The Influence of Psychological Traits, Managerial Discretion, and Technology Transfer on Innovative Success of Chinese Multinational Corporations in Kenya

Abstract

In the fierce international competition, the critical role of innovation is cored in driving corporations' growth, competitiveness, and sustainability. This study investigates the influence of psychological traits, managerial discretion, and technology transfer on the innovative success of Chinese multinational corporations (MNCs) operating in Kenya. Drawing on the Conservation of Resources (COR) theory, this longitudinal study examines the roles of curiosity, resilience, creativity, managerial autonomy, and technology transfer in shaping innovation performance over three-time points: 2018 (T1), 2021 (T2), and 2023 (T3). Data was collected from 216 top management team (TMT) members using structured questionnaires and analyzed using structural equation modeling (SEM). The findings reveal that psychological traits, particularly curiosity and resilience, significantly contribute to innovation. Managerial discretion emerges as a critical enabler of innovation, enhancing firms' ability to make bold, adaptive decisions. Technology transfer plays an important mediating role in driving innovative outcomes, although its impact fluctuates over time. The study highlights the dynamic interplay between individual traits, organizational factors, and external knowledge transfer in fostering innovation. The theoretical contributions include a deeper understanding of how psychological traits, combined with managerial discretion and technology transfer, drive innovation in cross-cultural and developing market contexts. Practically, the study offers insights into fostering innovation in MNCs by nurturing key psychological traits, promoting managerial autonomy, and leveraging technology transfer effectively. These findings provide actionable strategies for MNCs seeking to enhance their innovative capacities and sustain competitive advantage in volatile markets like Kenya.

Keywords: Psychological traits, Managerial discretion, Technology transfer, Innovative success, Conservation of Resources theory, Chinese multinational corporations, Kenya.

1 Introduction

In the context of globalization, innovation is a critical driver of growth, competitiveness, and sustainability. As industries move towards sustainable development, the ability to generate, share, and apply new ideas becomes vital to maintaining a competitive edge (Lee et al., 2021). Companies in this environment are compelled to innovate to stay relevant and succeed amid constant change and fierce competition (Fang et al., 2019). By embracing innovation, firms can develop new products, enhance processes, and create unique business models, fostering a culture of continuous improvement, collaboration, and customer-focused development (Tucker, 2002). For corporations, the ability to foster innovation is crucial to overcoming unique challenges related to limited resources, dynamic market conditions, and cross-cultural interactions. In this context, organizations must focus on enhancing their innovative success, which refers to their ability to generate, implement, and commercialize new ideas, products, and processes effectively (Srisathan et al., 2023). However, the underlying factors that contribute to innovative success extend beyond external market forces and encompass internal organizational dynamics, including the psychological traits of top management teams (TMTs), managerial discretion, and the successful transfer of technology across borders.

In the case of Chinese multinational corporations (MNCs) operating in Kenya, the unique developing country context provides a lens for examining these dynamics (Zhanglan et al., 2021). These companies are at the forefront of cross-cultural interactions, where success depends on effective technology transfer, collaboration, and adaptability (Hinane, 2024). Given the competitive pressures in the global marketplace, Chinese MNCs are compelled to innovate to maintain their competitive edge (Hwang et al., 2024). This requires not only strategic business decisions but also the right psychological traits and approaches within their top management teams (Su et al., 2021). Extensive research has examined the influence of psychological traits, managerial discretion, and technology transfer on innovation within MNCs. Psychological traits, such as curiosity, resilience, and creativity, are seen as fundamental characteristics that can foster a culture of innovation (Harrison et al., 2023). These traits influence how leaders navigate complex, cross-cultural environments and respond to challenges, making them pivotal in sustaining organizational innovation in competitive settings (Su et al., 2021). For instance, resilient leaders are better equipped to maintain innovative momentum during economic downturns, while curiosity fuels continuous learning and adaptation, both of which are vital for innovation in dynamic environments (Pasha, 2019). Key traits such as empathy, resilience, assertiveness, curiosity, and creativity are instrumental in shaping an organization's innovative culture (Harrison et al., 2023; Pasha, 2019; Martíne et al., 2023). Empathy allows leaders to understand diverse perspectives and foster an inclusive environment (Martíne et al., 2023).

Resilience ensures that teams can adapt and recover from setbacks, which is critical in a constantly changing economy (Pasha, 2019). Assertiveness and creativity encourage bold decision-making and the exploration of new ideas, while curiosity drives continuous learning and knowledge-seeking behavior (Harrison et al., 2023). Hence, the success of Chinese MNCs in Kenya depends on how these psychological traits are harnessed to foster innovation. As these companies integrate into the local business landscape, they bring unique management practices and cultural influences that affect how they approach innovation.

Technology transfer, particularly from relatively advanced to developing economies, has been extensively studied as a key enabler of innovation (Palmer et al., 2004). Chinese MNCs, as facilitators of this transfer, play a critical role in enhancing the technological capabilities of local firms in Kenya (Wangrow et al., 2015). Lau and Lo (2015) argue that technology transfer can significantly improve local firms' innovation capacity, provided they possess adequate absorptive capacity to integrate and adapt imported technologies effectively. However, the success of these transfers often hinges on the absorptive capacity of local firms and the degree to which managerial discretion is exercised by MNC leadership (Crossland & Hambrick, 2011). Research by Ryan (2004) and Ansari, Reinecke, and Spaan (2014) further indicates that the interaction between managerial discretion and psychological traits can significantly impact the success of technology transfer initiatives, particularly in cross-cultural environments where local conditions may require substantial adaptation of imported technologies. Despite the importance of these factors, existing studies have often examined them in isolation, leaving a gap in understanding their combined effect on innovation in emerging markets like Kenya.

While previous research has established the significance of psychological traits, managerial discretion, and technology transfer in driving innovation, there is a lack of comprehensive studies that integrate these factors, particularly in the context of Chinese MNCs operating in sub-Saharan Africa. Most studies have focused either on the role of psychological traits or managerial discretion, without exploring how these two dimensions interact to shape innovation outcomes (Kraus et al., 2018). Additionally, the literature on technology transfer has predominantly examined it as a standalone process, often overlooking the role that psychological and managerial factors play in determining the success of technology transfer initiatives in cross-cultural contexts (Adomako et al., 2021). Furthermore, there is limited research on how the unique cross-cultural dynamics in Kenya impact the interaction between psychological traits, managerial discretion, and technology transfer. As such, this study aims to fill this gap by exploring how these factors work together to influence the innovative performance of Chinese MNCs in Kenya.

This study seeks to address the aforementioned gap by investigating how the psychological traits of curiosity, resilience, and creativity, in conjunction with managerial discretion and technology transfer, contribute to the innovation success of Chinese MNCs in Kenya. Drawing on the Conservation of Resources (COR) theory, which posits that psychological resources are essential for maintaining organizational performance (Hobfoll, 2001), this study examined the relationship over three-time points—2018 (Time 1, T1), 2021 (Time 2, T2), and 2023 (Time 3, T3), using second-order construct structural equation modeling (SEM) techniques, utilizing SPSS Version 27.0 and AMOS 24.0 for analysis. Results reveal significant associations between psychological traits and innovative success, mediated by managerial discretion and technology transfer. Curiosity emerged as the most influential psychological trait across all three time periods. Notably, resilience, with the highest coefficient at T3, underscores the heightened importance of this trait due to the global COVID-19 pandemic. In particular, the data highlights that effective managerial discretion and innovative leadership were identified as key drivers that influence psychological traits on a firm’s innovation outcomes. This study contributes to the existing literature by 1. Providing a nuanced investigation into the psychological capital of TMTs and its direct and indirect effects on innovation success, thus extending the discourse beyond entrepreneurial leadership to encompass MNCs operating in emerging markets. 2. Elucidating the mediating roles of managerial discretion and technology transfer, offering a deeper understanding of the mechanisms through which TMTs' psychological traits makeup impacts a firm's innovative capacity. 3. Demonstrating the theoretical and practical implications of these relationships, our study aims to inform strategic management practices and innovation policies within MNCs, ultimately fostering a competitive edge in the global market and ensuring sustainable growth.

2 Literature Review

2.1 Theoretical Underpinning

This study seeks to explore how psychological traits, managerial discretion, and technology transfer shape the innovative success of Chinese MNCs operating in Kenya. The theoretical foundation of this research is grounded in the Conservation of Resources (COR) theory, which provides a comprehensive framework for understanding how individuals'

psychological traits, when combined with managerial discretion and technology transfer, serve as critical resources in fostering innovation.

COR theory, introduced by Hobfoll (1989), posits that individuals strive to accumulate, protect, and retain resources such as personal attributes, energy, and possessions. Psychological traits, such as resilience, creativity, curiosity, and empathy, serve as vital resources that enable individuals to perform effectively, particularly in environments where innovation is essential for competitive advantage (Hobfoll et al., 2018). In innovation-intensive environments, where uncertainty and stress are prevalent, psychological traits act as internal resources that individuals can draw upon to maintain their performance. For instance, Fredrickson (2001) emphasizes the importance of resilience as a psychological resource that helps individuals recover from setbacks and sustain long-term innovation efforts. Creativity, as highlighted by Amabile (1996), drives the generation of novel ideas, enabling organizations to explore new solutions and opportunities. Curiosity, according to Harrison et al. (2023), fosters continuous learning and adaptability, crucial for navigating complex business environments. Lastly, empathy enhances teamwork and collaboration, both of which are critical for generating and implementing collective innovation (Kellett et al., 2006). Within COR theory, these psychological traits not only serve as personal resources but also as organizational assets that influence a firm's ability to innovate. Hobfoll et al. (2018) argue that when these psychological traits are accumulated and protected, they enhance an individual's capacity to engage in innovation by fostering resilience to stress and promoting creative problem-solving. COR theory provides a valuable framework for understanding how psychological traits function as essential resources that drive innovation performance. By accumulating and protecting psychological resources such as resilience, creativity, empathy, and curiosity, individuals and organizations can navigate the challenges of innovation more effectively. These psychological traits, when combined with managerial discretion, enable managers to make bold, innovative decisions that drive firm success. Furthermore, technology transfer, particularly in the context of Chinese MNCs operating in Kenya, plays a crucial role in enhancing local innovation by introducing new knowledge and technologies. However, the success of technology transfer depends on the managerial discretion and psychological traits of the leaders involved. This theoretical integration highlights the complex interplay between psychological traits, managerial discretion, and technology transfer in driving innovative success in multinational corporations.

2.2 Psychological Traits and Innovative Success

Psychological traits refer to stable patterns of thought, behavior, or emotion that shape an individual's personality and influence their interactions with the world (McCrae & Costa, 1995). These traits are often considered innate or deeply rooted, guiding how individuals respond to various situations and relate to others (Cheung et al., 2021; Wang et al., 2020). In the context of Chinese Multinational Corporations, these traits are often seen within the framework of traditional Chinese philosophies, such as Confucianism and Taoism, while also integrating modern psychological theories. In the same examination, the concept of innovative success is described as the ability to generate new ideas, products, or processes and successfully implement them to create value (Wang et al., 2020). Successful innovation in China often entails the balancing of traditional values with contemporary methods to achieve sustainable growth and societal impact (Faure & Fang, 2008). Hence, the successful fusion of psychological traits and innovative success in Chinese MNCs serves as a powerful example of how tradition and modernity can harmonize to drive sustained growth and positive societal change (Rauch & Frese, 2021).

Research on psychological traits has identified a range of characteristics that can impact social interactions and behavior hence innovation success. Davis (1983) employed empathy to assess perspective-taking, empathic concern, personal distress, and fantasy while Jolliffe and Farrington (2006) measured both cognitive and affective empathy. Connor and Davidson (2003) measured resilience, focusing on adaptability, strength, and optimism. Smith et al. (2008) focused on assessing one person’s ability to recover from adversity. Kashdan et al. (2009) measured curiosity and exploratory behavior through factors like stretching and embracing (tolerance for uncertainty). Torrance (1966) measured creativity by assessing aspects like fluency, flexibility, originality, and elaboration and Carson et al., (2005) measured individual creative achievements in various domains. Rushton et al. (1981) evaluate altruistic tendencies based on various prosocial behaviors. Rosenberg (1965) measured self-esteem, assessing overall self-worth and confidence; Scheier et al. (1994) measured optimism, differentiating between optimistic and pessimistic outlooks. Davis et al. (2011) assess humility through factors like self-forgetfulness, modest self-assessment, and openness to feedback. Schnitker (2012) provides a measure of patience across three dimensions: interpersonal, life hardships, and daily hassles and Tangney et al., (2004) assessed an individual's self-control capacity in various contexts.

Further, numerous empirical research has consistently shown a link between certain psychological traits and innovative success. Okasha (2020) highlighted the role of individual traits such as self-motivation, resilience, and creativity, as well

as physical health, in entrepreneurial success. Purnomo and Rosadi (2024) emphasized the importance of social maturity and a supportive work environment in stimulating creativity and innovation. Khalili (2016) extended this research, demonstrating that leaders' emotional intelligence competencies enhance employees' creative performance and innovative behavior. Emotional intelligence, particularly the regulation of emotion in others, was found to promote innovativeness and entrepreneurial success (Ngah & Salle, 2015). Fernández-Díaz (2021) highlighted the positive impact of leaders' emotional intelligence competencies and the role of creativity and resilience in achieving career success. Yu et al. (2021) identified a link between creativity, risk tolerance, self-control, and performance in innovation games. Abukhait et al. (2020) further found that curiosity, focus on opportunity, and resilience can enhance career adaptability, which in turn predicts innovative behavior. These studies collectively suggest that a combination of psychological traits and cognitive strategies can significantly impact innovative success. By exploring these traits within the context of Chinese MNCs in Kenya, the research can offer valuable insights into how these personal attributes interact with organizational and environmental factors to drive innovative success.

Despite existing empirical evidence highlighting the impact of psychological traits on innovative success, there is a noticeable gap in the literature regarding the influence of psychological traits, especially empathy, resilience, curiosity, and creativity, among TMTs of Chinese multinational corporations (MNCs) operating in Kenya. This gap suggests a need for targeted research to explore how these psychological traits affect innovative success and contribute to sustainable business practices within this context. Drawing lights from Yao and Jiang (2020) and Lin et al. (2018), we conceptualize empathy, resilience, curiosity, and creativity as the second-order construct of SME. The unique setting of Chinese MNCs in Kenya presents an opportunity to examine cross-cultural influences on innovation, as well as how these traits may predict success. These theoretical perspectives underscore the need for an integrative approach considering individual traits and contextual factors in driving innovative success. Investigating this relationship could provide valuable insights into effective management practices and strategies that foster innovation and sustainability, offering a foundation for further research and application in similar contexts. Hence, we propose the following hypothesis to empirically examine the relationships between psychological traits and innovative success in the present context:

H1: Perceived psychological traits are positively related to innovative success.

This hypothesis reflects the assumption that psychological traits—specifically empathy, resilience, curiosity, and creativity—serve as critical resources that enhance a firm's innovative capabilities. By fostering resilience to challenges, promoting collaboration, and encouraging continuous learning and creativity, these traits are expected to contribute significantly to the innovative success of Chinese MNCs operating in Kenya.

2.3 Managerial Discretion

Managerial discretion, defined as the degree of freedom managers have in making decisions (Finkelstein & Hambrick, 1990), has been shown to influence strategic outcomes, including innovation. Crossland and Hambrick (2011) argue that managerial discretion varies across cultural, organizational, and industry contexts, influencing how much autonomy leaders have to pursue innovation. In environments where innovation is critical for competitive advantage, managers with high levels of discretion can allocate resources, pursue experimental projects, and take calculated risks, all of which are essential for driving innovative success (Quigley & Graffin, 2017).

Researchers have explored various potential drivers of innovative success, including a firm's strategy and structure (Opusunju et al., 2019), innovation strategy type (Ramadani et al., 2019), and Top Management Team (TMT) characteristics (Zhao et al., 2020; She et al., 2021; Rong & Wang, 2021). Some studies have specifically focused on the CEO within the TMT (Vu, 2022). However, there are conflicting perspectives on the importance of managerial discretion in contributing to innovative success. Abrahamson and Hambrick (1997) were among the first to empirically measure discretion, using industry analysts' ratings. Moreover, Kim, Sambharya, and Yang (2016) discovered that CEOs often reduce discretionary expenses like research and development (R&D) and advertising to bolster short-term earnings, which could have mixed impacts on innovation outcomes.

While previous research has explored various aspects of managerial discretion, the focus has often been on strategic decision-making, organizational performance, and leadership characteristics (Baixauli-Soler et al., 2020; Crossland & Hambrick, 2011). However, limited attention has been paid to how managerial discretion operates as a mediator between psychological traits and innovative success. In this study, we aim to bridge this gap by conceptualizing managerial discretion as a mediator that enables leaders to leverage their psychological resources ─ such as resilience, creativity, curiosity, and empathy─to foster innovation. Drawing on the theoretical model of Palmer et al. (2004) and Zhanglan et al.

(2021), which suggests that TMTs play a pivotal role in shaping organizational success, managerial discretion is introduced as a key factor that mediates the influence of individual psychological traits on innovation.

Within the framework of Conservation of Resources (COR) theory, managerial discretion can be understood as a resource that enables managers to protect and accumulate additional resources ─ such as psychological traits ─ essential for innovation (Hobfoll, 1989). When managers have high discretion, they are more likely to make bold decisions that align with their creative and innovative capacities. For example, a manager with strong creativity and curiosity may use their discretionary power to explore new markets, develop novel products, or implement cutting-edge technologies (Amabile, 1996; Kashdan et al., 2009). Similarly, resilience enables managers to withstand the challenges and uncertainties associated with innovation, allowing them to persist in their efforts despite potential setbacks (Fredrickson, 2001).

Empirical studies have supported the idea that managerial discretion plays a critical role in determining innovation outcomes. Quigley and Graffin (2017) found that managers with high discretion are more likely to implement strategic changes that foster innovation, particularly in dynamic and uncertain environments. Similarly, Kim et al. (2016) demonstrated that managerial discretion allows leaders to navigate complex organizational challenges, enabling them to protect long-term innovation efforts from short-term financial pressures. This is particularly relevant in cross-cultural contexts, where managers must adapt global strategies to local market conditions, as seen in the case of Chinese MNCs operating in Kenya. By exercising managerial discretion, leaders can create an organizational environment that fosters innovative success. For instance, Baixauli-Soler et al. (2020) found that managerial discretion influenced compensation and strategic changes, both of which have direct implications for innovation. In Chinese MNCs, where cross-cultural interactions are common, managerial discretion allows managers to balance the needs of the headquarters with local market dynamics, fostering innovative strategies that are culturally and contextually appropriate (Zhanglan et al., 2021). In this way, managerial discretion acts as a mediator that bridges the gap between the psychological traits of managers and the innovative success of the organization.

Drawing on the theoretical model of Palmer et al. (2004) and Zhanglan et al., (2020), which suggests that TMTs play a pivotal role, we utilized managerial discretion as a mediator. We argue that managerial discretion mediates the relationship between psychological traits and innovative success by providing the flexibility needed to translate individual traits into organizational outcomes. Managers who exhibit traits like resilience, curiosity, and creativity are more likely to use their discretion to explore new ideas, implement experimental projects, and encourage a culture of innovation within the firm (Amabile, 1996; Harrison et al., 2023). This discretion is crucial in cross-cultural environments, where managers must navigate different cultural expectations and market conditions while maintaining their innovative goals (Haj Youssef et al., 2019). The Kenyan market, where Chinese MNCs operate, presents unique challenges that require managers to exercise high levels of discretion. By drawing on their psychological traits, managers can make discretionary decisions that enhance their firm's ability to innovate, adapt, and thrive in a competitive landscape. Managerial discretion allows leaders to adjust their strategies in response to local conditions, fostering innovation that is both contextually relevant and globally competitive (Crossland & Hambrick, 2011).

In this current study, we aimed to investigate the factors operating at both organizational and individual levels that shape the degree of managerial discretion. We sought to understand how this discretion may affect the relationship between psychological traits and innovative success. Therefore, our conceptual framework and empirical findings offer significant insights for scholarly investigations into strategic leadership and the concept of managerial discretion. We hypothesize that firms with robust managerial capital will demonstrate superior processes, and emphasize efficiency, and customer satisfaction, leading to increased breakthrough sales and a better workplace environment, ultimately enhancing innovative success. Therefore, we propose the following hypothesis:

Hypothesis 2a: psychological traits are positively related to managerial discretion.

Hypothesis 2b: managerial discretion is positively related to innovative success.

Mediating Hypothesis 1: Managerial discretion mediates the relationship between psychological traits and innovative success.

These hypotheses build on the assumption that psychological traits—such as resilience, curiosity, and creativity—enhance a manager's ability to exercise discretion in decision-making processes. In turn, managerial discretion allows managers to implement innovative strategies that drive innovative success within the organization.

2.4 Technology Transfer

Technology transfer refers to the movement of technical skills, knowledge, and methods between organizations or individuals for economic purposes (Kaushik et al., 2014). It encompasses various forms, such as horizontal (between sectors or industries) and vertical (from research to production) transfers, as well as internal and external processes (Maskus, 2004). In industries like pharmaceuticals, it covers the entire journey from drug discovery to commercialization (Pandey et al., 2020). Technology transfer plays a crucial role in fostering economic growth, regional development, and industry innovation (Audretsch et al., 2014). However, it is a complex process, especially in Chinese firms operating in Kenya, where local contexts may require flexible and adaptive approaches to technology transfer (Zhanglan et al., 2021).

Two main streams of research on technology transfer focus on North-South transfers (from developed to developing countries) and South-South transfers (between developing countries). The former traditionally emphasizes the need for developing nations to adopt superior technologies from advanced economies to bridge development gaps (Osabutey & Jackson, 2019). More recent research highlights the potential of South-South technology transfer, where similarities in socio-economic and institutional contexts, such as in China-Africa exchanges, foster technology transferer adaptability and utilization of transferred technologies (Rui et al., 2016). Key debates in this area center on the effectiveness of technology absorption and the role of absorptive capacity ─ the ability of firms to recognize, assimilate, and apply external knowledge (Lee et al., 2010). Another debate is whether technology transfer serves as a tool for genuine development or is merely a mechanism for exploitation in the North-South context (Hensengerth, 2018).

Despite the recognized potential of technology transfer in boosting innovation, several challenges hinder its success. Barriers such as cultural mismatches, language differences, and weak human capital, especially in regions like Kenya, complicate the absorption of technology (Osabutey & Jackson, 2019). Moreover, technology transfer is not solely about transferring physical assets but also involves building the skills and knowledge necessary for long-term innovation (Hensengerth, 2018). Managerial discretion also plays a pivotal role in technology transfer, as leaders' flexibility in resource allocation and strategic decision-making can significantly influence technology adoption (Kim et al., 2016). In Chinese MNCs operating in Kenya, successful technology transfer requires managers to adapt technologies to local contexts while maintaining alignment with broader organizational goals.

There are notable gaps in the literature regarding the influence of psychological traits, such as curiosity, creativity, and resilience, on technology transfer success, especially in MNCs operating in developing regions like Kenya. While studies have explored organizational factors like absorptive capacity (Shen & Edwards, 2006), the role of individual traits remains underexplored. Additionally, the interaction between managerial discretion and technology transfer is still poorly understood, particularly in shaping localized strategies for effective technology adoption (Osabutey & Jackson, 2019). Lastly, while South-South technology transfer has emerged as a promising model, its long-term sustainability and impact on innovation need further empirical exploration (Audretsch et al., 2014).

Building on this literature, we propose the following hypotheses:

Hypothesis 3a: Psychological traits are positively related to technology transfer.

Hypothesis 3b: Technology transfer is positively related to innovative success.

Mediating Hypothesis 2: Technology transfer mediates the relationship between psychological traits and innovative success.

These hypotheses suggest that psychological traits like curiosity and resilience enable managers to engage more effectively with new technologies, thereby facilitating technology transfer. In turn, successful technology transfer promotes innovation by introducing new knowledge and capabilities that can be adapted to local needs, driving long-term success.

Finally, a unified model is constructed, as illustrated in Figure 1.

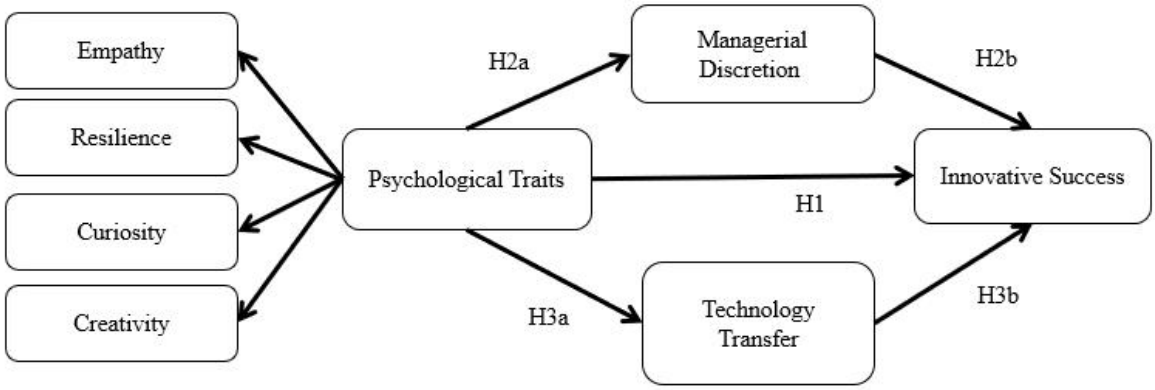

Figure 1: Conceptual Framework

3.1 Measures

To assess the psychological traits, the following measures were used and integrated: Basic Empathy Scale (BES) (Jolliffe & Farrington, 2006); Brief Resilience Scale (BRS) (Smith et al., 2008); Curiosity and Exploration Inventory-II (CEI-II) (Kashdan et al., 2009); and Creative Achievement Questionnaire (CAQ) (Carson, 2005). For the managerial discretion styles of TMTs within Chinese MNCs, we utilized the scale by Zhanglan et al., (2021). To assess the technology transfer of TMTs within Chinese multinational corporations, we employed the scale developed by Lee et al (2010). Based on Henry (2000) and Christensen (1997) scales, innovative success was measured by indicators perspectives ranging from research and development activities, success rates in obtaining patents for its innovations, engagement in technology licensing agreements and strategic partnerships, and encouragement of all employees to participate in innovation activities. A 5-point Likert scale (1 = "strongly disagree," 5 = "strongly agree") was used to gauge participants' agreement with statements.

To better fit the Chinese MNCs context, the authors translated the initial scale into Chinese because most of the existing scales are in foreign literature. To ensure the accuracy of the translation, we invited a certified translator, three scholars with relevant backgrounds, and three experienced top team managers to provide their insights regarding the items on the questionnaire. A pilot study involving 44 TMTs was conducted to test the methodologies and procedures before implementing them in the first wave of data collection in 2018. Confirmatory factor analysis (CFA) indicated that seven items did not meet reliability standards or showed low factor loadings in the analysis, leading to their removal from the questionnaire.

3.2 Data Collection

The researcher adopted a mixed method to distribute the survey questionnaires among the TMTs of Chinese MNCs in Kenya. By leveraging personal connections within these corporations, the researcher sent some surveys via email while others were administered in person. This distribution was conveniently aligned with the corporations' annual meetings and training sessions, which typically occurred in December, facilitating the collection of data. TMTs were informed, and consent was granted before the questionnaires were collected. In this longitudinal study, 201 valid questionnaires were collected in the first wave of data collection at time one (T1) in 2018. Subsequently, for the second time (T2) and third time (T3) in 2021 and 2023, the number of valid questionnaires was 206 and 216, respectively.

4. Results and Discussion

4.1Common method variance test

Principal component analysis is a common method used to identify common method variance, as indicated by Harman's single-factor test. The analysis was conducted on all items in three datasets with SPSS 27.0. The results of the Harman single-factor test showed that the variance explained by all factors was less than the recommended 50% threshold (Hair et al., 2014), suggesting that there was no common method bias effect among the variables, and our common method variance was within an acceptable range.

4.2 Reliability and validity analysis

Before the test of the measurement model, the reliability and validity of the questionnaire were examined. The reliability and validity tests were determined by observing two indicators: Composite Reliability (CR) and Average Variance Extracted (AVE). According to Fornell and Larcker (1981), it is considered acceptable when CR > 0.7 and AVE > 0.5, indicating good internal consistency among the measurement variables. Hence, these two indicators were calculated using Amos 24.0, and the results showed that CR was greater than 0.7 and AVE was greater than 0.5 for all variables in three waves (Table 1), indicating good internal consistency and acceptable reliability of the measures.

Table 1 Measurement model (convergent validity and reliability)

Construct	Item	T 1					T 2					T 3				
		Unstd.	P	Std.	CR	AVE	Unstd.	P	Std.	CR	AVE	Unstd.	P	Std.	CR	AVE
Empathy (ETH)	ETH1	0.979	***	0.898	0.964	0.791	0.970	***	0.869	0.953	0.744	0.954	***	0.859	0.947	0.718
	ETH2	1.035	***	0.906			1.060	***	0.886			1.042	***	0.872		
	ETH3	1.000		0.889			1.000		0.867			1.000		0.866		
	ETH4	1.013	***	0.914			1.039	***	0.901			1.010	***	0.892		
	ETH5	0.997	***	0.854			0.997	***	0.822			0.985	***	0.807		
	ETH6	1.027	***	0.898			1.011	***	0.856			0.955	***	0.823		
	ETH7	0.959	***	0.866			0.958	***	0.834			0.909	***	0.808		
Resilience (RSL)	RSL1	0.999	***	0.870	0.949	0.758	1.031	***	0.865	0.943	0.734	1.019	***	0.854	0.940	0.724
	RSL2	0.893	***	0.880			0.907	***	0.870			0.912	***	0.868		
	RSL3	1.015	***	0.903			1.022	***	0.886			0.998	***	0.874		
	RSL4	0.942	***	0.852			0.966	***	0.839			0.978	***	0.829		
	RSL5	1.004	***	0.859			1.009	***	0.838			1.039	***	0.845		
	RSL6	1.000		0.858			1.000		0.840			1.000		0.835		
Curiosity (CRS)	CRS1	1.093	***	0.855	0.940	0.758	1.155	***	0.813	0.918	0.692	1.093	***	0.841	0.931	0.731
	CRS2	1.019	***	0.902			1.078	***	0.889			1.012	***	0.879		
	CRS3	1.012	***	0.848			1.041	***	0.784			1.023	***	0.833		
	CRS4	1.041	***	0.875			1.143	***	0.870			1.076	***	0.868		
	CRS5	1.000		0.871			1.000		0.797			1.000		0.852		
Creativity (CRT)	CRT1	1.189	***	0.800	0.898	0.639	1.234	***	0.777	0.887	0.614	1.169	***	0.745	0.894	0.629
	CRT2	1.138	***	0.877			1.186	***	0.870			1.142	***	0.877		
	CRT3	1.087	***	0.779			1.153	***	0.793			1.124	***	0.805		
	CRT4	1.222	***	0.835			1.216	***	0.807			1.170	***	0.823		
	CRT5	1.000		0.693			1.000		0.655			1.000		0.705		
Managerial Discretion (MD)	MDQ1	0.985	***	0.833	0.882	0.652	1.001	***	0.871	0.889	0.669	0.999	***	0.875	0.891	0.674
	MDQ2	0.855	***	0.738			0.768	***	0.691			0.794	***	0.682		
	MDQ3	0.913	***	0.801			0.919	***	0.818			0.956	***	0.846		
	MDQ4	1.000		0.853			1.000		0.878			1.000		0.865		

Technology Transfer (TT)	TTQ1	1.000		0.813	0.909	0.714	1.000		0.781	0.867	0.621	1.000		0.771	0.875	0.637
	TTQ2	0.934	***	0.852			0.906	***	0.773			0.919	***	0.774		
	TTQ3	0.924	***	0.859			0.848	***	0.774			0.921	***	0.811		
	TTQ4	1.028	***	0.854			1.054	***	0.822			1.061	***	0.835		
Innovative Success (IS)	IP1	1.119	***	0.935	0.953	0.836	1.134	***	0.923	0.942	0.803	1.081	***	0.915	0.943	0.806
	IP2	1.088	***	0.926			1.079	***	0.907			1.047	***	0.909		
	IP3	1.040	***	0.910			1.030	***	0.889			1.009	***	0.893		
	IP4	1.000		0.886			1.000		0.864			1.000		0.873		

Note. ***p < 0.001.

This study applied discriminant validity to assess the correlation and significant differences between latent variables. Discriminant validity is considered good if the correlation coefficient between a variable and other variables is less than the square root of its AVE (Fornell & Larcker, 1981). In Table 2, the bold values represent the square roots of the AVEs. These values of AVEs are greater than all other values in their respective columns, indicating that the measurement model used in this study has adequate discriminant validity.

Table 2 Analysis of discriminant validity (T1-T3)

Construct	T 1							
	AVE	CRT	CRS	RSL	ETH	IS	TT	MD
CRT	0.639	**0.799**						
CRS	0.758	0.658	**0.871**					
RSL	0.758	0.617	0.687	**0.871**				
ETH	0.791	0.677	0.602	0.582	**0.889**			
IS	0.836	0.523	0.513	0.515	0.458	**0.914**		
TT	0.714	0.375	0.431	0.339	0.308	0.835	**0.845**	
MD	0.652	0.373	0.391	0.364	0.399	0.828	0.800	**0.807**
	T 2							
CRT	0.614	**0.784**						
CRS	0.692	0.655	**0.832**					
RSL	0.734	0.623	0.682	**0.857**				
ETH	0.744	0.709	0.627	0.621	**0.863**			
IS	0.803	0.586	0.522	0.643	0.544	**0.896**		
TT	0.621	0.531	0.515	0.461	0.436	0.727	**0.788**	
MD	0.669	0.420	0.388	0.442	0.439	0.751	0.643	**0.818**
	T 3							
CRT	0.629	**0.793**						
CRS	0.731	0.617	**0.855**					
RSL	0.724	0.641	0.772	**0.851**				
ETH	0.718	0.654	0.685	0.714	**0.847**			
IS	0.806	0.552	0.490	0.625	0.558	**0.898**		
TT	0.637	0.562	0.394	0.408	0.424	0.730	**0.798**	
MD	0.674	0.429	0.400	0.472	0.446	0.771	0.648	**0.821**

Note. Diagonals in boldness are the square roots of AVE and the lower triangle is the conformal Pearson correlation coefficient.

4.3 Measurement model fit (T1-T3)

Evaluating fit in the SEM model involves comparing the sample's covariance matrices with those of the theoretical model, which leads to the calculation of various fit indices (Hair et al., 2012). From Table 3, it was indicated that the measurement model remained consistent across the three time points (T1, T2, and T3) as indicated by the good fit indices for each time point. However, there are some variations in the fit indices and standardized loadings. At T1, the model is fit. The fit indices Chi-Square/DF (1.725), CFI (0.801), and RMSEA (0.060) meet the standard. At T2, the fit indices Chi-Square/DF (1.695), CFI (0.804), and RMSEA (0.058) meet the standard. At T3, the fit indices Chi-Square/DF (1.878), ACFI (0.769), and RMSEA (0.064) meet the standard. Despite the variations in fit indices, the measurement model maintained sufficient convergent validity across all three time points. The slight fluctuations in fit indices may be attributed to changes in the data or minor alterations in the relationships between variables over time. Our comparative analysis indicated that the goodness-of-fit indices achieved the recommended thresholds, demonstrating that the model adequately fit the collected data. Overall, the findings suggest that the measurement model is robust and stable across the longitudinal study period.

Table 3 Fit Indices

Fit indices	Chi-Square/DF	GFI	AGFI	CFI	TLI	RMSEA
Source	Hayduk, 1987	Bagozzi & Yi, 1988	Scott, 1995	Bagozzi & Yi, 1988	Hair et al., 2017	Hair et al., 2017
Recommended values	<3	>0.8 acceptable; >0.9 excellent fit	>0.8 acceptable; >0.9 excellent fit	>0.90	>0.90	<0.08
T1	1.725	0.801	0.772	0.943	0.938	0.060
T2	1.695	0.804	0.776	0.939	0.934	0.058
T3	1.878	0.798	0.769	0.929	0.923	0.064

Note: Chi-Square/DF Chi-Square to Degrees of Freedom ratio, AGFI Adjusted Goodness of Fit Index, CFI Comparative Fit Index, TLI Tucker-Lewis Index, RMSEA Root Mean Square Error of Approximation.

4.4 Structural model validation

4.4.1 Path diagram (T1-T3)

Based on the Second-order construct SEM path diagram for T1, as shown in Figure 2, three latent factors are present: managerial discretion (MD), psychological traits (PT), and technology transfer (TT), which act as predictors of innovative success (IS) in Chinese MNCs operating in Kenya. The coefficient of 0.26 suggests a positive relationship between psychological traits and innovative performance. Within psychological traits, curiosity has the highest coefficient of 0.82, followed by creativity (0.81), resilience (0.78), and empathy (0.75). This implies that individuals with these traits are more likely to contribute to innovation within the organization. Employees who possess traits like creativity, resilience, and an openness to new ideas are more inclined to generate novel solutions, take risks, and adapt to change—key drivers of innovative success. The path coefficient of curiosity (0.82) stands out as the strongest contributor among the psychological traits, suggesting that curiosity plays a particularly crucial role in fostering innovative thinking and experimentation. Although the path coefficient of 0.26 suggests a positive but moderate influence of psychological traits on innovative success, it indicates that psychological traits like curiosity and creativity directly contribute to innovation outcomes. However, the presence of other factors, such as managerial discretion and technology transfer, also plays a significant role.

The coefficient of 0.40 indicates a moderate positive relationship between managerial discretion (MD) and innovative success. This suggests a stronger direct relationship than that seen with psychological traits, highlighting the crucial role of managerial discretion in facilitating innovative activities by allowing decision-making freedom and effective resource

allocation. Managers with greater autonomy are more likely to implement innovative strategies, allocate resources toward innovative projects, and foster a culture conducive to experimentation and new ideas within the organization. The coefficient of 0.47 shows a strong positive relationship between technology transfer (TT) and innovative success. This suggests that successful technology transfer — the movement of knowledge, skills, and technical capacity into the organization—plays a pivotal role in enhancing innovation. Technology transfer brings new knowledge and capabilities to Chinese MNCs operating in Kenya, enabling them to leverage external technological advances and local adaptations. The effective adoption and integration of these new technologies into the organization's processes can significantly enhance its innovative potential. Technology transfer serves as a key enabler of innovative success by introducing cutting-edge knowledge and supporting the development of new products and processes.

The path diagram at T1 suggests that managerial discretion, psychological traits, and technology transfer are all significant predictors of innovative success in Chinese MNCs. While psychological traits like curiosity and creativity provide the individual drive for innovation, managerial discretion allows leaders to make bold decisions and allocate resources that support innovative initiatives. Technology transfer, on the other hand, brings external knowledge and advanced skills that can be effectively integrated into the organization to drive long-term innovative success. To maximize innovation, organizations can benefit from fostering a culture that values autonomy and individual creativity while actively facilitating technology transfer processes. By empowering managers through discretion, nurturing psychological traits within their workforce, and ensuring successful technology transfer, Chinese MNCs in Kenya can enhance their innovation performance and maintain a competitive edge in a dynamic global market.

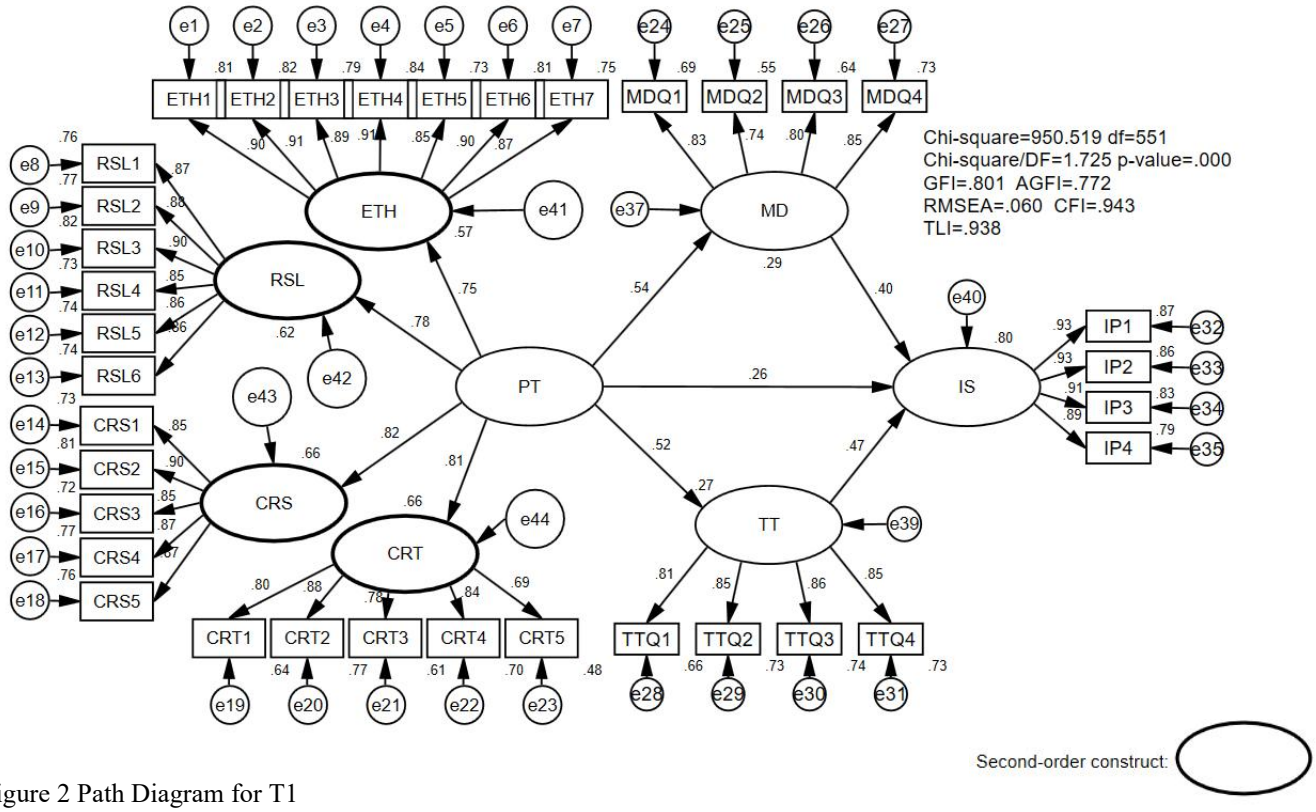

Figure 2 Path Diagram for T1

In the Second-order construct SEM path diagram for T2, as shown in Figure 3, similar to T1, we have three latent factors: managerial discretion, psychological traits, and technology transfer, all of which are predictors of innovative success. Like T1, the coefficient of 0.35 indicates a positive relationship between psychological traits and innovative success. Creativity remains the highest contributing factor with a coefficient of 0.82, followed by resilience at 0.80, and curiosity and empathy, both at 0.79. This suggests that individuals with these psychological traits are still significantly contributing to innovative performance, consistent with the T1 findings. The coefficient of 0.41 suggests a moderate positive relationship between managerial discretion and innovative success. This reinforces the earlier finding that as managerial

discretion increases, innovative success also improves. Managers with greater freedom and autonomy in their decision-making continue to create an environment that fosters innovation within their organizations. Through effective resource allocation, risk-taking encouragement, and support for experimentation, managerial discretion remains a key driver of innovation.

At T2, the coefficient of 0.27 for technology transfer suggests a slightly weaker positive relationship between technology transfer and innovative success compared to T1. Despite this, technology transfer still maintains a significant role in promoting innovative success. This indicates that while the role of technology transfer has slightly diminished, it continues to have a meaningful impact on fostering innovation, particularly through the introduction of new knowledge and capabilities that can be adapted to local conditions. The findings at T2 reaffirm the importance of managerial discretion, psychological traits, and technology transfer as key factors driving innovative success in Chinese multinational corporations operating in Kenya. Organizations should continue to focus on promoting these aspects as part of their broader strategy to foster innovation and maintain competitiveness in dynamic business environments. The slight variations in coefficients between T1 and T2 may reflect changes in the organizational context, or the varying effectiveness of initiatives aimed at boosting innovation over time.

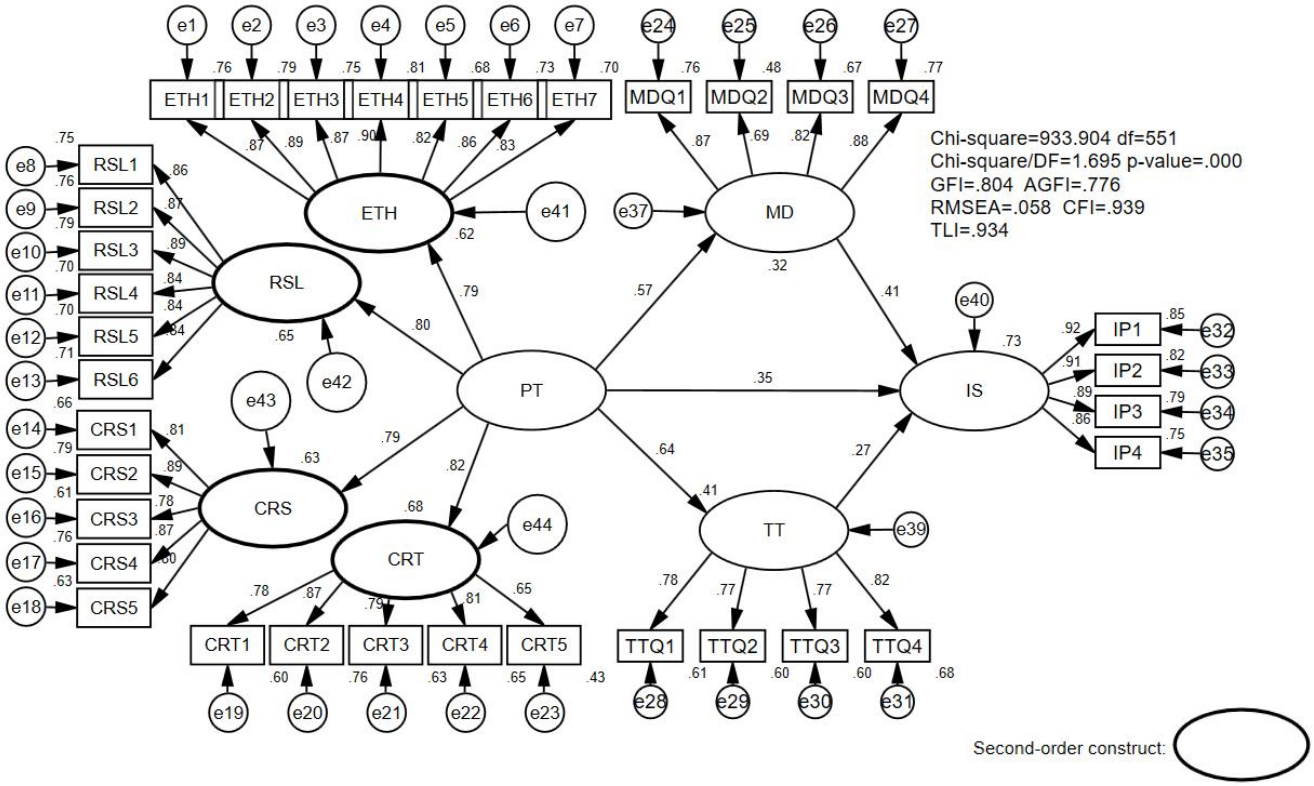

Figure 3 Path Diagram for T2

In the T3 second-order construct SEM path diagram, depicted in Figure 4, the three latent factors—managerial discretion, psychological traits, and technology transfer—continue to be significant predictors of innovative success in Chinese multinational corporations operating in Kenya. The analysis reveals a coefficient of 0.29 for psychological traits, indicating a positive but moderate influence on innovative performance. This underscores the sustained significance of individual psychological traits in fostering innovation. Notably, resilience stands out with the highest coefficient of 0.88, likely accentuated by the challenges posed by COVID-19, signifying the crucial importance of resilience in navigating the volatile African market context. Curiosity and empathy also maintain high coefficients of 0.83 and 0.82, respectively, reflecting their ongoing importance in driving innovative outcomes. Managerial discretion shows an increased coefficient of 0.44 at T3, suggesting that its influence on innovative success has grown over time. This rise indicates that greater managerial autonomy, necessitated by unprecedented challenges such as the pandemic, allows for more effective and agile decision-making, which in turn enhances the organization's innovative capabilities. Technology transfer, with a coefficient of 0.33, while slightly weaker than in previous assessments, continues to significantly impact innovative success. This sustained influence highlights the essential role of technology transfer in fostering innovation, particularly

in adapting and utilizing external knowledge and skills to improve internal processes. Overall, the T3 analysis highlights that despite the dynamic and sometimes adverse business environment, psychological traits, managerial discretion, and technology transfer remain crucial for driving innovative success. The growing importance of resilience emphasizes a critical adaptive quality that organizations must cultivate to navigate the increasing uncertainties and dynamics of the global business landscape, particularly during the COVID-19 pandemic. Furthermore, the increasing significance of managerial discretion underscores the need for adaptive leadership strategies that accommodate rapid changes and challenges in this pandemic context. Technology transfer also plays a pivotal role, ensuring that Chinese MNCs in Kenya continue to adopt and integrate new technologies that enhance their innovative capacities and maintain competitiveness.

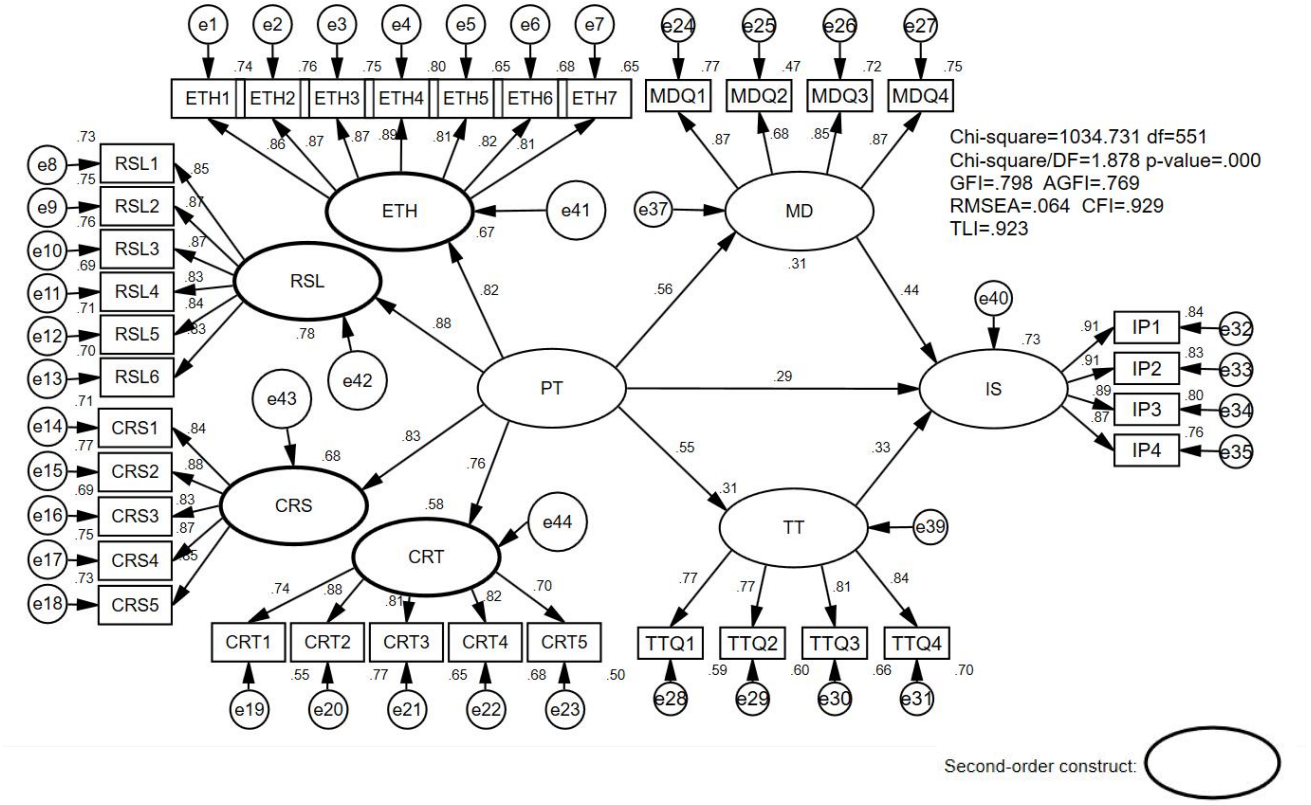

Figure 4 Path Diagram for T3

4.4.2 Hypothesis Testing and Mediation Effect

The bootstrap method within AMOS 24.0 software was used to perform 5,000 runs within a 95% confidence interval, thereby obtaining the upper and lower bounds of the direct, indirect, and total effects (Taylor et al., 2008). These bounds are used to assess the presence of mediation effects. If the confidence interval of the indirect effects does not include zero, mediation is indicated. Should the interval for direct effects also not include zero, it represents partial mediation; otherwise, it is considered full mediation. The bias-corrected percentile method was applied to assess the direct, indirect, and total impact of psychological traits, managerial discretion, technology transfer, and innovative success in Chinese MNCs in Kenya. All the P values for H1, H2a, H2b, H3a, and H3b were less than 0.05 over the three distinct time points (T1, T2, T3), as partly shown in Table 4. Figure 2, Figure 3, and Figure 4 depict the model after testing all five hypotheses collectively. Hence, H1, H2a, H2b, H3a, and H3b were supported across the three time points.

Table 4 also presents the robust analysis of the mediating effects of Managerial Discretion and Technology Transfer on the relationship between Psychological Traits and Innovative Success over three distinct time points (T1, T2, T3). This longitudinal analysis provides valuable insights into how these relationships evolve over time and how managerial discretion and technology transfer dynamics influence innovation outcomes. There is an increasing trend in the indirect effects through managerial discretion over time. At T1, the unstandardized coefficient is 0.267, which increases to 0.286 at T2, and further to 0.299 at T3. This suggests a growing influence of psychological traits through managerial discretion

on innovative success. The direct impact of psychological traits on innovative success shows variability but remains significant across all periods. It starts at 0.328 at T1, peaks at 0.424 at T2, and slightly decreases to 0.355 at T3. This indicates that while psychological traits directly contribute to innovative success, their impact might be moderated by other organizational factors over time. The indirect effect through technology transfer shows some variation. At T1, the unstandardized coefficient is 0.304, but it sees a slight decline to 0.215 at T2, before slightly increasing again to 0.221 at T3. These fluctuations may reflect changes in how effectively technology transfer is managed, particularly in adapting new technologies to the local Kenyan context or shifts in how MNCs integrate these technologies into their innovation processes. The total effect of psychological traits on innovative success remains relatively stable over time, with a slight decrease from 0.899 at T1 to 0.875 at T3. This stability suggests that, despite fluctuations in direct and indirect paths, the cumulative influence of psychological traits on innovation remains strong over time.

As observed in the T1, T2, and T3 path diagrams, the increasing indirect effect through managerial discretion over time suggests that as time progresses, the role of managerial discretion in leveraging psychological traits to enhance innovative success becomes more pronounced. This could reflect a greater alignment of managerial practices with the innovative goals of the organization, particularly in a developing country context like Kenya. On the other hand, the fluctuations in the indirect effect through technology transfer may indicate challenges in consistently transferring and adapting technologies to local environments, which could be an area for further organizational development. The relatively stable total effect of psychological traits on innovative success, across all three time points, underscores the enduring importance of psychological traits in driving innovation. It also emphasizes the need for Chinese MNCs operating in Kenya to continue nurturing these traits within their organizational culture to sustain competitive advantages. Additionally, the findings highlight the significance of strengthening managerial discretion and improving technology transfer processes to better harness the potential of psychological traits for innovation. Thus, the results provide meaningful insights into the dynamics of innovation drivers in Chinese multinational corporations in Kenya. They suggest that organizations should focus on areas such as enhancing managerial discretion and refining technology transfer strategies to maximize their innovative outcomes.

Table 4 Robust analysis: Mediating effect of MD and TT

Intermediate path	T 1				T 2				T 3			
	Unstd.	Lower	Upper	P	Unstd.	Lower	Upper	P	Unstd.	Lower	Upper	P
PT→MD→IS (Indirect)	0.267	0.106	0.599	0.007	0.286	0.126	0.64	0.003	0.299	0.145	0.617	0
PT→IS (Direct)	0.328	0.054	0.785	0.018	0.424	0.154	1.164	0.003	0.355	0.151	0.757	0.001
PT→TT→IS (Indirect)	0.304	0.117	0.695	0.004	0.215	0.025	0.557	0.033	0.221	0.098	0.48	0.003
Total effect	0.899	0.562	1.492	0.001	0.925	0.563	1.455	0.001	0.875	0.55	1.282	0.002

5 Conclusion, Contributions and Limitations

5.1 Conclusion

The longitudinal study of Chinese MNCs in Kenya conducted over three-time points—2018 (T1), 2021 (T2), and 2023 (T3)—presents a comprehensive examination of the factors influencing innovative success within these organizations. The longitudinal analysis reveals that psychological traits consistently play a significant role in predicting innovative success. The coefficient for psychological traits increased from 0.26 at T1 to 0.35 at T2, before stabilizing at 0.29 at T3. This indicates a sustained positive influence of psychological traits on innovation, underscoring their critical role in fostering innovative outcomes. Curiosity emerged as the most influential trait across all three time periods, with coefficients of 0.82 at T1, 0.79 at T2, and 0.83 at T3. This aligns with findings by Harrison et al. (2023), which suggest that curiosity drives the pursuit of new knowledge and adaptability to change, essential components for innovation in a rapidly evolving market. Notably, resilience, with the highest coefficient of 0.88 at T3, underscores the heightened importance of this trait in the face of global challenges such as the COVID-19 pandemic. This finding resonates with the COR theory, which posits that resilience helps in conserving critical personal resources necessary for sustaining

performance under stress and adversity (Pasha, 2019; Rauch & Frese, 2007). These findings underscore the enduring role of individual characteristics in shaping innovation within the context of the sustainable economy, where creativity, resilience, and effective leadership are crucial to maintaining competitive advantage. Despite changes in the external environment or shifts in organizational dynamics, these individual traits remained robust drivers of innovation.

Furthermore, managerial discretion demonstrated a significant and increasing influence on innovative success, with coefficients of 0.40 at T1, 0.41 at T2, and 0.44 at T3. This trend indicates that greater managerial autonomy, necessitated by the need to navigate unprecedented challenges such as those presented by the pandemic, facilitates more effective and flexible decision-making processes. This finding supports the work of Haj Youssef and Teng (2019), who emphasize the critical role of managerial discretion in fostering innovation by enabling quick and adaptive responses to dynamic market conditions. As for technology transfer, the coefficient slightly diminished from 0.47 at T1 to 0.33 at T3, reflecting changes in the strategic priorities of the organizations. Nevertheless, technology transfer continued to play a significant role in driving innovative success throughout the study period. Effective technology transfer, characterized by the successful movement of technical skills, knowledge, and methods from one entity to another, remains crucial in ensuring that Chinese MNCs can continuously adopt and integrate new knowledge into their operations, leading to enhanced innovation (Rui et al., 2016). The decline in its impact from T1 to T3 may suggest a growing reliance on internal resources, such as managerial discretion, as organizations navigate more complex and turbulent market environments. This finding aligns with literature that highlights the importance of absorptive capacity and the adaptation of transferred technology to local conditions, which becomes especially pertinent in developing economies such as Kenya (Osabutey & Jackson, 2019). The ability to transfer and adapt new technologies effectively can significantly enhance innovation, but it requires strong leadership and managerial oversight to ensure that the transferred knowledge is fully utilized within the new organizational context. Despite the slight decline in its direct impact, technology transfer continues to be a key enabler of innovative success, particularly in regions where local knowledge and external innovations must be harmonized to achieve optimal results.

The findings of this study corroborate and extend the existing literature on the determinants of innovative success in multinational contexts. For instance, Rauch and Frese (2007) and Pasha (2019) emphasize the pivotal role of psychological resilience in maintaining innovation under stress, which is strongly supported by the high coefficient of resilience at T3 in our study. Similarly, the sustained and increasing impact of managerial discretion aligns with the observations of Haj Youssef and Teng (2019), who argue that managerial autonomy is crucial for innovation in emerging markets. The slight decline in the impact of technology transfer may reflect the shifting dynamics of organizational priorities, where managerial discretion becomes more critical in crisis conditions. However, technology transfer remains important for bringing external knowledge and fostering innovation by introducing new capabilities that can be adapted to local contexts (Pandey et al., 2020).

5.2 Contributions

5.2.1 Theoretical Contributions

This longitudinal study of Chinese multinational corporations (MNCs) operating in Kenya enriches COR theory in the fields of innovation management, technology transfer, and managerial discretion, particularly in the context of multinational corporations (MNCs) operating in developing economies like Kenya. Firstly, the research extends the Conservation of Resources (COR) theory by linking psychological traits—such as curiosity, resilience, creativity, and empathy—to innovation outcomes in MNCs. COR theory primarily focuses on how individuals conserve, protect, and accumulate valuable resources (Hobfoll, 1989). This study broadens the theory's application by showing how these psychological traits, in combination with technology transfer and managerial discretion, act as critical resources that drive innovation. The findings emphasize that psychological traits not only serve as personal resources but also contribute to organizational innovation by fostering adaptability, problem-solving, and creative decision-making.

Secondly, this research contributes to the growing body of literature on technology transfer by highlighting its critical role in shaping innovative success, particularly in the context of South-South transfers between developing nations. The study demonstrates that technology transfer is not merely a one-way process of transferring technical knowledge from one organization to another, but a dynamic interaction that requires local adaptation and managerial input to foster innovative outcomes. This expands our understanding of how technology transfer can serve as a key driver of innovation in developing countries, where effective technology adaptation is essential for long-term success.

Thirdly, the study provides new insights into the mediating role of managerial discretion in innovation processes. While previous research has focused on the importance of managerial discretion in decision-making (Abrahamson & Hambrick, 1997), this study deepens that understanding by showing how managerial discretion enables the effective utilization of psychological traits and technology transfer in fostering innovation. Managers with higher discretion can use their creativity and curiosity to explore innovative opportunities, thereby playing a crucial role in translating individual-level resources into organizational innovation. This finding adds to the existing body of knowledge by emphasizing the strategic importance of managerial discretion in MNCs, particularly in emerging markets.

5.2.2 Practical Implications

For practitioners, particularly in the rapidly evolving markets of developing economies like Kenya, this study offers several actionable insights that can significantly enhance organizational innovation. Firstly, it highlights the need for MNCs to invest in developing psychological traits such as curiosity, resilience, and creativity, especially within their top management teams (TMTs). These traits are shown to be key drivers of innovation, fostering adaptability and problem-solving skills that are essential for navigating complex and dynamic market environments. Leadership development programs that focus on cultivating these psychological traits can equip leaders with the tools to inspire innovation and create environments where creative ideas can thrive. Such programs should aim to build not just technical competencies, but also the personal resilience and creative thinking necessary for sustaining innovation in uncertain markets.

Secondly, the study underscores the importance of managerial discretion in shaping innovation outcomes. In markets like Kenya, where change is rapid and unpredictable, granting managers greater autonomy in decision-making processes can lead to more effective innovation strategies. This discretion allows managers to respond quickly to market shifts, experiment with new ideas, and allocate resources in ways that support innovation. Organizations should aim to strike a balance between control and flexibility, ensuring that managers have the freedom to make decisive, innovative choices while still aligning with the broader strategic goals of the firm. This is particularly crucial in cross-cultural settings, where local knowledge and adaptability play a significant role in the success of MNCs.

Thirdly, technology transfer remains a critical enabler of innovation, but its success depends on more than just the movement of technical knowledge. The findings suggest that technology transfer processes must be localized and adapted to the specific market conditions of the host country. MNCs operating in Kenya should focus on strategies that integrate new technologies into their organizational frameworks in a way that aligns with local needs and market conditions. This means going beyond simply importing technology and ensuring that local teams are equipped with the skills and knowledge to adapt and apply these technologies effectively. Building strong local partnerships can further facilitate this process, providing the necessary cultural and contextual insights to make technology transfer more successful.

Additionally, fostering a culture of continuous learning and knowledge-sharing is vital. Organizations should create environments where experimentation is encouraged and where failures are seen as learning opportunities rather than setbacks. This kind of culture not only drives innovation but also promotes organizational resilience in the face of external challenges. Policies that support risk-taking and creativity are essential for cultivating an innovative workforce that can adapt to the fast-paced changes characteristic of developing markets.

Lastly, the study highlights the importance of continuous strategic adaptation in the face of external and internal shifts. The dynamic nature of markets like Kenya requires agility in strategy formulation and execution. Organizations must ensure that their strategies are not static but instead evolve to incorporate new insights, changing market conditions, and technological advancements. Regular updates to strategic plans, informed by both local market conditions and global trends, will help MNCs maintain a competitive advantage and ensure sustained innovative success.

5.3 Limitations of the Study

This study, while providing insightful contributions to the understanding of innovation drivers in Chinese multinational corporations in Kenya, has several limitations that warrant consideration. Firstly, the generalizability of the findings may be restricted due to the specific geographical and cultural context of the study. The unique socio-economic and business environments of Kenya may not fully represent other regions, particularly where economic, regulatory, and cultural dynamics differ significantly. Secondly, the reliance on self-reported measures for assessing psychological traits and leadership behaviors could introduce bias. The subjective nature of these measures might affect the accuracy of the data, as respondents may provide socially desirable answers or misinterpret the questions. Additionally, the longitudinal design, although a strength in understanding changes over time, has its constraints. The three time points (2018, 2021, and 2023)

may not adequately capture the rapid evolution of market conditions and organizational changes that could influence innovation. More frequent observations might provide a finer-grained understanding of the dynamics at play. Lastly, the impact of external variables such as economic fluctuations, technological advancements, and political changes was not extensively controlled for in this study. These factors could significantly influence innovation outcomes and the effectiveness of technology transfer and psychological traits. These limitations should be addressed in future studies to enhance the robustness and applicability of the research findings to different organizational and cultural contexts.

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