



Effects of Employee-Organization Relationships on Employee Creativity

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Abstract. The research is grounded in social exchange theory and focuses on employees within enterprises in China. Employing methodologies such as reliability and validity analysis, confirmatory factor analysis, and multilevel linear regression, this study investigates the impact mechanisms of various employee-organizational relationship (EOR) models and psychological contracts on employee creativity. The findings reveal that investment-oriented EOR significantly enhances employee creativity. Additionally, the psychological contract serves a mediating role in the relationship between employee-organizational relationships and employee creativity, with relational psychological contracts exhibiting a notable positive influence on employee creativity.

Keywords: employee creativity, employee-organizational relationship, psychological contract

1 Introduction

At present, Chinese enterprises are confronted with unprecedented challenges and opportunities. On the international front, Western countries—particularly the United States—are increasingly cautious about China's rise. They are employing various measures to suppress China's related industries and technologies in an effort to hinder the development of its high-tech sectors. For example, they have enacted the "Holding Foreign Companies Accountable Act," which restricts Chinese enterprises from raising capital in the U.S., and have added numerous Chinese companies to the "Entity List," thereby prohibiting these firms from purchasing American products. Many of these companies operate within currently popular technological fields, such as Huawei and Hikvision. Domestically, under a national strategy aimed at strengthening strategic scientific and technological capabilities while enhancing independent control over industrial and supply chains—and achieving carbon peaking and carbon neutrality goals—the existing industrial structure and energy framework are undergoing significant adjustments and optimizations. Enhancing independent innovation capabilities has become an essential pathway for enterprises seeking to improve their core

competitiveness. As is widely recognized, creativity serves as both the source and foundation of innovation. To bolster organizational innovation capabilities, it is imperative to foster employees' creativity [1]. The innovation that drives enterprise growth originates from employee creativity; thus, organizations must expand their expectations beyond merely requiring employees to possess necessary knowledge and skills or meet basic job requirements. Instead, there is a growing need for employees who can contribute creative solutions that keep enterprises dynamic and competitive. What type of employment model can more effectively enhance employees' work motivation, mobilize their enthusiasm and initiative, stimulate their creative thinking and activities, and ultimately improve their independent innovation capabilities is a pressing issue that enterprises must address. Existing research primarily focuses on team creativity from an organizational perspective. For instance, Jia et al. examined the relationship between employee organizational relationships and team creativity through the lens of social structure theory [2]. However, there is a relative scarcity of studies investigating how employee organizational relationships impact individual creativity.

Consequently, this study targets enterprise employees as its subjects and adopts an employee-centric perspective to explore the connection between employee organizational relationships and individual creativity. The aim is to verify whether these organizational relationships can foster employees' individual creativity, thereby enhancing and enriching both the theories surrounding employee organizational relationships and those related to creativity.

2 Theoretical Analysis and Research Hypotheses

2.1 The Impact of Employee-Organization Relationship on Employee Creativity

Creativity is defined as the generation of novel, practical, and valuable ideas, while innovation refers to the implementation of these new ideas. Innovation activities are derived from creativity, with the outcome of creativity manifesting as innovation [1, 3]. For individuals, creativity enables them to effectively navigate and resolve complex problems encountered in the workplace [4]. For organizations, fostering creativity is essential for survival and competitiveness; it serves as a driving force behind prosperity and development [5]. Consequently, investigating how to effectively stimulate individual creativity and understanding the internal mechanisms that facilitate creative thinking or engagement in creative activities represent significant research topics within organizational management. Employee creativity is primarily examined at an individual level. In this domain, most studies treat employee creativity as a dependent variable by exploring various factors that influence it. Early research predominantly concentrated on individual characteristics—such as personality traits, knowledge and skills, and motivation—to determine their impact on creativity. More recently, there has been a growing emphasis on environmental factors affecting employee creativity along with examining the interactions between individuals and their environments.

Employee-organization relationship management is a fundamental approach for enterprises to effectively manage their workforce. The employee-organization relationship (EOR) model is not merely a predetermined exogenous variable; rather, its selection and development are intricately linked to the specific characteristics of an enterprise's human resource management practices. This process reflects the enterprise's strategic choices based on the significance and capacity of its human resource management. Consequently, we assert that the choice of an EOR model represents an active decision by the enterprise and serves as an indicator of its managerial capabilities. Investigating how various EOR models influence creativity holds substantial importance for enhancing organizational management capabilities and fostering innovation. Ng & Feldman identified that the mutual investment type of EOR positively impacts organizational innovation capability through human capital, while underinvestment types interact with human capital in ways that also affect this capability [6]. Furthermore, Jia et al. demonstrated that communication density mediates the relationship between mutual investment types of EOR and team creativity, with mutual investment exerting the most significant effect [2]. Currently, there exists a paucity of research focusing on how employee-organization relationships impact team creativity, with even fewer studies addressing their influence on individual employee creativity. In summary, it appears that the mutual investment type of EOR may exert a particularly strong influence on individual employee creativity.

Based on this discussion, we propose the following hypothesis:

H1: Compared to other types of EOR, the mutual investment type has a more pronounced positive impact on employee creativity.

2.2 The Mediating Role of Psychological Contract

The relationship between employees and organizations fundamentally constitutes a social exchange that adheres to the principles of equity and reciprocity. The process of establishing a psychological contract involves the organization offering various incentives and expectations to employees, thereby achieving a balance between employee contributions and rewards as perceived by the employees themselves. Employees' beliefs regarding mutual responsibilities with the organization are grounded in their subjective interpretations of the organization's commitments, which may not necessarily be acknowledged by the organization or its representatives [7]. Although psychological contracts are implicit and lack legal protection, they exert significant motivational influence; when such contracts are breached, it can lead to a crisis of trust among employees towards the organization, potentially jeopardizing its normal development [8]. Consequently, it is evident that psychological contracts can shape employee behavior and attitudes, subsequently impacting organizational growth. In research concerning employee-organization relationships, most studies focus on how these relationships affect organizational performance, individual performance, organizational commitment, perceived fairness, perceived trust, etc., through economic exchanges and social exchanges [9-11]. However, there has been insufficient attention given to how employee-organization relationships—through employees' psychologi-

cal perceptions—form an understanding of mutual responsibilities and obligations that ultimately influences their behaviors and attitudes.

Based on this, the present study investigates the mediating role of psychological contracts in the relationship between employees and organizations concerning employee creativity. Scholars have extensively researched how to stimulate employee creativity. According to Amabile's component theory of creativity, intrinsic motivation is a fundamental element in fostering individual creativity and serves as a crucial mechanism through which external factors influence it [3]. Deci & Ryan (2000) categorized motivation into intrinsic and extrinsic types. Intrinsic motivation refers to an individual's engagement in work driven by genuine interest, while extrinsic motivation pertains to participation motivated by economic rewards or high evaluations [12]. The internalization process of extrinsic motivation alongside a strong level of intrinsic motivation can invigorate individuals, enabling them to adeptly navigate complex situations or persistently engage in tasks that may be uninteresting yet essential. This dynamic fosters cognitive flexibility or persistence during motivational information processing, thereby enhancing individual creativity [13]. Individual creative behavior is influenced not only by personal factors such as intrinsic motivation but also significantly shaped by the surrounding environment [14]. The impact of external environmental factors and the gradual internalization of extrinsic motivations encourage employees to cultivate stronger intrinsic motivations over time, thus promoting sustained creativity among them. When individuals encounter organizational reward systems within their work environments, they engage in value attribution processes. Based on these value judgments, individuals are capable of exerting heightened levels of creativity [14]. In summary, the incentives and expectations that organizations provide to their employees may significantly influence individual creativity through the perceived fulfillment of psychological contracts. Therefore, we propose the following hypothesis:

H2: The psychological contract will serve as a mediating factor in the relationship between employees and organizations, impacting employee creativity.

3 Research Methods and Design

3.1 Sample and Data Collection

This study utilized a questionnaire survey method, targeting employees from various provinces in China. A total of 2,566 questionnaires were distributed and collected online in February 2021, resulting in 510 valid responses. The samples were categorized based on the personal characteristics of the respondents. In terms of gender, females represented the largest proportion at 57.65%. Regarding educational attainment, individuals with a bachelor's degree constituted the highest percentage at 74.71%. Concerning years of service, over 30% of participants reported having between four to six years of experience. In terms of departmental distribution, the R&D department accounted for the highest proportion at 30.00%. With respect to annual salary, 42.75% of respondents earned an annual income ranging from ¥110,000 to ¥200,000; this was followed by 36.86% who earned between ¥50,000 and ¥100,000.

Such demographic distribution may introduce several biases: (1)Gender Bias:** The higher proportion of female respondents may influence the results, as research suggests that women tend to perceive psychological contracts in terms of relational interactions. Future studies should aim for a more balanced gender ratio. (2)Departmental Bias: Employees in the R&D department typically engage in more innovative tasks and may exhibit greater creativity compared to those in other departments (such as administrative or production sectors). Consequently, caution is warranted when generalizing conclusions to non-R&D positions. (3)Self-Selection Bias: Online surveys depend on voluntary participation, which can result in a sample skewed towards individuals who are more attuned to organizational relationships or possess higher educational qualifications (74.71% hold a bachelor's degree or above). It is advisable for future studies to employ stratified sampling methods or incorporate mixed data sources (such as offline interviews) to enhance representativeness.

3.2 Variable Measurement

In this study, employee-organization relationship (EOR) is identified as the core independent variable; psychological contract serves as the mediating variable; and employee creativity is designated as the dependent variable—comprising one core independent variable, one dependent variable, and one mediating variable. The psychological contract consists of both transactional and relational components. EOR was assessed using a scale developed by Jia et al. [2], which includes 27 items across four dimensions that describe varying degrees of EOR engagement. The Psychological Contract was measured utilizing a scale created by Martin & Matthew [15], encompassing two dimensions with a total of 17 items. Employee Creativity was evaluated based on a scale established by Tierney, Farmer & Graen [16], consisting of nine questions.

4 Data Analysis

4.1 Descriptive Statistical Results of Each Variable

A descriptive statistical analysis of the research variables and their corresponding measurement items was conducted using SPSS 22.0 software, calculating the means and standard deviations for each item and variable. The primary independent variable, employee-organization relationship, comprised a questionnaire consisting of questions 1 to 27, yielding an average score of 3.76. Among the various developmental incentives—material incentives, role-based expectations, and extra-role expectations—the average score for role-based expectations was notably high at 4.47, suggesting that perceptions of the employee-organization relationship are predominantly influenced by role-based expectations. Employee creativity was assessed through a questionnaire containing questions 1 to 9, resulting in an average score of 3.53. The psychological contract consisted of questions numbered from 1 to 17 with an average value of 3.26; conversely, relational contracts achieved a higher mean score of 3.73,

indicating that perceptions regarding psychological contracts are primarily derived from relational contracts.

4.2 Reliability Analysis

This study assessed the consistency and stability of the survey instrument's measurement results utilizing Cronbach's alpha coefficient as a reliability metric. Generally accepted standards suggest that a Cronbach's alpha value exceeding 0.9 indicates excellent scale reliability while values above 0.6 are deemed acceptable thresholds for reliability assessment. Our findings reveal that the alpha coefficients for developmental incentives (0.857), material incentives (0.744), intra-role expectations (0.798), extra-role expectations (0.687), relational contracts (0.822), transactional contracts (0.754), and employee creativity (0.869) demonstrate satisfactory levels of reliability across all measured constructs.

4.3 Confirmatory Factor Analysis

As is shown in Table 1, the four-factor confirmatory factor analysis of the employee-organization relationship reveals that the goodness-of-fit indicators are as follows: $\chi^2 = 771.689$, $DF = 289$, $\chi^2/df = 2.67$, $RMSEA = 0.057$, $GFI = 0.892$, $NFI = 0.852$, $CFI = 0.901$; all of these values meet or exceed the acceptable fit standards for the model. Furthermore, the Composite Reliability (CR) values are all greater than 0.7, and the factor loadings of the latent variables exceed 0.5, indicating that the measurement scales employed in this study demonstrate strong internal consistency and that the measurement indicators for the latent variables possess good reliability.

In addition, as displayed in Table 2, a two-factor confirmatory factor analysis concerning psychological contracts (specifically relational contracts) and employee creativity shows that its goodness-of-fit indicators are as follows: $\chi^2 = 632.058$, $DF = 395$, $\chi^2/df = 2.35$, $RMSEA = 0.051$, $GFI = 0.904$, $NFI = 0.872$, $CFI = 0.921$; again all values have reached or surpassed acceptable fit standards for this model as well. Moreover, CR values remain above the threshold of 0.7 while factor loadings for latent variables also exceed a value of 0.5—further confirming that both measurement scales utilized in this research exhibit robust internal consistency and reliable measurement indicators for their respective latent constructs.

Table 1. Confirmatory factor analysis results of the employee-organization relationship

Factor name	Measurement item	Normalized factor loading	S.E.	CR	AVE
Developmental incentives	a 1	.703		.86	.469
	a 2	.747	.076		
	a 3	.703	.076		
	a 4	.667	.071		
	a 5	.658	.08		
	a 6	.699	.072		
	a 9	.608	.067		

Material incentives	a 11	.641		.75	.43
	a 12	.66	.1		
	a 13	.74	.096		
	a 14	.571	.098		
In-role expectations	a 16	.739		.807	.4
	a 17	.616	.06		
	a 18	.629	.066		
	a 20	.589	.063		
	a 22	.505	.089		
	a 23	.662	.069		
	a 24	.532	.068		
Extra-role expectations	a 25	.616		.669	.404
	a 26	.7	.102		
	a 27	.584	.099		

Table 2. Confirmatory factor analysis results of relational contracts and employee creativity

Factor name	Measurement item	Normalized factor loading	S.E.	CR	AVE
Employee creativity	d 1	.716		.871	.459
	d 2	.704	.083		
	d 3	.614	.077		
	d 5	.597	.068		
	d 6	.646	.08		
	d 7	.695	.078		
	d 8	.753	.084		
	d 9	.683	.091		
Factor name	Measurement item	Normalized factor loading	S.E.	CR	AVE
Relational contract	b 3	.654		.826	.405
	b 5	.582	.067		
	b 8	.681	.073		
	b 10	.658	.085		
	b 13	.664	.097		
	b 16	.557	.091		
	b 17	.648	.077		

4.4 Multilevel Linear Regression Analysis

Table 3. Regression analysis table of EOR, employee creativity

Variables	Employee creativity		
	M1	M2	M3
Control variables			

Gender	-.106	-.097	-.075
Working years	.027	.048	.025
Working department	-.076*	-.061*	-.059*
Annual salary	.223**	.159**	.14**
Independent variable			
Under-investment	.048		
Variables	Employee creativity		
Over-investment		-.698**	
Quasi-transaction contract			
Mutual investment			.641**
R2	.112	.227	.27
F	12.690***	29.628***	37.294***
Annotate. N=510; *P<0.05, **p<0.01, ***P<0.001			

a) *Main Effect Test*: The relationship between various factors was analyzed using SPSS linear regression. Table 3 below presents the results of the regression analysis concerning the relationship between employee-organization relationships (EOR) and employee creativity. As indicated in the table, after controlling for variables such as gender, years of service, department, and annual salary, underinvestment in EOR does not have a significant impact on employee creativity (M1: $\beta = 0.048$, $P > 0.05$). Conversely, overinvestment in EOR has a significant negative effect on employee creativity (M2: $\beta = -0.698$, $P < 0.01$), while mutual investment in EOR demonstrates a significant positive influence on employee creativity (M3: $\beta = 0.641$, $P < 0.01$). Therefore, Hypothesis H1 is supported by these findings.

Table 4 presents the results of the regression analysis examining the relationship between psychological contracts and employee creativity. As indicated in the table, after controlling for variables such as gender, years of service, department, and annual salary, it is evident that relational contract types exert a significant positive influence on employee creativity (M1: $\beta = 0.573$, $P < 0.001$).

Table 4. Regression analysis table of psychological contract and employee creativity

Variables	Employee creativity	
	M1	M2
Control variables		
Gender	-.077	-.085
Working years	.005	.04
Working department	-.061**	-.065**
Annual salary	.125***	.191***
Independent variable		
Relational contract	.573***	
Transactional contract		-.265***
R2	.36	.194
F	56.603***	24.321***
Annotate. N=510; *P<0.05, **p<0.01, ***P<0.001		

Table 5. Summary of test results of mediation

Item	c Total effect	a	b	a*b Mediation effect	a*b (95% BootCI)	c' Direct effect	Test results
Employee-organizational relationship => relational contract => employee creativity	.760**	.920**	.325**	.299	.128-.285	.461**	Partial mediation

b) Mediation Effect Test: In the table 5, "c" denotes the regression coefficient of the independent variable on the dependent variable in the absence of a mediator variable M within the model, representing the total effect. "a" signifies the regression coefficient of the independent variable on the mediator variable M, while "b" indicates the regression coefficient of mediator variable M on the dependent variable. The product "a*b" reflects both "a" and "b," thereby illustrating the mediating effect. The term "95% BootCI" refers to the 95% confidence interval derived from Bootstrap sampling; if this interval does not encompass zero, it suggests statistical significance. Lastly, "c'" represents the regression coefficient of the independent variable on the dependent variable when a mediator variable M is included in the model, indicating what is known as direct effect. Based on these results presented in the table above, we can conclude that Hypothesis H2 is supported.

5 Conclusions

In conclusion, this study focused on employees of enterprises in China as the research subjects. Utilizing Tusi's inducement-contribution model, it analyzed the mechanisms through which employee-organization relationships (EOR) influence employees' attitudes and behaviors. The research explored how different EOR patterns affect employee creativity, specifically examining the impact of organizational returns and perceived expected contributions on individual creativity. Additionally, it expanded upon the effects of EOR while analyzing the mediating role of psychological contracts. The following conclusions can be drawn: The mutual investment type of EOR has a significant positive effect on employees' creativity, demonstrating the greatest influence among various types. Furthermore, psychological contracts serve as a mediator in the relationship between EOR and employee creativity; notably, relational psychological contracts have a substantial positive impact on this aspect. This finding underscores the importance of emotional exchanges within these relationships. These insights provide valuable references for enterprises seeking to adopt appropriate EOR models under varying circumstances to enhance organizational effectiveness. Moreover, they offer new strategies for stimulating employee creativity, thereby bolstering overall competitiveness within organizations. Based on the research findings, enterprises can enhance employee creativity through the following human resource policies: (1) Establish a mutual investment employment relationship (EOR): Implement long-term career development initiatives, such as Huawei's "Genius Youth Program," and provide technical training along with innovation resources. Create a two-way

feedback mechanism, including regular employee satisfaction surveys and management-level dialogues, to improve the transparency of the psychological contract. (2) Foster a relational psychological contract: Strengthen employees' emotional attachment through non-monetary incentives, such as public recognition and flexible working hours. Promote cross-departmental collaboration and knowledge sharing by initiating projects like an "innovation incubator" that encourages employees to independently propose ideas. (3) Avoid the pitfalls of over-investment: Strike a balance between work intensity and welfare support to ensure sustainable employee commitment to innovation.

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