

**Developing Sustainable HRM Strategies:
Lessons from Nantong Universities**

Fei Jin

Graduate School
University of the East

ABSTRACT

This study examined how human resource management (HRM) practices relate to faculty job satisfaction and retention intention in three Nantong universities (coded A, B, and C). Using a cross-sectional survey (valid responses: $n = 466$), four HRM dimensions were analyzed—Recruitment and Selection (RS), Training and Development (TR), Performance Evaluation (PE), and Benefits and Compensation (BC)—together with demographic covariates. Data screening included Shapiro–Wilk tests and non-normal outcomes were analyzed using Kruskal–Wallis tests and Spearman’s rho. Kruskal–Wallis tests were used to examine demographic differences in HRM perceptions that are theoretically grounded in the principles of equity and inclusion, which are in turn central to sustainable HRM. Results showed that Training and Development was positively associated with Performance Evaluation. Education level exhibited significant group differences in perceived Training and Development, whereas gender, age, post, tenure, and department did not show significant differences across the four HRM dimensions. Benefits and Compensation received the lowest mean ratings and showed weak association with Performance Evaluation. Findings inform a set of sustainable HRM strategies emphasizing transparent performance standards, tiered training pathways, and stronger Benefits and Compensation–performance alignment.

Keywords: Sustainable HRM, faculty retention, job satisfaction, nonparametric analysis, Nantong Universities

Institutional sustainability increasingly depends on people systems that foster capability, fairness, and trust. In Chinese local universities—especially teaching-oriented engineering colleges—HRM decisions on recruitment, training, performance, and rewards shape satisfaction and retention, which in turn affect teaching quality and student outcomes. This paper focuses on three universities in Nantong, China (coded as A, B, and C) and investigates how HRM practices relate to faculty satisfaction and retention intention.

Evidence on HRM–outcome linkages in prefecture-level Chinese universities remains limited, with internal surveys suggesting widespread dissatisfaction with benefits and compensation (BC) and uncertainty regarding the transparency of performance evaluation (PE). This study aimed to explore the human resource management practices of three selected universities in Nantong—Nantong University, Nantong Institute of Technology, and Nantong Normal College—as a basis for proposing sustainable HRM strategies.

Specifically, the study addresses six key research questions.

- (1) What is the demographic profile of respondents in terms of gender, age, educational qualification, position, years of working experience, and department?
- (2) What is the level of HRM practices in benefits and compensation, performance evaluation, recruitment and selection, and training?
- (3) How do recruitment, training, compensation, and evaluation practices differ across the three universities based on institutional profiles?
- (4) What associations exist between HRM practices and faculty job satisfaction and retention intention?
- (5) What are the key HRM implementation challenges?
- (6) What specific HRM strategies can be proposed to improve existing practices?

The study tests the null hypothesis that there are no significant differences in HRM practice levels when grouped by demographic profile. The significance of this research extends to multiple stakeholders. Teachers may benefit from improved job satisfaction through optimized HRM practices. Staff may experience fairer management approaches. Administrators gain evidence-

based insights for strategic planning. Students enjoy enhanced learning environments due to improved faculty morale. HR departments can refine policies based on empirical findings. Future researchers can build upon this work to advance HRM theory in higher education contexts.

By quantifying HRM–outcome associations and group differences, this study provides an evidence base for sustainable HRM strategies, offering both practical value for institutional policy-making and scholarly contributions through contextual data from under-studied Chinese regional universities. The research examines descriptive profiles of HRM dimensions, demographic group differences, and correlations among HRM practices and faculty outcomes.

LITERATURE REVIEW

International Practices

American universities' flexible teacher resource allocation (Peng, 2016) and "contract" management (Zhang, 2013) enhance competitiveness. Germany's strict recruitment and civil servant status for professors (Jin & Jiang, 2009) ensure high standards. British universities' part-time teacher prevalence offers flexibility (Leslie & Slaughter, 1997), with teaching-oriented universities favoring part-time faculty. Strathman (2000) and Leslie & Slaughter (1997) discuss salary differences and additional benefits for American university teachers. Sorcinelli et al. (2005) and Hobson & Talbot (2001) emphasize the importance of HR development mechanisms and performance evaluation. Jin and Jiang (2009) note Germany's efficient HR allocation due to training and salary incentives. Edvantia (2007) and Zhang and Xu (2011) highlight British universities' fund programs and performance-based salary determination.

Philippine Higher Education HRM: Human Resource Management in Higher Education in the Philippines

Case analysis emphasizes that governance structure and policy transparency are the foundation of human resource effectiveness (Galay, 2022; Gao Ran & Wu Jian, 2021). Innovation in the recruitment process provides actionable insights for institutional improvement (Peng, 2016).

Chinese Models

Although the research on the internal management of universities in China started relatively late, it has accumulated to a certain extent. At the level of macro governance, Liu (2002), based on the analysis of organizational characteristics, pointed out that universities in China need to balance the relationship between administrative efficiency and academic freedom. Yu et al. (2011) focused on the governance structure and proposed to enhance management efficiency through the power reconstruction at the university and college levels. In terms of the operational mechanism, Zhou Yan (2023) systematically explored the institutional design of teacher development and human resource management. Pei (2004) emphasized the adaptability of the regional economy and suggested that colleges and universities in underdeveloped areas adopt the performance redistribution model.

Digital HR

Human resource software and intelligent automation systems not only simplify administrative processes but also optimize the interaction experience between employees and organizational processes (Tao, 2025; Gao, 2021). Data shows that digitalization has significantly reduced manual operations, enabling HR to focus more on strategic talent management (Li, 2022; Liu et al., 2025). Meanwhile, the combination of automation and real-time interaction functions has effectively enhanced employee satisfaction (Wang, 2021; Ren, 2022).

Others

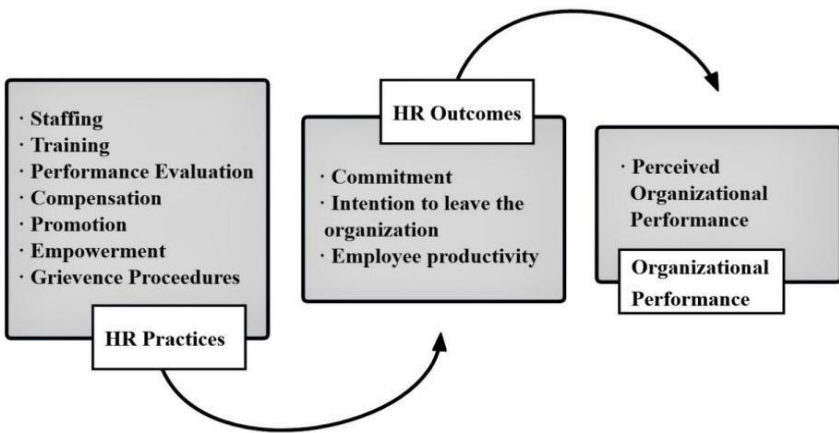
Structured training programs are shown to enhance workforce competencies, job satisfaction, and organizational loyalty, with institutional learning environments and resource support critically shaping emotional engagement and retention outcomes (Islam, Ahmed, & Ahmad, 2015). Workplace cultural dynamics mediate the effectiveness of performance evaluation systems, while equitable compensation frameworks are pivotal for sustaining employee commitment and morale (An et al., 2006). Proactive management of workplace relationships fosters reciprocal trust and job satisfaction, whereas dysfunctional cultural elements can undermine team cohesion and operational efficiency.

This literature review synthesizes key findings on HRM in higher education, focusing on training, performance management, employee relations, digitalization, and international practices, providing a foundation for understanding and improving HR strategies in educational institutions.

Theoretical Framework

Figure 1

Theoretical Framework of Sustainable HRM in Higher Education



The above image presents a theoretical framework for human resource management (HRM), detailing the various components of human resource management and their interrelationships. As a multi-faceted concept, human resource management (HRM) encompasses a broad range of functions, including staff allocation, training and development, as well as performance evaluation. The staffing process encompasses the recruitment and selection of suitable candidates to occupy vacancies within the organization. Following the hiring of employees, a systematic training regimen is essential to enhance their skills and knowledge, ensuring they can effectively meet the job's requirements.

The effectiveness of human resource management can be assessed through various outcomes, including the results of employees' performance evaluations, their loyalty to the organization, opportunities for promotion available to them, and

their intention to leave the organization. In addition, the level of employee productivity serves as a crucial indicator for evaluating the effectiveness of HRM practices. The organization implements empowerment strategies to bolster employee autonomy and engagement, while simultaneously instituting a comprehensive grievance process designed to effectively address employee concerns and issues. The primary objective of these HRM practices is to enhance employee satisfaction and retain talent, thereby fostering the overall performance of the organization. Through the implementation of comprehensive and strategic HRM practices, organizations can enhance not only employee job satisfaction and loyalty but also substantially improve overall productivity and market competitiveness.

METHODOLOGY

Research Design and Setting

This study employed a cross-sectional, questionnaire-based survey design to investigate HRM practices in three universities in Nantong, China, with the aim of analyzing deficiencies and proposing strategies for sustainable development. It employed a questionnaire survey to assess administrative management, teacher training, performance management, and assessment mechanisms. The selected universities represent diversity in academic research, faculty composition, and resource allocation, providing a robust platform for examining sustainable HRM practices.

The scope of the research was delimited to three selected institutions—Nantong University, Nantong Institute of Technology, and Nantong Normal College—which were coded as University A, B, and C, respectively. These universities represent diversity in academic focus, faculty composition, and resource allocation, providing a robust basis for examining sustainable HRM practices within a focused and in-depth case analysis framework.

This research focuses on the connotative human resource management in local universities, aiming to analyze development deficiencies and propose strategies for long-term health, using three universities in Nantong, China, as case studies.

Participants and Sampling

The study population comprised faculty members from the three universities. A total of 540 survey questionnaires were distributed, from which 508 responses were returned. After excluding 42 ineligible responses due to reasons such as unrealistically short completion time or straight-lining, the final analytical sample consisted of 466 participants, with 157 from University A, 157 from University B, and 152 from University C. The sampling design combined purposive and convenience sampling techniques, with the sample size determined based on both accessibility and the need for sufficient statistical power to support group comparisons and correlation analysis.

Sampling Procedure

In order to further explore the impact of human resource management strategies on the operation of selected universities in Nantong City and provide a basis for sustainable human resource management strategies, this study followed the principles of purposive sampling and convenience sampling. Through online questionnaire star distribution, 180 questionnaires were distributed to three selected universities in Nantong City, with a total of 540 questionnaires distributed and 508 questionnaires collected. Among them, 170, 173, and 165 questionnaires were collected from the three universities, respectively. After excluding invalid questionnaires with answer times less than 30 seconds and invalid questionnaires with all answers being the same option, a total of 42 questionnaires were collected. Finally, a total of 466 valid questionnaires were collected, with 157, 157, and 152 valid questionnaires from the three universities, respectively, with effective rates of 92.35%, 90.75% and 92.12%.

Instruments

The research instrument was a structured questionnaire that included four HRM subscales measured on a 4-point Likert scale (1 = strongly disagree to 4 = strongly agree): Recruitment and Selection (RS; 10 items), Training and Development (TR; 10 items), Performance Evaluation (PE; 10 items), and Benefits and Compensation (BC; 10 items). In addition, job satisfaction and retention intention were measured using established multi-item scales. A pilot test involving 30 faculty members was conducted to

assess clarity and reliability, resulting in minor wording adjustments. The instrument demonstrated good internal consistency, with Cronbach's alpha exceeding .70 for all subscales, and construct validity was supported by Kaiser-Meyer-Olkin (KMO) values greater than 0.7 and significant Bartlett's tests of sphericity ($p < .001$).

Procedures

The survey was administered via a structured online platform, and follow-up reminders were sent to enhance response rates.

Data Analysis

Data analysis began with screening for normality using the Shapiro-Wilk test. As the data violated normality assumptions, non-parametric tests were adopted such as the Kruskal-Wallis test to examine group differences, and Spearman's rank correlation coefficient was applied to assess associations between variables. All analyses were conducted using SPSS and R software.

Ethical Considerations

The proposal underwent ethical review from the Ethical Review Committee of the UE Graduate School and was granted clearance in July 2024. Data collection was carried out online after obtaining ethical approval. Participants provided informed consent, and anonymity was ensured throughout the process.

RESULTS AND DISCUSSION

This study revealed that training and development practices are positively linked to performance evaluation, suggesting that faculty perceive developmental support and fair assessment as interrelated. The weak association between benefits and performance evaluation indicates a potential misalignment that may affect perceptions of fairness. The significant difference in TR perceptions by education level highlights the need for tailored training programs. These findings support the importance of bundling HRM practices to enhance perceived justice and effectiveness.

Limitations include the cross-sectional design, which precludes causal inferences, and the single-region sample, which may limit generalizability. Future research should employ longitudinal or mixed-methods approaches to explore causal mechanisms and contextual factors.

Problem No. 1: Demographic Profile of the Respondents

The gender distribution in Table 1.1 shows a slight male majority, with 53.4% males and 46.6% females. This relatively balanced gender mix may influence human resource management practices, suggesting a need for inclusive and equitable strategies. According to previous studies, gender diversity within academic institutions is essential for fostering an inclusive culture, which has been linked to improved employee satisfaction and organizational performance (Kabene et al., 2006). HRM strategies should take into account the needs of both genders and promote an equal culture.

Table 1.1
Frequency Distribution in Terms of Gender

Gender	Counts	% of Total
Male	249	53.40%
Female	217	46.60%

Table 1.2 shows that the participants were primarily middle-aged and younger individuals, who may have been more active in social and work environments, possibly contributing to greater organizational dynamism (Huselid, 1995). With a high proportion of young employees, colleges and universities need to design targeted career development plans (such as training and promotion channels) to retain talents.

Table 1.2*Frequency Distribution in Terms of Age*

Age	Count	% of Total
21-25 years old	50	10.70%
26-30 years old	102	21.90%
31-35 years old	89	19.10%
36-40 years old	86	18.50%
41-45 years old	86	18.50%
46 and above	53	11.40%

Table 1.3 indicates that the educational level of university faculty was relatively high, with most faculty holding at least a Master's Degree with Units. With constituents mainly composed of highly educated groups, HRM should focus on high-level demands such as scientific research support and academic development.

Table 1.3*Frequency Distribution in Terms of Educational Qualification*

Educational Qualification	Counts	% of Total
Bachelor's Degree	106	22.70%
Master's Degree with Units	103	22.10%
Master's Degree	98	21.00%
PhD with Units	89	19.10%
Doctorate Degree	70	15.00%

Table 1.4 indicates that, in addition to teaching responsibilities, administrative and technical support roles are also indispensable components of university operations (Kabene et al., 2006). The job structure conforms to the teaching-centered characteristics of colleges and universities. HRM needs to balance the resource allocation among different positions.

Table 1.4

Frequency Distribution in Terms of Position in the University

Position	Counts	% of Total
Teacher	260	55.80%
Administrative Staff	119	25.50%
Technical Support Staff	87	18.70%

Table 1.5 shows that the employee tenure at the universities reflects a relatively young workforce in terms of service time. These data indicates that a certain proportion of faculty and staff possessed longer working experience. Only 4.5% of faculty members had worked for more than 21 years, which may suggest a lower proportion of senior positions or experienced teachers within the institutions (Hamadamin & Atan, 2019). The mobility of young employees may be relatively high, and universities need to strengthen long-term career development incentives.

Table 1.5

Frequency Distribution in Terms of Years in Service

Years	Counts	% of Total
0-5 years	180	38.60%
6-10 years	97	20.80%
11-15 years	83	17.80%
16-20 years	85	18.20%

21 and above 21 4.50%

The university departmental breakdown in Table 1.6 shows academic diversity. The decreased representation in these departments may reflect industry demands or university strategic goals. Stricter entry or qualification requirements may have contributed to the lower representation in the 'Medicine' department (Huselid, 1995). HRM needs to formulate differentiated strategies for advantageous and weak disciplines.

Table 1.6

Frequency Distribution in Terms of Department in the University

Department	Counts	% of Total
Humanities	65	13.90%
Sciences	71	15.20%
Engineering	62	13.30%
Medicine	41	8.80%
Business	53	11.40%
Social Sciences	43	9.20%
Arts	46	9.90%
Others	85	18.20%

Problem No. 2: Level of Availments of Microfinance's Financial Services Savings

Table 2.1 shows that the overall average score for employee benefits and compensation practices is 2.69 (SD = 0.871), indicating a relatively less favorable evaluation compared to other HR

practices. While these measures are widely regarded as addressing essential needs, some respondents express concerns about the current reward system's ability to remain competitive and tailored to individual circumstances. Academic institutions would benefit from implementing more personalized compensation frameworks that consider workforce diversity. Furthermore, evidence suggests that workplaces adopting adaptable pay structures gain distinct advantages in workforce attraction and retention, as such systems enable better alignment with employees' specific needs. Based on these results, it is suggested that a flexible salary system be introduced and differentiated plans be formulated be based on job value and individual contribution.

Table 2.1
On Benefits and Compensation

	Mean	SD	Interpretation
BC1	2.63	1.082	Agree
BC2	2.66	1.119	Agree
BC3	2.72	1.063	Agree
BC4	2.67	1.095	Agree
BC5	2.72	1.089	Agree
BC6	2.64	1.123	Agree
BC7	2.7	1.089	Agree
BC8	2.7	1.084	Agree
BC9	2.72	1.105	Agree
BC10	2.73	1.117	Agree
Overall	2.69	0.871	Agree

The evaluation of these practices has become increasingly positive, with an average score of 2.76 (SD = 0.901). The high level of agreement indicates that respondents generally believe these

evaluations play a positive role in promoting professional growth and accountability. In academic settings, meaningful performance assessments serve a dual purpose: quantifying results while offering constructive feedback to drive professional growth and enhance workplace satisfaction. This aligns with the consensus of this study, indicating that respondents expressed satisfaction with the performance evaluation process and its role in promoting professional development. Results suggest that it is necessary to enhance the linkage between assessment results and salary and promotion to improve the incentive effect.

Table 2.2
On Performance Evaluation

	Mean	SD	Interpretation
PE1	2.76	1.047	Agree
PE2	2.8	1.111	Agree
PE3	2.74	1.11	Agree
PE4	2.79	1.104	Agree
PE5	2.8	1.111	Agree
PE6	2.78	1.118	Agree
PE7	2.74	1.096	Agree
PE8	2.74	1.114	Agree
PE9	2.74	1.096	Agree
PE10	2.75	1.094	Agree
Overall	2.76	0.901	Agree

Results shown in Table 2.3 suggest that respondents largely achieved a consensus regarding the adequacy of the recruitment and selection practices utilized by universities in Nantong, China, with an overall average score of 2.71(SD = 0.867). This outcome indicates that the recruitment strategies employed by the

institutions are regarded as adequately aligned with organizational requirements, thereby enhancing their ability to attract suitable candidates. Research demonstrates that effective recruitment and selection practices are crucial for aligning talent with institutional objectives and for sustaining a competitive advantage in the academic landscape. In certain projects, a consistent level was observed (Mean=2.72, SD=1.083), indicating a positive attitude. A stable framework for enduring professional collaborations can be fostered through mutual commitment, which ultimately serves the interests of both educational organizations and their faculty members. Results point to the recruitment process having a relatively high degree of alignment with organizational needs, but it can still be further optimized through precise job analysis.

Table 2.3
On Recruitment and Selection

	Mean	SD	Interpretation
RS1	2.72	1.12	Agree
RS2	2.72	1.083	Agree
RS3	2.7	1.078	Agree
RS4	2.7	1.088	Agree
RS5	2.74	1.06	Agree
RS6	2.67	1.116	Agree
RS7	2.69	1.083	Agree
RS8	2.7	1.099	Agree
RS9	2.7	1.113	Agree
RS10	2.72	1.101	Agree
Overall	2.71	0.867	Agree

The consistency level of training practices as shown in Table 2.4 shows a slight improvement, with an average score of 2.75 (SD = 0.883). This indicates that the current training program is perceived as beneficial, likely due to its demonstrated relevance and consistency in enhancing skills and promoting professional development. Effective training is essential for employee development, as it enhances both job performance and overall satisfaction. The respondents generally agreed on the importance of specific training projects, further confirming their perception of training as a valuable component of human resource practices in higher education. This perspective highlights the importance of sustained skill enhancement in supporting both institutional performance and individual career progression within academic environments. Based on these findings, it is suggested that the training content be more in line with the needs of employees with different educational backgrounds (for example, the high-education group should focus on training in scientific research methods).

Table 2.4
On Training

	Mean	SD	Interpretation
TR1	2.73	1.09	Agree
TR2	2.75	1.108	Agree
TR3	2.75	1.102	Agree
TR4	2.67	1.104	Agree
TR5	2.74	1.078	Agree
TR6	2.79	1.072	Agree
TR7	2.73	1.112	Agree
TR8	2.79	1.076	Agree
TR9	2.76	1.079	Agree
TR10	2.78	1.07	Agree

Overall 2.75 0.883 Agree

Problem No. 3: Significant Difference on the Level of Availments of Microfinance Services

Testing for demographic differences in HRM perceptions is not merely descriptive but serves to validate whether universalistic or contingency perspectives on HRM apply in Chinese regional universities. If significant differences emerge (e.g., by education level), it supports contingency theory which suggest that HRM practices must be tailored to sub-populations. Absence of differences supports universalistic claims that best practices are equally effective across groups (Delery & Doty, 1996). This justification underpins the use of Kruskal-Wallis tests as theory-driven rather than exploratory.

The results of the Shapiro-Wilk test indicated that the scores for Recruitment and Selection (RS), Training (TR), Benefits and Compensation (BC), and Performance Evaluation (PE) did not follow a normal distribution, as evidenced by p-values across all domains being less than 0.001. The p-value being less than 0.001 indicated a significant deviation from normal distribution. This distinction from normality was of paramount importance, as it directly influenced the selection of statistical tests in subsequent analyses. It underscored the necessity of employing non-parametric methods when evaluating data to avoid reliance on the normality assumption inherent in typical parametric tests (Pallant, 2020).

Table 3.1
Test of Normality

	Mean	SD	Shapiro-Wilk	
			W	p
Recruitment and Selection	2.71	0.867	0.859	<.001

Training	2.75	0.883	0.851	<.001
Benefits and Compensation	2.69	0.871	0.86	<.001
Performance Evaluation	2.76	0.901	0.845	<.001

To investigate the impact of gender differences on perceptions of human resource management practices. The results in Table 3.2 indicate that no significant differences were found across all areas: recruitment and termination ($\chi^2 = 0.3162$, $df = 1$, $p = 0.574$), training ($\chi^2 = 0.3524$, $df = 1$, $p = 0.553$), benefits and compensation ($\chi^2 = 0.0794$, $df = 1$, $p = 0.778$), as well as performance evaluation ($\chi^2 = 1.0016$, $df = 1$, $p = 0.317$). These findings suggested that there were no substantial differences between male and female respondents in their perceptions of HRM practices (Conover, 1999). Hence, it is suggested that HRM strategies do not need to be adjusted for gender differences and a unified standard can be adopted.

Table 3.2

Kruskal-Wallis Analysis on Gender

	χ^2	df	p
Recruitment and Selection	0.3162	1	0.574
Training	0.3524	1	0.553
Benefits and Compensation	0.0794	1	0.778
Performance Evaluation	1.0016	1	0.317

Differences in perceptions based on age were also analyzed in Table 3.3, showing no significant differences across most HRM practices: recruitment and selection ($\chi^2 = 8.39$, $df = 5$, $p = 0.136$), training ($\chi^2 = 4.99$, $df = 5$, $p = 0.417$), benefits and compensation ($\chi^2 = 1.05$, $df = 5$, $p = 0.959$), and performance evaluation ($\chi^2 = 6.68$, df

= 5, $p = 0.246$). The satisfaction of employees of all age groups with HRM practices is basically the same, and therefore there is no need to design HR strategies by age stratification.

Table 3.3
Kruskal-Wallis on Age

	χ^2	df	p
Recruitment and Selection	8.39	5	0.136
Training	4.99	5	0.417
Benefits and Compensation	1.05	5	0.959
Performance Evaluation	6.68	5	0.246

Grouped by level of education, the Kruskal-Wallis test in Table 3.4 revealed significant differences in training ($\chi^2 = 10.26$, $df = 4$, $p = 0.036$) but not in other areas, such as hiring and selection ($\chi^2 = 2.60$, $df = 4$, $p = 0.626$), benefits and pay ($\chi^2 = 5.04$, $df = 4$, $p = 0.283$), or performance review ($\chi^2 = 4.78$, $df = 4$, $p = 0.311$). The significant result in training suggests that respondents' perceptions vary based on their educational qualifications, possibly reflecting differing expectations regarding the relevance and applicability of training programs (Howell, 2016). HRM strategies therefore should be adjusted to the educational qualification of the respondents.

Table 3.4
Kruskal-Wallis on Educational Qualification

	x²	df	p
Recruitment and Selection	2.6	4	0.626
Training	10.26	4	0.036
Benefits and Compensation	5.04	4	0.283
Performance Evaluation	4.78	4	0.311

Analysis of HRM practices by position in the university shown in Table 3.5 revealed no significant differences: Recruitment and Selection ($x^2 = 2.05733$, $df = 2$, $p = 0.357$), Training ($x^2 = 4.15990$, $df = 2$, $p = 0.125$), Benefits and Compensation ($x^2 = 0.00381$, $df = 2$, $p = 0.998$), and Performance Evaluation ($x^2 = 0.33175$, $df = 2$, $p = 0.847$) (Pallant, 2020). These findings suggest that perceptions of HRM practices were consistent regardless of the respondents' positions within the university. The consistent evaluations of HRM by employees in different positions indicate that the current HR strategy is universal.

Table 3.5

Kruskal-Wallis on Position in the University

	x²	df	p
Recruitment and Selection	2.05733	2	0.357
Training	4.1599	2	0.125
Benefits and Compensation	0.00381	2	0.998
Performance Evaluation	0.33175	2	0.847

The Kruskal-Wallis test results for differences based on years of working experience in Table 3.6 showed no significant findings: recruitment and selection ($\chi^2 = 7.34$, $df = 4$, $p = 0.119$), training ($\chi^2 = 6.07$, $df = 4$, $p = 0.194$), benefits and compensation ($\chi^2 = 2.92$, $df = 4$, $p = 0.571$), and performance evaluation ($\chi^2 = 4.89$, $df = 4$, $p = 0.299$). These findings indicate that perceptions of HRM practices did not significantly vary based on the respondents' years of working experience. The absence of significant difference in the satisfaction of new and old employees with HRM, indicates that the HR strategy remains stable in the long-term implementation.

Table 3.6

Kruskal-Wallis on Years of Working Experience

	χ^2	df	p
Recruitment and Selection	7.34	4	0.119
Training	6.07	4	0.194
Benefits and Compensation	2.92	4	0.571
Performance Evaluation	4.89	4	0.299

The Kruskal-Wallis test conducted across various departments of different universities shown in Table 3.7 revealed that Human Resource Management (HRM) practices do not exhibit statistically significant differences in perception. This conclusion encompasses several aspects, including recruitment and selection ($\chi^2 = 5.71$, $p = 0.574$), training ($\chi^2 = 8.97$, $p = 0.255$), compensation and benefits ($\chi^2 = 11.66$, $p = 0.112$), and performance evaluation ($\chi^2 = 12.4$, $p = 0.088$). These findings suggest that perceptions of HRM practices were consistent across different departments within the universities studied. Disciplinary differences therefore have a weak

impact on HRM perception, and a unified HR strategy can be implemented throughout the school.

Table 3.7

Kruskal-Wallis on Department in the university

	χ^2	df	p
Recruitment and Selection	5.71	7	0.574
Training	8.97	7	0.255
Benefits and Compensation	11.66	7	0.112
Performance Evaluation	12.4	7	0.088

Problem No. 4: Level of Availments of Microfinance Services and Demographic Profile

On the correlation analysis between recruitment selection practice and performance evaluation, Spearman's rho value was 0.131 and p-value was 0.005, indicating that a statistically significant but relatively weak positive correlation exists between recruitment selection practice and performance evaluation. This suggests that strengthening recruitment and selection practices may correlate with improvements in performance evaluation.

A strong positive correlation is shown between training and performance evaluation as indicated by Spearman rank correlation coefficient of 0.204 and p-value of less than 0.001. This significant relationship highlights that training has a greater impact on performance outcomes than recruitment and selection, making it a more impactful practice in human resource management.

The analysis of the correlation between welfare, compensation, and performance evaluation revealed no statistically significant relationship (Spearman's rho = 0.031, p-value = 0.499). This indicates that there is no substantial association among these variables (Conover, 1999). It is suggested therefore that improving the quality of training has the most significant promoting effect on performance and is the core handle of HRM. Simply optimizing salary and benefits is difficult to directly improve performance and needs to be combined with other HR practices.

Table 4.1
Correlation Matrix

		Recruitment and Selection	Training	Benefits and Compensation
Performance Evaluation	Spearman's rho	0.131	0.204	0.031
	df	464	464	464

p-value	0.005	<.001	0.499
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Problem No. 5: Challenges Encountered while Using Microfinance Services

The survey results in Table 5.1 show that participating Nantong University continues to face challenges in implementing human resource management practices, which is highly recognized, with an average score between 2.71 and 2.79. The results of this study show that the vast majority of respondents believe that there are major challenges to successfully implementing human resource management practices (Dessler, 2019).

The consistency levels concerning human resource management and alignment with organizational objectives, resource allocation, stakeholder engagement, and policy implementation across items (CLL1 to CLL10) are fundamentally similar. The standard deviation for these measures is approximately 1.1. These challenges highlight common issues encountered in the implementation of HRM. They typically include misalignment between human resource strategies and organizational strategies, insufficient resources, as well as a lack of support from stakeholders. It is therefore necessary to establish a transparent performance evaluation system, increase resource input, and develop diversified training programs to address challenges.

Table 5.1

Challenges in terms of implementing the HRM practices

	Mean	SD	Interpretation
CLL1	2.76	1.07	Agree
CLL2	2.76	1.11	Agree
CLL3	2.79	1.11	Agree
CLL4	2.74	1.12	Agree
CLL5	2.74	1.06	Agree
CLL6	2.71	1.06	Agree
CLL7	2.72	1.12	Agree
CLL8	2.71	1.12	Agree
CLL9	2.74	1.1	Agree

Problem No. 6: Sustainable Human Resource Management Strategies

The challenges faced in the implementation of human resource management practices primarily include ensuring the fairness of performance evaluations. Feedback from respondents shown in Table 6.1 indicates that this issue is perceived as particularly prominent, suggesting that it is a matter of widespread concern. In the implementation process, subsequent challenges include insufficient funding for human resource management-related projects and a lack of training and development opportunities. This underscores that limited resources and inadequate opportunities for employee growth represent significant obstacles during the execution phase. Therefore, to address these challenges, organizations should prioritize transparent evaluation systems, secure sufficient resources, and expand employee development programs.

Table 6.1

Sustainable Human Resource Management Strategies

Indicator	Mean	SD	Interpretation
SHRM1(Fair Performance Evaluation)	3.12	1.08	Strongly Agree
SHRM2(Adequate Funding)	2.85	1.15	Agree
SHRM3(Training & Development)	2.78	1.09	Agree
SHRM4(Leadership Support)	2.91	1.12	Agree
SHRM5(Employee Engagement)	2.87	1.07	Agree

CONCLUSION

In three Nantong universities, perceived training quality relates positively to performance evaluation experiences, while benefits/compensation lag behind other HRM dimensions. Addressing the BC–performance gap and systematizing developmental pathways are actionable levers for sustainable HRM. The study showed that the pattern that TR co-moves with PE supports HRM “bundling” perspectives and justice theory and that capability building and fair evaluation are perceived jointly. For policy, local universities therefore can achieve sustainability not solely by increasing budgets but by improving design coherence among TR, PE, and BC.

RECOMMENDATIONS

1. Performance Transparency and Feedback can be further improved by publishing criterion-referenced PE rubrics, scheduling mid-cycle formative feedback and documenting improvement plans and follow-up.
2. Tiered Training Architecture can be adopted by mapping competency ladders, offering modular PD (pedagogy, research skills, industry collaboration) and recognizing completion with micro-credentials.
3. Benefits based on performance alignment with safeguards can be linked with portions of BC to documented contributions while preserving baseline equity (e.g., cost-of-living, welfare).
4. Employee Voice and Co-Design can be improved by institutionalizing faculty panels on PE/BC policy revisions and conducting regular pulse surveys and publishing responses and actions.
5. Data system for sustainability can be assured by creating dashboards for RS/TR/PE/BC indicators and monitoring disparities by education level and closing loops with targeted interventions.

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