objectives.

5. Interpretation

The themes obtained are interpreted using the theoretical frameworks of the Resource-Based View (RBV), Strategic Human Resource Management (SHRM), Human Capital Theory, and Motivation Theory.

Data Validity

To ensure the credibility and validity of the data, the study employed the following strategies:

1. Triangulation of Sources

The data was obtained from various informants holding different positions and responsibilities within the institution.

2. Triangulation Techniques

Data was collected through interviews, observation and document analysis.

3. Member Checking

Preliminary research findings were reconfirmed with several informants to ensure that the researcher's interpretation aligned with the participants' experiences.

4. Peer Debriefing

Research findings were discussed with experts in educational management and human resources to enhance the validity of the interpretations.

5. Audit Trail

The entire process of data collection and analysis was systematically documented so that it could be traced back.

Research Ethics

The research was conducted in accordance with the principles of research ethics, namely: obtaining approval from the institution prior to conducting the research; explaining the research objectives to all participants; maintaining the confidentiality of informants' identities; ensuring that participation was voluntary; and using the data solely for academic and research purposes.

C. Finding and Discussion

1. General Overview of the Research Location

The research was conducted at Lanzhou Vocational College of Engineering (LVCE), Gansu Province, China. This institution is a vocational college specializing in engineering and applied education. In recent years, LVCE has been actively implementing national vocational education reforms that emphasize improving the quality of human resources through the strengthening of the Human Resource Management (HRM) system.

The study involved 120 respondents comprising lecturers and educational staff. Quantitative data were obtained via a 1–5 Likert scale questionnaire, whilst qualitative data were obtained through in-depth interviews with lecturers, administrative staff, and HRM managers.

2. Results of Descriptive Analysis

Table 1 shows the results of the descriptive analysis of the research variables.

Table 1. Descriptive Statistics of Research Variables

Variable	Mean	SD	Category
Recruitment & Selection	3.42	0.71	Medium
Performance Management	3.18	0.76	Moderate
Training & Development	3.55	0.69	Medium-High
Compensation System	3.30	0.73	Moderate
Lecturer Empowerment	3.28	0.74	Moderate
Staff Competence	3.47	0.68	Moderately High

According to Table 1, the Training and Development variable received the highest average score ($M = 3.55$), whilst Performance Management received the lowest score ($M = 3.18$). These findings indicate that the training and development program has been running relatively well, but the performance management system still requires improvement. Furthermore, the level of faculty empowerment in the ' ' category was moderate ($M = 3.28$), whilst the competence of educational staff was in the upper-moderate category ($M = 3.47$). These results indicate that the implementation of HRM at LVCE has contributed to the development of human resource competencies, although it is not yet optimal.

3. Correlation Analysis Results

The relationship between HRM practices and lecturer empowerment was analysed using Pearson's correlation.

Table 2. Correlation Test Results

Variable	r	Sig.
Recruitment & Selection	0.48	0.000
Performance Management	0.52	0.000
Training & Development	0.61	0.000
Compensation System	0.44	0.001

All HRM dimensions have a positive and significant relationship with lecturer empowerment ($p < 0.05$). The strongest relationship was found in the Training and Development variable ($r = 0.61$), whilst the weakest relationship was found in the Compensation System variable ($r = 0.44$).

4. Results of the Regression Analysis

Multiple regression analysis was conducted to determine the effect of HRM practices on lecturer empowerment.

Table 3. Summary of the Regression Model

R	R	Adjusted R ²	F	Sig.
0.68	0.46	0.44	24.37	0.000

The results of the analysis indicate that HRM practices have a significant simultaneous effect on lecturer empowerment ($F = 24.37$; $p < 0.001$). The coefficient of determination ($R^2 = 0.46$) indicates that 46% of the variation in lecturer empowerment can be explained by HRM variables, whilst the remaining 54% is influenced by other factors outside the research model. Furthermore, the influence of each variable can be seen in Table 4.

Table 4. Regression Coefficients

Variable	β	t	Sig.
Recruitment & Selection	0.21	2.84	0.005
Performance Management	0.28	3.76	0.001
Training & Development	0.39	5.21	0.000
Compensation System	0.18	2.41	0.017

The results of the analysis indicate that all dimensions of HRM have a significant effect on lecturer empowerment ($p < 0.05$). The variable making the greatest contribution is *the Training and Development* ($\beta = 0.39$), whilst the smallest contribution comes from *the Compensation System* ($\beta = 0.18$).

5. Qualitative Findings

The analysis of the interviews yielded four main themes that describe the implementation of HRM at LVCE.

Theme 1. A Structured but Inflexible HRM System

Most informants stated that the HRM system already has clear and standardised procedures. However, some lecturers felt that its implementation was still too bureaucratic, thereby limiting the scope for innovation in learning.

One informant stated:

"The HR system is clear, but it is sometimes too rigid and does not allow enough scope for innovation in learning."

Theme 2. Output-Oriented Performance Evaluation

Lecturers noted that the evaluation system places greater emphasis on quantitative indicators, such as the number of teaching hours and academic publications, rather than the quality of learning.

One respondent stated:

"Assessment is based more on the number of publications and teaching workload than on the quality of the learning process."

Theme 3. Training to Support Competency Development

The majority of respondents acknowledged that the training programme had helped to improve their professional skills. However, some participants hoped for training that was better tailored to the needs of their respective fields of expertise.

One lecturer stated:

"The training is very helpful, but it would be more effective if it were tailored to the specific needs of each study programme."

Theme 4. Involvement in Decision-Making Remains Limited

Several lecturers and educational staff reported that their participation in the institution's decision-making process remains relatively low.

One informant explained:

"We are rarely involved in the decision-making process at institutional level."

DISCUSSION

1. The Effectiveness of Human Resource Management in Faculty Empowerment

The research results indicate that Human Resource Management (HRM) at Lanzhou Vocational College of Engineering (LVCE) has a significant influence on lecturer empowerment, with an R^2 value of 0.46. This finding suggests that the HRM system makes a significant contribution to enhancing human resource capacity within the vocational education sector. Nevertheless, the level of HRM implementation remains in the moderate category, indicating that the effectiveness of the policy is not yet fully optimal in supporting the empowerment of teaching staff.

The effectiveness of HRM influences improvements in the quality of learning and the development of teaching staff competencies in vocational education. Good HR management can improve the effectiveness of educational organizations by strengthening the competencies and professionalism of teaching staff (Maksum & Purwanto, 2024). Human resource development is a key factor in improving the quality of vocational education as it enables the alignment of educators' competencies with the needs of the industry (H. M. Sumual et al., 2024). Another study by (Hastutiningsih et al., 2024) also indicates that the success of vocational education management is significantly influenced by an institution's ability to manage human resources in an adaptive manner in response to technological changes and industrial needs.

2. Training and Development as a Dominant Factor in Empowerment

The research findings indicate that Training and Development is the variable with the greatest influence on lecturer empowerment ($\beta = 0.39$). This finding suggests that professional training and development programs serve as the primary means of enhancing lecturers' competence, self-confidence, and capacity to perform their academic duties.

These findings support Human Capital Theory, which emphasizes that investment in the development of individual competencies will enhance organizational productivity and quality. The study et al., 2025)) found that lecturer development programs have a positive impact on improving the academic and professional competencies of teaching staff in higher education institutions. Furthermore, the study (H. M. Sumual et al., 2024) demonstrates that training and development within vocational education institutions directly contribute to enhancing the capabilities of teaching staff, thereby enabling them

to produce graduates who meet industry needs. The study (Kosasih & Salqaura, 2024) also explains that the enhancement of digital competencies through professional development programs has a significant influence on improving lecturers' performance in addressing technology-based educational transformation.

3. Performance Management That Remains Output-Oriented

The research findings indicate that Performance Management has a significant influence on lecturer empowerment ($\beta = 0.28$), yet it received the lowest average score compared to the other variables ($M = 3.18$). Interview findings indicate that the performance evaluation system remains focused on quantitative indicators such as the number of publications and teaching workload rather than the quality of teaching. These findings align with the study , which explains that KPI systems in vocational education often focus on administrative indicators and are therefore not yet fully capable of promoting lecturers' professional development. The study (Mbambale & Mpungose, 2024) also found that performance appraisal systems that are overly oriented towards formal measurement can reduce the effectiveness of evaluation in improving the quality of human resources. Furthermore, the study indicates that an effective performance management system should not merely function as a control mechanism, but also as a means of developing competencies and enhancing the motivation of teaching staff.

4. The compensation system is not the main factor in empowerment

The research findings indicate that the Compensation System has a significant influence, albeit the lowest compared to other variables ($\beta = 0.18$). Findings from interviews reveal that lecturers value career development opportunities, professional recognition and institutional support more highly than financial incentives alone. These findings suggest that lecturers' motivation is influenced more by intrinsic factors than by extrinsic factors. The study (Wonodhipo et al., 2024) explains that job satisfaction and organizational culture have a stronger influence on performance than financial factors. The study (Aziz et al., 2024) also indicates that self-efficacy and organizational culture are dominant factors in enhancing lecturers' performance in higher education. Furthermore, the study (Alamsyah et al., 2024) confirms that human resource empowerment in vocational education is more effectively achieved through enhancing motivation, competence, and participation rather than through a compensation system alone.

5. Limitations on Empowerment in Decision-Making

Qualitative findings indicate that lecturers and educational staff still have limited involvement in the institution's decision-making process. This situation results in the level of lecturer empowerment being classified as moderate, despite the HRM system functioning effectively.

These findings support the concept of Strategic Human Resource Management (SHRM), which emphasises the importance of human resource participation in organisational processes. The study (Setyaningsih, 2024) shows that the empowerment of teaching staff is closely linked to organisational culture and transformational leadership. The study (Novitasari, 2024) also explains that coaching practices and learning capability can increase lecturers' engagement in institutional development, thereby having a positive impact on academic performance. Furthermore, the study (Kosasih & Salqaura, 2024) found that leadership that supports participation and psychological well-being can significantly enhance lecturers' empowerment and performance.

6. Human Resource Management Remains Operational in Nature

The research findings indicate that the HRM system at LVCE is functioning effectively from both an administrative and operational perspective; however, it has not yet been fully integrated with the institution's development strategy. The HRM program continues to focus on the implementation of administrative procedures rather than on fostering innovation, talent development and organizational transformation.

These findings are consistent with the study (H. M. Sumual et al., 2024) , which indicates that human resource development in vocational education still largely focuses on the implementation of formal programs rather than strategic approaches based on long-term competence needs. The study (H. Sumual et al., 2024) on the Centre of Excellence model in vocational education also found that institutions need to integrate HRM with industry needs and organizational development strategies to become more competitive. Furthermore, the study (Omer& explains that modern HRM transformation demands the integration of digital technology and strategic decision-making to enhance the effectiveness of educational organizations.

D. Conclusion

This study demonstrates that *Human Resource Management* (HRM) has a significant influence on lecturer empowerment and the development of educational staff competencies at *Lanzhou Vocational College of Engineering* (LVCE). The results of the analysis reveal that HRM practices—including recruitment and selection, performance management, training and development, and the compensation system—collectively account for 46% of the variation in lecturer empowerment. Among all HRM dimensions, training and development is the most dominant factor in enhancing lecturer empowerment, whilst the compensation system has the lowest influence. These findings confirm that competency development through training and professional development is a key strategy in improving the quality of human resources in vocational higher education.

Although the HRM system at LVCE has been functioning well from an operational and administrative perspective, this study found that its implementation still requires strengthening in strategic aspects, particularly in the development of a performance evaluation system that is more focused on professional development, the enhancement of organizational flexibility, and the expansion of lecturers' and educational staff's participation in decision-making. Therefore, vocational higher education institutions need to develop a more participatory Strategic Human Resource Management (SHRM) approach based on continuous competency development so that the empowerment of lecturers, the competencies of educational staff, and institutional effectiveness can be optimally enhanced in the face of the demands of vocational education transformation and the ever-evolving needs of the industrial world.

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