

Where humor prevails, entrepreneurship never ends: the role of leader's positive humor on employee intrapreneurship

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Abstract

Purpose – In the increasingly competitive market, employee intrapreneurship characterized by innovation, has become an important path for enterprises to acquire core competitiveness. Based on the social identity theory, the purpose of this paper was to empirically analyze the mechanism and boundary conditions of the relationship between leader's positive humor and employee intrapreneurship.

Design/methodology/approach – Based on the social identity theory, a questionnaire survey of 310 innovation workers of information service enterprises in Zhejiang Province of China was used to test the moderated mediation model. The authors used SPSS and AMOS to further verify the research model through structural equation modeling and multiple regression analysis.

Findings – The results showed that leader's positive humor positively promoted employee intrapreneurship, and perceived insider status played a partial mediating role between them. Affect-based trust and leader encouragement of creativity positively moderated the relationship between leader's positive humor and perceived insider status, perceived insider status and employee intrapreneurship, respectively. Furthermore, affect-based trust and leader encouragement of creativity also moderated the mediating role of perceived insider status.

Originality/value – This study further deepens the influencing factors and mechanism of employee intrapreneurship, helps to provide a theoretical basis for organizations to effectively guide employees to carry out intrapreneurship.

Keywords Leader's positive humor, Affect-based trust, Perceived insider status, Leader encouragement of creativity, Employee intrapreneurship

Paper type Research paper

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1. Introduction

The dynamically complex market environment and rapidly iterating technological innovations pose more severe challenges to the survival and development of enterprises. Employee intrapreneurship, characterized by proactivity, innovation and risk-taking, has gradually become an important strategy for many enterprises to cope with business challenges (Wang and Mao, 2021; Finkle, 2012). Different from the previous organizational entrepreneurship, employees who implement employee intrapreneurship are willing to take risks. They transform from passive recipients of entrepreneurship into active change-seekers, possessing more autonomy and creativity. This has a significant impact on enterprises' enhancement of organizational capabilities and innovation performance (Xin, 2014; Usman *et al.*, 2021). To better meet the challenges of the market and achieve high-performance development of the organization, how to promote employee intrapreneurship has become a common dilemma faced by enterprise leaders.

Although a number of studies have investigated the impact of leaders on employee intrapreneurship (Zhou *et al.*, 2024; Gorgievski *et al.*, 2023), these investigations have largely focused on issues of leader motivation and attitude toward employee intrapreneurship (Jia *et al.*, 2021). Less attention has been paid to leadership styles while dealing with employee intrapreneurship. More recently, several scholars have noticed that positive leadership styles are important factors in motivating employee intrapreneurship. For example, platform leadership and inclusive leadership have been proven to significantly enhance employee intrapreneurship (Zhou *et al.*, 2024; Xu *et al.*, 2023). However, noticeably missing from research attention has been leader's humor, especially leader's positive humor, despite suggestions by researchers that scholars should focus greater effort on leadership approaches that can address the elemental underpinnings of employee intrapreneurship (Galloway *et al.*, 2015).

Humor is the ability to combine things that are completely unrelated to each other artfully (Lee, 2015). This very ability also constitutes a crucial foundation for employees to embark on intrapreneurship within the organization. Leader's positive humor refers to leader entertaining subordinates by telling funny stories and making good-natured jokes to provoke positive emotional response from them (Huang *et al.*, 2017). On the one hand, leaders encourage employees to "think out of the box" through positive and humorous language and behaviors. On the other hand, leaders convey more support and understanding from the organization through positive humor. This not only shortens the interpersonal distance with employees but also further enhances employees' psychological security (Ford, 2000). When facing the risks and challenges of intrapreneurship, employees do not need to worry that they will be severely punished by the organization in case of failure in their entrepreneurial endeavors, and thus they can plunge into actions more resolutely (Dai *et al.*, 2023).

Although leader's humor has been well studied and applied abroad, in the organizational context of China, leaders are often expected to be serious and earnest. What's more, joking with employees may be regarded as a sign of cynicism or mockery. Therefore, the application and research on leader's humor in Chinese organization still need further supplementation. In view of this, this paper focuses on employee intrapreneurship, a crucial entrepreneurial behavior of employees within organizations. Taking the organizational context in China as the research background, it further explores the relationships among leader's positive humor, perceived insider status and employee intrapreneurship from the perspective of leader's positive humor.

In building a model linking leader's positive humor and employee intrapreneurship, we further posited the mediating mechanism with high potential to help explain linkage between leader's positive humor and employee intrapreneurship: perceived insider status. Perceived

insider status is the self-awareness of employees as members of an organization to obtain personal space and the degree of acceptance by the organization (Masterson and Stamper, 2003). It measures employee's sense of identity and belonging to the organizational identity. Through leader's positive humor, employees can feel care and kindness from their leaders. According to the social identity theory, employees are more likely to regard themselves as "insiders" of the leaders and the organization (Brown, 2000), thus obtaining stronger insider status. Employees with stronger perceived insider status will repay their leaders and the organization through positive organizational behaviors (Lapalme *et al.*, 2009), and employee intrapreneurship is precisely an important way for them to make such repayments.

Most of the existing studies support the positive role of leader's positive humor on employees' innovative behaviors within the organization. However, some scholars have pointed out that the effect of leader's positive humor on employees is not consistent under different situations (Lee, 2015). Therefore, it is quite necessary to study the boundary conditions between leader's positive humor and employee intrapreneurship. Employees' interpretations of leader's attitude and behavior are largely depended on their affect-based trust level in leaders. When employees have a high level of affect-based trust in their leaders, leader's positive humor can more easily narrow the distance between them and the employees, enabling the employees to define themselves as "insiders" of the leaders and the organization. Meanwhile, leader encouragement of creativity measures the extent to which leaders attach importance to creativity and actively participate in the creative process (Zhang and Bartol, 2010). When the level of leader encouragement of creativity is high, employees become aware of the leaders' recognition and encouragement of creative work. As a result, they will be more motivated to translate their perception of being insiders into intrapreneurial behaviors.

Overall, based on the social identity theory and taking leader's positive humor as the research perspective, this paper introduced perceived insider status as the mediating variable and affect-based trust and leader encouragement of creativity as the moderating variables. Our purpose was and is to build theory by theoretically and empirically analyze the mediating mechanism and boundary conditions of the effect of leader's positive humor on employee intrapreneurship by using enterprise samples from China. This was in answer to calls for a more comprehensive understanding of leader's positive humor as it relates to employee intrapreneurship.

The main content arrangements of this paper were as follows: By systematically reviewing relevant concepts and theories, sorted out the interrelationships among various variables and put forward hypotheses; then introduced the research methods and the sources of survey data; tested the research hypotheses one by one through empirical analysis; finally draw research conclusions and analyzed the research significance and deficiencies.

2. Literature review and assumptions

Research on humor is divided into two levels: individual and team, mainly focusing on issues such as leader humor, team humor and organizational humor (Jing and Zhou, 2019). As scholars have introduced humor into the study of organizational behavior, it has gradually attracted widespread attention and importance among researchers. Depending on the different modes of use and outcomes, humor can be divided into two types: positive humor and negative humor (Decker and Rotondo, 2001). The study of leader's positive humor is an important direction in humor research, and many scholars have analyzed its significant impact on employee behavior in organizations from the perspective of the process of positive humor (Shi *et al.*, 2017). Leaders with positive humor please their subordinates by telling

funny jokes and making amusing actions, thereby eliciting positive emotional responses from their subordinates.

Existing research has shown that leaders who frequently use positive humor can not only enhance employee job satisfaction and engagement but also strengthen employee creativity, further improving organizational performance (Goswami *et al.*, 2016; Decker, 1987). In contrast, negative leader humor, through sarcasm, ridicule and mockery, can trigger strong negative emotions and feelings among subordinates, leading to adverse interpersonal interaction outcomes. Studies have found that these two different types of humor have distinctly different mechanisms and pathways in influencing employee organizational behavior. The difficulty of exploring both within the same research framework is considerable, hence this paper focuses on the positive type of humor.

Research on internal entrepreneurship currently primarily focuses on organizational entrepreneurship and entrepreneurial orientation, with less attention paid to employee intrapreneurship at the individual level, and the research findings are also relatively scattered (Lang and Lee, 2010). Employee intrapreneurship is a commercial activity initiated from the bottom up by individuals within their organizations, belonging to the intersection of research topics in employee behavior and entrepreneurial management within organizations. Mainly characterized by organizational context-dependence, bottom-up initiative and activity innovation, it has distinct differences from employee intraorganizational innovative behavior and independent entrepreneurial behavior (Chen *et al.*, 2021).

Research on the connotation of employee intrapreneurship mainly exists in two forms: behaviorism and teleology. Behaviorism emphasizes that proactivity, risk-taking and innovation are the main characteristics of employee intrapreneurship (Zhang *et al.*, 2020). Teleology, on the other hand, considers employee intrapreneurship as employees creating new ventures and achieving strategic renewal for the benefit of the organization (Gawke *et al.*, 2019). Neessen *et al.* (2019) integrated perspectives from both behaviorism and teleology. They posited that employee intrapreneurship was a process, where employees, through initiatives, innovation and risk-taking, identified and capitalized on opportunities to innovate products, update strategies and launch new ventures for the organization. This, in turn, enhanced the organization's core competitiveness and performance.

2.1 The relationship between leader's positive humor and employee intrapreneurship

A comparative study of the essence of humor and employee intrapreneurship reveals that they share similar internal mechanism. The premise of humor formation is to combine originally unrelated things, thereby creating cognitive dissonance (Edú Valsania *et al.*, 2016). Employee intrapreneurship, as an entrepreneurial process, is about employees reorganizing innovative resources within the organization and creating new ventures from scratch, and there is an inherent consistency between these two. The Benign violation theory of humor (BVT) suggests that violating some established rules in the organization can be beneficial and should be supported and advocated by the organization (Cheng and Liu, 2017). Employee intrapreneurship, as an entrepreneurial process within the organization, needs to go through the stages of opportunity identification, opportunity assessment and idea implementation involved in general entrepreneurial activities. It also requires breaking organizational routines and reallocating and recombining organizational resources to form new products, new ideas and new services (McGraw and Warren, 2010).

Leadership is one of the most important organizational factors affecting employee intrapreneurial behavior. Existing research has confirmed that positive leadership such as transformational leader, authentic leader and platform leader can all positively predict employee intrapreneurial behavior (Afsar *et al.*, 2017; Edú Valsania *et al.*, 2016;

Finkle, 2012). Unlike other leadership styles, leaders with positive humor skillfully resolve contradictions and embarrassments in the process of organizational interpersonal communication through interesting words and actions. It helps to improve employees' positive emotions and build a good leader–member exchange relationship (Cann *et al.*, 2014).

According to the social exchange theory, a good leader–member exchange relationship can enhance employees' psychological safety and thus alleviate employees' concerns about the potential adverse effects of entrepreneurial failure, making it an important predictive variable for employee intrapreneurship. In a high-quality leadermember exchange relationship, employees feel the leader's friendliness and goodwill from positive humor. To reciprocate the leader and the organization, employees will actively try behaviors that are beneficial to the organization and strive to contribute to the organization. Employee intrapreneurship is the active behavior of employees in seeking and identifying entrepreneurial opportunities within the organization and putting ideas into practice. Therefore, this paper proposes the following hypothesis:

H1. Leader's positive humor positively promotes employee intrapreneurship.

2.2 The mediating role of perceived insider status

Perceived insider status is the self-awareness of employees as members of an organization to obtain personal space and the degree of acceptance by the organization. It measures the extent to which employees consider themselves as members of the organization's in-group (Masterson and Stamper, 2003). Perceived insider status reflects employees' sense of identification with and belonging to the organization, providing a fresh perspective for exploring the relationship between employees and the organization, as well as positive employee behaviors within the organization (Yin *et al.*, 2012). Compared to employees with low perceived insider status, those with high perceived insider status consider themselves as “insiders” of the leader and organization, feeling a sense of responsibility and obligation to promote the organization's development toward a better direction (Yang and Yang, 2021) and guide their actual actions accordingly.

Leaders with positive humor skillfully resolves contradictions and embarrassments in the process of organizational interpersonal communication and alleviates workplace pressure through interesting words and actions. It further promotes employees' positive identification with the leader and organization (Duncan, 1982). According to social identity theory, employees continuously define and categorize themselves by comparing with groups or others to reduce uncertainty, maintain a high level of self-esteem and satisfy the desire for self-enhancement (Gao and Zhao, 2014).

On the one hand, as a positive form of organizational communication, leaders create relaxed and pleasant working atmosphere for employees through positive humor, while sharing corporate culture, values, information and opportunities with employees. Employees further deepen their understanding and recognition of the organization, form a more profound acceptance and internalization of the organizational culture and values. Through this, they develop a strong sense of responsibility and mission toward the organization (Wang and Zhao, 2020). To further maintain organizational identification, employees closely link their fate with the growth and development of the organization, defining themselves as insiders of the organization.

On the other hand, leaders use positive humor to break down interpersonal barriers in the organization that are formed by formal hierarchy or status (Locke, 1996), further reducing the interpersonal distance caused by differences in rank (Rosen, 1988). Employees can find

more common topics with leaders, gain an in-depth understanding of the leader's personality and qualities and further strengthen their identification with a good relationship with the leader. Social identity theory suggests that identification helps employees establish psychological connection with the target object to achieve a sense of purpose and belonging (Gao and Zhao, 2014).

Through positive humor, employees further strengthen their positive identification with the leader, developing stronger internal aspiration and emotional attachment (Romero and Cruthirds, 2006). Employees not only wholeheartedly follow their leaders, highly identify with their personalities, values and behavior patterns, but also develop a specific emotional dependence. They classify themselves as insiders of the leaders and the organization based on their relationships with the leaders. Therefore, we believe that leader's positive humor has a positive effect on enhancing employees' perceived insider status.

Meanwhile, employee perceptions of their internal status within the organization can directly affect their work attitudes and behaviors (Guerrero *et al.*, 2013). Especially in the organizational context of China, the identity of being an insider conveys the signal that "one is an important part of the organization," which can significantly influence employee behavior (Wang and Kim, 2013). Employee intrapreneurship is a form of proactive organizational behavior where employees seek out and identify entrepreneurial opportunities within the organization and put them into practice (Jiang *et al.*, 2024). The innovative and adventurous characteristics of intrapreneurship require employees to have strong internal motivation to drive them. Therefore, we believe that when employees regard themselves as "insiders" of the organization, they will be more proactive in launching intrapreneurial activities that are conducive to the long-term development of the organization.

In addition, employees with a strong sense of insider status perceive the attention and support from the leader and organization. They believe even if intrapreneurship fails, they do not have to worry about threats and punishment to their career trajectory (Pundt and Hermann, 2015). As an entrepreneurial activity initiated from the bottom up and actively carried out by employees within the organization, employee intrapreneurship often comes with a high degree of uncertainty and riskiness. Therefore, when employees define themselves as insiders of the organization, they possess a stronger sense of psychological security. This leads them to engage in a higher degree of self-empowerment, proactively attempt innovative ideas and practices and intensify entrepreneurial behaviors within the organization (Cooper, 2008). Based on the above discussion, we believe that employees' perceived insider status can promote employee intrapreneurship. Thus, this paper proposes the following hypothesis:

- H2. Perceived insider status mediates the relationship between leader's positive humor and employee intrapreneurship.

2.3 The moderating role of affect-based trust

Trust is a psychological state in which an individual willingly exposes their vulnerabilities based on positive expectations of others' intentions and behaviors without fear of being exploited (Wei and Long, 2009). Affect-based trust, which is based on mutual care and attention, reflects the specific emotional connections between the trusting parties (Rousseau *et al.*, 1998). As mentioned earlier, leader's positive humor has positive effect on employees' perceived insider status, but the manifestation of this positive effect is influenced by situational factors, one of which is the relationship between employees and leaders.

In the organizational context of high collectivism and power distance in China (Hofstede, 1993), the cognition and behavior of leaders are far more important to employees than any

other organizational system (Jia *et al.*, 2020). The level of affect-based trust that employees have toward their leaders directly affects their interpretation of leadership and behaviors. As a highly directed psychological mechanism, the level of employees' affect-based trust in the organizational environment, especially toward leaders, influences a series of perceptions, attitudes and behaviors, playing an important role in explaining leadership effectiveness (Li *et al.*, 2006).

Employees' interpretations of their leaders' attitudes and behaviors largely depend on their level of affect-based trust in those leaders, and the same leader's humor can be understood quite differently due to varying levels of this trust (Tremblay, 2017). When employees have a high level of affect-based trust in their leaders, they are likely to view the leader's positive humor as affirmation and encouragement. Employees who perceive positive humor from their leaders feel the care and goodwill from both the organization and the leader, making it easier for them to consider themselves as "insiders" of the leader and important members of the organization, thus gaining stronger sense of insider status. In such cases, employees are more likely to integrate organizational resources into their work roles and performance, leading to positive subsequent responses.

On the contrary, when employees do not have sufficient affect-based trust in their leaders and view them as unreliable, even positive humor may be seen as frivolous or insincere (Kim *et al.*, 2016). Resources are then more likely to be used for self-protection and defense against the leader, leading to feelings of insecurity and anxiety within the organization, making it difficult for employees to develop a sense of insider status. Therefore, this paper proposes the following hypothesis:

H3a. Affect-based trust positively moderates the positive impact of leader's positive humor on employees' perceived insider status.

Integrating *H2* and *H3a*, we further infer that affect-based trust can moderate the mediating role of perceived insider status. When employees have a high level of affect-based trust in their leaders, those who have developed strong sense of insider status due to the leader's positive humor can further enhance their identification with the organization and the leader through positive communication with the leader. This enhancement leads employees to strive in the direction expected by the leader and the organization, actively engaging in employee intrapreneurship for the long-term development of the organization.

Conversely, when employees have a low level of affect-based trust in their leaders, negative emotional experiences can reduce employees' positive identification with the leader and the organization (Tu *et al.*, 2017). Even if the leader's positive humor promotes a high level of insider status among employees, they may forgo engaging in employee intrapreneurship due to concerns about potential negative impacts on themselves. Therefore, we propose the following hypothesis:

H3b. Affect-based trust positively moderates the mediating effect of perceived insider status between leader's positive humor and employee intrapreneurship.

2.4 The moderating role of leader encouragement of creativity

Leader encouragement of creativity measures the extent to which leaders value creativity and actively participate in processes that may yield creative outcomes within an organization (Zhang and Bartol, 2010). Research indicates that leader's emphasis on and encouragement of creativity is an important source of organization's innovative climate (Dunegan *et al.*, 1992). It can promote employees to focus their attention and strive to engage in innovative

work and activities (Scott and Bruce, 1994; Srull and Wyer, 1980). In organizations with a rich atmosphere of leader encouragement of creativity, employees can clearly perceive leader's emphasis and expectations for creativity in their daily work. This makes it easier for them to transform their perception of being insiders into proactive innovative organizational behaviors, thereby enhancing employee intrapreneurship.

According to the connotation of leader encouragement of creativity, when the level of leader encouragement of creativity in an organization is high, leaders themselves will also actively participate in creative work, paying more attention to the process of creativity (Li *et al.*, 2019). It allocates more organizational resources to creative activities, provides employees with dual support in terms of resources and manpower. With this support, employees feel the organization's encouragement and advocacy for innovation, making it easier for them to transform their insider perception into innovative efforts, thus improving the level of employee intrapreneurship.

Leader encouragement of creativity is conducive to fostering high-level innovative atmosphere within the organization (Paglis and Green, 2002). Innovation activities in an organization are fraught with uncertainty and risk, and leader's encouragement of creativity conveys the important signal that even if entrepreneurial endeavors fail, they can be understood and forgiven by the leader and the organization (West, 1997). Thereby, it provides employees with strong sense of psychological safety. When the degree of leader encouragement of creativity is high, in response to the positive feedback toward the leader and the organization, employees are more likely to manifest their insider perception in the form of more enthusiastic innovation attempts and a higher level of entrepreneurial activities.

On the contrary, when the level of leader encouragement of creativity in the organization is low, employees cannot perceive the importance that the leader and the organization place on innovation activities. Even if employees consider themselves important members of the organization, they cannot transform this perception into intrapreneurial activities. Therefore, leader encouragement of creativity plays a positive moderating role between perceived insider status and employee intrapreneurship. That is to say, when leader encouragement of creativity in the organization is high, the promoting effect of employee perceived insider status on employee intrapreneurship is enhanced; on the contrary, when leader encouragement of creativity is low, the promoting effect of perceived insider status on employee intrapreneurship is correspondingly weakened. Based on this, the paper proposes the following hypothesis:

H4a. Leader encouragement of creativity positively moderates the positive impact of perceived insider status on employee intrapreneurship.

Integrating *H2* and *H4a*, this study further infers that leader encouragement of creativity can moderate the mediating role of perceived insider status. When leader encouragement of creativity in an organization is high, employees who have a higher perception of insider status, triggered by leader's positive humor, can clearly feel the leader's support and emphasis on innovative activities in their interactions with leaders and colleagues (Li *et al.*, 2019). Therefore, to better align with the leader's expectations and achieve the long-term development of the organization, employees focus their time and energy on innovative activities and actively engage in employee intrapreneurship.

Conversely, when the level of leader encouragement of creativity is low, employees do not perceive leader's emphasis on innovative activities in their daily work. Employee intrapreneurship, as an entrepreneurial behavior within the organization, often comes with significant uncertainty and risk (Chen *et al.*, 2021). To avoid unnecessary risks, employees

may choose to refrain from proactively implementing intrapreneurship. Based on this, the paper proposes the following hypothesis:

H4b. Leader encouragement of creativity positively moderates the mediating effect of perceived insider status between leader's positive humor and employee intrapreneurship.

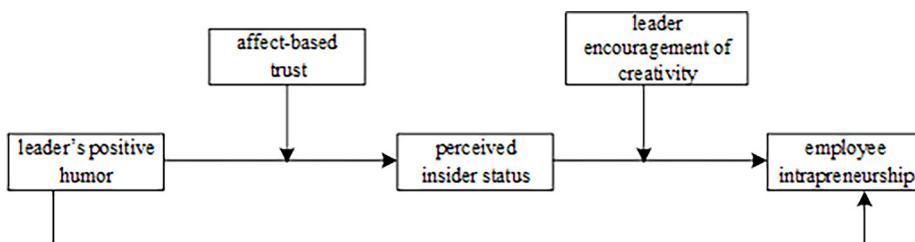
Therefore, based on the aforementioned approach, this study adopts the social identity theory as a significant theoretical foundation, introduces the perception of being an insider from the perspective of leader–employee interaction as an individual factor, affect-based trust and leader encouragement of creativity as situational factors, to construct a moderated mediation model. The study empirically analyzes the mechanisms and conditions of the influence of leader's positive humor on employee intrapreneurship. The theoretical model is depicted in Figure 1.

3. Research methods

3.1 Data collection

The data for this study was collected from a large information service company based in Hangzhou, Zhejiang, which has long been engaged in internet-related businesses such as enterprise e-commerce hosting, online store decoration and information services. The company operates multiple subsidiaries within Zhejiang Province, and employees are involved in a significant number of innovative activities in their daily work. To enhance the objectivity and authenticity of the survey data and to prevent or mitigate common method bias, we conducted a two-stage questionnaire survey between June and September 2023. In the first phase, we measured the demographic characteristics of employees and leaders, leader's positive humor and the level of affect-based trust. Two months later, in the second phase, we mainly measured the employees' perceived insider status, leader encouragement of creativity and employee intrapreneurship.

We conducted a survey using questionnaires among employees from the company's headquarters, specifically from the product design, market promotion and service innovation departments, as these departments' daily work involves many innovative activities that align well with the theme of this study. With the assistance of the company's human resource department, we obtained the complete list of employees from the aforementioned three departments and randomly selected 500 employees to distribute Questionnaire 1. In the first phase, a total of 500 employee questionnaires were distributed, and after excluding invalid



Source(s): Figure created by authors

Figure 1. The theoretical model

ones, a total of 382 valid questionnaires were collected. In the second phase, Questionnaire 2 was distributed to the 382 employees who completed valid questionnaires in the previous phase. After excluding incomplete and invalid responses, a total of 310 valid questionnaires were ultimately collected, with a valid response rate of 81.15%.

3.2 Measures

The measurement scales used in this study were all derived from well-established scales from foreign research, which had been used and validated by scholars at home and abroad multiple times, demonstrating high reliability and validity. Two bilingual scholars within the team were responsible for translating and back-translating all variable items to ensure the accuracy and effectiveness of the language expression. Except for control variables, all variables were measured using a seven-point Likert scale, with numbers 1–7 representing the degree of agreement with the questionnaire items, where 1 indicated “strongly disagree” and 7 indicated “strongly agree.”

Measurement of leader’s positive humor was based on the scale developed by [Thorson and Powell \(1993\)](#), which was revised to form a total of seven measurement items, with a representative item such as “The way my leader speaks is always amusing.”

Perceived insider status was measured according to the scale developed by [Stamper and Masterson \(2002\)](#), which includes a total of six items, consisting of three positive and three negative items, with representative items such as “I feel that my job is very important” and “The company makes me believe that I am one part of it.”

Employee intrapreneurship was measured based on the research of [Gawke et al. \(2019\)](#), including two dimensions: strategic renewal and business innovation. Since the research subjects of this paper were front-line employees who do not directly influence organizational strategy, we used four items of the business innovation dimension to measure employee intrapreneurship, with a representative item such as “I actively participate in the company’s activities to establish new businesses.”

Affect-based trust was measured using the leader affect-based trust scale from the research of [Yang and Mossholder \(2010\)](#), which includes five items, with a representative item such as “I believe I can openly communicate my true thoughts with my leader.”

We also drew on the six-item scale developed by [Zhang and Bartol \(2010\)](#) to measure the variable of leader encouragement of creativity, with a representative item such as “My leader values the ability to do creative work.”

Existing research had indicated that demographic characteristics such as gender, age and education can also influence employees’ behaviors within an organization. Therefore, this study selected gender, age, education and years of service as control variables. Age was categorized into four groups: under 25 years old, 26–30 years old, 31–35 years old and above 35 years old, represented by the numbers 1–4, respectively. Gender was a dummy variable coded “0” for male and “1” for female. Education was also represented by numbers 1–4 for below high school, associate degree, bachelor’s degree and postgraduate education or higher, respectively. Years of service were directly represented by numbers indicating time an employee had worked at the current company.

3.3 Analysis

The employees who participated in our survey were relatively balanced in gender. Out of 310 samples, there were 152 males and 158 females, with males accounting for 48.7%. In terms of age structure, the employees were generally young, with 61.6% being under 25 years old, 23.4% between 26 and 30 years old, 10.3% between 31 and 35 years old and 5.1% above 36 years old. Regarding education, the percentages for below high school, associate degree,

bachelor's degree and postgraduate education or above were 2.9%, 61.2%, 31.4% and 3.8%, respectively. The average tenure of employees was three years.

The study adopted Cronbach's α coefficient as the standard for reliability assessment. According to the results of the factor analysis (see Table 1), the α coefficients for the variables of leader's positive humor (HU), affect-based trust (TR), perceived insider status (IS), leader encouragement of creativity (EC) and employee intrapreneurship (EI) were all greater than 0.7, with the smallest being 0.887, indicating high internal consistency of the scales. Furthermore, the minimum factor loading was 0.717, which was greater than 0.5, the composite reliability (CR) value was a minimum of 0.889, greater than 0.7, and the average variance extracted (AVE) was a minimum of 0.632, greater than 0.5. All indicators were above the acceptable threshold, demonstrating that the five constructs have good convergent validity.

The study used Amos 22 to conduct a confirmatory factor analysis on the five core variables involved in the model to test their discriminant validity. The data in Table 2 showed that the five-factor model had the best fit indices, where $\chi^2 = 707.397$, $df = 340$, $\chi^2/df = 2.081$, which is less than 3; CFI = 0.943, greater than 0.9; IFI = 0.944, greater than 0.9; TLI = 0.932, greater than 0.9; RMSEA = 0.059, less than 0.08. The fit of the five-factor model was significantly better than that of the other four alternative models. This indicated that the variables had good discriminant validity, which was conducive to further research work.

Table 3 provided the means (mean), standard deviations (SD) and correlation coefficients for the variables within the model, with the bolded numbers on the diagonal indicating the arithmetic square roots of each variable's AVE. As can be seen from Table 3, the square roots

Table 1. Factor analysis results

Variables	Minimum factor loadings	Cronbach's α	CR	AVE
HU	0.719	0.925	0.925	0.638
TR	0.719	0.906	0.907	0.662
IS	0.717	0.910	0.911	0.632
EC	0.751	0.942	0.944	0.740
EI	0.769	0.887	0.889	0.667

Note(s): HU = Leader's positive humor; TR = affect-based trust; IS = perceived insider status; EC = leader encouragement of creativity; EI = employee intrapreneurship

Source(s): Table created by authors

Table 2. Confirmatory factor analysis results

Model	Factors	χ^2	df	χ^2/df	CFI	IFI	TLI	RMSEA
Five-factor model	HU, TR, IS, EC, EI	707.397	340	2.081	0.943	0.944	0.932	0.059
Four-factor model	HU + TR, IS, EC, EI	1759.760	344	4.064	0.780	0.783	0.741	0.115
Three-factor model	HU + TR, IS, EC + EI	2690.360	347	7.753	0.637	0.640	0.575	0.147
Two-factor model	HU + TR, IS + EC + EI	3391.716	349	9.718	0.528	0.532	0.451	0.167
Single-factor model	HU + TR + IS + EC + EI	4562.709	350	13.036	0.347	0.352	0.242	0.197

Note(s): HU = Leader's positive humor; TR = affect-based trust; IS = perceived insider status; EC = leader encouragement of creativity; EI = employee intrapreneurship; "+" signified the aggregation into a single factor

Source(s): Table created by authors

Table 3. Variable descriptive statistics and correlation coefficient matrix (N = 310)

	Mean	SD	1	2	3	4	5	6	7	8	9
1GE	0.510	0.501	1								
2YE	1.610	0.917	-0.045	1							
3ED	2.371	0.629	0.035	0.473***	1						
4WY	2.934	2.707	-0.109	0.698***	0.340***	1					
5HU	5.416	1.028	-0.133**	-0.253***	-0.179**	-0.248***	0.799				
6TR	6.061	0.865	-0.051	-0.150**	-0.166**	-0.167**	0.288***	0.814			
7IS	5.581	0.923	0.084	0.071	0.026	0.003	0.284***	0.252***	0.795		
8EC	5.352	1.106	-0.70	0.014	0.015	-0.087	0.340***	0.242***	0.279***	0.860	
9EI	4.499	1.059	-0.076	-0.014	-0.075	-0.094	0.371***	0.120**	0.437***	0.197***	0.817

Note(s): (1) GE = Gender; YE = age; ED = education; WY = work experience; HU = leader's positive humor; TR = affect-based trust; IS = perceived insider status; EC = leader encouragement of creativity; EI = employee intrapreneurship; (2) * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; (3) The italicized numbers on the diagonal were the square roots of average variance extracted (AVE)

Source(s): Table created by authors

of the AVE for the correlation coefficients were all greater than the correlation coefficients between the variables in the same row or column, which once again confirmed that there is a high degree of discriminant validity among the variables.

3.4 Results

This study used multiple regression analysis using SPSS 22 software to test the model hypotheses, with the regression results presented in Table 4. Following the mediation effect testing method recommended by Baron and Kenny (1986), we examined the mediating role of perceived insider status. First, we tested whether the independent variable, leader's positive humor, had a positive effect on the dependent variable employee intrapreneurship. As shown in Model 4 of Table 4, the regression coefficient β for leader's positive humor on employee intrapreneurship was 0.388, with a significance level $p < 0.001$, indicating a significant positive effect of leader's positive humor on employee intrapreneurship, thus validating *H1*.

Second, we tested whether the independent variable, leader's positive humor, had a significant positive effect on the mediator variable, perceived insider status. According to Model 2, the regression coefficient β for leader's positive humor on perceived insider status was 0.343, with a significance level $p < 0.001$, indicating a significant positive effect of leader's positive humor on perceived insider status.

In the third step, both the independent variable (leader's positive humor) and the mediator variable (perceived insider status) were included in the regression equation to perform a simultaneous regression analysis on the dependent variable. As shown in Model 6, when both the independent and mediator variables were included in the regression equation, the positive effect of perceived insider status on employee intrapreneurship remained significant ($\beta = 0.362$, $p < 0.001$), but the positive effect of leader's positive humor on employee intrapreneurship was reduced compared to before ($\beta = 0.263 < 0.388$, $p < 0.001$). This indicated that perceived insider status indeed played a partial mediating role between leader's positive humor and employee intrapreneurship, thus *H2* was supported.

To more accurately verify the mediating role of perceived insider status, we used the Bootstrap mediating test using the PROCESS macro. This method does not require the assumption that the indirect effect of the sample follows a normal distribution, and simulation studies have shown that this method is more effective than traditional methods. We used unstandardized coefficients and the Bootstrap method, set the sample size to 5,000

Table 4. Mediation effect test

Variables	Perceived insider status		Model 3	Employee intrapreneurship		
	Model 1	Model 2		Model 4	Model 5	Model 6
GE	0.081	0.134**	-0.086	-0.026	-0.122**	-0.075
YE	0.133	0.174**	0.134	0.181**	0.075	0.118
ED	-0.008	0.015	-0.072	-0.046	-0.068	-0.051
WY	-0.078	-0.024	-0.173	-0.111	-0.138*	-0.103
HU		0.343***		0.388***		0.263***
IS					0.444***	0.362***
R^2	0.016	0.121	0.026	0.161	0.221	0.276
F	1.225	8.401***	2.053*	11.675***	17.215***	19.278***

Note(s): (1) GE = Gender; YE = age; ED = education; WY = work experience; HU = leader's positive humor; IS = perceived insider status; (2) * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source(s): Table created by authors

and selected a 95% confidence interval (95% CI). If the 95% CI does not contain 0, it indicates that the indirect effect is significant. We incorporated the main variables and control variables into the macro, set the Bootstrap random sampling to 5,000 times, and the running results were presented in Table 5.

As can be seen from Table 5, both the direct effect and the indirect effect of perceived insider status were significant. The indirect effect was 0.128, with a 95% CI of [0.026, 0.159], did not include 0. Thus, it can be concluded that perceived insider status has a partial mediating effect in the model, and H2 was once again verified and supported.

To examine the moderating effect of affect-based trust, the variables of leader's positive humor and affect-based trust were first centered. A multiplicative term was then created for leader's positive humor and affect-based trust. Using the hierarchical regression analysis method in SPSS software, the hypotheses were tested to examine the moderating effects of both affect-based trust and leader encouragement of creativity. The results were shown as Table 6.

As can be seen from Model 9 in Table 6, the multiplicative term of leader's positive humor and affect-based trust had a significant positive effect on perceived insider status

Table 5. Bootstrap test results for the mediating role of perceived insider status

Variable	Effect	SE	ULCI	95%CI LLCI
<i>Perceived insider status</i>				
Indirect effect	0.128	0.028	0.081	0.192
Direct effect	0.271	0.056	0.161	0.382

Note(s): N = 5,000, confidence interval 95%

Source(s): Table created by authors

Table 6. Moderation effect test results

Variables	IS			EI		
	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
GE	0.081	-0.139**	0.133**	-0.086	-0.115**	-0.099*
YE	0.133	0.171**	0.182**	0.134	0.069	0.079
ED	-0.008	0.035	0.027	-0.072	-0.070	-0.082
WY	-0.078	-0.007	-0.003	-0.173**	-0.127*	-0.124*
HU		0.292***	0.302***			
TR		0.205***	0.245***			
IS					0.428***	0.392***
EC					0.058	0.084*
HU*TR			0.141**			
IS*EC						0.204***
R ²	0.016	0.159	0.177	0.026	0.224	0.264
F值	1.225***	9.570***	9.286***	2.053***	14.554***	15.460***

Note(s): (1) GE = Gender; YE = Age; ED = education; WY = work experience; HU = leader's positive humor; TR = affect-based trust; IS = perceived insider status; EC = leader encouragement of creativity; EI = employee intrapreneurship; (2) * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source(s): Table created by authors

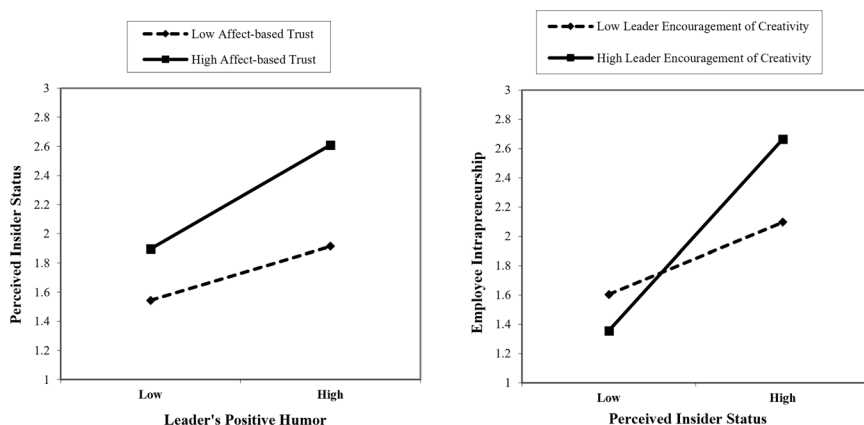
($\beta = 0.141, p < 0.01$), indicating that when employees had a high level of affect-based trust in their leader, the impact of leader's positive humor on employees' perceived insider status was stronger. This verified the positive moderating effect of affect-based trust in the relationship between leader's positive humor and perceived insider status, thus supporting *H3a*.

Similarly, Model 12 showed that the multiplicative term of perceived insider status and leader encouragement of creativity had a significant positive impact on employee intrapreneurship ($\beta = 0.204, p < 0.001$), indicating that leader encouragement of creativity significantly moderated the relationship between perceived insider status and employee intrapreneurship, supporting *H4a*. That is, when there was a strong culture of leader encouragement of creativity within an organization, the influence of perceived insider status on employee intrapreneurship was enhanced. Figure 2 visually depicts the moderating roles of affect-based trust and leader encouragement of creativity in the model.

Further analysis was conducted using the Bootstrap method within the SPSS PROCESS macro to test for moderated mediation effects of the model. Specifically, the mediating effect of perceived insider status was examined at values one standard deviation above and below the mean of the moderating variable. The results were presented in Table 7.

When employees had a high level of affect-based trust in their leader, the indirect effect of leader's positive humor on employee intrapreneurship through perceived insider status was significant (indirect effect $\beta = 0.146$, standard error $SE = 0.036$, 95% confidence interval [0.083, 0.223], excluding 0). When the level of affect-based trust was low, the indirect effect of leader's positive humor on employee intrapreneurship through perceived insider status remained significant (indirect effect $\beta = 0.078$, standard error $SE = 0.036$, 95% confidence interval [0.015, 0.159], excluding 0). This indicated that regardless of the level of affect-based trust, the indirect effect of leader's positive humor on employee intrapreneurship through perceived insider status was significant, necessitating further judgment using an index of moderated mediation.

According to Table 7, the index of moderated mediation (INDEX) was 0.039 with a standard error $SE = 0.023$, and the confidence interval was [0.005, 0.096], excluding 0,



Source(s): Figure created by authors

Figure 2. Moderating effects of affect-based trust and leader encouragement of creativity

Table 7. Results of moderated mediation effect test using bootstrap method

Dependent variable	Moderating variable	Indirect effect				Moderated mediating effect			
		Effect	SE	95% LLCI	95% ULCI	INDEX	SE	95% LLCI	95% ULCI
Affect-based trust	Low	0.078	0.036	0.015	0.159	0.039	0.023	0.005	0.096
	High	0.146	0.036	0.083	0.223				
Leader encouragement of creativity	Low	0.065	0.026	0.018	0.121	0.039	0.019	0.007	0.082
	High	0.152	0.043	0.078	0.250				

Note(s): $N = 5,000$, confidence interval 95%

Source(s): Table created by authors

indicating the presence of a moderated mediation effect. This suggested that affect-based trust positively moderates the mediating role of perceived insider status between leader's positive humor and employee intrapreneurship, thus supporting *H3b*.

Similarly, regardless of the level of leader encouragement of creativity, the indirect effect of leader's positive humor on employee intrapreneurship through perceived insider status was significant, with an INDEX of 0.039, standard error $SE = 0.019$ and a confidence interval of $[0.007, 0.082]$, excluding 0. This indicated that leader encouragement of creativity also had a moderated mediation effect. In other words, the mediating role of perceived insider status between leader's positive humor and employee intrapreneurship was positively moderated by the level of leader encouragement of creativity, thus supporting *H4b*.

4. Conclusion and discussion

4.1 The main conclusions

This paper focused on the positive humor of leader and conducted research on employee intrapreneurship, a positive behavior within organizations. Using the social identity theory, we explored the influence mechanism and conditions of leader's positive humor on employee intrapreneurship from the perspective of leader-employee interaction. The following conclusions had been drawn: Perceived insider status played a partial mediating role between leader's positive humor and employee intrapreneurship; affect-based trust not only positively moderated the relationship between leader's positive humor and perceived insider status but also regulated the mediating role of perceived insider status. Similarly, leader encouragement of creativity not only positively moderated the relationship between perceived insider status and employee intrapreneurship but also regulated the mechanism by which leader's positive humor promoted employee intrapreneurship through perceived insider status.

4.2 Theoretical contributions

First, the research of this paper enriched the research findings related to how leadership styles influence employee intrapreneurship. In organizations, leadership styles exerted a constant influence on employees' psychology and behavior, and they were important antecedents affecting employee intrapreneurship. Previous research had confirmed that transformational, authentic, platform and transactional leader all played significant roles in employee intrapreneurship (Edú Valsania *et al.*, 2016; Afsar *et al.*, 2017; Liu *et al.*, 2022), but there was still a lack of discussion on the relationship between leader's humor and employee intrapreneurship.

Leader's humor, especially positive humor, was an important leadership style that positively promoted employee work engagement, psychological empowerment, positive emotions and innovative behaviors (Goswami *et al.*, 2016; Mesmer - Magnus *et al.*, 2012; Li *et al.*, 2021). It had been widely valued by scholars and entrepreneurs in recent years. Through theoretical reasoning and empirical analysis, the research further validated that leader's positive humor was a crucial antecedent for promoting employees to engage in intrapreneurship. This finding filled the void in previous research on the relationship between leader's positive humor and employee intrapreneurship, which was a significant contribution of this paper. The conclusions of this paper not only responded to existing research on the relationship between leadership style and employee intrapreneurship but also further enriched the research findings on the antecedents of employee intrapreneurship, providing a new perspective for the study of employee intrapreneurship.

Second, this paper further enriched the research findings regarding the mechanism by which leader's positive humor influenced employee intrapreneurial behavior. At present, in the research on the effectiveness of leader's humor, most studies analyzed the impact of leader's humor on employees' job performance, organizational innovation and proactive behavior from perspectives such as leader-member exchange, positive emotions, intrinsic motivation and work flourishing (Zhang and Bartol, 2010; Ma *et al.*, 2017; Cooper *et al.*, 2018). By focusing on the positive interactions between leaders and employees within the organization, this paper introduced perceived insider status as a mediating variable and deepened the study of the mechanism by which leader's positive humor affected employee intrapreneurship.

Through leader's positive humor, employees formed a strong sense of identity with the organization and the leader, defining themselves as insiders of the leader and the organization. Employees with a strong sense of insider status were full of responsibility and mission for the organization (Wang and Zhao, 2020), closely integrating the development of the organization with themselves, and having a strong internal motivation to carry out intrapreneurship that was beneficial to the long-term development of the organization (Cooper, 2008). By introducing the mediating variable of perceived insider status, the study deepened the specific path by which leader's positive humor enhanced employee intrapreneurship and further clarified the internal mechanism by which leader's positive humor played a role within the organization.

In addition, this study further enriched the research on the boundary conditions of how leader's positive humor affected employee intrapreneurship. Existing research had indicated that employee intrapreneurship was influenced not only by individual factors but also by situational factors (Chen *et al.*, 2021), making the exploration of situational factors in employee intrapreneurship highly significant. However, as far as the literature search and our knowledge extended, currently, few studies analyzed the relationship between leadership and employee intrapreneurship from both individual and situational aspects simultaneously (Jing and Zhou, 2019). This paper attempted to explore the situational factors of employee intrapreneurship from both individual and organizational perspectives, which was of great significance. Specifically, this paper introduced affect-based trust from individual factors and leader encouragement of creativity from organizational situational factors as dual moderating variables. It focused on analyzing how and when leader's positive humor impacted employee intrapreneurship, thus further deepening our understanding of the boundary conditions for the effects of leader's positive humor.

4.3 Practical implications

Business managers must fully recognize the important role of leader's humor. In the organizational context of China, which emphasizes collectivism, high power distance and strong cultural tightness (Hofstede, 1993), leaders are often expected to be serious and reserved, and many corporate leaders lack a sense of humor. Therefore, to enhance employees' perceived insider status and promote internal entrepreneurship, it is particularly necessary to strengthen positive humor in leadership.

Our study confirms from both theoretical and empirical perspectives that leader's positive humor not only helps to reinforce employees' perception of themselves as insiders of the organization but also promotes internal entrepreneurship as a way to give back to the organization and leaders, which is of great significance to the organization. According to the behavioral view of humor, leader's humor can be learned through daily training (Cooper *et al.*, 2018). Therefore, companies should place greater emphasis on and train in leader humor during daily management and training to further enhance leaders' mastery and use of positive humor.

At the same time, leaders should not only possess positive humor but also focus on shaping their image within the employee community and strengthening the emotional trust of employees in them. This allows the important value of leader's positive humor to be fully realized. With the new generations of "post-95s" and "post-00s" continuously entering the workplace, they have distinct personalities, strong self-awareness and a strong desire to express themselves, which creates a significant "generation gap" with leaders. When employees trust their leaders fully, they will see themselves as the leader's "insiders," understand and recognize the leader's actions more and respond with positive organizational behaviors.

On the other hand, creating an atmosphere within the organization that supports creativity is an important way to enhance employee innovation. The leader's emphasis on and encouragement of creativity set a clear "wind vane" for employees. With the leader's support, employees will take the initiative to increase their investment in innovation, strengthening employee intrapreneurship. The atmosphere of innovation is an important factor that constrains the rapid development of enterprises in China. Therefore, leaders at all levels of the enterprise must continuously emphasize the importance of innovation and creation in their work, strengthen the formation of an atmosphere that encourages leader creativity, further stimulate employees' enthusiasm for innovation and enhance the organization's innovation capabilities and level.

4.4 Limitations and future research

According to leadership humor theory, in addition to positive humor, leaders may also display negative humor through demeaning, sarcasm and ridicule. Research has confirmed that leaders can enhance employees' perceived insider status through positive humor, thereby influencing employees' intrapreneurial behavior. However, what impact does leader's negative humor have on employees? What are the mechanisms and boundary conditions of this impact? This paper has not specifically investigated this issue, and future research can continue to explore in this area.

What's more, our study indicated that perceived insider status partially mediates the relationship between leader's positive humor and employee intrapreneurship, implying that there may be other mediating mechanisms at play. From the perspective of individual employees, psychological capital, organizational commitment and job flourishing are all important mechanisms that effectively connect employees with the organization. Whether

they constitute a mechanism linking leader's positive humor with employee intrapreneurship requires further in-depth research in the future.

This study's focus on positive aspects opens the door for future inquiries to delve into the potential negative consequences of humor in leadership. Understanding the full spectrum of how humor is used and perceived in organizational contexts can provide a more comprehensive view of its impact on employees and organizational dynamics.

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Further reading

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