MONETARY MOTIVATION, NON-MONETARY RECOGNITION, AND PERCEIVED PERFORMANCE APPRAISAL FAIRNESS AS ANTECEDENTS OF JOB SATISFACTION AMONG ADMINISTRATIVE STAFF IN PRIVATE UNIVERSITIES IN QINGDAO, CHINA*

Tiantian Li[1] and Ao Chen[2]

[1-2]International College, Panyapiwat Institute of Management, Thailand

Corresponding Author's Email: tiantianliedu@outlook.com

Received 11 May 2026; Revised 20 May 2026; Accepted 22 May 2026

Abstract

This study examined the effects of monetary incentives, non-monetary recognition, and the sense of fairness in performance evaluation on the job satisfaction of administrative staff in private universities in Qingdao. A quantitative cross-sectional survey was conducted using purposive sampling to ensure that the respondents were all administrative staff with sufficient practical experience in institutional assessment. After qualification screening and quality check of responses, 333 valid questionnaires were retained. The data were analyzed using descriptive statistics, reliability analysis, Pearson correlation, one-way ANOVA, and hierarchical multiple regression. The results showed that all three predictors were positively correlated with job satisfaction. In the final regression model, the standardized effect of non-monetary recognition was the strongest (β = 0.34, p

Citation:

* Tiantian Li and Ao Chen. (2026). Monetary Motivation, Non-Monetary Recognition, And Perceived Performance Appraisal Fairness As Antecedents Of Job Satisfaction Among Administrative Staff In Private Universities In Qingdao, China. Journal of Interdisciplinary Social Development, 4(4), 1116-1133.;

DOI: https://doi.org/10.

Website: https://so12.tci-thaijo.org/index.php/JISDIADP/

< 0.001), followed by the sense of fairness in performance evaluation (β = 0.29, p < 0.001) and monetary incentives (β = 0.18, p < 0.001). After adding the three main predictor variables to the demographic control model, the explained variance increased by 52 percentage points, and the complete model explained 59% of the variance in job satisfaction (R^2 = 0.59; adjusted R^2 = 0.58; ΔR^2 = 0.52, p < 0.001). The results of variance analysis further indicated that years of service was the most significant demographic factor associated with job satisfaction. This study contributes to the field of higher education human resource management by demonstrating that the satisfaction of administrative staff is not only dependent on economic incentives but also on recognition and a fair evaluation system. It suggests implementing comprehensive rewards, recognition, and evaluation reforms to enhance the retention rate, morale, and service quality of private university employees.

Key Words: monetary incentives, non-monetary recognition, performance evaluation fairness, job satisfaction, private universities

Introduction

Private higher education has become an important component of China's diversified higher education system. In coastal cities like Qingdao, private colleges and universities are confronted with a highly competitive environment, which is influenced by enrollment pressure, quality assurance requirements, service expectations, and competition in the labor market. These institutional environments make human resource management particularly crucial, as employee morale and stability can affect service delivery, student support, and administrative efficiency.

Administrative staff are the operational backbone of private colleges and universities. They are responsible for tasks such as admissions, student affairs, academic management, finance, human resources, procurement, information

technology, quality assurance, and external coordination (Wu, 2025). Although they may not directly engage in classroom teaching, their work impacts the quality of services provided by the institution and the daily experiences of both students and faculty. However, previous studies on job satisfaction in higher education have focused more on academic staff rather than administrative staff. This has created a gap in both practice and theory, especially in private colleges and universities, where administrative staff may face heavier workloads, limited promotion opportunities, and less transparent evaluation systems.

Job satisfaction is a core indicator for measuring employees' well-being and organizational effectiveness, closely related to their engagement, commitment, service quality and intention to quit (Pelly, 2023). For administrative staff in private universities, satisfaction may be influenced by both material and psychological factors. Material incentives reflect their perception of salary, bonuses, allowances, benefits and performance-related economic incentives. Non-material recognition refers to appreciation, respect, supervisor support, career development opportunities, public praise and trust. The fairness of performance appraisal reflects whether employees consider the results, processes and interpersonal interactions of the appraisal to be fair and transparent.

This research focuses on Qingdao because the city has a dynamic higher education and service industry labor market, making the rationality of compensation, the fairness of recognition and assessment particularly important for administrative staff. The contribution of this study lies in integrating three human resource-related factors into an explanatory model and testing their relative and combined effects on the job satisfaction of administrative staff in private universities. This study aims to provide directly referable evidence for college administrators who are committed to improving employee retention rates, morale, and service quality.

Questions

RQ1. What is the relationship between monetary motivation and job satisfaction among administrative staff in private universities in Qingdao?

RQ2. What is the relationship between non-monetary recognition and job satisfaction among administrative staff in private universities in Qingdao?

RQ3. What is the relationship between perceived performance appraisal fairness and job satisfaction among administrative staff in private universities in Qingdao?

RQ4. To what extent do monetary motivation, non-monetary recognition, and perceived performance appraisal fairness jointly explain job satisfaction among administrative staff in private universities in Qingdao?

Objectives

RO1. To examine the relationship between monetary motivation and job satisfaction among administrative staff in private universities in Qingdao.

RO2. To examine the relationship between non-monetary recognition and job satisfaction among administrative staff in private universities in Qingdao.

RO3. To examine the relationship between perceived performance appraisal fairness and job satisfaction among administrative staff in private universities in Qingdao.

RO4. To examine the combined explanatory power of monetary motivation, non-monetary recognition, and perceived performance appraisal fairness in predicting job satisfaction among administrative staff in private universities in Qingdao.

Literature Review

Job Satisfaction among Administrators in Private Higher Education Job satisfaction refers to employees' emotional and cognitive evaluations of their

work, including perceptions of compensation, oversight, recognition, workload, career development, organizational support, and fairness (Sun, 2019). In higher education institutions, job satisfaction is closely correlated with employee engagement, service quality, work participation, and retention. Satisfaction is particularly important for administrators, as their work involves ongoing interactions with students, faculty, parents, regulatory bodies, and external partners. The unique characteristics of private universities underscore the importance of job satisfaction (Pepple et al., 2025). Private institutions typically rely on efficient administrative systems to maintain competitiveness and institutional sustainability (Bhuiyan et al., 2023). Administrators may face role ambiguity, heavy workloads during peak periods, and pressure to meet service and compliance requirements. These circumstances suggest that compensation alone cannot explain job satisfaction (Wang, 2022). A more comprehensive explanation should consider economic incentives, recognition, and fairness in assessment practices.

Theoretical Foundations This model is based on three complementary theoretical perspectives. Expectancy theory posits that employees are more likely to develop positive work attitudes when they believe that effort leads to performance, and performance leads to valuable results. From this perspective, monetary incentives should enhance employee satisfaction when employees perceive a meaningful link between their work contributions and financial rewards (Chi et al., 2023). Herzberg's two-factor theory distinguishes between hygiene factors and motivators. Compensation and basic working conditions can prevent dissatisfaction, while recognition, achievement, and development opportunities are more closely associated with positive motivation. This distinction supports the inclusion of both monetary incentives and non-monetary recognition in the model. The perspective of organizational equity and justice emphasizes that employees evaluate not only what they receive but also whether the outcomes, procedures, and interpersonal interactions are fair.

Therefore, the fairness of performance appraisals is expected to affect job satisfaction, as the appraisal system influences compensation, promotion, workload assessment, and employee respect. These theories collectively construct a model in which job satisfaction is determined by financial rewards, recognition, and equity.

Monetary Incentives and Job Satisfaction, Monetary incentives refer to the satisfaction and motivational effect of employees on salaries, bonuses, allowances, benefits, and performance-based financial rewards (Nnubia & Ngige, 2024). Monetary incentives are particularly important in private universities because administrative staff often bear heavy workloads during admissions, registration, evaluation, and accreditation processes. Employees are more likely to feel their value is recognized and thus experience satisfaction when they perceive financial rewards as competitive and commensurate with their workload. However, the effectiveness of monetary incentives may be limited if the allocation rules are unclear or if salary increases are decoupled from performance. Therefore, a positive correlation generally exists between monetary incentives and job satisfaction, but this should be interpreted in conjunction with recognition and fairness.

Non-monetary recognition and job satisfaction: Non-monetary recognition refers to psychological and social forms of appreciation that do not directly involve economic rewards (Iman & Shaikh, 2025). It includes managerial praise, public recognition, respect, trust, professional support, and development opportunities. Recognition is particularly important for administrative staff, as service-oriented work often only receives attention when problems arise, while successful coordination may be taken for granted. Recognition can satisfy employees' needs for respect, belonging, achievement, and professional identity. In private universities where promotions and salary increases may be limited,

recognition can serve as a practical and cost-effective mechanism to improve employee satisfaction and engagement.

Performance Appraisal Fairness and Job Satisfaction Employee-perceived fairness in performance appraisals refers to an employee's judgment on whether the appraisal results, processes, standards, feedback, and interpersonal interactions are fair (Matabane, 2025). It includes distributive fairness, procedural fairness, and interactive fairness. For administrative staff, appraisal fairness is crucial because their work output is sometimes difficult to quantify. Unlike teaching hours or the number of publications, administrative performance may involve coordination quality, responsiveness, problem-solving abilities, document accuracy, and stakeholder communication. When appraisal indicators fail to reflect these contributions, employees may perceive the appraisal system as biased or subjective. A fair appraisal system can clarify expectations, build trust, and increase employee acceptance of management decisions, thereby enhancing job satisfaction.

Conceptual Framework and Hypotheses

Based on the literature review, this study proposes a conceptual model in which monetary motivation, non-monetary recognition, and perceived performance appraisal fairness are independent variables and job satisfaction is the dependent variable. The model reflects an integrated HRM perspective: administrative staff satisfaction is shaped by both tangible rewards and intangible experiences of recognition and justice.

H1: Monetary motivation has a positive effect on job satisfaction among administrative staff in private universities in Qingdao, China.

H2: Non-monetary recognition has a positive effect on job satisfaction among administrative staff in private universities in Qingdao, China.

H3: Perceived performance appraisal fairness has a positive effect on job satisfaction among administrative staff in private universities in Qingdao, China.

H4: Monetary motivation, non-monetary recognition, and perceived performance appraisal fairness jointly explain job satisfaction among administrative staff in private universities in Qingdao, China.

Methodology

This study employed a cross-sectional quantitative survey design to explore the impact of monetary incentives, non-monetary recognition, and performance appraisal fairness on job satisfaction among administrative staff at private universities and affiliated private colleges in Qingdao. Target respondents were administrative or support staff with sufficient work experience and familiarity with the institution's performance appraisal process. Purposeful sampling was used to ensure respondents met the research criteria. Data collection utilized a structured self-administered questionnaire. The questionnaire comprised five sections: demographic information, monetary incentives, non-monetary recognition, performance appraisal fairness, and job satisfaction. All principal variables were measured using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). A total of 333 valid questionnaires were collected. Data analysis was performed using SPSS software. Descriptive statistical analysis was used to determine respondent characteristics and variable levels. Cronbach's alpha coefficient was used to test the reliability of the measurement scales. Pearson correlation analysis was used to examine the relationships between principal variables. One-way ANOVA was used to examine differences in job satisfaction among different demographic groups. (Alsharji et al.) Finally, a hierarchical multiple regression analysis was conducted to determine the predictive effects of monetary incentives, non-monetary recognition, and perceived fairness of performance appraisal on job satisfaction, while controlling for demographic variables.

Result

Table1 indicates that the respondent pool is predominantly early- to mid-career, which is consistent with the staffing profile of many private universities where administrative functions are expanding and roles are increasingly professionalized. The gender distribution shows a higher proportion of female respondents, which is also common in service-oriented administrative workforces. Tenure is broadly distributed, allowing meaningful comparison across employment stages (e.g., newer staff vs. more established staff) using ANOVA.

Table 1 Respondent demographic profile (n = 333)

Characteristic	Category	n	%
Gender	Female	193	58.0
	Male	140	42.0
Age	≤ 25	46	13.8
	26–35	142	42.6
	36–45	103	30.9
	≥ 46	42	12.6
Education	Diploma/Associate	38	11.4
	Bachelor	223	67.0
	Master or above	72	21.6
Tenure	< 2 years	61	18.3
	2–5 years	141	42.3
	6–10 years	86	25.8
	> 10 years	45	13.5

Respondents' average perceptions of all constructs were above average. Non-monetary recognition had the highest average, indicating that many respondents felt recognized or valued at least sometimes, but the standard deviation showed significant individual differences. Among all predictors,

perceived fairness had the lowest average, suggesting that perceived fairness is a potential area for improvement in private university administration. Job satisfaction was above average, but not yet at its highest, consistent with a generally stable workforce that remains sensitive to the quality of human resource practices show Table 2.

Table 2 Descriptive statistics of study variables (n = 333)

Construct	Mean	SD	Min	Max
Monetary motivation	3.62	0.74	1.40	5.00
Non-monetary recognition	3.78	0.71	1.33	5.00
Performance appraisal fairness	3.55	0.77	1.20	5.00
Job satisfaction	3.70	0.69	1.50	5.00

Table 3 Correlations among variables

Variable	1	2	3	4
1. Monetary motivation	1.00			
2. Non-monetary recognition	0.52	1.00		
3. Appraisal fairness	0.49	0.57	1.00	
4. Job satisfaction	0.45	0.60	0.58	1.00

Table 3 shows that all predictors are positively associated with job satisfaction. The strongest bivariate association is between non-monetary recognition and job satisfaction, followed closely by appraisal fairness. Monetary motivation also correlates positively with satisfaction, though the association is comparatively smaller. These bivariate results provide preliminary support for H1–H3, but multiple regression is required to determine whether each predictor remains significant when the others are held constant.

Table 4 Reliability statistics for study constructs

Construct	Number of items	Cronbach's α	Interpretation
Monetary motivation	5	0.87	Good internal consistency
Non-monetary recognition	5	0.90	Excellent internal consistency
Performance appraisal fairness	6	0.91	Excellent internal consistency
Job satisfaction	5	0.89	Good-to-excellent consistency

Table 4 indicates that reliability is strong across all constructs. This matters practically because the regression and ANOVA results depend on scale scores that are stable and not dominated by measurement noise. High reliability strengthens confidence that observed relationships reflect meaningful patterns in respondents' perceptions rather than idiosyncratic item variance. In managerial terms, this also implies that the questionnaire can serve as a credible diagnostic tool for internal HR audits if the university wishes to repeat the survey periodically.

Table 5 One-way ANOVA: Job satisfaction differences by demographic categories

Grouping variable	Categories (k)	F / Welch F	p-value	Effect size (η^2)	Interpretation
Gender	2	1.12	0.291	0.003	No meaningful difference
Age group	4	2.46	0.063	0.022	Marginal; small effect
Education level	3	3.18	0.043	0.019	Significant; small effect

Tenure group	4	5.27	0.001	0.060	Significant; small-to-moderate effect

Table 5 suggests that tenure is the clearest demographic factor associated with job satisfaction. The effect size for tenure ($\eta^2 = 0.060$) indicates that while the difference is not dominant, it is large enough to matter operationally: satisfaction patterns differ by employment stage. Education level shows a statistically significant but small effect, suggesting that satisfaction varies slightly across qualification levels, potentially due to differences in role expectations or career opportunities. Gender differences are negligible. These results support the inclusion of tenure and education as control variables in the regression models reported in Section 4.7.

Table 6 Post-hoc comparison (tenure) means job satisfaction by tenure group

Tenure group	Mean	SD	Key interpretation
< 2 years	3.60	0.72	Newer staff show lower satisfaction
2–5 years	3.66	0.68	Stabilizing stage
6–10 years	3.82	0.63	Higher satisfaction; integration/competence gains
> 10 years	3.85	0.61	Highest satisfaction; role security and mastery

Table 6 indicates a clear practical pattern: satisfaction rises with tenure. A plausible organizational explanation is that newer staff face higher uncertainty (role clarity, appraisal expectations, workload adjustment), while longer-tenured staff have accumulated social capital and procedural familiarity. For management, this suggests that onboarding, early-career development, and transparent performance communication may be high-leverage interventions for improving satisfaction among staff who are most likely to disengage or exit.

Table 7 Regression model summary (hierarchical regression)

Model	Predictors entered	R^2	Adjusted R^2	ΔR^2	F change (p)	Interpretation
1	Controls only	0.07	0.06		$p < 0.01$	Demographics explain a small share
2	Controls + main predictors	0.59	0.58	0.52	$p < 0.001$	Substantial added explanatory power

Table 8 Regression coefficients predicting job satisfaction (Model 2)

Predictor	B	SE	β	t	p	Decision
(Constant)	0.74	0.22		3.36	0.001	
Gender (1 = female)	0.04	0.03	0.04	1.21	0.226	ns
Age (ordinal)	0.03	0.02	0.05	1.54	0.124	ns
Education (ordinal)	-0.05	0.02	-0.07	-2.08	0.038	control
Tenure (ordinal)	0.06	0.02	0.09	2.83	0.005	control
Monetary motivation	0.17	0.03	0.18	5.44	<0.001	H1 supported
Non-monetary recognition	0.32	0.03	0.34	9.72	<0.001	H2 supported
Appraisal fairness	0.27	0.03	0.29	8.34	<0.001	H3 supported

Tables provide clear evidence supporting the study hypotheses. First, Model 1 shows that demographic controls explain only a small proportion of variance in job satisfaction (R^2 = 0.07), indicating that satisfaction differences are not primarily driven by respondent background. Second, adding the three HR predictors increases explained variance substantially (ΔR^2 = 0.52), bringing total R^2 to 0.59. This directly supports the integrated-model logic of H4: monetary motivation, recognition, and fairness jointly account for a large share of job satisfaction variability. Third, in Model 2, all three predictors remain positive and statistically significant after controlling for demographics. The standardized coefficients suggest that recognition has the strongest unique association (β = 0.34), followed by appraisal fairness (β = 0.29), and then monetary motivation (β = 0.18).

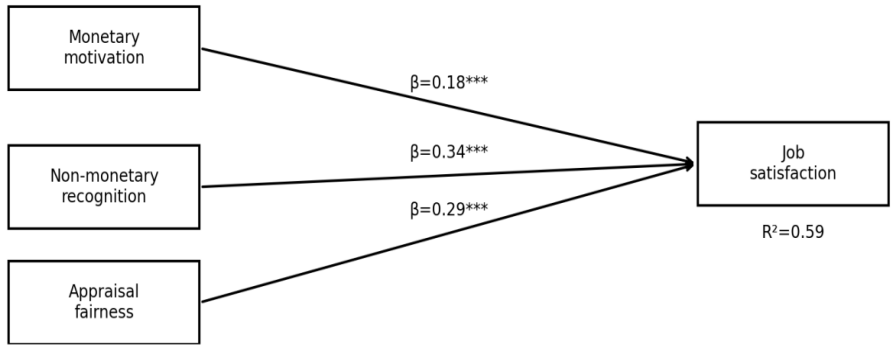


Figure 1 Model Framework Diagram

Discussion

Job satisfaction among administrators at private universities is influenced by both economic and non-economic human resource practices. After controlling for demographic factors, monetary incentives remain significant, indicating that salaries, bonuses, allowances, and performance rewards remain crucial for employees performing high-intensity administrative work. This result aligns with

expectation-based reasoning: employees are more likely to give positive evaluations of their work when they perceive a clearer link between their contributions and financial rewards. Non-monetary recognition has the strongest predictive power for job satisfaction. This result highlights an important characteristic of university administration: much administrative work often goes unnoticed when successful but becomes apparent when problems arise. Recognition from supervisors and the institution can be a powerful psychological resource. Respect, appreciation, trust, and developmental support help employees feel that their contributions are meaningful, enhancing their positive work attitude even with limited financial resources. The fairness of performance appraisals also has a significant positive impact. This finding is particularly important for private universities, as performance appraisals are commonly used to allocate rewards, assess service quality, and manage accountability. Administrative work is sometimes difficult to quantify; therefore, employees may question appraisal results if standards are unclear, or feedback is not adequately explained. A fair performance evaluation system can reduce uncertainty, enhance trust in management, and increase acceptance of institutional decisions. The results of the analysis of variance supplement this finding from the perspective of career stage. Tenure was the most significant factor associated with job satisfaction, with employees of longer tenure showing higher satisfaction. New employees may have lower satisfaction because they are still learning role expectations, institutional processes, and performance evaluation standards. Therefore, private universities should consider newly hired employees as a key group for human resource intervention.

Conclusions

This study investigated the impact of monetary incentives, non-monetary recognition, and performance appraisal fairness on job satisfaction among

administrative staff at private universities in Qingdao, China. The results supported all four hypotheses. Monetary incentives, recognition, and assessment fairness were all significant positive predictors of job satisfaction, collectively explaining 59% of the satisfaction disparity. Among these predictors, non-monetary recognition had the most significant impact, followed by assessment fairness and monetary incentives. These findings suggest that administrative staff satisfaction is not solely determined by compensation; it depends on a well-coordinated human resources system in which employees feel financially supported, socially recognized, and fairly evaluated. By strengthening reward, recognition, and evaluation systems, private universities can improve staff morale, retention rates, and the quality of administrative services.

Recommendations

Private universities should improve the transparency of their assessments by clarifying evaluation criteria, explaining scoring procedures, and providing constructive feedback after assessments. Institutions should standardize recognition mechanisms, including supervisor praise, public recognition, peer recognition, and career development support. Financial incentives should be commensurate with workload, performance contribution, and assessment results, ensuring employees perceive monetary incentives as fair and meaningful. Newly hired administrative staff should receive structured onboarding training, mentorship, and early assessment guidance to reduce uncertainty and improve satisfaction.

Human resources departments should regularly monitor employee satisfaction, recognition, assessment fairness, turnover intention, and service quality to evaluate the effectiveness of human resources reforms.

Limitations and Future Research Directions

First, the sample is limited to administrative staff at private universities in Qingdao, therefore the findings may not be directly generalizable to public universities or other regions. Second, the cross-sectional study design supports predictive associations but cannot determine causal changes over time. Third, this study relies on self-reported perceptions, which may be susceptible to common methodological bias. Future research should employ a longitudinal study design, comparing public and private institutions, including multiple provinces, and examining mediating mechanisms such as perceived organizational support, psychological safety, job engagement, and retention intentions.

References

Alsharji, A. S., Al-Tamimi, A. N. A., & Khudari, M. Employees' Perceptions Of The Impact Of Monetary And Non-Monetary Incentives On Performance And Job Satisfaction: A Case Study From Oman College Of Health Sciences. International Journal of Environmental Sciences, 11(17s), 2025.

Bhuiyan, F., Rana, T., Baird, K., & Munir, R. (2023). Strategic outcome of competitive advantage from corporate sustainability practices: Institutional theory perspective from an emerging economy. Business Strategy and the Environment, 32(7), 4217-4243.

Chi, H., Vu, T. V., Nguyen, H. V., & Truong, T. H. (2023). How financial and non–financial rewards moderate the relationships between transformational leadership, job satisfaction, and job performance. Cogent Business & Management, 10(1), 2173850.

Iman, A., & Shaikh, O. A. (2025). Influence of Monetary And Non-Monetary Rewards on Employee Performance. Journal of Social Signs Review, 3(12), 204-224.

Matabane, M. P. (2025). The Effect of Perceived Fairness of Performance Appraisals on Job Satisfaction and Employee Motivation Stellenbosch: Stellenbosch University].

Nnubia, A. L., & Ngige, C. D. (2024). Financial Incentives and Employee Performance of Manufacturing Firms in Anambra State, Nigeria. Journal Of Emerging Trends In Management Sciences And Entrepreneurship, 6(1), 262-281.

Pelly, D. (2023). Worker well-being and quit intentions: is measuring job satisfaction enough? Social Indicators Research, 169(1), 397-441.

Pepple, G. J., Fajulugbe, A. T., Enebeli, J. I., & Makama, L. L. (2025). A CRITICAL COMPARATIVE ANALYSIS OF EMPLOYEES'PERCEPTION OF JOB SATISFACTION IN PUBLIC AND PRIVATE UNIVERSITIES IN CROSS RIVER STATE, NIGERIA. Nnadiebube Journal of Social Sciences, 6(4), 38-56.

Sun, L. (2019). Perceived organizational support: A literature review. International Journal of Human Resource Studies, 9(3), 155-175.

Wang, F. (2022). Job demands amid work intensity: British Columbia school administrators' perceptions. Educational Management Administration & Leadership, 50(6), 1013-1031.

Wu, K. (2025). Innovative Research on Administrative Management Mode of Private Colleges and Universities in the New Era. International Journal of Asian Social Science Research, 2(1), 93-99.