

How Do Perceived Promotion Opportunities Influence Employee Turnover Intention? Evidence from Structural Equation Modeling and Fuzzy-set Qualitative Comparative Analysis

Yu Zhong¹, Ziling Tang^{2,*}

¹*School of Management, Ocean University of China, Qingdao, Shandong, China*

²*College of Economics and Management, South China Agricultural University, Guangzhou, Guangdong, China*

**Corresponding Author*

Abstract: As workforce mobility increases and career advancement becomes a growing priority for employees, organizations are increasingly evaluated not only by the rewards they provide but also by the career opportunities they make available. Among these opportunities, employees' perceptions of promotion prospects have become an important indicator of an organization's commitment to long-term development and internal career mobility. Drawing on data from 1262 respondents in the 2021 China Employer-Employee Linked Survey, this study combines structural equation modeling (SEM) with fuzzy-set qualitative comparative analysis (fsQCA). SEM is employed to identify the psychological processes linking perceived promotion opportunities to employee turnover intention, whereas fsQCA is used to uncover alternative combinations of conditions that give rise to high employee turnover intention. The SEM results show that stronger perceived promotion opportunities are associated with lower employee turnover intention. This relationship operates through two parallel psychological mechanisms—organizational sense of belonging and career self-drive—with the mediating role of organizational sense of belonging proving more substantial. The moderated mediation analysis shows that trade union service quality reinforces the positive effects of perceived promotion opportunities on both organizational sense of belonging and career self-drive. The fsQCA findings show that high employee turnover intention reflects multiple configurations rather than a single condition. Rather, it emerges through multiple configurational pathways involving weak organizational sense of belonging, limited

perceived promotion opportunities, low career self-drive, inadequate organizational support, individual human capital characteristics, and job demands. These findings suggest that employee retention depends on more than the existence of formal promotion systems. Greater attention should instead be directed toward how promotion opportunities are perceived by employees, together with efforts to strengthen organizational sense of belonging, cultivate career self-drive, and improve labor-relations governance.

Keywords: Perceived Promotion Opportunities; Employee Turnover Intention; Organizational Sense of Belonging; Career Self-Drive; Trade Union Service Quality; fsQCA

1. Introduction

Employees' decisions to remain with an organization increasingly depend on how they assess their prospects for future development, not simply on the compensation they currently receive. In more conventional employment relationships, stable positions, predictable earnings, and organizational security were often sufficient to support long-term retention. That foundation has become less secure as work arrangements have grown more platform-based, career boundaries have become more permeable, and movement across employers has become easier. For employees at an early stage of career development, promotion represents more than a higher position. It reflects the organization's recognition of their capabilities, contributions, and future potential. Organizations may offer stable pay without providing clear promotion pathways, yet such arrangements rarely sustain employees' professional identity, expectations

for growth, or psychological commitment.

This gap creates a persistent managerial challenge. Organizations value employee loyalty, but clear and credible career opportunities are not always available. Employees, meanwhile, weigh internal development prospects against opportunities in the external labor market, peer compensation, and information about alternative careers. Turnover is often attributed to employee instability, disloyalty, or limited resilience. In many cases, however, the decision to leave develops gradually as expectations for future growth within the organization fade over time. Once opportunities for upward mobility are no longer perceived as attainable, initial frustration may evolve into a considered decision to pursue career development elsewhere. This pattern is also reflected in recent research. Younger employees confronted with excessive cognitive demands, value incongruence, and unmet developmental needs may respond by adopting quiet quitting as a coping strategy [1]. At the same time, the growing prevalence of boundaryless careers has made career decisions increasingly sensitive to the developmental opportunities and organizational signals employees perceive from their employers [2].

Despite the generally accepted view that greater perceived promotion opportunities contribute to employee retention, this relationship is unlikely to follow a simple linear pattern. Promotion opportunities undoubtedly encourage employees to envision a future within the organization, reinforcing their willingness to invest in their capabilities while anticipating long-term career rewards. At the same time, these opportunities may strengthen employees' career agency by increasing their focus on longer-term career aspirations. As employees become more proactive in managing their own careers, they may also become more conscious of their ability and the opportunities available beyond their current organization, particularly when anticipated organizational commitments fail to materialize. Existing research likewise suggests that the effects of career development are more nuanced than a direct association between promotion opportunities and turnover intention. Employees' career advancement experiences and promotion trajectories have been shown to influence turnover intention, yet these relationships vary according to factors such as career commitment and perceived career opportunities [3]. Although prior studies have

documented the relationship between career development and turnover-related outcomes, considerably less attention has been devoted to the psychological processes through which perceived promotion opportunities ultimately shape employee turnover intention. The mechanisms linking perceived promotion opportunities to employee turnover intention require further clarification.

The present study argues that perceived promotion opportunities operate through at least two parallel pathways. The first is a relational pathway centered on organizational sense of belonging. Promotion opportunities signal that the organization is willing to include employees in its long-term development plans. This helps align personal and organizational goals while strengthening employees' perceived insider status and emotional attachment. The second is a motivational pathway centered on career self-drive. Promotion opportunities provide external incentives and may also encourage autonomous career planning. Employees can then translate internal opportunities into sustained effort and greater self-management. In this sense, promotion opportunities make employees more willing to stay and more motivated to do so.

At the same time, the motivational effect of promotion opportunities does not operate in isolation. Employees consider more than the existence of formal promotion pathways. They also evaluate the quality of labor relations, the protection of employee rights, and the quality of union services. In this context, High-quality union services strengthen employees' confidence in promotion opportunities. They protect employee rights, promote communication between employees and management, and reinforce trust in organizational procedures. Without such support, employees may question the value of formal promotion opportunities, even when such opportunities exist. Incorporating trade union service quality into the analytical framework therefore helps situate employees' career development within the institutional context of labor relations governance in Chinese enterprises.

Against this background, this study seeks to address three research questions. First, do perceived promotion opportunities significantly reduce employee turnover intention? Second, do organizational sense of belonging and career self-drive respectively serve as the relational

and motivational mechanisms through which perceived promotion opportunities influence employee turnover intention? Third, does the strength of these mechanisms vary across different levels of trade union service quality? Furthermore, given that employee turnover intention is characterized by causal complexity and multiple conjunctural antecedents, this study complements the SEM analysis with fuzzy-set qualitative comparative analysis (fsQCA) to identify multiple configurations associated with high turnover intention, thereby revealing the equifinal pathways through which turnover intention emerges.

2. Literature Review

2.1 Employee Turnover Intention

Employee turnover intention is widely regarded as the most direct and reliable psychological predictor of voluntary turnover behavior. Whether employees ultimately leave an organization depends on their overall evaluation of multiple factors, including job satisfaction, external employment opportunities, the perceived costs of leaving, and the availability of alternative career options [4]. Although turnover intention does not necessarily translate into actual turnover, it signals a weakening of the psychological bond between employees and their organization. Understanding the factors underlying employee turnover intention is fundamental for organizations seeking to identify potential talent loss at an early stage and strengthen human resource management practices.

Existing research has generally interpreted employee turnover intention from three complementary perspectives. Understanding the factors underlying employee turnover intention is fundamental for organizations seeking to identify potential talent loss at an early stage and strengthen human resource management practices. Existing research has generally interpreted employee turnover intention from three complementary perspectives [5-7].

The second perspective draws on Social Exchange Theory and organizational support. It proposes that employees reciprocate organizational treatment by deciding whether to remain with or leave the organization according to their perceptions of organizational support, trust, fairness, and developmental investment. Consistent with this perspective, perceived

organizational support has consistently been found to be negatively associated with employee turnover intention [8].

The third perspective emphasizes organizational identification and job embeddedness, suggesting that organizational identification, organizational commitment, job embeddedness, and psychological safety strengthen employees' emotional attachment to the organization and consequently reduce employee turnover intention [9,10].

Taken together, prior research has provided substantial evidence that unfavorable work experiences and insufficient organizational support contribute to employee turnover intention. Nevertheless, considerably less attention has been devoted to development opportunities as forward-looking organizational signals. Employees may leave not only because they are dissatisfied with their current jobs but also because they perceive limited prospects for future career development within the organization. Incorporating perceived promotion opportunities into turnover research therefore extends the existing literature by examining employee turnover decisions from the perspectives of career development and internal organizational mobility.

2.2 Perceived Promotion Opportunities

Perceived promotion opportunities represent both a developmental resource and an organizational signal of long-term investment in employees. Their influence extends beyond the prospect of career advancement itself. Prior research has shown that limited promotion opportunities weaken knowledge workers' intrinsic motivation and diminish their perceived internal status, with adverse consequences for job performance [11]. Related evidence further indicates that lower perceived insider status is accompanied by reduced in-role performance [12]. Internal promotion helps reduce voluntary turnover among core employees, particularly those with strong performance and shorter organizational tenure [13]. Research on rural teachers similarly shows that clear promotion pathways for professional titles reduce turnover intention by meeting employees' developmental expectations and compensating for limitations in objective working conditions [14]. These findings suggest that promotion opportunities function as both instrumental incentives and symbolic

recognition. They signal that the organization values employees' contributions and offers meaningful opportunities for long-term development and rewards. They enable employees to perceive greater opportunities for future career development while reinforcing the belief that their abilities, contributions, and value are recognized by the organization. From the perspective of Social Exchange Theory, employees who perceive meaningful development opportunities are more likely to reciprocate organizational investment through stronger work engagement and lower turnover intention.

2.3 Organizational Sense of Belonging and Career Self-Drive

Organizational sense of belonging reflects employees' affective attachment to the organization, identification with it, and sense of organizational membership. Prior research suggests that employees' sense of belonging captures the extent to which they identify with organizational goals and remain actively engaged in organizational activities, thereby fostering sustained motivation for innovation [15]. Organizational sense of belonging has also been shown to partially mediate the relationship between person-job fit and job satisfaction [16] and to attenuate the positive association between perceived over qualification and turnover intention [17]. In contexts of workplace exclusion, it further serves as an important psychological pathway through which exclusion increases employee turnover intention [18]. These findings indicate that organizational sense of belonging is not merely a transient emotional experience; rather, it constitutes an important psychological foundation for employees' decisions about whether to maintain their membership in the organization.

Compared with organizational sense of belonging, career self-drive primarily reflects employees' initiative and self-regulatory capacity in pursuing long-term career goals. Research on knowledge workers suggests that career self-drive encompasses four dimensions: goal setting, self-management, responsibility, and perseverance [19]. Employees with stronger career self-drive are more likely to transform external development opportunities into intrinsic motivation and sustained career-related behaviors. Previous research further indicates that the integration of human resource

management practices and union practices can promote employees' willingness and capability to achieve career growth by strengthening their career calling and career competence [20]. Likewise, intrinsic motivation has been identified as a key mediating mechanism linking leader-member exchange to employee creativity [21]. Taken together, these findings suggest that career self-drive serves as an important motivational mechanism through which organizational development opportunities are translated into sustained employee engagement. It is important to note that organizational sense of belonging and career self-drive represent two distinct yet complementary mechanisms underlying employee retention. The former emphasizes employees' affective attachment to the organization and addresses the question of whether they perceive themselves as belonging to the organization. The latter emphasizes employees' proactive investment in their future career development and addresses the question of whether they are willing to continue building their careers within the organization. Considering both mechanisms simultaneously therefore provides a more comprehensive explanation of how perceived promotion opportunities influence employee turnover intention.

Despite the growing body of research on employee turnover intention, perceived promotion opportunities, organizational sense of belonging, and career self-drive, several important gaps remain. First, existing studies on turnover intention have focused primarily on antecedents such as job stress, job insecurity, destructive leadership, and insufficient organizational support, while paying comparatively less attention to perceived promotion opportunities as a developmental and motivational antecedent. Second, although previous research has examined the effects of promotion opportunities on outcomes such as job performance, organizational citizenship behavior, and actual turnover, relatively little is known about how perceived promotion opportunities influence turnover intention through employees' underlying psychological mechanisms. Third, prior studies have typically examined constructs such as affective commitment, organizational identification, or career motivation as independent mediating mechanisms, with limited attention to the parallel operation of relational and motivational

mechanisms. Finally, from a methodological perspective, conventional regression analysis and structural equation modeling are well suited to estimating the net effects of individual variables, but they are less capable of capturing the complex configurational pathways through which multiple conditions jointly shape employee turnover intention.

To address these gaps, this study develops an integrated theoretical framework incorporating perceived promotion opportunities, organizational sense of belonging, career self-drive, and employee turnover intention. It further introduces trade union service quality as an important organizational governance variable in the Chinese institutional context. By combining structural equation modeling (SEM) with fuzzy-set qualitative comparative analysis (fsQCA), this study examines the formation of employee turnover intention from both variable-centered and configurational perspectives.

3. Theoretical Framework and Hypothesis Development

3.1 Theoretical Foundations

3.1.1 Social exchange theory and psychological contract theory

Social Exchange Theory posits that the relationship between organizations and employees extends beyond purely economic transactions to encompass social exchanges characterized by trust, organizational support, and expectations of reciprocity [22]. When employees perceive that an organization provides fair promotion opportunities and meaningful prospects for long-term career development, they are more likely to interpret these opportunities as signals that the organization values and invests in them. Such perceptions strengthen employees' sense of obligation to reciprocate through positive work attitudes and behaviors.

Psychological Contract Theory views the employment relationship as a set of implicit reciprocal obligations between employees and their organizations rather than a purely formal exchange arrangement [23]. Promotion opportunities are a key element of the developmental psychological contract. When employees perceive that the organization is committed to supporting their long-term growth, they are more likely to remain with the

organization. Conversely, when promotion opportunities are perceived as limited or lacking credibility, employees are more likely to experience a psychological contract breach, thereby increasing turnover intention

3.1.2 Self-determination theory

According to Self-Determination Theory, autonomous motivation develops when the needs for autonomy, competence, and relatedness are adequately supported [24]. Promotion opportunities can contribute to each of these psychological needs in different ways. Transparent and fair promotion procedures enhance employees' sense of autonomy by strengthening perceptions of control over future career development. Opportunities for advancement reinforce competence by validating employees' capabilities and future potential, whereas organizational investment in employee development strengthens relatedness by deepening employees' psychological connection with the organization. As these needs become increasingly satisfied, employees are more likely to internalize motivation for continued career development. Accordingly, perceived promotion opportunities extend beyond the role of external incentives and instead support sustained career self-drive and continued organizational engagement.

3.1.3 Job embeddedness theory

Job Embeddedness Theory explains employee retention in terms of the interconnected relationships that bind individuals to their organizations and surrounding communities through links, fit, and sacrifice [25,26]. From this perspective, organizational sense of belonging reinforces employees' emotional attachment to the organization, career self-drive strengthens perceptions that future development can be achieved within the organization, and high-quality union services reduce uncertainty surrounding employment relationships. Together, these conditions strengthen employees' organizational embeddedness and reduce their inclination to leave.

At the same time, employee turnover intention is rarely driven by a single antecedent in isolation. Employees with similar turnover intentions may reach that outcome through different combinations of conditions. This suggests that examining only the linear relationships among variables is insufficient. A configurational perspective is also needed to identify the equifinal pathways arising from the

combined effects of multiple conditions.

3.2 Hypothesis Development

3.2.1 Perceived promotion opportunities and employee turnover intention

Promotion opportunities signal not only higher positions, greater financial rewards, and increased influence within the organization, but also the organization's commitment to employees' long-term development. When employees perceive sufficient promotion opportunities, they are more likely to value their current positions and less likely to seek opportunities elsewhere, reducing turnover intention. By contrast, when promotion opportunities are perceived as limited or promotion procedures as unfair, employees' expectations of long-term returns from their current jobs decline, making them more inclined to leave. Accordingly, the following hypothesis is proposed:

H1: Perceived promotion opportunities are negatively associated with employee turnover intention.

3.2.2 The parallel mediating roles of organizational sense of belonging and career self-drive

Perceived promotion opportunities are expected to influence employees' organizational sense of belonging. When employees perceive favorable promotion opportunities, they are more likely to believe that the organization is committed to supporting their long-term career development. Such perceptions reinforce employees' sense of insider status and strengthen their emotional attachment to the organization. As organizational sense of belonging increases, employees become more likely to align their personal interests with organizational goals and less inclined to leave the organization. Therefore, perceived promotion opportunities are expected to reduce employee turnover intention by enhancing their organizational sense of belonging.

At the same time, perceived promotion opportunities may also strengthen employees' career self-drive. Clearly defined career advancement pathways enable employees to perceive a stronger connection between their current efforts and future career outcomes, thereby encouraging goal setting, self-management, and sustained career investment. When employees believe that their present efforts contribute to future career

advancement, they are more likely to proactively create opportunities for learning and professional growth within the organization rather than seek external career alternatives. Career self-drive therefore represents another important psychological mechanism through which perceived promotion opportunities reduce turnover intention. Based on the above arguments, the following hypotheses are proposed:

H2: Perceived promotion opportunities are positively associated with organizational sense of belonging.

H3: Organizational sense of belonging is negatively associated with employee turnover intention.

H4: Perceived promotion opportunities are positively associated with career self-drive.

H5: Career self-drive is negatively associated with employee turnover intention.

Taken together, Hypotheses 2-5 suggest that organizational sense of belonging and career self-drive operate as parallel mediating mechanisms linking perceived promotion opportunities to employee turnover intention.

3.2.3 The moderating role of trade union service quality

Within the Chinese organizational context, labor unions serve not only as important institutions for safeguarding employees' rights and interests but also as key mechanisms for coordinating labor-management relations. High-quality union services strengthen employees' trust in organizational governance procedures and enhance their perceptions of the fairness of promotion systems and the credibility of the organization's developmental commitments. When employees believe that labor unions effectively protect their rights and facilitate constructive labor-management communication, they are more likely to interpret promotion opportunities as credible signals of organizational support rather than merely symbolic promises. Existing research suggests that union practices not only perform an instrumental role in protecting employees' interests but also shape employees' organizational behavior through the psychological contract [27]. Moreover, employees' psychological attachment to labor unions has been shown to predict their turnover intention [28]. Therefore, trade union service quality should be regarded as an important organizational context that shapes how

employees interpret organizational commitments and evaluate the credibility of organizational practices.

More specifically, under conditions of high trade union service quality, promotion opportunities signify not only greater prospects for individual career development but also the existence of a stable, fair, and participatory organizational environment. Consequently, employees are more likely to develop a stronger sense of organizational trust and belonging. At the same time, high-quality union services improve communication between employees and management while strengthening employees' confidence in organizational support, thereby encouraging them to pursue long-term career development within the organization and enhancing their career self-drive. By contrast, when trade union service quality is low, employees may question whether promotion opportunities are genuinely attainable, thereby weakening the positive effects of perceived promotion opportunities. Accordingly, the following hypotheses are proposed:

H6: Trade Union service quality positively moderates the relationship between perceived promotion opportunities and organizational sense of belonging, such that the positive relationship is stronger when trade union service quality is higher.

H7: Trade union service quality positively moderates the relationship between perceived promotion opportunities and career self-drive, such that the positive relationship is stronger when trade union service quality is higher.

Figure 1 presents the theoretical framework of this study, which summarizes the proposed relationships among the research variables and hypotheses.

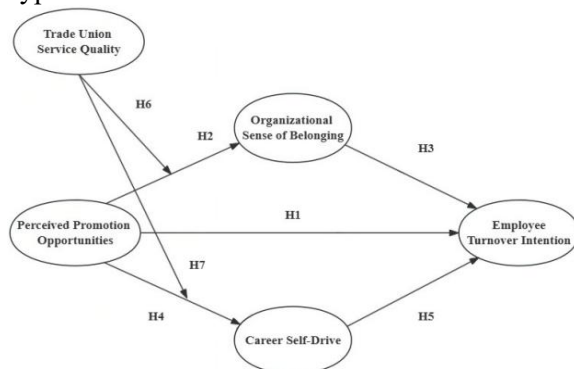


Figure 1. Theoretical Framework

4. Data and Variable Measurement

4.1 Data Source

The empirical analysis is based on data from the 2021 China Employer-Employee Linked Survey (CEELS), conducted by the School of Labor and Human Resources at Renmin University of China. This study draws on the Employee Questionnaire, which collects detailed information on enterprise management, human resource practices, labor relations, employees' work conditions, and career development. The survey provides rich individual-level data that are well suited to examining the relationships investigated in this study.

The sample was constructed through the following screening procedures. First, only employees working in organizations with established labor unions were retained to ensure the substantive relevance of the trade union service quality variable. Following data screening, observations with missing information, ambiguous responses, or implausible values on key variables were excluded, resulting in a final analytical sample of 1262 employees. In terms of sample composition, female employees account for 58.6% of the sample, employees aged 26-45 account for nearly 70%, and rank-and-file employees account for 56.7%. The overall sample structure aligns with the characteristics of the participating companies' frontline workforce, effectively reflecting the career development experiences and turnover intentions of rank-and-file employees. Specific sample characteristics are presented in Table 1.

Table 1. Sample Characteristics (N = 1262)

Variable	Category	Frequency	Percentage (%)
Gender	Male	523	41.4
	Female	739	58.6
Age Group	18-25	181	14.3
	26-35	493	39.1
	36-45	369	29.2
	46 and Above	219	17.4
Education	Primary School	8	0.6
	Junior High School	118	9.4
	Senior High School	108	8.6
	Secondary Vocational School/ Technical School	102	8.1
	Junior College/Higher Vocational College	389	30.8
	Bachelor's Degree	473	37.5
	Master's Degree or Above	64	5.1

Position	Managerial Staff	337	26.7
	Professional and Technical Staff	209	16.6
	Non-Managerial Staff	716	56.7

4.2 Measurement of Variables

The measurement items were developed from the original Employee Survey Questionnaire and refined with reference to validated management scales and previous research. Item responses were rated on ascending scales ranging from "strongly disagree" to "strongly agree", "very poor" to "very good", or "very dissatisfied" to "very satisfied". The specific variable dimensions and item configurations are presented in Table 2.

(1). Dependent Variable: Employee Turnover Intention. Employee turnover intention was measured using four dimensions: thoughts of quitting, external job search, the likelihood of future turnover, and the evaluation of current job rewards. Together, these dimensions provide a comprehensive assessment of employees' intention to leave their current organization.

(2). Explanatory Variable: Perceived Promotion Opportunities. This variable encompasses opportunity availability, procedural fairness, and satisfaction with outcomes, reflecting employees' overall evaluation of internal promotion opportunities.

(3). Mediating Variables: Organizational Sense of Belonging and Career Self-Drive. These two variables represent the relational and

motivational mechanisms through which perceived promotion opportunities influence employee turnover intention. Organizational sense of belonging was assessed across four dimensions: emotional attachment, shared responsibility for organizational challenges, willingness to remain with the organization, and concern for its future development. These dimensions reflect employees' emotional connection with the organization and their sense of organizational membership. Career self-drive reflects employees' proactive evaluation of career opportunities, self-development, and long-term career development.

(4). Moderating variable: Trade union service quality. Trade union service quality is constructed based on employees' evaluations of the union's effectiveness in protecting employee rights and interests, their level of trust in the union, the relationship between frontline employees and managers, and the relationship between managers and the trade union. This variable reflects both the instrumental role of trade unions in safeguarding employee rights and their relational role in facilitating labor-management communication and strengthening organizational trust.

(5). Control variables. This study includes employees' education level, job difficulty, one-way commuting time (measured in minutes), and total overtime hours in the previous month (measured in hours) as control variables.

Table 2. Measurement Items of Variables

Variable	Item	Measurement Item	References
Employee Turnover Intention	A1	I often consider quitting my current job.	Wu et al.(2021); Yang et al.(2010)
	A2	I am constantly looking for a better job.	
	A3	I may look for another job next year.	
	A4	Staying in this job does not provide much value to me.	
Perceived Promotion Opportunities	B1	I currently have opportunities for promotion.	Weng and Xi(2010); Zheng et al. (2025)
	B2	My promotion opportunities are fair.	
	B3	I am satisfied with the promotions I have received.	
Organizational Sense of Belonging	C1	I feel emotionally attached to this organization.	Zhang et al. (2026); Chen et al. (2024); Hu et al. (2023)
	C2	I regard the problems faced by this organization as my own problems.	
	C3	I hope to work in this organization for a long time.	
	C4	I care deeply about the future and development of this organization.	
Career Self-Drive	D1	Career opportunities are created through personal effort.	Wang and Dong (2026); Ma and Li (2023)
	D2	Regardless of the task, everyone can accomplish what they want to achieve.	
	D3	What I do today determines my future.	
Trade Union	E1	How would you evaluate the performance of your	Zhao et al. (2021);

Service Quality		enterprise's trade union in protecting employees' rights and interests?	Zhou et al. (2019); Tang and Dong (2020)
	E2	Do you trust the trade union of your enterprise?	
	E3	How would you evaluate the relationship between ordinary employees and enterprise managers?	
	E4	How would you evaluate the relationship between enterprise managers and the trade union?	

It is worth noting that the original questionnaire measured the items of employee turnover intention and organizational sense of belonging using a 8-point Likert scale, whereas all other variables were measured using a 5-point Likert scale. To ensure the robustness of the results, this study employs the Min-Max normalization method to convert the 8-point Likert scale responses into a 5-point scale. Let X denote the original score and Y the converted 5-point score. The general formula for Min-Max normalization-based scale transformation is:

$$Y = a + \frac{(X - X_{\min})(b - a)}{X_{\max} - X_{\min}} \quad (1)$$

where $X_{\min}$ and $X_{\max}$ represent the minimum and maximum values of the original scale, respectively, while $Y_{\min}$ and $Y_{\max}$ represent the minimum and maximum values of the target scale, respectively. Because the original items for employee turnover intention and organizational sense of belonging were scored on a 0-7 scale, they were converted to a 1-5 scale as follows:

$$X_{\min} = 0, X_{\max} = 7, a = 1, b = 5 \quad (2)$$

Substituting the corresponding values into the formula yields:

$$Y = 1 + \frac{(X - 0)(5 - 1)}{7 - 0} = 1 + \frac{4X}{7} \quad (3)$$

This conversion aligns the measurement ranges for employee turnover intention and organizational sense of belonging with those of other variables measured on a 5-point scale while preserving the relative distances between the original scores. It therefore minimizes the information loss that may result from direct scale compression or category grouping. All subsequent reliability and validity tests, structural equation modeling, and fsQCA calibration were conducted using the converted 5-point scale.

5. Empirical Results and Analysis

5.1 Reliability Analysis

Cronbach's Alpha was used to assess reliability. As shown in Table 3, the alpha values for employee turnover intention, perceived promotion opportunities, organizational sense of

belonging, career self-drive, and trade union service quality were 0.908, 0.803, 0.926, 0.787, and 0.887, respectively. All values exceeded the commonly accepted threshold of 0.70, indicating good internal consistency and satisfactory reliability.

Table 3. Cronbach's Alpha Coefficients for Each Construct

Construct	Cronbach's Alpha	Number of Items
Employee Turnover Intention	0.908	4
Perceived Promotion Opportunities	0.803	3
Organizational Sense of Belonging	0.926	4
Career Self-Drive	0.787	3
Trade Union Service Quality	0.887	4

5.2 Validity Analysis

The measurement items were adapted from validated scales used in the China Employer-Employee Linked Survey. Existing research in organizational behavior was also incorporated to strengthen the theoretical foundation and content validity of the measures. Confirmatory Factor Analysis (CFA) was conducted to assess the structural validity of the measurement model, with convergent and discriminant validity evaluated for the latent constructs.

5.2.1 CFA model fit assessment

As shown in Table 4, the fit indices for the CFA model all reached ideal levels. The CMIN/DF value was 3.935, falling within the acceptable range, whereas the RMSEA was 0.048, below the recommended threshold of 0.05, indicating a low level of model misfit. In addition, the CFI, IFI, and TLI values were 0.974, 0.974, and 0.969, respectively, all exceeding the recommended threshold of 0.90. Taken together, these results support the adequacy of the measurement model and the appropriateness of the proposed latent construct structure.

Table 4. Goodness-of-Fit Indices for the CFA Model

CMIN/DF	RMSEA	CFI	IFI	TLI
3.935	0.048	0.974	0.974	0.969

5.2.2 Convergent validity and composite reliability assessment

Given the satisfactory overall fit of the measurement model, subsequent analyses focused on the convergent validity and composite reliability (CR) of each construct. As shown in Table 5, the standardized factor loadings of all measurement items are generally high. The CR values of all constructs exceed the recommended threshold of 0.70, and the average variance extracted (AVE) values are all above the recommended threshold of 0.50. These results indicate that all latent constructs demonstrate satisfactory composite reliability and convergent validity. Therefore, the measurement model established in this study provides adequate support for the subsequent path analysis and configurational analysis.

Table 5. Convergent Validity and Composite Reliability Assessment for Each Construct

Construct	Item	Standardized Factor Loading	CR	AVE
Employee Turnover Intention	A1	0.884	0.914	0.728
	A2	0.923		
	A3	0.894		
	A4	0.692		
Perceived Promotion Opportunities	B1	0.614	0.807	0.586
	B2	0.835		
	B3	0.827		
Organizational Sense of Belonging	C1	0.855	0.926	0.758
	C2	0.836		
	C3	0.913		
	C4	0.876		
Career Self-Drive	D1	0.776	0.787	0.552
	D2	0.730		
	D3	0.722		
Trade Union Service	E1	0.817	0.888	0.665
	E2	0.818		

Quality	E3	0.839		
	E4	0.786		

5.3 Common Method Bias Test

Since the data used in this study were collected through a single questionnaire, there may be a potential risk of common method bias. To ensure the validity of the empirical results, this study conducts Harman's single-factor test as a post hoc assessment.

As presented in Table 6, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is 0.887, exceeding the recommended threshold of 0.80 by a considerable margin and indicating that the data are suitable for factor extraction. In addition, Bartlett's test of sphericity produces an approximate chi-square value of 14377.194 with 153 degrees of freedom and is statistically significant at the 0.001 level. Collectively, these results indicate that significant correlations exist among the variables, thereby satisfying the requirements for factor analysis.

Table 6. KMO and Bartlett's Test

KMO Measure of Sampling Adequacy	0.887	
Bartlett's Test of Sphericity	Approximate Chi-Square	14377.194
	Degrees of Freedom	153
	Significance	0.000

As shown in Table 7, the factor analysis extracted five common factors with eigenvalues greater than 1. The variance explained by the first factor is 36.696%, which is below the critical threshold of 40%. This indicates that no single factor accounts for the majority of the variance in the data. Therefore, the results suggest that common method bias is not a serious concern in this study and is unlikely to substantially bias the empirical findings.

Table 7. Total Variance Explained in Factor Analysis

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	Variance Percentage (%)	Cumulative (%)	Total	Variance Percentage (%)	Cumulative (%)
1	6.605	36.696	36.696	6.605	36.696	36.696
2	2.451	13.615	50.311	2.451	13.615	50.311
3	1.846	10.255	60.566	1.846	10.255	60.566
4	1.717	9.538	70.103	1.717	9.538	70.103
5	1.143	6.353	76.456	1.143	6.353	76.456

Note: Extraction method: Principal Component Analysis.

5.4 Correlation Analysis

Correlation analysis provides preliminary evidence regarding the direction and strength of

associations among variables and serves as a foundation for subsequent regression analysis, mediation analysis, and configurational analysis. This study employs Pearson correlation

coefficients to examine the correlations among the variables.

As shown in Table 8, perceived promotion opportunities are significantly negatively correlated with employee turnover intention and significantly positively correlated with organizational sense of belonging and career self-drive. In addition, organizational sense of belonging, career self-drive, and trade union

service quality are all significantly negatively correlated with employee turnover intention. These findings are generally consistent with theoretical expectations, suggesting that internal career development opportunities, emotional attachment to the organization, intrinsic motivation, and effective labor relations governance may contribute to reducing employee turnover intention.

Table 8. Correlation Matrix

Variable	1	2	3	4	5	6	7	8	9
1 Education Level	1								
2 Job Difficulty	0.228**	1							
3 Commuting Time	0.205**	0.112**	1						
4 Overtime Hours	0.069*	0.139**	0.011	1					
5 Trade Union Service Quality	-0.017	-0.071*	0.029	-0.141**	1				
6 Career Self-Drive	-0.135**	-0.032	-0.062*	-0.034	0.290**	1			
7 Organizational Sense of Belonging	-0.073**	-0.035	0.051	-0.080**	0.440**	0.296**	1		
8 Perceived Promotion Opportunities	-0.029	0.014	-0.015	-0.024	0.348**	0.472**	0.313**	1	
9 Employee Turnover Intention	0.103**	0.081**	-0.042	0.076*	-0.348**	-0.208**	-0.426**	-0.198**	1

Note: $p < 0.01$ (two-tailed); $p < 0.05$ (two-tailed).

5.5 Multiple Linear Regression Analysis

This study employs multiple linear regression analysis to examine the direct effect of perceived promotion opportunities on employee turnover intention, while incorporating education level, job difficulty, commuting time, and overtime hours as control variables.

As shown in Table 9, perceived promotion opportunities have a significantly negative effect on employee turnover intention ($B = -0.240$, $p < 0.001$), indicating that employees who perceive more fair and satisfactory internal promotion opportunities tend to exhibit lower turnover intention. Regarding the control variables, education level, job difficulty, and overtime hours have significantly positive effects on

employee turnover intention. This may be because highly educated employees have access to more external career opportunities. At the same time, greater job difficulty and heavier work demands can contribute to emotional exhaustion and burnout, making employees more likely to leave. The negative coefficient for commuting time may reflect sample self-selection in the cross-sectional data. Employees who are unable to tolerate long commutes are more likely to leave their jobs earlier, resulting in a final survey sample composed of individuals with a higher tolerance for commuting costs. The VIF values of all models are close to 1, indicating that no severe multicollinearity problem exists. Therefore, Hypothesis H1 is supported.

Table 9. Regression Results of Perceived Promotion Opportunities on Employee Turnover Intention

Variable	Employee Turnover Intention						
	Unstandardized Coefficients		Standardized Coefficients	t	Significance	Collinearity Statistics	
	B	SE	Beta			Tolerance	VIF
Constant	2.369	0.173	—	13.67	<0.001	—	—
Perceived Promotion Opportunities	-0.24	0.034	-0.196	-7.16	<0.001	0.998	1.002
Education Level	0.068	0.021	0.094	3.289	0.001	0.913	1.095
Job Difficulty	0.057	0.026	0.063	2.205	0.028	0.928	1.078
Commuting Time	-0.003	0.001	-0.072	-2.563	0.01	0.953	1.049
Overtime Hours	0.015	0.007	0.057	2.059	0.04	0.978	1.022
Adjusted R ²	0.057						
F	16.314***						
Sample Size	1262						

5.6 Parallel Mediation Analysis

This study employs the PROCESS macro to examine the parallel mediating roles of organizational sense of belonging and career self-drive in the relationship between perceived promotion opportunities and employee turnover intention.

5.6.1 Parallel mediation effects of organizational sense of belonging and career self-drive

The results are presented in Table 10 and Figure 2. First, regarding the effects of perceived promotion opportunities on the two mediating variables, perceived promotion opportunities have a significantly positive effect on both organizational sense of belonging and career self-drive. These findings suggest that perceived promotion opportunities not only strengthen employees' emotional attachment to the

organization but also enhance their proactive motivation toward future career development. Second, after simultaneously incorporating the two mediators into the model, organizational sense of belonging exhibits a significantly negative effect on employee turnover intention ($B = -0.515$, $p < 0.001$), while career self-drive also has a significantly negative effect ($B = -0.091$, $p < 0.05$). Meanwhile, the direct effect of perceived promotion opportunities on employee turnover intention becomes statistically insignificant. These findings indicate that perceived promotion opportunities reduce employee turnover intention primarily by reshaping employees' perceptions of their relationship with the organization and their future career prospects, rather than merely through external incentives.

Table 10. Parallel Mediation Analysis of Organizational Sense of Belonging and Career Self-Drive

Step	Dependent Variable	Independent Variable	Coefficient	SE	t	R ²	F
Step 1	Organizational Sense of Belonging	Perceived Promotion Opportunities	0.281	0.024	11.662***	0.112	31.658
Step 2	Career Self-Drive	Perceived Promotion Opportunities	0.407	0.021	19.002***	0.239	78.840
Step 3	Employee Turnover Intention	Perceived Promotion Opportunities	-0.058	0.036	-1.616	0.200	44.814
		Organizational Sense of Belonging	-0.515	0.037	-14.003***		
		Career Self-Drive	-0.091	0.041	-2.203*		

Note: N = 1262. The reported coefficients are unstandardized regression coefficients. Control variables include education level, job difficulty, commuting time, and overtime hours. $p < 0.05$, $p < 0.01$, $p < 0.001$.

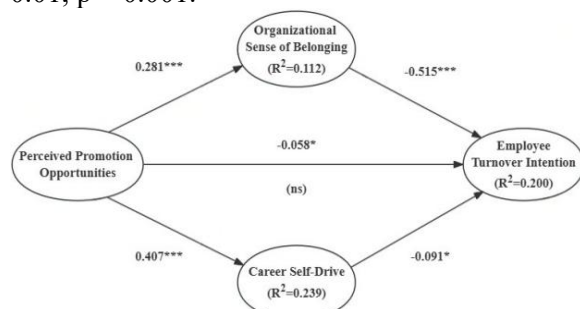


Figure 2. Parallel Mediation Model

Overall, organizational sense of belonging and career self-drive serve as significant parallel mediators between perceived promotion opportunities and employee turnover intention. Among the two mediators, organizational sense of belonging represents the stronger mediating pathway, whereas career self-drive plays a relatively weaker but still significant complementary role. These findings suggest that organizations seeking to reduce employee turnover intention through promotion mechanisms should not focus solely on establishing formal promotion systems but

should also recognize the role of promotion opportunities in strengthening employees' organizational identification and motivating their career development. Accordingly, Hypotheses H2-H5 are supported.

5.6.2 Bootstrap test of the parallel mediation effects

The bootstrap method was further employed to examine the significance of the mediation effects. The results indicate that the total indirect effect is statistically significant (Effect=-0.182, 95%CI [-0.232,-0.134]). Specifically, the indirect effect of the pathway Perceived Promotion Opportunities→Organizational Sense of Belonging→Employee Turnover Intention is significant

(Effect=-0.145, 95%CI [-0.182,-0.109]).

Likewise, the indirect effect of the pathway Perceived Promotion Opportunities→Career Self-Drive→Employee Turnover Intention is also significant (Effect=-0.037, 95%CI [-0.076,-0.002]).

Furthermore, the difference between the two indirect effects is statistically significant ($C1 = -0.108$, 95%CI $[-0.163, -0.054]$), indicating that the mediating effect of organizational belonging is significantly stronger than that of

career self-drive. Overall, the bootstrap results provide robust evidence supporting the reliability of the mediation analysis. (As shown in table 11)

Table 11. Bootstrap Test Results for the Parallel Mediation Effects

Effect	Path	Effect	Effect Size	95%CI Lower Bound	95%CI Upper Bound
Direct Effect	Perceived Promotion Opportunities→Employee Turnover Intention	-0.058	24.20%	-0.129	0.012
Indirect Effect	Perceived Promotion Opportunities→Organizational Sense of Belonging→Employee Turnover Intention	-0.145	60.35%	-0.182	-0.109
Indirect Effect	Perceived Promotion Opportunities→Career Self-Drive→Employee Turnover Intention	-0.037	15.45%	-0.076	-0.002
Total Indirect Effect	Parallel Mediation	-0.182	75.80%	-0.232	-0.134
Total Effect	Perceived Promotion Opportunities→Employee Turnover Intention	-0.240	100%	-0.306	-0.174

5.7 Moderated Mediation Analysis

To further examine the moderating role of trade union service quality, this study investigates whether the effects of perceived promotion

opportunities on organizational sense of belonging and career self-drive vary across different levels of trade union service quality.

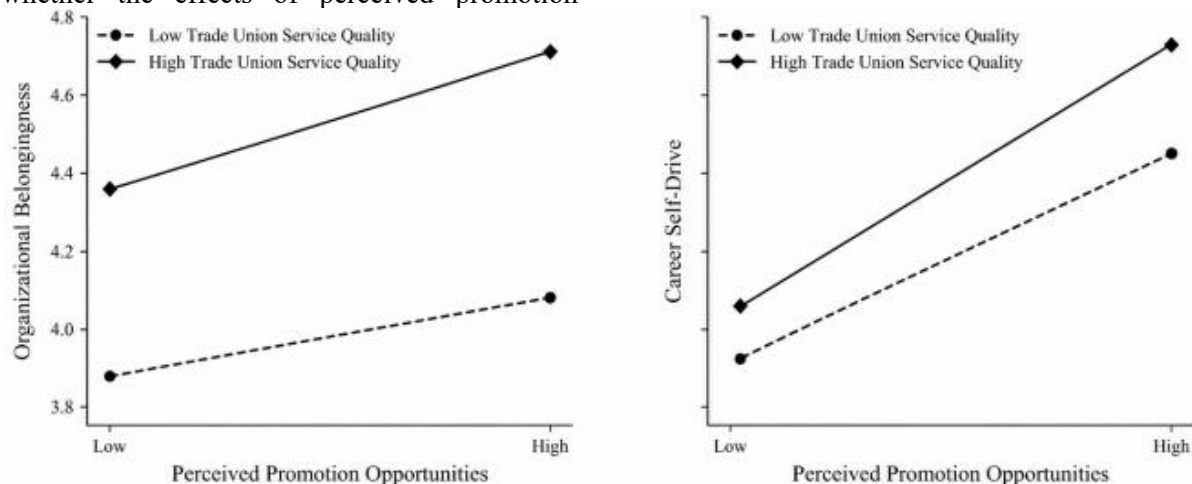


Figure 3. Moderating Effects of Trade Union Service Quality on Organizational Sense of Belonging and Career Self-Drive

Simple slope analysis was conducted to illustrate the moderating effects of trade union service quality on the relationships between perceived promotion opportunities and the two mediators. As shown in Figure 3, perceived promotion opportunities positively influence both organizational sense of belonging and career self-drive under both high and low levels of trade union service quality. However, the slopes of both relationships are considerably steeper under the high trade union service quality condition, indicating that higher trade union service quality strengthens the positive effects of perceived promotion opportunities on organizational sense of belonging and career self-drive.

Specifically, as reported in Table 12, under the

high trade union service quality condition, the first-stage effect of perceived promotion opportunities on organizational sense of belonging is 0.208, and the corresponding indirect effect on employee turnover intention through organizational sense of belonging is -0.107. Under the low trade union service quality condition, the first-stage effect decreases to 0.122, while the indirect effect declines to -0.063. The difference between the two conditions is statistically significant. These findings indicate that higher trade union service quality enables perceived promotion opportunities to be more effectively translated into stronger organizational sense of belonging, thereby contributing more substantially to the reduction of employee turnover intention.

Accordingly, Hypothesis H6 is supported.

**Table 12. Moderated Mediation Analysis
(Organizational Sense of Belonging as the Mediator)**

Moderator	Perceived Promotion Opportunities(X)→Organizational Sense of Belonging(M)→Employee Turnover Intention(Y)			
	Stage	Effect		
	First-Stage Effect	Indirect Effect	Direct Effect	Total Effect
High Trade Union Service Quality	0.208***	-0.107** *	-0.058	-0.165**
Low Trade Union Service Quality	0.122***	-0.063** *	-0.058	-0.121*
Difference	0.086**	-0.044**	0	-0.044**

Note: The first-stage effect refers to the effect of perceived promotion opportunities on organizational sense of belonging. $p < 0.05$ (two-tailed); $p < 0.01$ (two-tailed); $p < 0.001$ (two-tailed).

As shown in Table 13, under the high trade union service quality condition, the first-stage effect of perceived promotion opportunities on career self-drive is 0.406, and the corresponding

Table 13. Moderated Mediation Analysis (Career Self-Drive as the Mediator)

Moderator	Perceived Promotion Opportunities(X)→Career Self-Drive(M)→Employee Turnover Intention(Y)			
	Stage	Effect		
	First-Stage Effect	Indirect Effect	Direct Effect	Total Effect
High Trade Union Service Quality	0.406***	-0.037*	-0.058	-0.095
Low Trade Union Service Quality	0.326***	-0.030*	-0.058	-0.088
Difference	0.080**	-0.007*	0	-0.007*

Note: The first-stage effect refers to the effect of perceived promotion opportunities on career self-drive. $p < 0.05$ (two-tailed); $p < 0.01$ (two-tailed); $p < 0.001$ (two-tailed).

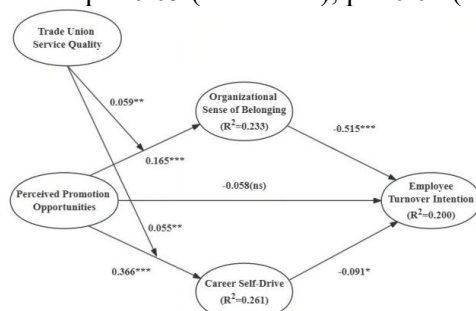


Figure 4. Results of the Moderated Mediation Analysis

5.8 Fuzzy-set Qualitative Comparative Analysis (fsQCA)

To further uncover the complex causal mechanisms underlying employee turnover intention, this study conducts a configurational

indirect effect on employee turnover intention through career self-drive is -0.037. Under the low trade union service quality condition, the first-stage effect decreases to 0.326, while the indirect effect declines to -0.030. The difference between the two conditions is also statistically significant. These findings indicate that trade union service quality not only strengthens the positive effect of perceived promotion opportunities on organizational sense of belonging but also reinforces its role in fostering employees' career self-drive. Accordingly, Hypothesis H7 is supported.

This finding has important practical implications. Employees do not evaluate promotion opportunities in isolation; rather, they interpret such opportunities within the broader context of the organization's labor relations governance environment. Only when trade union services, employee rights protection, and labor-management communication provide institutional credibility are promotion opportunities more likely to be perceived as credible signals that the organization is willing to establish a long-term relationship with its employees. (As shown in Figure 4)

analysis using fuzzy-set Qualitative Comparative Analysis (fsQCA) based on the findings of the SEM analysis. Unlike conventional regression methods, fsQCA focuses on how different combinations of causal conditions jointly lead to the same outcome, making it particularly suitable for explaining organizational behaviors such as employee turnover intention, which are characterized by multiple concurrent determinants and diverse causal pathways.

With respect to the selection of causal conditions, perceived promotion opportunities are included as the core explanatory condition, as they have been shown to influence employee turnover intention through psychological mechanisms. Organizational sense of belonging

and career self-drive are incorporated because they exhibit significant mediating effects in the parallel mediation analysis, representing the relational and motivational mechanisms underlying employees' turnover decisions, respectively. Trade union service quality is further included because the moderated mediation analysis demonstrates that it influences the extent to which perceived promotion opportunities are translated into organizational sense of belonging and career self-drive, thereby reflecting the role of the organization's labor relations governance environment. Considering that employee turnover intention may also be affected by differences in individual human capital and job characteristics, education level and job difficulty are additionally incorporated to capture employees' ability to evaluate external career opportunities and the level of job demands, respectively. Accordingly, this study includes education level, job difficulty, organizational

sense of belonging, perceived promotion opportunities, career self-drive, and trade union service quality as the causal conditions, with employee turnover intention serving as the outcome variable.

Following common practice in the fsQCA literature, the 95th percentile, median, and 5th percentile are specified as the thresholds for full membership, the crossover point, and full non-membership, respectively. All causal conditions are calibrated accordingly. The frequency threshold is set to 1, and the consistency threshold is set to 0.80.

5.8.1 Necessity analysis of individual conditions

As shown in Table 14, for both high and low employee turnover intention, the consistency values of all individual conditions are below the threshold of 0.90. This indicates that no single condition constitutes a necessary condition for employee turnover intention; rather, employee turnover intention arises from the combined effects of multiple causal conditions.

Table 14. Results of the Necessity Analysis of Individual Conditions

Causal Condition	High Employee Turnover Intention		Low Employee Turnover Intention	
	Consistency	Coverage	Consistency	Coverage
Education Level	0.7383	0.6069	0.639	0.6439
~Education Level	0.5668	0.5616	0.6099	0.7407
Job Difficulty	0.7155	0.6018	0.6322	0.6518
~Job Difficulty	0.586	0.5652	0.6138	0.7256
Organizational Sense of Belonging	0.5738	0.4643	0.7912	0.7849
~Organizational Sense of Belonging	0.7342	0.7415	0.46	0.5695
Perceived Promotion Opportunities	0.5968	0.5419	0.6618	0.7366
~Perceived Promotion Opportunities	0.7099	0.6313	0.5884	0.6414
Career Self-Drive	0.605	0.5477	0.6764	0.7505
~Career Self-Drive	0.7244	0.6461	0.5924	0.6477
Trade Union Service Quality	0.5127	0.481	0.676	0.7774
~Trade Union Service Quality	0.7627	0.6576	0.5487	0.5799

5.8.2 Configurational analysis

According to the fsQCA results, seven configurational pathways leading to high employee turnover intention are identified. The consistency values of all configurations exceed the threshold of 0.80, indicating that each

configuration exhibits strong explanatory power. The overall solution coverage is 0.7045, suggesting that the seven configurations jointly explain 70.45% of the cases with high employee turnover intention. The detailed results are reported in Table 15.

Table 15. Configurational Pathways Leading to High Employee Turnover Intention

Variable	S1	S2	S3	S4	S5	S6	S7
Education Level			●	⊗	●	●	
Job Difficulty		●		⊗	●	●	⊗
Organizational Sense of Belonging	⊗	⊗		⊗		⊗	⊗
Perceived Promotion Opportunities	⊗	.	⊗		⊗		.
Career Self-Drive	⊗		⊗	.			.
Trade Union Service Quality			⊗		⊗	⊗	.
Raw Coverage	0.5222	0.4661	0.4544	0.3073	0.4231	0.4433	0.2439

Unique Coverage	0.0269	0.0096	0.0098	0.011	0.0086	0.0372	0.0069
Consistency	0.8258	0.8361	0.8081	0.8169	0.8163	0.8813	0.8114
Overall Solution Coverage	0.7045						
Overall Solution Consistency	0.7492						

Note: "●" indicates the presence of a core condition; "." indicates the presence of a peripheral condition; "⊗" indicates the absence of a core condition; "⊗" indicates the absence of a peripheral condition; blank cells indicate that the condition is irrelevant to the corresponding configuration.

Based on the characteristics of the core and peripheral conditions, the configurational pathways leading to high employee turnover intention can be classified into four categories. The first category is the "Triple Deficiency in Belonging, Promotion Opportunities, and Career Self-Drive" configuration, corresponding to Configuration S1. The first configurational pattern highlights the combined absence of organizational sense of belonging, perceived promotion opportunities, and career self-drive as a pathway associated with high employee turnover intention. Employees characterized by this pattern neither develop meaningful emotional ties with the organization nor perceive sufficient opportunities for internal career advancement. At the same time, they show limited willingness to continue investing in their future careers within the organization. Organizational identification can serve as a mediator in the process by which responsible leadership influences employee turnover intentions [29]. A high turnover intention to leave is more likely to emerge when relational bonds, expectations for development, and individual drive are simultaneously weakened.

Configurations S2, S4, and S7 form a second category, labeled the High Job Difficulty-Low Organizational Attachment pathway. The common characteristic of this pathway is that under high task difficulty, weak organizational sense of belonging becomes a key factor triggering high turnover intention. The results also indicate that challenge stressors and hindrance stressors affect turnover intention in different ways, and that social support influences the mechanisms through which stress operates [30]. High job demands do not inevitably lead to employee turnover, as the decision to leave depends on whether the organization provides appropriate relational support and resource compensation. Without a strong organizational sense of belonging, high

job demands are more likely to be perceived as a burden rather than an opportunity for growth, thereby fostering an intention to leave.

Configurations S3 and S5 represent the High Human Capital-Low Development Support pattern. In this pathway, education level emerges as a key condition alongside limited perceived promotion opportunities and inadequate trade union service quality. Prior research shows that professional qualifications and interpersonal connections influence the likelihood of employees securing promotions [31], while an organization's growth potential shapes expectations of future returns and, in turn, turnover decisions [32]. Highly educated employees generally possess a greater capacity to identify external career opportunities. They are also more sensitive to the allocation of internal opportunities and place greater emphasis on developmental rewards that match their capabilities. When organizations fail to provide corresponding promotion opportunities and sufficient support, these employees are more likely to regard leaving as an alternative way to realize their career aspirations.

Configuration S6 represents the High Human Capital-High Job Demands-Low Organizational Support pattern. Among all identified configurations, this pattern exhibits the highest consistency. This pattern suggests that highly capable employees facing demanding job requirements are more likely to develop high turnover intention when organizations fail to provide sufficient relational support and institutional safeguards. Research on unions indicates that they can foster employee trust in the organization through welfare support and the protection of rights and interests [33,34]. Their influence therefore extends well beyond dispute resolution or formal rights protection. Without adequate institutional support and relational safeguards, employees are more likely to view sustained work investment as a one-sided depletion of resources, increasing their turnover intention.

SEM results reveal the average effect through which perceived promotion opportunities reduces employee turnover intention through organizational sense of belonging and career self-drive. Meanwhile, fsQCA results further

indicate that high turnover intention is not determined by a single factor but arises from a combination of conditions. These findings suggest that reducing employee turnover intention requires a coordinated approach that integrates development opportunities, organizational sense of belonging, career self-drive, and trade union service quality.

6. Conclusions and Implications

6.1 Conclusions

This study investigates how perceived promotion opportunities affects employee turnover intentions. The analysis combines two complementary approaches. A parallel mediation model is used to examine the roles of organizational sense of belonging and career self-drive, together with the moderating effect of trade union service quality, while fsQCA is employed to identify alternative configurational pathways associated with high employee turnover intention. The evidence leads to several conclusions.

The evidence leads to several conclusions. To begin with, perceived promotion opportunities are negatively associated with employee turnover intention. This relationship operates primarily through two parallel psychological mechanisms—organizational sense of belonging and career self-drive. This finding suggests that promotion opportunities do not simply retain employees by increasing the costs of leaving; rather, they reduce turnover intention by shaping employees' psychological interpretations of their relationship with the organization and their future career development.

Second, organizational sense of belonging and career self-drive constitute two parallel mediating pathways, with the mediating role of organizational sense of belonging being stronger. This indicates that employees' willingness to remain with the organization depends primarily on whether they perceive themselves as belonging to the organization and are willing to establish a long-term relationship with it, and only subsequently on whether their intrinsic career motivation has been activated.

Third, trade union service quality strengthens the positive effects of perceived promotion opportunities. High-quality trade union services not only reinforce the positive effect of perceived promotion opportunities on organizational sense of belonging but also

enhance their positive effect on career self-drive. These findings suggest that the retention effect of promotion opportunities depends on whether employees perceive the organization's institutional environment as trustworthy. By safeguarding employee rights, facilitating communication, and improving labor-management relations, high-quality trade union services provide an organizational context that enables promotion opportunities to be translated into stronger organizational sense of belonging and greater career self-drive.

Finally, the fsQCA results reveal multiple configurational pathways leading to high employee turnover intention, highlighting the complexity and causal asymmetry underlying employees' turnover decisions. The configurational evidence further suggests that similar levels of employee turnover intention may arise from different combinations of antecedent conditions rather than from any single factor alone. Accordingly, retention initiatives are unlikely to be effective if they rely on isolated interventions. Greater benefits are likely to come from an integrated governance approach in which development opportunities, organizational sense of belonging, career self-drive, and labor-management support reinforce one another in reducing employee turnover intention.

6.2 Managerial Implications

Promotion management should no longer be treated merely as a means of allocating a small number of positions. Its significance is broader: promotion practices shape how employees judge the organization's willingness to invest in their future.

Managers should establish clear, transparent, and explainable promotion rules while prioritizing fairness and information disclosure throughout the process, alleviating employee concerns regarding opaque practices and uncertainty about opportunities.

Organizations should foster organizational sense of belonging to reduce employee turnover intention. This study finds that organizational sense of belonging as a key mediating pathway through which promotion opportunities influence employee turnover intention. Employees are more likely to remain when promotion opportunities are accompanied by organizational recognition and support. Enhancing organizational communication,

employee participation, and team support are effective ways for enterprises to strengthen employees' sense of connection to the organization.

Career self-drive should be activated, but it should not mean self-imposed pressure or the unilateral shifting of responsibility from the organization to the employees. It is more likely to foster proactive growth by aligning goals, resources, and feedback. Managers can strengthen employee's sense of control over their career development through planning support, training opportunities, challenging assignments, and periodic developmental feedback.

Trade unions are another important source of retention support. High-quality trade union services reinforce trust in organizational institutions by protecting employee rights, facilitating communication and coordination, and providing emotional support. This means trade unions should also function as protectors of employees' rights, facilitators of communication and coordination, and participants in employee development. They can contribute directly to both employee retention and organizational stability.

Organizations need to adopt differentiated retention strategies for distinct configurations of turnover risk. The fsQCA results indicate that multiple pathways lead to high turnover intention. For employees with limited perceived promotion opportunities and weak organizational sense of belonging, the immediate priorities are to improve career development support and strengthen organizational connection. Highly educated employees who face high job difficulty and inadequate trade union service quality need better resource allocation and greater procedural fairness. Employees with low career self-drive, career coaching and goal-oriented feedback can foster proactive professional development.

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