

The Causal Factors Effecting on Employees' Turnover Intention on High-Tech Small and Medium Enterprises in Henan Province

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Abstract:- The objectives of this study are as follows: (1) To study the factors influencing individual and organizational adaptability on turnover intention of small and medium-sized high-tech enterprises in Nanyang City, Henan Province. (2) To analyze the factors influencing individual and organizational adaptability on turnover intention of small and medium-sized high-tech enterprises in Nanyang City, Henan Province. (3) To propose solutions to address the turnover intention of small and medium-sized high-tech enterprises in Nanyang City, Henan Province.

This study adopts a mixed research method, combining quantitative and qualitative research. The sample for the quantitative research consists of 320 small and medium-sized high-tech enterprises around urban areas of Henan Province (Source: Nanyang Municipal People's Government, 2023). The qualitative research method involves in-depth interviews, mainly interviewing 2 managers or 3 human resource management managers from 5 high-tech small and medium-sized enterprises.

➤ Major Findings

This study explores the complex relationships among IOA, POS, JE, and TI by constructing a structural equation model. After careful analysis and verification, we arrived at the following conclusions and implications: (1) The positive impact of individual and organizational adaptability on perceived organizational support. Individual and organizational adaptability (IOA) has a significant positive impact on perceived organizational support (POS) with a path coefficient of 0.73. This indicates that improving employee adaptability helps enhance their perception of organizational support, thereby improving the overall organizational atmosphere and employee satisfaction. (2) The positive moderating effect of perceived organizational support on turnover intention. Perceived organizational support (POS) partially mediates the relationship between individual and organizational adaptability (IOA) and turnover intention (TI) with a path coefficient of 0.19. This suggests that enhancing employees' perception of organizational support can effectively reduce their turnover intention, thereby increasing employee retention rates. (3)

The positive impact of job embeddedness on organizational performance. Job embeddedness (JE) has a significant negative impact on turnover intention (TI) with a path coefficient of 0.03. This indicates that increasing employees' embeddedness in the organization can significantly reduce their turnover intention, contributing to greater organizational stability and overall performance.

Keywords:- Causal Relationships; Turnover Intention; High-Tech Small and Medium-Sized Enterprises.

I. INTRODUCTION

In Nanyang City, Henan Province, small and medium-sized high-tech enterprises are rapidly emerging as engines of economic growth and innovation. This trend has injected vitality into local economic development, but it also brings a series of management challenges, among which the issue of employee resignation has become a difficult problem that needs to be solved urgently. Small and medium-sized high-tech enterprises in Nanyang City cover a wide range of fields such as information technology, biotechnology, new materials, etc. Their prosperous development has had a positive impact on the upgrading of the local industrial structure and the enhancement of the level of scientific and technological innovation.

However, with the rapid development of enterprises, the problem of employee resignation has gradually come to the fore. Employee leaving not only represents individual dissatisfaction with the working environment, but also may reflect a series of potential problems within the organization. In order to deeply understand the reasons for employee resignation, we need to carry out a systematic study on the influencing factors of employee resignation intention in small and medium-sized high-tech enterprises in Nanyang City.

Small and medium-sized enterprises (SMEs) in the high-tech sector of Henan Province are pivotal to the region's economic vitality and innovation. These enterprises, often agile and forward-thinking, are situated in a province that is increasingly becoming a hub for technological advancement. The State Council's recent approval to upgrade the high-tech industrial development zone in Xuchang to a national industrial development zone is a testament to the region's commitment to fostering a modernized economic system.

Henan's high-tech SMEs are characterized by their entrepreneurial spirit and their ability to adapt quickly to new technologies and market demands. They are often at the forefront of innovation, driving growth in sectors such as information technology, biotechnology, and renewable energy. The government's support in the form of policy incentives and infrastructure development has been instrumental in creating an environment conducive to the growth of these enterprises.

The effectiveness of high-tech SMEs in Henan is influenced by a variety of factors, including leadership, technological innovation, talent acquisition, financial resources, and market environment. Leadership in the digital age is particularly crucial, as it directly affects the organization's innovation capacity and employee motivation. A strong leadership team can inspire and drive the workforce towards achieving the company's strategic goals.

Technological innovation is the cornerstone of high-tech SMEs. These companies invest heavily in research and development to create cutting-edge products and services that meet the evolving needs of their customers. Access to financial resources, whether through government grants, venture capital, or other funding mechanisms, is essential for these enterprises to sustain their innovation efforts.

Talent is another critical factor. High-tech SMEs in Henan strive to attract and retain skilled professionals who can contribute to their growth. The region's educational institutions play a significant role in nurturing the next generation of innovators who will lead these enterprises.

The market environment also plays a significant role. High-tech SMEs must navigate a competitive landscape, where they must differentiate themselves through quality, innovation, and customer service. The ability to respond swiftly to market changes and consumer preferences is a key determinant of success.

In conclusion, high-tech SMEs in Henan Province are a driving force behind the region's economic and technological progress. The interplay of leadership, innovation, talent, financial resources, and market dynamics shapes the effectiveness of these enterprises. With continued support from the government and a focus on fostering a culture of innovation, Henan's high-tech SMEs are well-positioned to thrive in the global economy.

➤ *Research Objective*

- To study factors of individual and organizational adaptability on turnover intention of small and medium-sized high-tech enterprises in Nanyang City, Henan Province.
- To analyze factors of individual and organizational adaptability on turnover intention of small and medium-sized high-tech enterprises in Nanyang City, Henan Province.
- To propose a solution to the turnover intention of small and medium-sized high-tech enterprises in Nanyang City, Henan Province.

➤ *Research Hypothesis*

- Hypothesis 1: Individual Adaptability and Organizational Adaptability have a positive effect on Perceived Organizational Support.
- Hypothesis 2: Individual and organizational adaptability have a positive effect on Job Embeddedness.
- Hypothesis 3: Individual and organizational adaptability have a negative effect on turnover intentions.
- Hypothesis 4: Perceived Organizational Support have a negative effect on turnover intentions.
- Hypothesis 5: Job Embeddedness. have a negative effect on turnover intentions.
- Hypothesis 6: Individual Adaptability & Organizational Adaptability has an indirect influence on turnover Intentions through perceived organizational support.
- Hypothesis 7: Individual Adaptability & Organizational Adaptability has an indirect influence on turnover Intentions through perceived organizational support.

➤ *Research Framework*

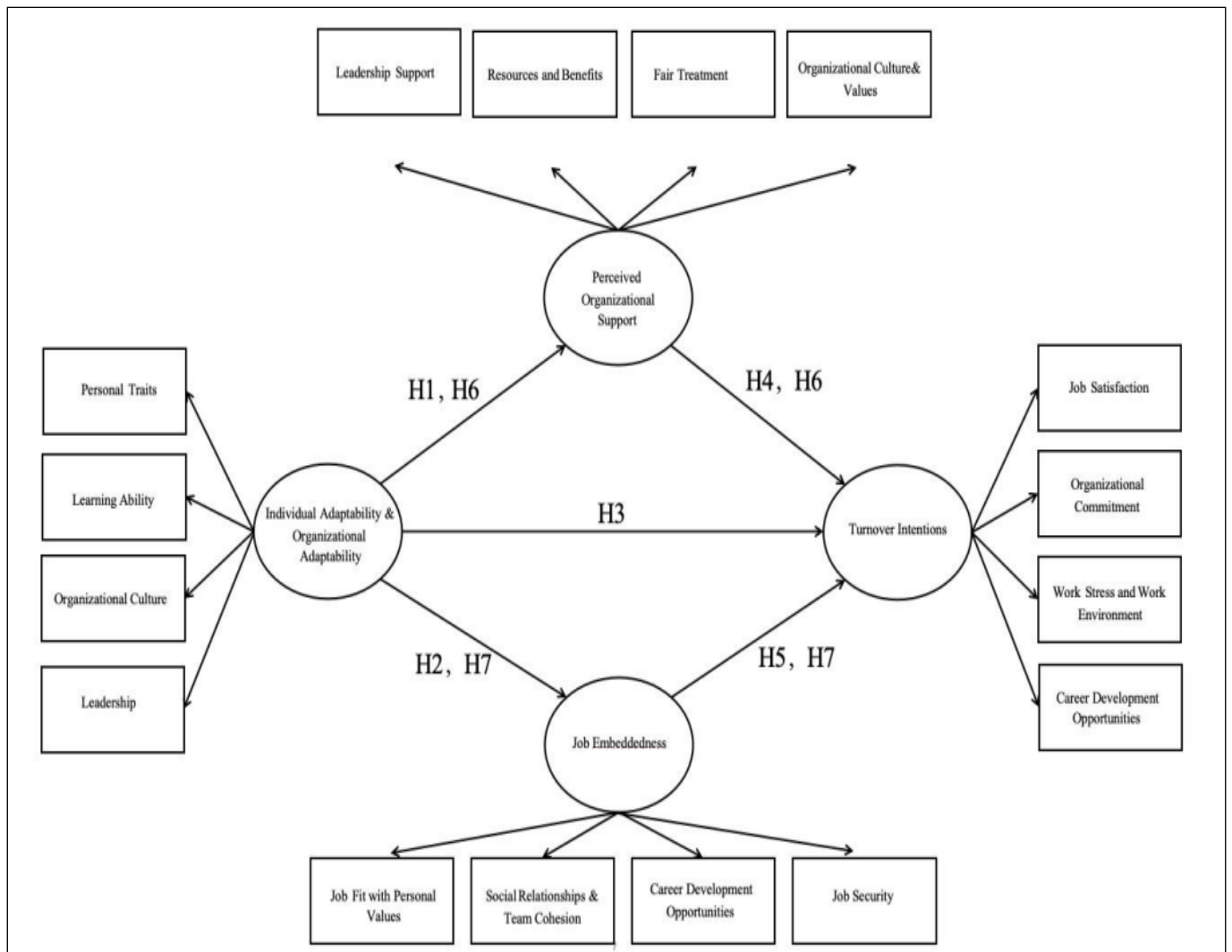


Fig.1 Research framework

II. LITERATURE REVIEW

➤ *Theory of Individual Adaptability & Organizational Adaptability*

Adaptability, whether at the individual or organizational level, has been a subject of considerable scholarly exploration. This chapter delves into the existing literature to elucidate the nuances of the Theory of Individual Adaptability & Organizational Adaptability.

Individual Adaptability refers to an individual's capacity to adjust and thrive in the face of changing circumstances. Scholars have examined this phenomenon from various perspectives, considering factors such as personality traits, cognitive flexibility, and emotional intelligence. For instance, DeYoung et al. (2012) explored the relationship between personality traits, particularly openness to experience, and individual adaptability. Their research suggests that individuals high in openness to experience tend to exhibit greater adaptability, embracing novel ideas and unconventional approaches.

The significance of personal traits in influencing individual adaptability has been a subject of extensive research. Scholars have explored various dimensions of personality traits and their implications for adaptability. DeYoung et al. (2022) conducted a comprehensive study examining the relationship between personality traits and individual adaptability. Their research emphasizes the role of openness to experience as a key predictor of adaptability.

Learning ability, defined as the aptitude to acquire new knowledge, skills, and behaviors, emerges as a fundamental aspect of individual adaptability. Scholars have extensively investigated the dynamics of learning and its implications for adaptability, recognizing that the ability to learn is a key determinant of an individual's capacity to navigate diverse and evolving situations.

Research by Davis and Easterby-Smith (2014) contributes to the understanding of learning ability by exploring the cognitive processes underlying individual adaptability. Their work emphasizes the role of learning in facilitating adaptability, suggesting that individuals who engage in continuous learning are better equipped to adjust to new challenges and changing environments.

The exploration of individual and organizational adaptability within the Theory of Individual Adaptability & Organizational Adaptability extends to an in-depth examination of organizational culture. This section delves into existing literature to elucidate the critical role of organizational culture in shaping the adaptive capacity of individuals and organizations.

Organizational culture, defined as the shared values, beliefs, and norms that characterize an organization, emerges as a powerful determinant of adaptability. Scholars have extensively studied how organizational culture influences individuals' behaviors, attitudes, and responses to change, ultimately shaping the overall adaptive capacity of the organization.

The work of Schein (2015) provides foundational insights into the conceptualization of organizational culture. Schein emphasizes the three levels of organizational culture: artifacts and behaviors, espoused values, and underlying assumptions. Understanding these levels is crucial for comprehending the deep-seated influence of culture on organizational dynamics. Research by Denison (2020) explores the relationship between organizational culture and adaptability. Denison's model identifies four cultural traits—mission, adaptability, involvement, and consistency—and highlights the role of adaptability as a key component. The adaptability trait reflects an organization's capacity to respond to external changes and embrace innovation, highlighting its connection to organizational adaptability.

Cameron and Quinn (2016) further contribute to the discourse by introducing the Competing Values Framework, which identifies four organizational culture types: Clan, Adhocracy, Market, and Hierarchy. The Clan culture is characterized by a focus on collaboration and employee development; Adhocracy values innovation and risk-taking; Market culture emphasizes competition and achievement; Hierarchy prioritizes stability and control. Each culture type has implications for how organizations approach adaptability. The servant leadership model, as introduced by Greenleaf (2020), emphasizes leaders' focus on serving the needs of their followers. Servant leaders prioritize the development and well-being of their team members, fostering a culture of trust and collaboration. This model aligns with adaptability, as leaders who prioritize their team's needs and empower them to navigate change contribute to a more resilient and agile organization.

The resource-based view (RBV) of the firm, as proposed by Barney (2021, 2017), contributes to the organizational perspective on leadership and adaptability. RBV suggests that leadership can be a source of valuable, rare, and difficult-to-imitate resources. Leaders who effectively foster a culture of adaptability and drive organizational learning contribute to the development of unique resources that enhance the organization's adaptive capacity.

In conclusion, the exploration of leadership within the Theory of Individual Adaptability & Organizational Adaptability underscores its central role in shaping adaptive behaviors at both the individual and organizational levels. From the transformational leadership model and contingency theory to the leader-member exchange theory and servant leadership model, the literature reveals the diverse ways in which leadership influences adaptability. As organizations strive for resilience and success in a rapidly changing environment, cultivating effective leadership becomes imperative for navigating the complexities of the contemporary world

➤ *Theory of Perceived Organizational Support*

Perceived Organizational Support (POS) stands as a pivotal concept in organizational psychology and management literature, representing employees' subjective perceptions regarding the extent to which their organization values and supports them. This chapter delves into the extensive body of literature surrounding the Theory of Perceived Organizational Support, providing a comprehensive overview of its conceptualization, antecedents, outcomes, and implications for organizational behavior.

Rooted in the seminal work of Eisenberger, Huntington, Hutchison, and Sowa (2016), the foundational premise of Perceived Organizational Support centers on the idea that employees form beliefs about the level of support they receive from their organization. This support is not solely financial; rather, it encompasses a broad spectrum of organizational actions and behaviors that communicate care, appreciation, and commitment to employee well-being.

The social exchange theory, as introduced by Blau (2014), serves as a theoretical underpinning for understanding the reciprocity inherent in the employee-organization relationship. According to this theory, individuals are motivated to reciprocate positive treatment with positive behaviors. In the context of Perceived Organizational Support, employees reciprocate the perceived support by demonstrating increased commitment, engagement, and positive work-related behaviors.

Technology's impact on Perceived Organizational Support is investigated by Golden and Gajendran (2019), who explore how virtual interactions and remote work arrangements influence these perceptions. Organizations are challenged to adapt their support mechanisms to accommodate the evolving nature of work arrangements.

In applied interventions, Eisenberger and Rhoades (2011) discuss the implementation of interventions aimed at enhancing Perceived Organizational Support. These interventions may include leadership training, communication initiatives, and programs designed to enhance the overall organizational climate.

Moreover, the connection between Perceived Organizational Support and employee engagement is explored by Rich, LePine, and Crawford (2020). Their study suggests that Perceived Organizational Support contributes to employee engagement, which, in turn, has positive implications for organizational performance.

In conclusion, the Theory of Perceived Organizational Support stands as a cornerstone in understanding the intricate dynamics between employees and organizations. This chapter provides a condensed overview of its conceptualization, antecedents, outcomes, and practical implications, showcasing its enduring relevance in organizational research. As organizations strive to create environments conducive to positive employee attitudes and behaviors, recognizing, fostering, and sustaining Perceived Organizational Support remains essential for achieving organizational success.

➤ *Theory of Job Embeddedness*

The Theory of Job Embeddedness represents a conceptual framework that has gained prominence in the field of organizational behavior and human resource management. Job embeddedness refers to the multidimensional construct capturing the extent to which employees feel enmeshed or embedded in their work and organizational contexts. This chapter delves into the extensive body of literature surrounding the Theory of Job Embeddedness, providing a comprehensive overview of its conceptualization, antecedents, outcomes, and implications for understanding employee retention and organizational behavior.

Rooted in the seminal work of Mitchell, Holtom, Lee, Sablynski, and Erez (2021), the foundational premise of Job Embeddedness centers on the idea that employees' decisions to remain in an organization are influenced not only by job-related factors but also by the interconnectedness of their work and personal lives with the broader organizational and community contexts. The construct goes beyond traditional predictors of turnover, considering both the push factors that might encourage employees to leave a job and the pull factors that anchor them to their current positions.

The conceptualization of Job Embeddedness comprises three interrelated components: links, fit, and sacrifice. Links refer to the connections employees have with their colleagues, supervisors, and other individuals within and outside the organization. Fit reflects the alignment between employees' values, skills, and preferences with those of the organization. Sacrifice involves the investments employees make in terms of time, effort, and emotional commitment that would be lost if they were to leave the organization.

Antecedents to Job Embeddedness are diverse and encompass individual, organizational, and contextual factors. For example, research by Lee, Gerhart, Weller, and Trevor (2018) highlights the role of job satisfaction, organizational commitment, and person-organization fit as predictors of embeddedness. Employees who experience a positive work environment and a strong alignment between their values and those of the organization are more likely to feel embedded in their jobs. The strategic implications of Job Embeddedness are discussed by Holtom, Mitchell, Lee, and Inderrieden (2015). The study suggests that organizations can leverage Job Embeddedness as a tool for talent management and retention. By understanding the factors that contribute to employees' embeddedness, organizations can implement targeted interventions to enhance retention and foster a positive organizational climate.

In conclusion, the Theory of Job Embeddedness stands as a valuable framework for understanding the complex interplay of factors that influence employees' decisions to remain embedded in their jobs and organizations. This chapter provides a condensed overview of its conceptualization, antecedents, outcomes, and practical implications, showcasing its significance in the realm of employee retention and organizational behavior. As organizations navigate the challenges of retaining talent and creating environments conducive to long-term employee commitment, recognizing and fostering Job Embeddedness remains essential for achieving sustained organizational success.

➤ *Theory of Turnover Intentions*

Turnover intentions refer to the cognitive evaluations and intentions that employees hold regarding voluntarily leaving their current employment. It represents a critical precursor to actual turnover and is often considered a key indicator of employees' dissatisfaction or disengagement with their current work situation.

The literature suggests that turnover intentions encompass a range of factors, including job satisfaction, organizational commitment, perceived job alternatives, and other job-related and personal factors. Employees' intentions to leave can be influenced by both individual and organizational aspects, making it a complex and multifaceted phenomenon.

The antecedents to turnover intentions are rooted in various factors that impact employees' perceptions of their work environment. Research by Mobley, Griffeth, Hand, and Meglino (2019) underscores the role of job satisfaction as a significant predictor of turnover intentions. Employees who are dissatisfied with their jobs are more likely to contemplate leaving.

The outcomes of turnover intentions extend beyond the individual to organizational performance. Research by Hanisch (2019) explores the consequences of employees' turnover intentions on team dynamics. Turnover intentions can disrupt team cohesion, communication, and overall effectiveness, impacting the organization's success.

The study by Tett and Meyer (2013) suggests that turnover intentions can also serve as a predictor of actual turnover. Organizations that effectively identify and address turnover intentions may have an opportunity to implement interventions and retention strategies, mitigating the negative impact of turnover on productivity and morale. The temporal aspect of turnover intentions is essential for understanding how these intentions may change over time. Research by Bluedorn (2022) suggests that turnover intentions may fluctuate based on changes in job conditions, life circumstances, or organizational initiatives. Organizations need to continuously assess and address turnover intentions to maintain a stable and engaged workforce. The cultural nuances of turnover intentions are explored in cross-cultural research by Pelled, Eisenhardt, and Xin (2019). The study suggests that cultural values and norms influence employees' tolerance for job dissatisfaction and their likelihood of considering turnover. Organizations operating in diverse cultural contexts need to consider these nuances in developing strategies to manage turnover intentions.

Strategically, organizations can leverage insights from turnover intentions to implement proactive measures aimed at employee retention. Research by Hom and Griffeth (2015) emphasizes the role of strategic human resource management in addressing turnover intentions. Organizations that prioritize employee engagement, job satisfaction, and organizational commitment contribute to a positive work environment, reducing the likelihood of turnover intentions.

In conclusion, the literature on Turnover Intentions within the theoretical framework underscores the critical role of understanding employees' intentions to leave their current employment. From the conceptualization and antecedents to the outcomes and strategic implications, this review provides a condensed overview of the significance of turnover intentions. As organizations strive to create environments conducive to long-term employee commitment, recognizing and actively addressing turnover intentions becomes imperative for achieving sustained organizational success.

III. RESEARCH METHODOLOGY

The aim of this research is to study factors of individual and organizational adaptability on turnover intention of small and medium-sized high-tech enterprises in Nanyang City, Henan Province, To analyze factors of individual and organizational adaptability on turnover intention of small and medium-sized high-tech enterprises in Nanyang City, Henan Province, and To propose a solution to the turnover intention of small and medium-sized high-tech enterprises in Nanyang City, Henan Province This research is a quantitative and qualitative research. The survey used a questionnaire design. and interviews were conducted.

➤ Population

The target population used in this research study is High-tech SMEs in Henan Province.

➤ Sample Size

A. Quantitative Research

In the quantitative research, a questionnaire survey was conducted on employees of high-tech small and medium-sized enterprises (SMEs) in Henan Province to measure their evaluations and feedback on individual adaptability, organizational adaptability, perceived organizational support, job embeddedness, and turnover intention. The population scope comprised 320 small and medium-sized high-tech enterprises in Henan Province (Source: Henan Provincial People's Government, 2023). According to the sample calculation method proposed by Hair (1998), there were 16 variables in this study. Based on the sample calculation formula, $16 \times 20 = 320$.

B. Qualitative Research

In the qualitative research, interviews were conducted with managers or human resource managers of 8 high-tech enterprises in Henan Province. The purpose was to gain deeper insights into the real thoughts of the management and further evaluate the influencing mechanism of the theoretical research framework to more accurately measure the variables in the theoretical research framework. The specific information of the interviewees is provided below.

➤ Research Tools

The questionnaire consists of an opening section and a main section. The opening section includes the questionnaire title, greeting, and questionnaire number. The questionnaire title should be concise and able to arouse interest; the greeting explains the identity of the investigator, the purpose of the survey, and the confidentiality commitment to the respondent, aiming to ensure that the respondent fills out the questionnaire truthfully; and the questionnaire number is used for identification and tracing of the questionnaire. The main section consists of six parts. The first part evaluates the individual adaptability and organizational adaptability of the respondents using Likert scales; the second part assesses the perceived organizational support of the respondents using Likert scales; the third part evaluates the turnover intention of the respondents using Likert scales; the fourth part evaluates the job embeddedness of the respondents using Likert scales;

the fifth part comprehensively evaluates the impact of the above factors on turnover behavior using Likert scales; and the sixth part collects demographic information of the respondents. The Likert scales used in the study are divided into 5 levels (5=Strongly Agree, 4=Agree, 3=Neutral, 2=Disagree, 1=Strongly Disagree).

➤ *The Statistics Used in Data Analysis*

Descriptive statistical analysis is a common method used to summarize and describe survey data. It provides information about the central tendency, variability, and distribution shape of the dataset. Common descriptive statistics include:

- Measures of central tendency: including mean and mode.
- Measures of variability: including standard deviation, variance, and range.
- Measures of distribution shape: including kurtosis and skewness.

➤ *Frequency and Relative Frequency:*

Recording the occurrence frequency of each value and its frequency relative to the total.

In this study, frequency, percentage, and mean were used for the second part of the questionnaire, while mean and standard deviation were used for the first part of the questionnaire to describe the general information and analyze opinion data, independent variables, and dependent variables of the sample.

IV. RESULTS

➤ *Research Objective 1: Investigate the Factors Influencing the Turnover Intentions of High-tech SMEs in Nanyang City, Henan Province*

This study explored the factors influencing the turnover intentions of employees in high-tech SMEs in Nanyang City, Henan Province, focusing on individual and organizational adaptability. Data analysis shows that individual adaptability and organizational adaptability significantly influence turnover intentions. Individual adaptability includes personal traits (PT), learning ability (LA), organizational culture (OC), and leadership (LEA). Organizational adaptability encompasses the ability of the enterprise to respond to external changes and internal adjustments. The data shows that the mean of personal traits is 3.77, with a standard deviation of 0.86; the mean of learning ability is 3.71, with a standard deviation of 0.85; the mean of organizational culture is the highest at 3.79, with a standard deviation of 0.87; and the mean of leadership is 3.47, with a standard deviation of 1.02. Structural equation model analysis indicates that individual and organizational adaptability have path coefficients of 0.73 and 0.38, respectively, towards perceived organizational support (POS) and turnover intentions (TI). Stronger adaptability leads to higher perceived organizational support and lower turnover intentions. Perceived organizational support has a significant negative impact on turnover intentions, with a path coefficient of -0.11. Individual and organizational adaptability also have significant indirect effects on turnover intentions through perceived organizational support and job embeddedness (JE). Job embeddedness has a negative impact on turnover intentions, with a path coefficient of -0.30. Personal traits and learning ability play

key roles in adaptability, with their observed variable loadings ranging from 0.71 to 0.82 and 0.77 to 0.82, respectively. The qualitative research part shows that corporate managers and HR managers believe that individual and organizational adaptability play important roles in reducing employee turnover intentions. Enhancing employees' adaptability through regular training, knowledge-sharing platforms, and career development plans can improve employee satisfaction and loyalty.

➤ *Research Objective 2: Analyze the Impact of Individual and Organizational Adaptability on Turnover Intentions in High-tech SMEs in Nanyang City, Henan Province*

This study analyzed the individual and organizational adaptability of employees in high-tech SMEs in Nanyang City, Henan Province, and found that these factors significantly influence turnover intentions, with indirect effects through perceived organizational support and job embeddedness. The path coefficients for the impact of individual and organizational adaptability on perceived organizational support and job embeddedness are 0.722 and 0.758, respectively, indicating that stronger adaptability leads to higher perceived support and job embeddedness. Perceived organizational support and job embeddedness have direct path coefficients of 0.651 and 0.709, respectively, both significant and positive, towards turnover intentions. In the structural equation model, personal traits (PT), learning ability (LA), organizational culture (OC), and leadership (LEA) serve as observed variables for individual and organizational adaptability, with loadings of 0.713, 0.751, 0.772, and 0.769, respectively, showing their significant contribution to adaptability, particularly organizational culture and leadership. The qualitative research part validated the quantitative analysis results through interviews, where managers pointed out that providing continuous learning and development opportunities, establishing fair and transparent resource allocation and welfare systems, can effectively enhance employee adaptability. One enterprise manager mentioned that personalized career development plans and internal promotion systems help employees see their growth path within the company, increasing their satisfaction and loyalty. Perceived organizational support (POS) consists of four dimensions: leadership support (LS), resources and benefits (RB), fair treatment (FT), and organizational culture and values (OCV), with loadings for resources and benefits ranging from 0.852 to 0.892. Job embeddedness (JE) consists of four dimensions: the fit between work and personal values (JPV), social relationships and team cohesion (SRC), career development opportunities (CDO), and job security (JSY), with the highest loadings for career development opportunities and job security, ranging from 0.835 to 0.914 and 0.878 to 0.939, respectively.

➤ *Research Objective 3: Propose Solutions to Reduce Turnover Intentions in High-tech SMEs in Nanyang City, Henan Province*

This study proposes a series of solutions to reduce turnover intentions by enhancing individual and organizational adaptability, perceived organizational support, and job embeddedness. Strengthening training and development plans, providing continuous internal and external training opportunities to improve employees' personal skills and adaptability. The research data shows that the mean of learning ability (LA) is 3.71, indicating that employees recognize the importance of training. Optimizing

resource allocation and welfare systems to ensure fair and transparent distribution of resources and providing competitive benefits, with the loadings of perceived organizational support (POS) ranging from 0.852 to 0.892. Enhancing leadership and organizational culture through leadership training and development programs to improve managerial leadership abilities, with organizational culture (OC) loadings ranging from 0.772 to 0.796. Increasing job security and career development opportunities by providing a stable work environment and clear career development paths, with job embeddedness (JE) loadings ranging from 0.835 to 0.914 and 0.878 to 0.939, respectively.

Establishing a supportive work environment through regular meetings and open communication channels to ensure every employee feels leadership support, with the mean of leadership support (LS) being 3.77. Promoting social relationships and team cohesion through team-building activities and values workshops, with social relationships and team cohesion (SRC) loadings ranging from 0.695 to 0.834. By implementing these measures, high-tech SMEs can effectively enhance individual and organizational adaptability, perceived organizational support, and job embeddedness, thereby reducing turnover intentions

Table 1 Summary of Hypothesis Test Results

Research Hypothesis	Results
H1: Individual Adaptability and Organizational Adaptability have a positive effect on Perceived Organizational Support.	Accept
H2: Individual and organizational adaptability have a positive effect on Job Embeddedness.	Accept
H3: Individual and organizational adaptability have a negative effect on turnover intentions.	Accept
H4: Perceived Organizational Support have a negative effect on turnover intentions.	Accept
H5: Job Embeddedness. have a negative effect on turnover intentions.	Accept
H6: Individual Adaptability & Organizational Adaptability has an indirect influence on turnover Intentions through perceived organizational support.	Accept
H7: Individual Adaptability & Organizational Adaptability has an indirect influence on turnover Intentions through perceived organizational support.	Accept

V. DISCUSSION

➤ *H1: Individual Adaptability and Organizational Adaptability have a positive effect on Perceived Organizational Support.*

Individual adaptability and organizational adaptability play a crucial role in promoting a supportive organizational environment. Individual adaptability refers to employees' ability to adapt to changes, learn new skills, and cope with work challenges. Organizational adaptability refers to an organization's ability to evolve, innovate, and respond to external pressures. When employees exhibit high adaptability, they are more likely to perceive the organization as supportive because they feel more competent in meeting the demands of their roles. This perception is reinforced when organizations provide resources and opportunities that align with employees' adaptability needs, such as training programs and flexible work arrangements. Thus, highly adaptable employees feel valued and supported, enhancing their perceived organizational support (POS). POS is vital for improving job satisfaction, commitment, and overall employee well-being. The positive relationship between adaptability and POS is also influenced by organizational culture and leadership, which play important roles in fostering adaptability and support in the workplace.

➤ *H2: Individual Adaptability and Organizational Adaptability have a positive effect on Job Embeddedness.*

Job embeddedness refers to the extent to which employees feel connected to their job and organization through various factors, such as fit, links, and sacrifice. Individual and organizational adaptability positively influence job embeddedness by enhancing the alignment between employees' skills and organizational needs. When employees can adapt to new situations and continuously develop their abilities, they are more likely to find their roles

satisfying and aligned with their career goals. On the other hand, organizational adaptability ensures that the organization remains dynamic and responsive to change, providing a stable and supportive work environment for employees. This stability fosters deeper connections and a sense of belonging, which are key components of job embeddedness. Additionally, adaptable organizations can create opportunities for career development and growth, further strengthening employees' intention to stay. The interaction between individual adaptability and a supportive organizational environment enhances employees' embeddedness, reducing their turnover intentions.

➤ *H3: Individual Adaptability and Organizational Adaptability have a negative effect on Turnover Intentions.*

Turnover intentions refer to employees' plans or considerations to leave their current job. High levels of individual and organizational adaptability can significantly reduce turnover intentions. Employees who can adapt to job demands and organizational changes are more likely to feel competent and satisfied in their roles. This adaptability reduces stress and frustration associated with changes, thereby lowering the desire to seek other employment. Organizational adaptability also plays a crucial role in ensuring an engaging and supportive workplace, mitigating factors that typically drive turnover, such as job dissatisfaction and lack of career advancement opportunities. Furthermore, organizations that can effectively adapt to external pressures and internal demands can provide a more stable and positive work environment, further decreasing turnover intentions. By fostering a culture that values adaptability, organizations can retain talent and maintain a motivated and engaged workforce.

➤ *H4: Perceived Organizational Support has a negative effect on Turnover Intentions.*

Perceived Organizational Support (POS) is a key factor in reducing turnover intentions. When employees feel that their organization values their contributions and cares about their well-being, they are less likely to consider leaving. POS includes emotional support, recognition, and providing necessary resources to effectively complete tasks. High levels of POS lead to higher job satisfaction, loyalty, and a sense of belonging, all of which are negatively correlated with turnover intentions. Additionally, POS can strengthen employees' emotional and psychological attachment to the organization, making them more resilient to external job opportunities or personal dissatisfaction. Organizations that actively promote supportive policies, open communication, and recognition programs can significantly reduce turnover rates. By understanding and addressing employees' needs and concerns, organizations can create a supportive environment that lowers the likelihood of employees leaving.

➤ *H5: Job Embeddedness has a negative effect on Turnover Intentions.*

Job embeddedness is a multifaceted concept that captures the extent to which employees are integrated into their work and organization through fit, links, and sacrifice. High levels of job embeddedness indicate strong connections to the organization, alignment with personal and professional goals, and significant perceived costs of leaving. These factors collectively reduce turnover intentions. When employees feel deeply embedded in their work, they are less likely to seek other opportunities, as doing so would disrupt established connections and entail considerable personal and professional sacrifices. Organizations that enhance job embeddedness through a supportive work environment, career development opportunities, and strong team cohesion can effectively reduce turnover intentions. By investing in initiatives that strengthen employees' connections to their roles and the organization, employers can create a more stable and engaged workforce, thereby reducing the likelihood of turnover.

➤ *H6: Individual Adaptability and Organizational Adaptability have an indirect influence on Turnover Intentions through Perceived Organizational Support.*

The indirect influence of individual and organizational adaptability on turnover intentions is mediated by Perceived Organizational Support (POS). Adaptable employees are better able to cope with workplace changes and challenges, enhancing their perception of organizational support. When employees feel they can successfully handle their roles and adapt to new situations, they are more likely to view the organization as supportive. This perception of support further reduces turnover intentions by increasing job satisfaction and organizational commitment. Additionally, adaptable organizations can create a supportive environment through resources, training, and flexible policies. These support measures reinforce employees' sense of being valued, further decreasing turnover intentions. By promoting adaptability at both individual and organizational levels, companies can enhance POS, indirectly reducing turnover intentions and creating a more stable and engaged workforce.

➤ *H7: Individual Adaptability and Organizational Adaptability have an indirect influence on Turnover Intentions through Job Embeddedness.*

The indirect influence of individual and organizational adaptability on turnover intentions is also mediated by job embeddedness. Employees who exhibit high adaptability are more likely to find fit within their roles and organizational culture, enhancing their job embeddedness. Organizational adaptability ensures a dynamic and supportive work environment, further strengthening employees' embeddedness. When employees feel deeply connected to their work and organization through fit, links, and sacrifice, they are less likely to consider leaving. This strong sense of embeddedness reduces turnover intentions by making the prospect of leaving less attractive. Organizations that promote adaptability can enhance job embeddedness, indirectly reducing turnover intentions and creating a more committed and loyal workforce. By investing in adaptability at both individual and organizational levels, companies can foster a work environment that supports long-term employee retention.

VI. SUGGESTIONS FOR FURTHER RESEARCH

In future research, the specific mechanisms by which individual adaptability and organizational adaptability affect employees' perceived organizational support, job embeddedness, and turnover intentions should be explored in depth. Firstly, further analysis of how adaptability affects perceived organizational support in different contexts could be conducted, examining how individual and organizational adaptability influence employees' perception of organizational support in different types of organizational cultures and management styles. Research can also refine the components of adaptability, identifying which specific adaptability skills, such as technical adaptability, emotional adaptability, or social adaptability, have a greater impact on employees' perceived organizational support and job embeddedness. Secondly, future research should consider the multidimensional nature of job embeddedness, analyzing in depth how individual adaptability and organizational adaptability enhance job embeddedness by affecting employees' professional identity, team belongingness, and task engagement. This can help understand how adaptability promotes positive work attitudes and behaviors, providing scientific evidence for companies to develop employee retention strategies. Additionally, research on turnover intentions can be approached from a temporal dynamic perspective, examining how adaptability affects turnover intentions at different stages of employees' careers, identifying critical periods for adaptability improvement, and helping companies implement targeted support measures at various career stages. Moreover, further studies should explore perceived organizational support as a mediating variable between individual and organizational adaptability and turnover intentions, employing longitudinal research designs to empirically validate the robustness and generalizability of this mediating effect. Future research should also consider the moderating effects of external environment and industry characteristics, such as economic fluctuations and industry competition, on the relationship between adaptability and turnover intentions, aiding companies in formulating more flexible management strategies in different market environments. In summary, future research can utilize

multivariate statistical methods and big data analysis techniques to delve into the complex mechanisms of individual and organizational adaptability in organizational behavior, providing richer and more specific guidance for theoretical innovation and management practice.

➤ *New Knowledge*

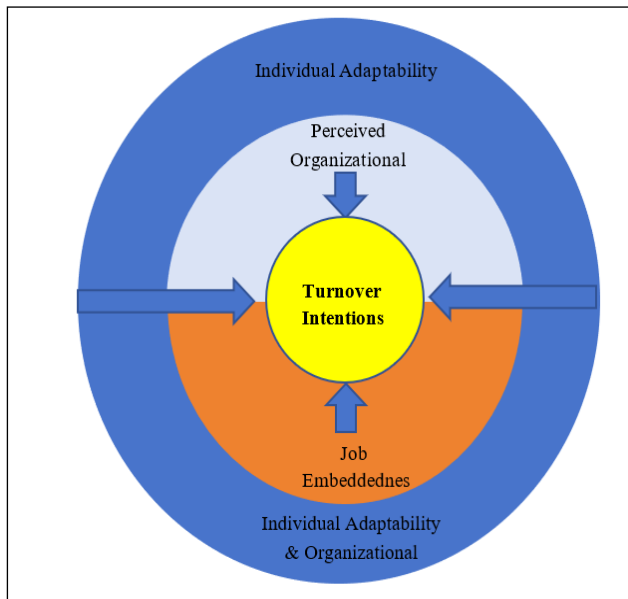


Fig.2 Research New Knowledge

In future research, the specific mechanisms by which individual adaptability and organizational adaptability affect perceived organizational support, job embeddedness, and turnover intentions should be explored in depth. Firstly, the role of adaptability on perceived organizational support in different contexts can be further analyzed, investigating how individual and organizational adaptability influence employees' perception of organizational support under various types of organizational cultures and management styles. Research should also detail the components of adaptability, identifying which specific adaptability skills, such as technical, emotional, or social adaptability, have a greater impact on perceived organizational support and job embeddedness.

Secondly, future research should consider the multidimensional composition of job embeddedness, analyzing how individual and organizational adaptability enhance job embeddedness through their effects on employees' professional identity, team belongingness, and task involvement. This will not only help to understand the positive influence of adaptability on employees' attitudes and behaviors but also provide scientific evidence for companies to formulate employee development and retention strategies.

Furthermore, research on turnover intentions can be approached from a temporal dynamic perspective, examining how adaptability affects turnover intentions at different stages of an employee's career, identifying the critical periods during which improving adaptability is most beneficial. This can help companies to implement targeted support measures at different stages of employees' careers. Additionally, further studies on

perceived organizational support as a mediating variable between individual and organizational adaptability and turnover intentions can adopt a longitudinal research design to empirically verify the robustness and generalizability of this mediating effect.

Future research should also consider the influence of external environment and industry characteristics, such as economic fluctuations and industry competition, on the relationship between adaptability and turnover intentions. This can assist companies in formulating more flexible management strategies in different market environments.

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