

**EMPLOYEE INNOVATIVE BEHAVIOR: THE
INFLUENCE OF INCLUSIVE LEADERSHIP,
PSYCHOLOGICAL SAFETY AND WORK
ENGAGEMENT AND THE MEDIATING ROLE OF
CREATIVE SELF EFFICACY IN CHINESE E-
COMMERCE COMPANIES**

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COMMERCE COMPANIES**

by

ZHANG JIAQI

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**TINGKAH LAKU INOVATIF PEKERJA: PENGARUH KEPIMPINAN
INKLUSIF, KESELAMATAN PSIKOLOGI DAN PENGLIBATAN KERJA
SERTA PERANAN MEDIASI EFIKASI KENDIRI KREATIF DALAM
KALANGAN SYARIKAT E-DAGANG DI CHINA**

ABSTRAK

Tingkah laku inovatif pekerja mempengaruhi kedua-dua produktiviti dan kecekapan organisasi secara signifikan. Dalam bidang e-dagang China yang berkembang pesat dan kompetitif, syarikat menghadapi cabaran untuk mengekalkan inovasi bawah tekanan pasaran yang berat. Amalan pengurusan tradisional selalu gagal memenuhi keperluan pekerja yang dinamik dan berkembang, menyebabkan penglibatan kerja yang tidak optimum dan mengurangkan output kreatif. Jurang ini menekankan keperluan pemahaman yang lebih mendalam tentang bagaimana gaya kepimpinan dan faktor organisasi mempengaruhi inovasi pekerja. Pembangunan strategi yang berkesan bagi memupuk kreativiti dan pengekalan prestasi tinggi adalah penting bagi mengekalkan kelebihan daya saing dalam industri ini. Kajian ini menyelidik kesan kepimpinan inklusif terutamanya dari aspek keterbukaan, ketersediaan, dan ketersampaiannya, di samping keselamatan psikologi dan penglibatan kerja terhadap tingkah laku inovatif pekerja dalam syarikat e-dagang China. Ia juga mengkaji peranan pengantara efikasi sendiri kreatif dalam hubungan-hubungan ini. Kerangka teori bagi kajian ini adalah berasaskan Teori Kognitif Sosial dan Teori Pertukaran Sosial. Sampel kajian termasuk 385 pekerja dari syarikat e-dagang di Beijing, Shanghai, Shenzhen, and Hangzhou, China. Data dianalisis menggunakan SPSS versi 26.0 dan kaedah Smart PLS. Keputusan kajian menunjukkan korelasi positif yang kuat antara efikasi sendiri kreatif dan tingkah laku inovatif

pekerja, Tambahan pula, kepimpinan inklusif mempengaruhi tingkah laku inovatif pekerja secara signifikan, menekankan kepentingan peranan kualiti kepimpinan inklusif dalam meningkatkan efikasi sendiri kreatif. Efikasi sendiri kreatif dikenali sebagai pengantara utama antara faktor organisasi dan tingkah laku inovatif, menekankan kepentingannya dalam memupuk inovasi di tempat kerja. Dapatan kajian ini mempunyai implikasi kepada syarikat e-dagang yang hendak meningkatkan daya saing mereka melalui inovasi. Dengan menekankan kepentingan kepimpinan inklusif dan efikasi sendiri kreatif, kajian ini menyumbangkan pandangan yang boleh dilaksanakan kepada pengurus untuk memupuk suasana yang menyokong dan mendorong pekerja untuk berinovasi. Kajian ini menyumbangkan pemahaman yang lebih mendalam tentang bagaimana kepimpinan dan faktor organisasi berinteraksi untuk mempengaruhi tingkah laku inovatif, menawarkan rangka kerja strategik bagi meningkatkan kreativiti pekerja dalam sektor perniagaan yang berkembang pesat.

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ABSTRACT

Employee innovative behavior significantly impacts both productivity and organizational efficiency. In the rapidly expanding and highly competitive Chinese e-commerce sector, companies face the challenge of sustaining innovation amidst intense market pressures. Traditional management practices often fail to address the dynamic and evolving needs of employees, leading to suboptimal engagement and diminished creative output. This gap underscores the necessity for a deeper understanding of how leadership styles and organizational factors influence employee innovation. Developing effective strategies for fostering creativity and maintaining high performance is essential for sustaining a competitive edge in this industry. This study investigates the effect of inclusive leadership—specifically its dimensions of openness, availability, and accessibility—alongside psychological safety and work engagement on employee innovative behavior in Chinese e-commerce companies. It also examines the mediating role of creative self-efficacy in these relationships. The theoretical framework of this research is grounded in Social Cognitive Theory and Social Exchange Theory. The study sample includes 385 employees from e-commerce companies in Beijing, Shanghai, Shenzhen, and Hangzhou, China. Data were analyzed using SPSS version 26.0 and the Smart PLS method. The findings reveal a strong positive correlation between creative self-efficacy and employee innovative behavior. Furthermore, inclusive leadership significantly influences employee innovative

behavior, highlighting the critical role of inclusive leadership qualities in enhancing creative self-efficacy. Creative self-efficacy emerges as a key mediator between organizational factors and innovative behavior, underscoring its importance in fostering innovation within the workplace. These findings have profound implications for e-commerce companies seeking to enhance their competitive edge through innovation. By emphasizing the importance of inclusive leadership and creative self-efficacy, the study offers actionable insights for managers to cultivate an environment that supports and motivates employees to innovate. This research contributes to a deeper understanding of how leadership and organizational factors interact to influence innovative behavior, providing a strategic framework for enhancing employee creativity in rapidly evolving business sectors.

CHAPTER 1

INTRODUCTION

1.1 Introduction

This study examines employees' innovative behavior and creative self-efficacy, along with the factors that indirectly influence them. It further addresses the problem statement, followed by the research questions, objectives, significance, scope of the study, definitions of key terms, and the organization of chapters.

1.2 Background of Study

This section provides the background of the study by dividing the discussion into five parts: an overview of the main sectors in China, the internet sector in China, the e-commerce sector in China, livestream e-commerce in China, and employee innovative behavior.

1.2.1 The main sectors in China

The classification system of Chinese industries plays a crucial role in the country's economic development and is widely used in the formulation of macroeconomic policies, as well as in market research and analysis by firms and investors. One of the most commonly used standards is provided by the National Bureau of Statistics (NBS), which categorizes economic activities into three main sectors: primary, secondary, and tertiary (Semerjian et al., 2022).

China's economy is fundamentally supported by primary industries, which encompass agriculture, forestry, fishing, and animal husbandry. These industries primarily produce raw materials and are essential for sustaining the domestic market and ensuring food security. In recent years, the Chinese government has invested

heavily in the modernization and automation of these sectors to boost productivity and enhance food security (Wang et al., 2021).

The secondary sector involves economic activities focused on the production and processing of finished goods, including industries such as manufacturing, mining, and construction. China's manufacturing industry, in particular, is a major contributor to the national economy and has experienced substantial growth in recent years. The Chinese government has actively encouraged and supported the development of this sector to foster innovation and drive economic growth (Haini, 2021).

The tertiary sector, dominated by the provision of services, includes wholesale and retail trade, accommodation and catering, culture and entertainment, among other related industries. Recently, this sector has become a focal point of China's economic strategy, with a strong emphasis on developing high-value service industries to reduce the country's reliance on manufacturing exports (Jiechang, 2021).

In addition to the NBS standards, China also has industry classification standards issued by the Securities and Exchange Commission and the Ministry of Human Resources and Social Security. These standards serve specific purposes, such as stock market classification, labor market management, and supervision.

In general, industry classification standards are fundamental to China's economic development and are crucial for policymakers, businesses and investors to understand and use effectively. As China continues to grow and evolve, its system of industry classification can play an integral role in shaping the nation's future.

1.2.2 Internet sector in China

In recent years, China's Internet industry has been one of the fastest developing industries. As a result of China's rapidly developing economy and the rapid flight of

information technology, the Internet has emerged as one of China's new pillar industries. The Internet is a diverse industry, including search engines, electronic commerce, online education, social media, and other areas (Ren, et al., 2021).

Firstly, search engines are a major component of China's Internet industry. With a market share of over 80 percent, Baidu is the biggest search engine in China. And 360 search has a competitive advantage in some domains. Baidu and 360 searches in the increasingly competitive search engine industry, search engines are also increasingly used, especially with the popularity of the mobile Internet, the search engine has become one of the primary means by which people obtain information (Nsoesie, et al., 2020).

Secondly, electronic commerce is also one of the main areas of China's Internet industry. Jingdong and Taobao have grown to become one of China's largest e-commerce companies, with sales increasing well beyond conventional retailing. The rapid development of the mobile internet has made mobile e-commerce the new wind of the e-commerce industry, and it has shown explosive growth (Tang, et al., 2020).

On the other hand, online education has emerged as a new bright spot for the internet industry. Online schools have become a major part of the education industry and have their own unique market space in the areas of homeschooling, foreign language education, tutoring, and college-level education. Online education has the advantage of allowing students to learn anywhere and at any time, while saving money on the cost of their education.

Apart from this, social media is a major part of China's internet industry. WeChat, microblogging, and friendship groups have emerged as one of the primary channels through which people share information and communicate. As demand for digital content increases, so does the social media user base.

China's Internet industry has generally become one of the main pillars of the Chinese economy. As China becomes the center of the global Internet industry, China's Internet industry will also be faced with more challenges and opportunities. We can predict that China's Internet industry will exhibit a more diverse and rapid trend of development in the future, as well as enhancing technological innovation and managerial innovation to achieve sustainable industry development (Tang, et al., 2020).

1.2.3 E-commerce sector in China

China is experiencing rapid growth in e-commerce and has become a key player in the country's economy. China represents the world's largest e-commerce market with a population of more than 1.4 billion people. The growth of e-commerce has been driven by China's active consumer base and the increasing number of mobile internet users. Today, more than three quarters of China's population is connected to the internet (Feng, 2023).

China's e-commerce industry has grown at an unprecedented rate in the last decade, with online retail accounting for almost 20% of total retail sales in 2020. In 2019, the online retail market in China reached CN¥ 5.15 trillion (US\$747 billion), representing a growth rate of 15.9% per year (Wang et al., 2015).

The e-commerce industry in China is unique in that it has largely been driven by major internet companies such as Alibaba and JD.com. Alibaba Group is China's largest e-commerce company, leveraging on e-commerce, logistics, digital media and cloud computing to create an online platform that provides consumer to consumer, business to consumer and business to business sales services. It operates a variety of ecommerce platforms like Tmall, Taobao and AliExpress. In addition, JD.com is a

major player in the Chinese e-commerce space, offering a similar range of products and services to Alibaba Group, as well as other companies (Wang et al., 2015).

The Chinese government has also played a key role in supporting e-commerce growth by implementing policies that aim to promote e-commerce, such as tax incentives, infrastructure development, and investment in research and development. In addition, the government has removed barriers to entry, facilitating the entry of new e-commerce companies into the market.

With the rise of electronic commerce technology, new business models and innovations such as social commerce and livestreaming have also emerged, where e-commerce platforms are integrated into social media platforms to enable businesses to reach a wider social media audience. In addition, live streaming e-commerce has become a popular trend in China, where influencers or key opinion leaders (KOLs) take advantage of live streaming in order to showcase their products and engage with consumers. This phenomenon has spawned a new industry known as the "live commerce" industry (CNNIC, 2020). As of 2020, China's e-commerce livestreaming has never been warmer, with people from all walks of life, mediums of all kinds, and individuals joining the livestreaming. For a moment, it was all liveable. During the first half of 2020 alone, there were over 10 million live feeds on ecommerce platforms nationwide, with an average of over 50, 000 streams being streamed online daily according to a trove of data from the China Video Ecommerce Research Report of 2021. According to the China Internet Information Center, 562 million people watched live online in the first half of 2020, an increase of 129 million since the same period in 2019.

According to data from Ai Media Consulting, China's e-commerce market size grew 121.5% year on year to more than 961 billion yuan in 2020. The size of China's

live streaming e-commerce market is expected to exceed 1.2 trillion yuan by 2021 (Ji, 2016).

The rapid growth and expansion of China's e-commerce market present both opportunities and challenges that necessitate further academic exploration. According to projections by Guosheng Securities, the online e-commerce business market in China is expected to reach a total size of 6 trillion yuan by 2025. This significant market potential is being driven by the increasing popularity of platforms such as Taobao and Douyin (known as Jitterbug in the provided text), which have emerged as the dominant traffic entry points in the current high-speed media environment and trading context. These platforms have been instrumental in promoting major shopping events, such as the "Double Eleven Bash" and "Big Push as of June 2018," resulting in substantial growth in consumer engagement and transaction volumes.

For example, during the first ten minutes of the 2020 Double Eleven pre-sales event, transactions led by Taobao Direct quadrupled compared to the same period in 2019, equaling a full day of pre-sales in the previous year. Additionally, influencers like Li Jiaqi and Viya have significantly impacted the market, with their promotions reaching over three billion hits and transactions, demonstrating the powerful role of live streaming and influencer marketing in driving consumer behavior.

The onset of the COVID-19 pandemic in 2020 further accelerated these trends. As home isolation became commonplace, the number of internet users surged, leading to a high saturation of information and a shift in consumer behavior. The entertainment industry, once dominated by content like singing and dancing, began to wane, and live-streamed shopping emerged as a mainstream mode of consumption. Platforms like Douyin adapted quickly to the pandemic, becoming critical channels for businesses to reach consumers across various regions, thereby supporting economic activity and

regional development. This shift in consumer behavior was underscored by the fact that over half of the users clicked on third-party e-commerce platforms to purchase products, indicating a significant move towards online shopping driven by the pandemic. There is no doubt that the new coronavirus pandemic has been a powerful catalyst for live advertising on the Telegram buffeting platform (Li, 2020).

However, the e-commerce sector in China is not without its challenges. Consumer confidence has been a problem, with concerns over product quality, safety and counterfeit goods. In response to these concerns, the government has implemented various laws and regulations, but the issue of counterfeit products is still a concern in the Chinese ecommerce marketplace.

The e-commerce sector in China is also facing the challenge of intense competition. The presence of established e-commerce giants limits the space available to new entrants to the marketplace. It can be difficult for startups and small businesses to compete with established e-commerce companies in China.

In spite of these challenges, the e-commerce sector in China is likely to continue to grow in the coming years, motivated by the increasing number of internet users, government support, technological innovation and the rise of new business models. As the industry continues to evolve, it is interesting to see how new technologies and innovations shape the market for Chinese electronic commerce in the future. Thus, this study chooses the Chinese e-commerce industry as the target industry and aims to explore the employee innovative behavior in this industry.

1.2.4 Employee innovative behavior

Organizations need to prioritize innovation as a foundation for growth and progress in order to succeed. In today's competitive business landscape, companies

must constantly explore new and innovative ways of gaining an advantage within their industry. This can be achieved by promoting innovative employee behavior at all levels of the organization (Nandal, et al., 2020).

Innovative employee behavior involves the proactive and voluntary generation of new ideas, products, services and processes that contribute to organizational growth and development. These behaviors are critical to the success of an organization as they lead to business success, market leadership and innovation (Nandal, et al., 2020). This requires employees to question the status quo, take calculated risks and introduce new ways of doing business.

Organizations need to create a work culture that supports creativity, experimentation, and risk taking in order to motivate employee innovative behavior. It is important for employees to feel supported and encouraged when contributing new ideas and perspectives. Encouraging an innovation culture where employees feel valued, celebrated and valued for their efforts provides motivation to engage in innovative behavior.

Moreover, employee engagement levels also play a critical role in driving innovative behavior. Engaged employees experience a strong sense of ownership and loyalty to the organization, which motivates them to be proactive in problem identification, solution development and implementation of new ideas. It is better equipped to deal with uncertainty, ambiguity and complexity, which are crucial features in fostering innovation (Kwon, et al., 2020).

Furthermore, organizations need to invest in training and development programs that equip employees with the skills and knowledge required to engage in innovative behavior. Incentivizing and rewarding innovative behavior is also crucial in motivating employees to engage in such behavior.

Ultimately, successful organizations are those that prioritize innovation and foster a culture of creativity, experimentation and risk taking. Organizations can achieve sustainable success and progress within their industries by encouraging and promoting innovative employee behavior (Jalil, et al., 2021).

Innovative organizations understand the importance of fostering innovative employee behavior as a key driver for growth and success. They accomplish this by using a range of strategies and techniques to create a work environment that fosters and supports innovation. Providing employees with opportunities for training, development, and upskilling is one of the most effective techniques, as it equips them with the knowledge, skills and tools to produce and implement innovative ideas.

However, simply providing training and development opportunities may not be enough to drive innovative behavior. In addition, organizations need to provide incentives and rewards for innovation in order to encourage and motivate employees to generate new ideas, challenge established processes and practices, and take calculated risks. Such incentives can take the form of financial compensation, recognition and promotions, and are an effective means of demonstrating the organization's commitment to supporting and promoting employee innovative behavior (Jalil, et al., 2021).

Despite the importance of individual contributions, employee innovative behavior is not a one-off effort. This requires cross-functional collaboration and teamwork to facilitate the sharing of ideas and perspectives, which in turn leads to innovation and progress. The creation of a collaborative and supportive work environment is essential for fostering innovative behavior, and innovative organizations prioritize engagement and collaboration with employees to achieve this (Jalil, et al., 2021).

It is concluded that employee innovative behavior is vital to an organization's growth and success. Organizations can promote and encourage innovative behavior by prioritizing employee engagement, collaboration and innovation and by providing a supportive work environment. In today's competitive business environment, innovative organizations are in the best position to achieve long-term success by leveraging these factors to create an environment that supports and fosters innovative employee behavior.

1.3 Problem statement

China is home to the world's largest e-commerce market, with sales expected to reach approximately \$3.3 trillion by 2025. This rapid growth demands continuous innovation to maintain competitive advantage. However, the core issue that Chinese e-commerce companies face is the difficulty in fostering consistent employee innovative behavior. Previous studies indicate that inclusive leadership is positively correlated with employee innovative behavior. For instance, research by Carmeli et al. (2010) found that inclusive leaders significantly enhance innovation by providing psychological safety. According to a survey conducted by Gallup, organizations with high employee engagement see a 21% increase in profitability and a 17% increase in productivity. This supports the thesis that engaging employees through supportive leadership can drive innovation. A 2022 report by Deloitte highlighted that many Chinese companies struggle with innovation due to a lack of leadership support and a fear-based culture. This aligns with the study's focus on how inclusive leadership can overcome these barriers.

Several key challenges hinder the cultivation of innovative behavior among employees: (1) Despite rapid market expansion, many Chinese e-commerce firms have not developed a strong culture of innovation. Hierarchical organizational structures

and traditional leadership approaches often stifle creativity, preventing employees from contributing innovative ideas. This study seeks to understand how inclusive leadership, which fosters openness and engagement, can help overcome this cultural barrier by promoting an environment conducive to innovation. (2) Ineffective Leadership Practices: Effective leadership is essential for driving innovation. Yet, many Chinese companies lack leaders who can inspire innovation and make employees feel valued. Inclusive leadership—which emphasizes equity, support, and accessibility—can directly address this problem by creating a workplace where employees feel motivated to innovate. The absence of such leadership is a key reason for the lag in innovative practices in the Chinese e-commerce sector. (3) Psychological Safety: Employees need to feel safe to express their ideas without fear of negative consequences. In many Chinese e-commerce companies, there may be a cultural hesitation to share new ideas or challenge the status quo, which hinders innovation. The study explores how psychological safety can be cultivated to encourage more innovative behavior. (4) Low Engagement Levels: Employee engagement is a significant driver of innovation, yet engagement levels can often be low due to high work pressure, lack of recognition, and inadequate opportunities for professional growth. This study addresses how engagement is a key factor in encouraging innovative behavior.

Given the complex and rapidly changing social environment, firms face unprecedented pressures for survival and development. It is only through continuous innovation that firms can become dynamic and hard-working. To speed up innovation and relieve pressure to survive, many companies have begun to pay attention to the innovative behavior of their employees.

In business management, employees' ability to perform innovative behavior is

limited by a variety of organizational factors. Most researchers believe that leaders, as the soul of business management, can have a very significant influence on employees' creative behavior. Particularly in recent years with most companies facing internal and external issues, managers are looking forward to a new type of leadership to get them out of trouble. Across the global economic model, after entering the new century, globalization, diversification, and innovation have become the inevitable focal point for firms. Nokia's decline and Apple's rise perfectly explain innovation as the firms' first competitiveness. If can't meet the needs of the new generation of employees, understand their characteristics, it is impossible to achieve the goals of the company in an efficient manner. Inclusionary leadership stands out in the face of a new economic environment and a unique labor force. Inclusive and harmonious work environments reduce employee sales/revenue rates and enhance the creativity of the new generation of employees.

China's ever-evolving e-commerce landscape presents companies with an intensely competitive environment in which constant innovation is key for reaching and maintaining market dominance. Employee Innovative Behavior (EIB) stands as an indispensable driver of organizational competitiveness and sustainability (Scott & Bruce 1994). EIB captures the ability and willingness of workers to generate, accept, and implement innovative ideas or solutions that result in improved process efficiencies, customer satisfaction levels, and overall organizational performance. Given China's emerging digital economy and rapid market dynamics driven by technological innovations and changing consumer tastes, Chinese e-commerce firms face additional pressure to maintain an innovative edge.

Due to changing market trends, e-commerce firms in China must foster an environment conducive to innovation through Employee Innovative Behavior.

Employee engagement in innovative endeavors, problem-solving skills and contributing to an environment of continuous improvement could significantly affect an organization's agility and responsiveness to market exigencies; yet due to limited knowledge on this topic pertaining specifically to Chinese e-commerce firms (Amabile 1997).

Further, China's unique sociocultural and organizational context could engender distinct dynamics that shape Employee Innovative Behavior. Therefore, an in-depth examination of EIB in this setting becomes imperative to uncover insights that could inform organizational strategies and leadership practices conducive to creating an innovative culture within an organization - one where innovation becomes part of its organizational ethos instead of simply an occasional event - creating sustainable competitive advantage within China's hypercompetitive e-commerce sector.

According to Scott and Bruce (1994) innovative behavioral pathway model, innovation is a complex process of organic interaction involving leadership, individual characteristics, and organizational context, in which leadership behavior or leadership style is a critical dominant factor. The promotion of innovative employee behavior as a means of achieving organizational innovation and competitive advantage is one of the key responsibilities of leadership (Shalley et al., 2004). The influence of leadership on employees' creative behavior is currently mostly discussed from the perspective of individual characteristics of leadership, leadership behavior or style, as well as the relationship between leadership and subordinates. Leaders who address employee difficulties in a positive way and provide effective feedback can significantly increase employee innovation (Zhou & George, 2001), as well as significantly reduce employee innovation when managers become too involved in subordinates' decision making (Ma

& Zhu, 2015). These results fully demonstrate that leadership behavior has a significant effect on employee innovativeness. However, research into the relationship between inclusive leadership and employees' belief in their creative self-efficacy remains underdeveloped in Chinese e-commerce companies (Hassan et al. 2019).

One of the most significant factors affecting employee innovation is leadership style. Leader attitudes and behaviors toward innovation influence employee attitudes and behaviors, and leader support for innovation can enhance individual innovation performance (Tierney & Farmer, 2002). Inclusive leadership in complex environments is an emergent relational leadership style (Carmeli et al., 2010) characterized by openness, efficacy and accessibility. Inclusive leaders are employee-centered in their day-to-day work and develop two-way relationships with employees that respect, acknowledge, respond to, and hold them accountable (Zhang et al., 2016), pay attention to employee differences, and respond to their diversity needs. Inclusive leadership helps create a more harmonious working environment between the leadership and the employees, encourages communication and cooperation among employees, helps leaders absorb and adopt new ideas and approaches in a timely manner and to the extent possible, tolerates deviations from the staff, and accomplishes team and organizational goals while increasing employee motivation. However, this relationship in relation to Chinese e-commerce remains unclear.

The research on inclusive leadership focuses on the employee and team level, and more research is being conducted on inclusive leadership factors and individual employees. From an employee perspective, existing research focuses on innovation themes (Zhu et al., 2018), advising behavior, and behavioral characteristics, and further investigates the intrinsic mechanisms of employee innovativeness and employee innovativeness. Prior research has shown that inclusive leadership has a

positive effect on employee innovative performance. Jiang and Qi (2018) propose that inclusive leadership inspires employee innovative behavior by effectively promoting the socialization of new employees and the formation of friendships in the workplace. Gu et al. (2017) found that inclusive leadership positively influences the innovation performance of employees, with positive emotions serving as a partial mediator, and Jing (2015) providing validation of the positive effect of inclusive leadership on employee creativity, with intrinsic motivation and psychological availability acting as a partial mediator.

Tierney and Farmer (2002), on the basis of self-efficacy and creativity theory, defining innovative self-efficacy as "an individual's evaluation of his or her ability and confidence that he or she can carry out innovative behavior in a specific task or job" (Tierney & Farmer, 2002), a definition that has been widely adopted and cited. The sense of innovation self-efficacy, as the driver of employee innovative behavior, focuses on the subject's self-cognition in the innovation process, and clarifies the significant role of the creative subject's subjective initiative (Guo et al., 2017). Prior research has found that organizational factors, leadership behaviors, job factors, and employee personality traits all influence employees' innovation behavior via innovative self-efficacy. Innovation, such as employee innovative behavior, employee innovativeness, and employee personal innovation performance, is often studied as an outcome variable of employee innovative self-efficacy, which have been found to have a positive influence on employee innovative behavior (Gu & Peng, 2010). However, empirical data that illustrates these relationships within Chinese e-commerce firms remains scant.

In reviewing the current research, it can be seen that these studies consider only the general paradigm of the relationship between traditional leadership and innovative

behavior. In general, they do not take into account the fundamental and necessary factors that support the persistence of high levels of innovative behavior in individuals, such as the significant effect of individual physical and psychological conditions on innovative behavior, such as sustained and energized engagement at the physical level, intense and active work at the mental level, and highly focused work at the cognitive level of the individual. Through literature searches, these factors can be found to be closely related to one of the most popular and interpretive constructs in organizational behavior, namely work contribution. Sonnentag (2003) suggests that a high level of work engagement, involving sufficient additional energy, enthusiasm for work, and continued work focus, is a crucial positive influence on a person's tendency to engage in a variety of initiatives including innovation. Similarly, Fredrickson (2000) Broaden-and-Build theory finds that positive affective experiences associated with higher levels of work engagement strongly broaden habitual thinking and activity (such as attention, cognition, and thought patterns), broaden the cognitive range, and make the individual's instantaneous sequences of thought and action more flexible and creative, as well as assisting in the response to stress and adversity, making the individual more creative, knowledgeable, resilient, interpersonal and healthy. We can see that work input is a basic multidimensional motivator that is closely related to individual innovation behavior.

Psychological safety is a perception of interpersonal risk in the work environment (Edmondson, 1999a; Edmondson, 2003). Psychological safety is a subjective sense of comfort and security. When an individual feels secure in a work environment, he or she does not worry about negative self-talk, challenging his or her boss, or interpersonal conflict (Kahn, 1990). These employees are willing to express themselves or to change voluntarily. Employees, on the other hand, tend to remain

silent or shy away from and passively defend their actions.

The aim of this study is to explore the effect of inclusive leadership, psychological safety and work engagement on employee innovative behavior mediated by creative self-efficacy in Chinese e-commerce companies in order to explore the gaps in the current research. We analyze the influence of creative self-efficacy on employee innovative behavior, analyze how the various sub-dimensions of inclusive leadership directly influence employee innovative behavior, and analyze how inclusive leadership, psychological safety and work engagement directly influence creative self-efficacy. It discusses the possible mediating role of creative self-efficacy between inclusive leadership, psychological safety, work engagement and employee innovative behavior. By conducting these studies, we aim to offer valuable theoretical insights to further enhance employee innovative behavior and improve the effective leadership of managers in practice.

1.4 Research questions

- 1) Does inclusive leadership (openness, availability and accessibility) influence employee innovative behavior in Chinese e-commerce companies?
- 2) Does creative self-efficacy positively influence employee innovative behavior in Chinese e-commerce companies?
- 3) Does inclusive leadership (openness, availability and accessibility) positively influence creative self-efficacy among Chinese e-commerce companies?
- 4) Does creative self-efficacy act as a mediator between inclusive leadership (openness, availability and accessibility) and employee innovative behavior in Chinese e-commerce companies?

- 5) Are psychological safety factors positively associated with creative self-efficacy among Chinese e-commerce firms?
- 6) Does creative self-efficacy play an influential role in mediating the relationship between psychological safety and employee innovative behavior in Chinese e-commerce companies?
- 7) Does work engagement positively influence creative self-efficacy in Chinese e-commerce companies?
- 8) Are creative self-efficacy levels the mediator between work engagement and employee innovative behavior in Chinese e-commerce companies?

1.5 Research objectives

The overarching objectives of the present study is to study the influence of inclusive leadership, psychological safety and work engagement on employee innovative behavior and the mediating role of creative self-efficacy. Specific objectives are set out below:

- a) To examine the relationships between inclusive leadership (openness, availability and accessibility) and employee innovative behavior in Chinese e-commerce companies.
- b) To examine the relationships between creative self-efficacy and employee innovative behavior in Chinese e-commerce companies.
- c) To examine the relationships between inclusive leadership (openness, availability and accessibility) and creative self-efficacy in Chinese e-commerce companies.
- d) To examine creative self-efficacy has mediating effects on the relationship between inclusive leadership (openness, availability and accessibility) and employee innovative behavior in Chinese e-commerce companies.

- e) To examine the relationships between psychological safety and creative self- efficacy in Chinese e-commerce companies.
- f) To examine creative self-efficacy has mediating effects on the relationship between psychological safety and employee innovative behavior in Chinese e-commerce companies.
- g) To examine the relationships between work engagement and creative self- efficacy in Chinese e-commerce companies.
- h) To examine creative self- efficacy has mediating effects on the relationship between work engagement and employee innovative behavior in Chinese e-commerce companies.

The problem statement, research questions, and objectives focus on exploring how inclusive leadership, psychological safety, and work engagement effect employee innovative behavior in Chinese e-commerce firms, with a specific emphasis on the mediating role of creative self-efficacy. Organizations face intense pressure to innovate for survival and competitiveness, especially in dynamic markets like Chinese e-commerce. Employee innovative behavior is crucial for maintaining market dominance, yet the specific influences and mediating factors related to innovation are underexplored. The role of inclusive leadership, psychological safety, and work engagement in fostering employee innovative behavior, particularly through creative self-efficacy, remains unclear, especially within the unique context of Chinese e-commerce. This study aims to address gaps in understanding how these variables interact to influence innovation and provide insights into how to enhance innovation through improved leadership and organizational practices.

1.6 Scope of study

Focusing the scope of current research endeavor, particular consideration is paid to firms operating within China's robust digital market sphere in 4 cities, Shenzhen, Shanghai, Beijing and Hangzhou. These regions were selected due to their pronounced e-commerce activity and consequent competitive landscape, proving an ideal platform for studying employee innovative behavior dynamics. China's enormous consumer base of over 1.4 billion individuals reinforces the urgency for such investigation given this sector's rising significance within national economic reconstruction efforts.

At the core of this inquiry is an in-depth exploration of creative self-efficacy as an influential mediator between inclusive leadership, psychological safety, work engagement and employees' innovative dispositions. Employee demography studied spans across job roles but with special consideration for mid-level managerial and operational personnel whose bridging roles connect leadership directives with ground-level execution; providing essential linkages that spawn innovative endeavors.

By situating this research within its designated geographic and organizational milieu and by focusing on an employee stratum, a sound theoretical framework is established. It seeks to reveal insights into how creating an inclusive leadership style with psychological safety measures could foster work engagement, creative self-efficacy and ultimately innovative behavior among employees.

This study's potential findings aim to further the scholarly discourse surrounding inclusive leadership, psychological safety and work engagement within China's thriving e-commerce industry. Furthermore, by investigating creative self-efficacy's mediating role and exploring its effects on innovation culture in organizations - essential skills necessary for successfully operating within today's dynamic digital market arena.

1.7 Significance of study

As discussed in the following sections, the theoretical and practical contributions of this study are presented.

1.7.1 Theoretical significance

The theoretical underpinnings of this research center around two pivotal theories - Leadership Theory and Social Cognitive Theory. Together these serve as cornerstones in formulating an outline illustrating inclusive leadership, psychological safety, work engagement, creative self-efficacy and employee innovative behavior within Chinese e-commerce firms.

The Leadership Theory provides a useful lens through which to assess how leadership styles influence employees' innovative behaviors. Inclusive leadership characterized by openness, accessibility, and availability (Nembhard & Edmondson 2006) can create an atmosphere conducive to innovation by instilling feelings of belongingness, value, and voice among employees. This study endeavors to extend this theory by investigating how inclusive leadership might spark innovation within employees in China's e-commerce sector (Kickul & Gundry, 2001).

Social Cognitive Theory's core premise, self-efficacy (Bandura, 1986), provides the theoretical scaffold to investigate the mediating role creative self-efficacy has on organizational variables and employee innovative behavior. By investigating how individual cognitive faculties such as creative self-efficacy influence translation from inclusive leadership and psychological safety into enhanced work engagement and ultimately innovative comportment this research seeks to deepen our understanding of innovation within organizational settings.

Psychological safety research conducted under the broad framework of Social

Cognitive Theory seeks to reveal its crucial role in creating an environment conducive to open communication and risk taking that are essential elements for encouraging innovation. By doing this, the study not only highlights its theoretical connections with innovative behavior, but also increases practical comprehension on how organizations can strengthen their innovation landscape through psychological safety promotion.

By interweaving Leadership Theory and Social Cognitive Theory, this study offers a detailed examination of how leadership dynamics and individual cognitive mechanisms interact to promote innovation among employees at Chinese e-commerce firms. Through carefully designed variables, this fusion of theories seeks not only to add richer theoretical material to innovation discourse but also provide pragmatic insights for organizations aspiring to foster vibrant innovation ecosystems in such an unpredictable market as Chinese e-commerce.

The variables for this study are selected based on the theoretical foundations and research objectives outlined in this section. The first step is to define the key constructs and variables. According to the theoretical frameworks, the following variables are essential:

- **Inclusive Leadership:** Characterized by openness, accessibility, and availability, this variable represents a leadership style that fosters an inclusive environment where employees feel valued, heard, and supported.
- **Psychological Safety:** This variable is critical in creating an environment where employees feel safe to take risks, communicate openly, and share innovative ideas without fear of negative consequences.
- **Work Engagement:** Reflecting the level of enthusiasm, dedication, and absorption employees have in their work, this variable directly influences creativity and innovation.

- **Creative Self-Efficacy:** Grounded in Social Cognitive Theory, this variable measures an individual's belief in their ability to generate creative and innovative solutions. It serves as a mediator between organizational factors (such as inclusive leadership and psychological safety) and innovative behavior.
- **Employee Innovative Behavior:** This outcome variable captures the extent to which employees generate, promote, and implement novel ideas in their work.

By selecting these variables, the study aligns with well-established theoretical frameworks. This approach not only deepens the theoretical understanding of innovation within organizational contexts but also offers practical insights for Chinese e-commerce companies aiming to foster a culture of innovation.

Psychological safety and work engagement are critical for fostering innovation and creativity due to their direct effect on employee behavior and organizational performance. Psychological safety creates a secure environment where employees feel free to voice ideas and take risks without fear of negative repercussions, promoting open communication and early problem identification. This sense of security enhances collaboration, reduces stress, and boosts engagement, leading to higher productivity and job satisfaction. Work engagement, characterized by enthusiasm and dedication, directly influences employees' commitment and creativity, encouraging them to exceed job expectations and contribute innovative solutions. Unlike other variables that often act as enablers or mediators, psychological safety and work engagement directly influence day-to-day employee behavior, making them essential for sustained innovation and long-term cultural change. Their role in creating a supportive environment that motivates employees underscores their importance in driving organizational success and maintaining a competitive edge.

Creative self-efficacy is also crucial in fostering innovation by shaping

employees' confidence in their creative abilities. It acts as a mediator between factors such as inclusive leadership, psychological safety, work engagement, and innovative behavior. Creative self-efficacy bridges the gap between these elements, encouraging employees to innovate when they feel supported and valued. High CSE motivates employees to engage in creative tasks, enhancing their willingness to think outside the box and pursue innovation. However, the specific role of CSE as a mediator in fostering innovation is less studied, particularly in the context of Chinese e-commerce companies. There is a lack of research on how CSE impacts innovation within the unique cultural and market dynamics of China's e-commerce sector. Moreover, studies on the long-term effects of increasing CSE on innovation are limited, underscoring the need for research on sustainable innovation strategies. Addressing these gaps helps organizations, especially in Chinese e-commerce, systematically enhance their innovation capabilities. By focusing on boosting creative self-efficacy, companies can establish a stronger foundation for continuous innovation and maintain a competitive edge.

In the research context of Chinese e-commerce companies, the variables of inclusive leadership, psychological safety, work engagement, and creative self-efficacy play crucial roles in shaping employee innovation and organizational performance. These variables are interrelated and crucial for enhancing innovation within the unique cultural and market dynamics of Chinese e-commerce, providing a framework for companies to foster a culture of innovation and maintain a competitive edge.

The gap in innovative behavior that informs the need for this study involves several key issues: (1) Lack of Understanding of Mediating Roles: There is limited research on how CSE mediates the relationship between organizational factors (such