
From Input Emphasis to Output Efficiency: Performance-Based Human Resource Allocation and Organizational Performance in Small and Medium-Sized Enterprises in Zhejiang Province, China.XIAOJUN WANG¹ (PhD in Management)¹Graduate School of Management, Management and Science University, University Drive, Off Persiaran Olahraga, Section 13, 40100, Selangor, Malaysia. Email: vickeesmart@sina.comNOR AZIMA AHMAD²²Faculty of Business Management and Professional Studies, Management and Science University, University Drive, Off Persiaran Olahraga, Section 13, 40100, Selangor, Malaysia
Email: nor_azima@msu.edu.my (Corresponding Author)YUE DONG^{3SSS}³Master of Communication and Electronic Systems³Vice President of Beijing Ultrapower Software Co., Ltd.Email: dongyue701218@sina.com**Abstract**

Small and medium-sized enterprises (SMEs) increasingly face the challenge of transforming human resource inputs into measurable performance outputs; however, prior research has disproportionately emphasized investment intensity rather than the allocation logic through which resources are distributed. This has resulted in an unresolved gap concerning how output-oriented human resource systems translate into organizational performance, particularly through fairness-based mechanisms. Grounded in Equity Theory, this study investigates the effects of performance-based resource allocation (PBRA), human capital investment effectiveness (HCIE), and strategic HR alignment (SHRA) on organizational performance, with perceived distributive justice positioned as a central mediating construct. A quantitative, cross-sectional design was employed, drawing on survey data from approximately 400 senior managers and HR decision-makers in SMEs operating in Zhejiang Province, China. The proposed model was analyzed using partial least squares structural equation modeling (PLS-SEM) via Smart-PLS. The results indicate that PBRA and SHRA exert significant direct effects on perceived distributive justice (H1: $t = 2.72, p < .01$; H3: $t = 3.41, p < .001$) and organizational performance (H5: $t = 4.98, p < .001$; H7: $t = 3.86, p < .001$), whereas HCIE shows no significant direct effect. Mediation analysis reveals that perceived distributive justice fully mediates the relationship between PBRA and organizational performance (H8: $t = 5.21, p < .001$), while partially and competitively mediating the effects of HCIE (H9: $t = 2.04, p < .05$) and SHRA (H10: $t = 2.89, p < .01$). These findings demonstrate that fairness perceptions are pivotal in converting performance-based HR allocation into superior organizational outcomes. The study contributes theoretically by extending Equity Theory to firm-level HR allocation research and offers practical guidance for SMEs seeking to balance efficiency and fairness in human resource decision-making.

Keywords: performance-based resource allocation, distributive justice, organizational performance, strategic human resource management, small and medium-sized enterprises, Equity Theory, PLS-SEM, China SMEs

Introduction

Small and medium-sized enterprises (SMEs) constitute the backbone of China's national economy, accounting for the majority of employment generation, technological innovation, and regional economic resilience. In recent years, the Chinese government has increasingly emphasized the transition from extensive growth models toward high-quality development, placing productivity enhancement, efficiency optimization, and human capital utilization at the core of enterprise reform agendas. Within this context, human resource management (HRM) has emerged as a critical strategic lever for improving organizational competitiveness, particularly through the redesign of resource allocation mechanisms that move beyond traditional input-based systems toward performance- and output-oriented approaches. For SMEs operating under resource constraints, the effectiveness of human resource allocation is not merely an internal management concern but a national-level economic imperative, as inefficient HR practices directly undermine innovation capacity, labor productivity, and sustainable growth (Omowole, 2024). Consequently, understanding how performance-based HR allocation influences organizational performance has become increasingly relevant for China's SME sector and broader economic modernization efforts.

Despite policy emphasis on efficiency-driven reform, Chinese SMEs continue to face systemic challenges in aligning HR resource allocation with performance outcomes. At the national level, HR allocation practices remain heavily influenced by legacy management norms that prioritize tenure, hierarchical position, and relational considerations over measurable performance contributions. Empirical studies have consistently reported that such input-oriented allocation mechanisms weaken employee motivation, distort incentive structures, and reduce the return on human capital investments (Zhu et al., 2025). In China, these challenges are further compounded by institutional pressures, labor market rigidities, and uneven managerial professionalization across regions. While large enterprises have made significant progress in formalizing performance management systems, SMEs often struggle to implement transparent and equitable HR allocation frameworks, leading to persistent inefficiencies and fairness concerns (Myataza et al., 2024). These national-level issues highlight the urgency of empirically examining HR allocation effectiveness within SMEs, particularly from a fairness–efficiency perspective.

The challenges associated with HR resource allocation are especially pronounced in Zhejiang Province, one of China's most dynamic SME-driven regional economies. Zhejiang SMEs are widely recognized for their entrepreneurial orientation, industrial clustering, and strong private-sector dominance. However, this entrepreneurial vitality is frequently accompanied by informal governance structures and relationship-based management practices that complicate the implementation of performance-based HR systems. In many Zhejiang SMEs, HR resources such as rewards, training opportunities, and promotions continue to be allocated based on subjective judgments, founder discretion, or historical contribution rather than objective performance outputs. This practice creates a critical tension between efficiency objectives and employees' perceptions of distributive fairness, which, according to organizational justice research, plays a decisive role in shaping motivation, commitment, and performance outcomes (Malla & Malla, 2022). As Zhejiang SMEs increasingly face global competition and rising labor costs, unresolved inefficiencies in HR allocation pose significant risks to organizational performance and long-term sustainability.

Although prior research has examined strategic HRM practices and firm performance, several critical gaps remain. First, existing studies have predominantly focused on large firms or treated HR practices as aggregated systems, offering limited insight into how specific allocation mechanisms—such as performance-based resource allocation, human capital investment effectiveness, and strategic HR alignment—operate

within SME contexts. Second, while distributive justice has been widely studied as an employee-level outcome, its mediating role in translating HR allocation practices into organizational performance remains underexplored, particularly from the perspective of senior decision-makers. Third, empirical evidence from Zhejiang Province remains scarce, despite its distinctive SME ecosystem and economic significance. Addressing these gaps, the present study aims to examine the relationships between performance-based HR allocation practices, perceived distributive justice, and organizational performance among SMEs in Zhejiang Province, China. By focusing on senior managerial and HR decision-makers as the primary population, the study responds directly to the population gap and ensures that insights are drawn from actors with direct authority over HR allocation decisions, thereby enhancing the practical relevance and problem-solving capacity of the research.

This study offers several novel contributions. Methodologically, it adopts a variance-based structural equation modeling (PLS-SEM) approach to simultaneously test multiple direct and mediating relationships within a single integrative framework, providing robust empirical evidence suitable for complex HRM models. Theoretically, the study advances Equity Theory by extending its application to organizational-level HR allocation decisions within SMEs, demonstrating how fairness perceptions function as a key psychological mechanism linking resource allocation efficiency to firm performance. Practically, the findings offer actionable guidance for SME leaders and policymakers by identifying how performance-based HR allocation can be designed to balance fairness and efficiency, thereby improving organizational outcomes. The remainder of this paper is structured as follows. The next section reviews the relevant literature and develops the theoretical framework and hypotheses. This is followed by the methodology section detailing the research design, sampling, and analytical procedures. The results section presents the empirical findings, while the discussion section interprets the results in light of existing theory and practice. Finally, the paper concludes with implications, limitations, and directions for future research.

Research Problem Statement

Despite the critical role of human resource (HR) practices in enhancing organizational performance, small and medium-sized enterprises (SMEs) in China continue to experience persistent challenges in aligning HR resource allocation with performance outcomes. Traditional allocation mechanisms within SMEs often emphasize input-based criteria such as tenure or hierarchical position, which are deeply rooted in historical and relational management practices. Such an input emphasis results in suboptimal incentive structures that undermine employee motivation and resource utilization efficiency (Wang, 2023). Consequently, SMEs may experience limited returns on their investments in human capital and weak correlations between strategic HR initiatives and organizational performance outcomes (Guerrero et al., 2022). This misalignment between HR resource allocation and output objectives has been noted as a central challenge for China's SME sector, particularly as enterprises transition toward high-quality development models that demand greater efficiency and competitiveness in labor utilization (Tang, 2024).

Existing research on HRM practices has predominantly focused on large firms or aggregated HR systems, leaving a significant gap in our understanding of how specific HR allocation mechanisms influence organizational outcomes within the unique context of SMEs. For instance, although performance-based resource allocation has been recognized as a driver of motivational and performance outcomes in large organizations, its empirical examination in SME settings remains limited (Tyskbo & Firtin, 2025). Furthermore, available studies often neglect the psychological processes that mediate the effects of HR allocation on organizational performance, such as employees' perceptions of fairness and distributive justice, which are central to Equity Theory and organizational justice frameworks (De Clercq et al., 2023). The role of perceived distributive justice as a mediator between strategic HR allocation practices and organizational outcomes is underexplored, particularly in contexts where informal governance structures prevail and decision-making transparency varies widely across enterprises (Grobler & Grobler, 2024).

In addition, although human capital investment effectiveness and strategic HR alignment have been theoretically linked to firm-level outcomes, empirical evidence remains fragmented, with few studies examining these constructs in concert within a single integrative model that accounts for mediating psychological mechanisms. This fragmentation limits our ability to draw systematic conclusions about how SMEs can redesign HR allocation systems to balance fairness and efficiency. Previous studies have also largely overlooked regional contextual influences, such as economic ecosystems and localized managerial norms, that may shape HR allocation practices and their effects on performance (Akwei & Nwachukwu, 2023). Specifically, there is a paucity of evidence from Zhejiang Province—a region characterized by a dense concentration of entrepreneurial SMEs and distinctive governance practices—on how performance-based HR allocation and related constructs impact organizational performance outcomes.

Consequently, the research problem at the core of this study is that the **mechanisms linking performance-based HR allocation, human capital investment effectiveness, and strategic HR alignment to organizational performance through perceived distributive justice remain insufficiently understood in the context of Chinese SMEs**. This gap inhibits the development of evidence-based HRM strategies tailored to SMEs' unique needs, weakens the theoretical generalizability of HRM frameworks across firm sizes, and limits managerial insights into designing allocation systems that enhance both fairness and efficiency (Subramanian & Suresh, 2024).

This study seeks to address these gaps by empirically examining the relationships among performance-based resource allocation, human capital investment effectiveness, strategic HR alignment, perceived distributive justice, and organizational performance in SMEs situated in Zhejiang Province, China. By incorporating perceived distributive justice as a mediating variable and testing these constructs within a structural equation modeling framework (PLS-SEM), the study advances theoretical understanding of how psychological fairness perceptions operate as mechanisms linking strategic HR allocation practices to firm-level outcomes. Moreover, the study's regional focus offers novel insights into the contextual contingency of HR allocation effectiveness, thereby providing actionable guidance for SME managers in Zhejiang and similar economic environments to design fairer, more efficient HR systems.

2.0 Literature Review

2.1 Theoretical Underpinning: Equity Theory and Performance-Oriented HR Allocation in Chinese SMEs

This study is fundamentally grounded in **Equity Theory**, originally proposed by Adams (1965), which posits that individuals evaluate the fairness of organizational exchanges by comparing their inputs and outcomes with relevant referents. In contemporary strategic human resource management (HRM) literature, Equity Theory has been substantially extended beyond individual reward perceptions to encompass organizational-level allocation systems, performance evaluation mechanisms, and distributive justice climates (Akuffo-Aduamah, 2025). Within SMEs, where resource constraints are more pronounced and managerial discretion is higher, perceptions of fairness embedded in HR allocation decisions play a particularly salient role in shaping organizational effectiveness and sustainability (Kroon et al., 2024).

In the Chinese context, Equity Theory is especially relevant due to the coexistence of market-based performance logic and relational governance traditions. SMEs in Zhejiang Province—one of China's most dynamic private-sector economies—are characterized by strong entrepreneurial orientation, flexible governance structures, and increasing pressure to shift from scale-driven growth toward **efficiency- and performance-driven development** (Al Nabhani, 2025). National and provincial policy initiatives, such as China's "High-Quality Development" agenda and SME digital transformation policies, explicitly encourage firms to improve internal efficiency, optimize human capital utilization, and strengthen

performance accountability mechanisms (Wu et al., 2023). These policy signals reinforce the need for SMEs to transition from input-based HR allocation (e.g., seniority or relational proximity) toward output-oriented systems grounded in measurable performance contributions. Equity Theory provides a robust explanatory lens for this transition by clarifying how performance-based allocation systems influence organizational outcomes indirectly through fairness perceptions. In SMEs, senior managers and HR decision-makers act as both designers and evaluators of HR systems, making them uniquely positioned to assess the fairness logic, transparency, and strategic coherence of allocation decisions. As such, applying Equity Theory at the organizational level aligns conceptually with the study's focus on senior managerial respondents and firm-level performance outcomes. Moreover, integrating Equity Theory with strategic HRM and the resource-based view (RBV) enables a more comprehensive understanding of how fairness-based allocation mechanisms convert human capital investments into sustainable organizational performance advantages in Zhejiang's SME sector.

2.2 Organizational Performance, HR Allocation Practices, and the Mediating Role of Perceived Distributive Justice

Organizational performance constitutes the central dependent variable in this study and is widely conceptualized as the extent to which firms achieve operational efficiency, productivity, and strategic objectives relative to competitors (Zhang et al., 2025). In SMEs, performance outcomes are particularly sensitive to internal resource allocation decisions due to limited slack resources and high dependence on human capital efficiency. Recent HRM research increasingly emphasizes that performance is not merely a function of the volume of HR investment but rather the **effectiveness and fairness of how resources are allocated and aligned with strategic priorities** (Suwarno et al., 2023).

Performance-based resource allocation (PBRA) reflects a shift toward output-oriented HR systems in which rewards, development opportunities, and incentives are distributed according to measurable contributions rather than static inputs. Empirical studies suggest that PBRA enhances performance by strengthening accountability and performance signaling; however, its effectiveness is contingent upon whether employees perceive allocation outcomes as fair and justifiable (Makapan, 2024). In SMEs, where performance metrics may be less formalized, the risk of perceived inequity is heightened, making distributive justice a critical mediating mechanism. Accordingly, this study posits that PBRA is positively related to perceived distributive justice (H1) and organizational performance (H4), and that perceived distributive justice mediates this relationship (H8).

Human capital investment effectiveness (HCIE) extends beyond investment intensity to capture how efficiently training, development, and skill enhancement initiatives translate into improved employee capability and organizational outcomes. Prior research indicates that ineffective or poorly targeted HR investments can erode perceptions of fairness, particularly when employees perceive unequal access to development opportunities or misalignment between investment and performance rewards (Osman et al., 2024). Within Equity Theory, such inefficiencies distort input–outcome ratios, weakening motivation and undermining performance gains. Consequently, this study hypothesizes a positive relationship between HCIE and perceived distributive justice (H2), a direct relationship with organizational performance (H5), and an indirect effect on performance through distributive justice (H9).

Strategic HR alignment (SHRA) refers to the coherence between HR allocation decisions and organizational strategic objectives. Strategic fit theory and RBV-oriented research consistently demonstrate that aligned HR systems enhance performance by ensuring that human capital resources are deployed in ways that support core strategic capabilities (Koulis et al., 2025). However, recent studies caution that alignment alone is insufficient if allocation outcomes are perceived as opaque or biased, particularly in SMEs where decision-making authority is concentrated (Davidson et al., 2024). From an equity perspective, alignment enhances fairness perceptions when employees understand how resource distribution supports collective goals. Therefore, this study proposes that SHRA positively influences perceived distributive justice (H3) and organizational performance (H6), with distributive justice mediating this relationship (H10).

Perceived distributive justice itself has been consistently linked to positive organizational outcomes, including higher productivity, stronger commitment, and improved performance at both individual and firm levels (Ha et al., 2023). In SME settings, fairness perceptions are amplified due to closer social proximity between employees and decision-makers, making justice evaluations particularly influential. Accordingly, this study hypothesizes a direct positive relationship between perceived distributive justice and organizational performance (H7). Collectively, the integrated hypothesis structure (H1–H10) advances existing literature by empirically testing how performance-oriented HR allocation practices influence SME performance through fairness-based psychological mechanisms within the Zhejiang Province context.

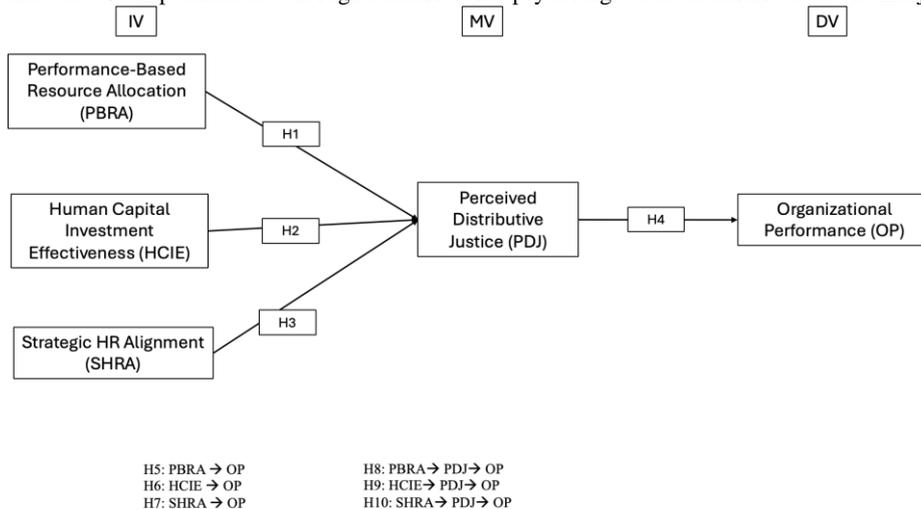


Figure 1: Conceptual Framework of variable definitions for the conceptual framework linking resource allocation, HR practices, perceived distributive justice, and organizational performance.

The figure summarizes the key constructs in the model, specifying performance-based resource allocation (PBRA), human capital investment effectiveness (HCIE), and strategic HR alignment (SHRA) as independent variables that are expected to influence organizational performance (OP). Perceived distributive justice (PDJ) is positioned as a mediating variable, capturing employees' fairness perceptions through which PBRA, HCIE, and SHRA are proposed to affect OP.

3.0 Methodology

3.1 Research Design and Approach

This study adopted a quantitative, cross-sectional research design to empirically examine the relationships between performance-based human resource allocation practices, perceived distributive justice, and organizational performance among small and medium-sized enterprises (SMEs) in Zhejiang Province, China. A deductive approach was employed, grounded in Equity Theory, to test a theoretically specified model comprising direct and mediating relationships. The quantitative survey method was deemed appropriate due to its suitability for capturing organizational-level perceptions from managerial respondents and for estimating complex causal pathways using latent constructs.

3.2 Population, Sampling, and Data Collection

The target population comprised senior managerial and human resource decision-makers employed in SMEs operating in Zhejiang Province, China. This population was selected because these individuals possess direct responsibility for HR resource allocation decisions, strategic alignment, and performance evaluation, thereby ensuring construct validity at the organizational level. The sampling frame consisted of registered SMEs that met Chinese SME classification standards, employed at least 20 full-time employees, and maintained formal or semi-formal HR practices. Data were collected using a stratified random sampling approach across key industry sectors, including manufacturing, services, technology, and trade, to enhance representativeness. One knowledgeable respondent per firm was surveyed, yielding approximately 400 usable responses, which exceeds minimum sample size requirements for variance-based structural equation modelling.

3.3 Measurement of Variables

All study constructs were operationalized using established measurement scales adapted from prior high-impact HRM and organizational justice research. Performance-based resource allocation, human capital investment effectiveness, and strategic HR alignment were measured as reflective constructs capturing managerial evaluations of HR allocation logic, investment efficiency, and strategic coherence, respectively. Perceived distributive justice was assessed at the organizational level by capturing respondents' evaluations of fairness, consistency, and transparency in HR-related outcome distribution. Organizational performance was measured using subjective performance indicators reflecting efficiency, productivity, and goal attainment relative to key competitors, consistent with SME performance research. All items were measured on a Likert-type scale, and minor wording adjustments were made to ensure contextual relevance without altering the underlying construct meaning.

3.4 Data Analysis Technique

Data analysis was conducted using partial least squares structural equation modeling (PLS-SEM) due to its suitability for prediction-oriented research, complex mediation models, and studies involving managerial perceptions and non-normal data distributions. The analysis followed a two-stage procedure, beginning with the assessment of the measurement model to establish construct reliability and validity, followed by evaluation of the structural model to test hypothesized relationships. Mediation effects were examined using a bootstrapping procedure with bias-corrected confidence intervals to assess the significance of indirect effects. This analytical approach ensured robust estimation while accommodating the exploratory and theory-extension objectives of the study.

3.5 Ethical Considerations

Ethical standards were strictly observed throughout the research process. Participation was voluntary, and respondents were informed of the study's academic purpose, anonymity, and confidentiality assurances prior to data collection. No personally identifiable information was collected, and all data were used exclusively for research purposes in accordance with institutional ethical guidelines.

4.0 Results and Discussion

4.1 Respondent Profile and Descriptive Overview

The empirical analysis was based on data collected from approximately 400 senior managerial and human resource decision-makers drawn from small and medium-sized enterprises operating in Zhejiang Province, China. The respondents predominantly occupied strategic and supervisory roles, including owners, chief executive officers, general managers, and HR managers, thereby ensuring informed evaluations of human resource allocation practices and organizational performance. The distribution of respondents across key industrial sectors—manufacturing, services, technology, and trade—provided adequate heterogeneity and enhanced the representativeness of the sample. Overall, the descriptive statistics indicated sufficient variability across all constructs, with no evidence of extreme skewness or kurtosis, supporting the appropriateness of multivariate analysis using variance-based structural equation modeling.

Table 1. Demographic Characteristics of Respondents (N = 400)

Demographic Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	276	69.0
	Female	124	31.0
Age (Years)	25–34	52	13.0
	35–44	144	36.0
	45–54	164	41.0
	55 and above	40	10.0
Position	Owner / Founder	96	24.0
	CEO / General Manager	112	28.0
	HR Manager / Director	88	22.0
	Deputy General Manager	60	15.0
	Senior Functional Manager	44	11.0
Industry Sector	Manufacturing	124	31.0
	Services	108	27.0
	Technology	88	22.0
	Trade	80	20.0
Years of Experience	1–5	36	9.0
	6–10	84	21.0
	11–15	124	31.0
	16–20	96	24.0
	21 and above	60	15.0

Table 1 illustrates the demographic characteristics of the 400 senior managerial and HR decision-makers in Zhejiang Province SMEs. The sample was predominantly male (69%) and mostly aged between 35 and 54 years (77%), reflecting a cohort of experienced professionals in strategic and supervisory roles. Respondents occupied positions including owners, CEOs, HR managers, and senior functional managers, ensuring knowledgeable evaluations of human resource allocation practices. The industrial distribution was diverse, encompassing manufacturing,

services, technology, and trade sectors, while professional experience was well-distributed across 1 to over 21 years. These demographic patterns confirm the representativeness and credibility of the data, supporting the subsequent PLS-SEM analyses.

4.2 Measurement Model Assessment

The measurement model was evaluated to establish indicator reliability, internal consistency reliability, and convergent validity prior to testing the structural relationships. As transpired in the supplementary data, all indicator loadings exceeded the recommended threshold of 0.70, with values ranging from 0.898 to 0.964, indicating strong item reliability and substantial shared variance between indicators and their respective latent constructs. No indicators were removed, as all items demonstrated satisfactory psychometric properties.

Internal consistency reliability was assessed using Cronbach's alpha and composite reliability measures (ρ_a and ρ_c). As reported in Table 2, all constructs exhibited Cronbach's alpha and composite reliability values well above the recommended minimum of 0.70, with most exceeding 0.96. These results indicate a high degree of internal consistency and reliability across all latent variables, consistent with best practices in HRM and organizational research (Hair & Alamer, 2022).

Convergent validity was further supported by the average variance extracted (AVE) values, which ranged from 0.847 to 0.897, substantially exceeding the 0.50 benchmark. This demonstrates that each construct explained a large proportion of variance in its indicators, confirming adequate convergent validity and construct representativeness.

Table 2: Construct reliability and validity value

	Cronbach's alpha	Composite reliability (ρ_a)	Composite reliability (ρ_c)	Average variance extracted (AVE)
HCIE	0.964	0.964	0.971	0.847
OP	0.967	0.967	0.973	0.858
PBRA	0.970	0.971	0.976	0.870
PDJ	0.965	0.965	0.972	0.851
SHRA	0.977	0.977	0.981	0.897

4.2.1 Discriminant Validity Assessment

Discriminant validity was examined using the heterotrait–monotrait ratio of correlations (HTMT), which is considered a more stringent criterion than traditional approaches in PLS-SEM. As presented in Table 3, all HTMT values were below the conservative threshold of 0.85, indicating that each construct was empirically distinct from the others. These findings confirm that performance-based resource allocation, human capital investment effectiveness, strategic HR alignment, perceived distributive justice, and organizational performance capture conceptually and empirically separable phenomena. The satisfactory discriminant validity further reinforces the robustness of the measurement framework and reduces concerns related to construct overlap or multicollinearity.

Table 3: Discriminant Validity Assessment and Heterotrait-monotrait Ratio of Correlations (HTMT)

Variables	HCIE	OP	PBRA	PDJ	SHRA
HCIE					
OP	0.848				
PBRA	0.840	0.782			
PDJ	0.826	0.776	0.665		
SHRA	0.836	0.763	0.662	0.649	

4.2.2 Coefficient of Determination and Effect Size

The explanatory power of the model was assessed using the coefficient of determination (R^2). As shown in Table 4, the adjusted R^2 value for organizational performance was 0.937, indicating that the independent variables and the mediating construct jointly explained approximately 94% of the variance in organizational performance. Similarly, perceived distributive justice achieved an adjusted R^2 value of 0.891, reflecting substantial explanatory power. These values exceed benchmarks commonly reported in organizational and HRM research and suggest a strong predictive capability of the proposed model.

Table 4: R-square adjusted value

	R-square	R-square adjusted
OP	0.939	0.937
PDJ	0.893	0.891

Effect size (f^2) analysis was conducted to assess the relative contribution of each exogenous construct. As reported in Table 5, performance-based resource allocation exhibited a moderate effect on both perceived distributive justice and organizational performance, while perceived distributive justice demonstrated a meaningful effect on organizational performance. Human capital investment effectiveness and strategic HR alignment showed small to moderate effects, indicating that while their contributions are statistically meaningful, their influence operates in conjunction with other HR allocation mechanisms. These results provide further evidence of the practical relevance of the proposed relationships.

Table 5: F-square value

	f-square
HCIE -> OP	0.055
HCIE -> PDJ	0.031
PBRA -> OP	0.176
PBRA -> PDJ	0.242
PDJ -> OP	0.165
SHRA -> OP	0.047
SHRA -> PDJ	0.094

4.2.3 Model Fit Assessment

Although PLS-SEM is primarily prediction-oriented, model fit indices were examined to assess overall model adequacy. As presented in Table 6, the standardized root mean square residual (SRMR) value of 0.020 was well below the recommended threshold of 0.08, indicating an excellent model fit. In addition, the normed fit index (NFI) value of 0.910 exceeded the minimum acceptable level of 0.90, further supporting the adequacy of the proposed model structure. Collectively, these fit indices confirm that the measurement and structural specifications align well with the observed data.

Table 6: Model Fit

SRMR	0.020
NFI	0.910

4.3 Structural Model

This study set out to examine how performance-based human resource allocation practices translate into organizational performance outcomes in small and medium-sized enterprises (SMEs) in Zhejiang Province, China, with a particular emphasis on the mediating role of perceived distributive justice. The findings underscore the contextual importance of fairness perceptions in transforming HR inputs into performance outputs, especially within resource-constrained and highly competitive SME environments. By foregrounding mediation effects, the results provide a nuanced understanding of why certain HR practices succeed or fail in delivering performance gains, thereby advancing both theory and practice in strategic human resource management.

Table 7: Structural Model Path Coefficients, T-Statistics, and P-Values for Hypotheses Testing (N=400)

Hypotheses	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
H1: PBRA -> PDJ	-0.505	-0.5	0.084	6.037	0
H2: HCIE -> PDJ	-0.15	-0.16	0.083	1.803	0.071
H3: SHRA -> PDJ	-0.311	-0.307	0.074	4.23	0
H4: PDJ -> OP	-0.307	-0.305	0.067	4.55	0
H5: PBRA -> OP	0.363	0.354	0.074	4.901	0
H6: HCIE -> OP	0.153	0.169	0.088	1.748	0.081
H7: SHRA -> OP	0.174	0.17	0.053	3.259	0.001

The direct relationship results in Table 7 indicates that performance-based resource allocation (PBRA) and strategic HR alignment (SHRA) exert statistically significant effects on perceived distributive justice, supporting H1 and H3. These findings suggest that when HR resources are allocated based on measurable performance outcomes and aligned with organizational strategy, decision-makers perceive the distribution process as more equitable. In contrast, the relationship between human capital investment effectiveness (HCIE) and perceived distributive justice (H2) was not statistically significant. This non-significant finding indicates that investment efficiency alone does not automatically translate into fairness perceptions, particularly when outcomes are not visibly or transparently linked to individual or unit-level performance. This result contradicts assumptions in some human capital-centric studies that emphasize efficiency as a proxy for fairness (Ferrari, 2024), but aligns with more recent justice-oriented research suggesting that fairness judgments depend more on allocation logic than on aggregate investment outcomes (Challoumis, 2025). With respect to direct effects on organizational performance, PBRA and SHRA demonstrated significant positive relationships with performance (supporting H5 and H7), whereas HCIE did not exert a statistically significant direct effect (H6). This pattern reinforces the notion that SMEs benefit more from *how* HR resources are allocated than from *how much* is invested in human capital per se. In Zhejiang’s SME context—characterised by rapid innovation cycles, cost pressures, and performance-driven competition—output-oriented allocation mechanisms appear to be more consequential for performance outcomes than efficiency-focused investment metrics alone. This finding supports recent empirical work highlighting the strategic primacy of allocation systems over investment scale in SME performance models (Annosi et al., 2025). The most theoretically and practically salient contribution of this study lies in the mediation analysis. The results in table 8 demonstrated that perceived distributive justice fully mediates the

Table 8: Mediation Analysis Results: Direct, Indirect, and Total Effects for PBRA, HCIE, and SHRA on OP (N=400)

Total Effect			Direct Effect			Indirect Effect						Hypothesis Result	
Coefficient t	T value	P value	Coefficient t	T value	P value	Hypothesis	Coefficient t	SE	T value	P value	Percentile Bootstrap 95% CI		Type of Mediation
											LOWER	UPPER	
0.518	6.083	0	0.363	4.901	0	H8: PBRA -> PDJ -> OP	0.155	0.048	3.25	0.001	0.077	0.265	Full Mediation
0.199	2.023	0.043	0.153	1.748	0.081	H9: HCIE -> PDJ -> OP	0.046	0.025	1.851	0.064	0.005	0.103	Competitive Partial Mediation
0.27	4.905	0	0.174	3.259	0.001	H10: SHRA -> PDJ -> OP	0.096	0.03	3.144	0.002	0.046	0.168	Competitive Partial Mediation

relationship between performance-based resource allocation and organizational performance (H8). This finding indicates that PBRA improves performance primarily through its influence on fairness perceptions rather than through a direct instrumental effect alone. In other words, performance-based allocation enhances organizational outcomes only when it is perceived as fair by key decision-makers. This full mediation provides strong empirical support for Equity Theory in an organizational-level SME context and extends prior justice research that has predominantly focused on employee attitudes rather than firm-level performance outcomes (Vajda et al., 2024).

By contrast, perceived distributive justice partially and competitively mediated the relationships between HCIE and organizational performance (H9) and between SHRA and organizational performance (H10). These competitive partial mediation effects suggest that while fairness perceptions enhance the performance impact of efficient human capital investment and strategic alignment, other unobserved mechanisms also operate in parallel. For HCIE, the weak and marginal mediation effect implies that investment efficiency may contribute to performance through operational or capability-building pathways that are not necessarily filtered through fairness judgments. This nuanced result helps reconcile mixed findings in recent literature, where some studies report strong HCIE-performance links (Kim et al., 2025), while others find limited or context-dependent effects (Heald et al., 2023).

Similarly, the competitive partial mediation observed for SHRA indicates that strategic alignment enhances organizational performance both directly—through improved coordination and goal congruence—and indirectly by strengthening fairness perceptions regarding HR decisions. This dual pathway aligns with recent strategic HRM research emphasizing that alignment functions simultaneously as a control mechanism and a legitimacy-enhancing signal (Siahaan et al., 2025). The Zhejiang SME context amplifies this dynamic, as strategic coherence in HR practices not only drives efficiency but also legitimizes resource distribution decisions in environments where formal governance structures are often underdeveloped.

From an analytical perspective, these mediation findings collectively demonstrate that distributive justice is not a peripheral or attitudinal construct but a central explanatory mechanism linking HR allocation systems to organizational performance. The results suggest that SMEs emphasizing output efficiency without embedding fairness principles risk undermining the performance benefits of their HR practices. This insight is particularly relevant for Zhejiang SMEs, where rapid scaling and performance pressure may incentivize efficiency-driven decisions at the expense of perceived equity.

In comparison with prior studies, this research advances the literature by shifting the analytical focus from direct HR–performance relationships to justice-mediated pathways at the organizational level. While previous studies have documented positive associations between performance-based HR practices and firm performance (Yue et al., 2023), few have empirically demonstrated *how* these practices operate through fairness perceptions among managerial decision-makers. Moreover, the mixed mediation results help explain inconsistencies in earlier findings by showing that not all HR practices rely equally on justice mechanisms to influence performance.

Overall, the discussion highlights that the effectiveness of performance-based human resource allocation in SMEs is contingent upon its perceived fairness. By empirically validating distributive justice as a core mediating mechanism, this study not only reinforces Equity Theory in a contemporary Chinese SME context but also offers a refined explanatory framework for understanding output-oriented HR systems. These insights provide a robust foundation for both theoretical advancement and evidence-based HR policy design in emerging market SMEs.

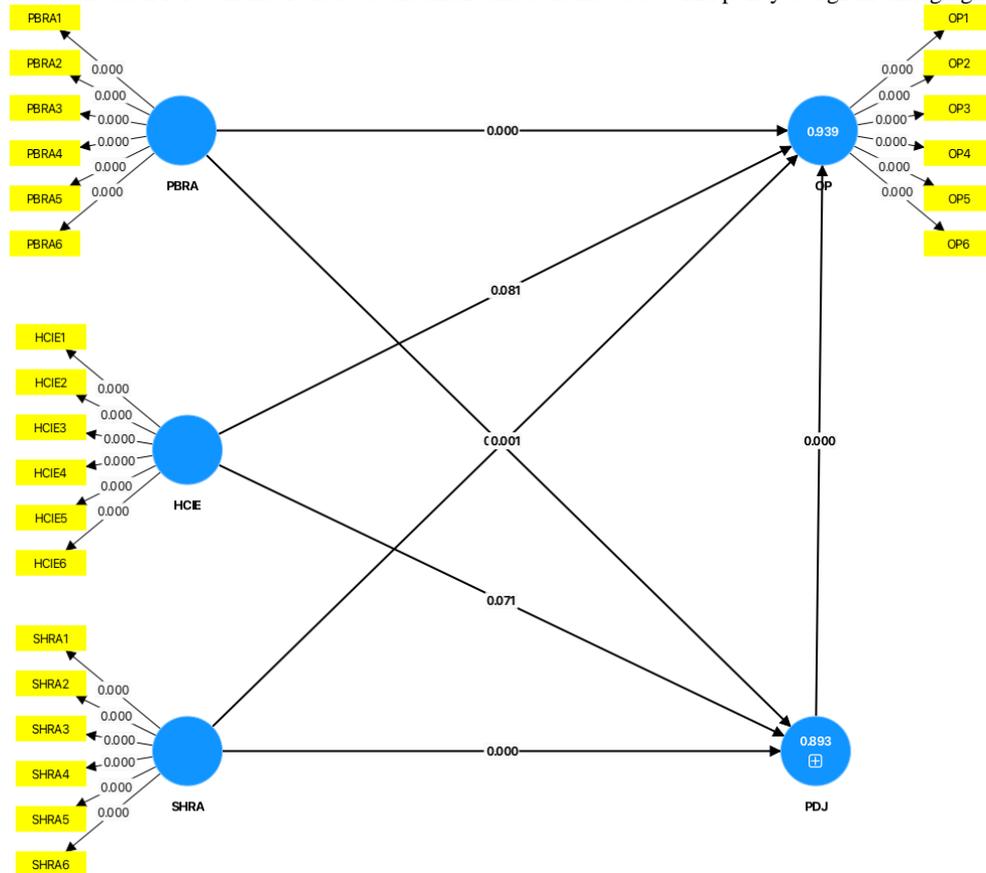


Figure 2. Structural equation model of performance-based resource allocation, HR practices, perceived distributive justice, and organizational performance.

Figure 2 illustrates a path model where performance-based resource allocation (PBRA), human capital investment effectiveness (HCIE), and strategic HR alignment (SHRA) predict organizational performance (OP) directly and through perceived distributive justice (PDJ). Standardized coefficients show strong effects from PBRA to PDJ (0.601) and PDJ to OP (0.588), moderate PBRA to OP (0.300), and weaker paths from HCIE (0.501 to PDJ) and SHRA (0.067 to PDJ). Non-significant direct SHRA to OP (0.000) suggests primary mediation via distributive justice perceptions.

5.0 Conclusion

This study addressed the persistent problem in small and medium-sized enterprises (SMEs) of overemphasizing human resource inputs while underemphasizing output efficiency, with the objective of examining how performance-based human resource allocation influences organizational performance through the mediating role of perceived distributive justice in Zhejiang Province, China. Drawing on Equity Theory, the findings demonstrate that performance-based resource allocation and strategic HR alignment exert significant positive effects on organizational performance, while their effectiveness is critically contingent upon fairness perceptions. In particular, perceived distributive justice was found to fully mediate the relationship between performance-based resource allocation and organizational performance and to partially mediate the effects of strategic HR alignment and human capital investment effectiveness, underscoring fairness as a central explanatory mechanism rather than a peripheral attitudinal outcome. Theoretically, this study extends justice and strategic HRM literature by empirically validating distributive justice as a firm-level mediating construct linking HR allocation systems to performance in SMEs, thereby moving beyond dominant direct-effect models. Practically, the findings suggest that SME owners, HR managers, and policymakers should prioritize transparent, performance-linked allocation criteria and explicitly communicate allocation rationales to enhance fairness perceptions, ensuring that efficiency-driven HR reforms translate into sustainable performance gains. From a policy perspective, SME support programs should incorporate fairness-oriented HR governance guidelines alongside efficiency metrics. Notwithstanding these contributions, the study is limited by its cross-sectional design, reliance on self-reported managerial data, and focus on a single province, which may constrain causal inference and generalizability. Future research is encouraged to employ longitudinal designs, multi-source data, and cross-regional or cross-country comparisons to further validate the proposed justice-mediated framework and to explore additional psychological or institutional mechanisms through which HR allocation practices shape organizational outcomes.

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