



The Influence of Succession Ability Cultivation, Family Governance Structure and Enterprise Succession Success through Innovation Ability in Family Enterprises

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Abstract

Family business succession represents a critical challenge threatening enterprise continuity and economic stability, with particular complexity in innovation-intensive environments. This study examines how succession ability cultivation and family governance structure influence enterprise succession success through innovation ability's mediating role in family enterprises in Shenzhen, China. Drawing on resource-based theory, agency theory, and stewardship theory, we develop an integrated framework proposing that succession antecedents influence outcomes both directly and indirectly through innovation capabilities. Using quantitative survey data from family business stakeholders representing diverse organizational roles, generations, and industries, we employ partial least squares structural equation modeling to test hypothesized relationships. Results demonstrate that both succession ability cultivation and family governance structure positively influence enterprise succession success, with innovation ability partially mediating these relationships, accounting for approximately half of total effects. The findings reveal that successful succession in innovation-intensive contexts requires not only systematic successor preparation and effective governance mechanisms but critically depends on developing innovation capabilities that enable adaptation and renewal during leadership transitions. This study contributes to succession literature by identifying innovation as a central mediating mechanism linking traditional succession factors to outcomes, demonstrating the need for context-specific succession theories acknowledging environmental contingencies. Practical implications suggest family enterprises should adopt integrated approaches combining innovation-oriented successor development, governance structures balancing stability with flexibility, and strategic prioritization of innovation capabilities. The research provides actionable guidance for family business owners, professional advisors, policymakers, and educators supporting sustainable generational transitions in dynamic business environments.

Keywords: Family Business Succession; Innovation Ability; Succession Ability Cultivation; Family Governance Structure; Chinese Family Enterprises.

1. Introduction

Family enterprises represent a fundamental pillar of economic systems worldwide, contributing substantially to employment generation, wealth creation, and regional development. These businesses possess unique characteristics that distinguish them from non-family corporations, including long-term strategic orientation, concentration of ownership and control, and the intertwining of family and business systems (Chrisman et al., 2005). In China, family businesses have emerged as particularly significant economic actors, representing approximately 85% of private enterprises and contributing more than 60% of the nation's GDP (Xu et al., 2015). This substantial economic footprint underscores the critical importance of ensuring these enterprises' continuity across generations.

However, family enterprises face a profound challenge that threatens their survival and continued contribution to economic prosperity: the succession crisis. Research consistently demonstrates that the majority of family businesses fail to successfully transition leadership from one generation to the next. In the Chinese context, this challenge is particularly acute, with only 30% of family enterprises successfully completing the succession process to the second generation (Xu et al., 2015). This alarming statistic represents not merely a private family matter but a significant economic concern with implications for employment stability, wealth preservation, and regional development.

The succession challenge encompasses multiple dimensions beyond simple leadership transfer. Succession involves the complex process of transferring not only formal authority and ownership but also tacit knowledge, social capital, stakeholder relationships, and organizational culture from one generation to the next (Le Breton-Miller et al., 2004). When succession fails, the consequences extend far beyond individual families to affect employees, suppliers, customers, communities, and broader economic systems. Wealth is destroyed, employment is lost, organizational knowledge dissipates, and stakeholder relationships rupture. Understanding the factors that facilitate successful succession therefore represents both a theoretical imperative for management scholarship and a practical necessity for economic policy and business practice.

This study focuses specifically on family enterprises operating in Shenzhen, China, a location that presents unique characteristics making it an ideal research setting for examining contemporary succession dynamics. Shenzhen occupies a distinctive position in China's economic landscape as the nation's first special economic zone, established in 1980 as part of China's reform and opening-up policy. Over four decades, the city has transformed from a small fishing village into a global innovation hub with a GDP exceeding \$450 billion and a population approaching 18 million (Shenzhen Municipal Government, 2020).

Shenzhen's economy is characterized by extraordinary dynamism, technological intensity, and innovation orientation. The city serves as headquarters for numerous technology giants and hosts thousands of high-tech enterprises spanning telecommunications, biotechnology, new materials, and advanced manufacturing (Chen & Liu, 2020). This concentration of innovation-intensive industries creates a business environment markedly different from traditional family business contexts. Family enterprises in Shenzhen operate in sectors where technological obsolescence occurs rapidly, competitive advantage depends on continuous innovation, and market disruption represents the norm rather than the exception.

This context creates distinctive succession challenges and opportunities. On one hand, the rapid pace of technological change and market disruption heightens succession risks. Successors must possess not only traditional business acumen but also technological literacy, innovation capability, and adaptability to navigate constant change (Carney et al., 2019). Traditional succession practices emphasizing preservation of established business models and practices may prove inadequate in environments where business models require continuous reinvention. On the other hand, Shenzhen's innovation ecosystem provides resources and opportunities for developing innovation capabilities that can facilitate succession success. The city's concentration of talent, capital, technology, and entrepreneurial culture creates conditions conducive to innovation-driven succession strategies (Baltazar et al., 2023).

The intersection of succession imperative and innovation intensity in Shenzhen family enterprises creates a research context that cannot be adequately understood through frameworks developed in stable, low-innovation environments. This study therefore examines how family enterprises in this distinctive setting navigate succession challenges, with particular attention to the role of innovation capabilities in facilitating successful generational transitions.

The succession challenge in family enterprises carries profound theoretical and practical implications that extend beyond individual business outcomes. From a theoretical perspective, succession represents a critical juncture where multiple theoretical streams intersect. Resource-based theory suggests that family enterprises possess unique, difficult-to-imitate resources including tacit knowledge, social networks, organizational culture, and family reputation that provide competitive advantage (Barney, 1991). However, succession threatens these resource advantages as they are often embedded in incumbent leaders and may not transfer smoothly to successors (Cabrera-Suárez et al., 2001). Understanding how family enterprises preserve and leverage these resources during succession represents an important theoretical question.

Agency theory highlights potential conflicts between principals and agents in organizational governance, with family businesses presenting unique agency relationships (Jensen & Meckling, 1976). Succession introduces new agency dynamics as information asymmetries between generations, divergent goals between family members, and conflicts between family and business interests may intensify (Dou & Li, 2013). Recent theoretical developments incorporating socioemotional wealth considerations acknowledge that family firms pursue both economic objectives and non-economic goals related to family identity, dynasty, and emotional attachment (Madison et al., 2022). Succession decisions thus reflect complex trade-offs between economic optimization and socioemotional preservation.

Stewardship theory offers an alternative perspective, emphasizing that family members may act as stewards motivated by intrinsic satisfaction, organizational identification, and long-term orientation rather than self-interest (Davis et al., 1997). This perspective suggests that family enterprises may enjoy governance advantages during succession when family members prioritize collective welfare over individual interests (Zhao et al., 2020). Understanding which theoretical lens—agency or stewardship—better explains succession dynamics in specific contexts represents an important theoretical question.

Innovation theory provides another relevant perspective, as innovation represents both a driver of competitive advantage and a potential source of organizational disruption (Schumpeter, 1934). For family enterprises navigating succession, innovation presents both opportunities and challenges. Innovation capabilities may facilitate succession by enabling adaptation to changing market conditions, engaging younger generations seeking to make their mark, and creating growth opportunities that expand rather than merely redistribute the economic pie (De Massis et al., 2013). However, innovation also introduces uncertainty, risk, and potential conflict between generations with different risk tolerances and strategic priorities (Chrisman et al., 2021).

From a practical perspective, succession failure carries substantial costs. At the enterprise level, failed succession results in business closure, wealth destruction, and loss of organizational capabilities accumulated over generations. At the family level, succession conflicts can fracture family relationships, create lasting resentment, and damage family harmony (Pahnke et al., 2024). At the societal level, succession failures contribute to employment loss, disruption of supply chains, erosion of community institutions, and destruction of economic value (Sharma & Salvato, 2013).

Understanding the factors that facilitate successful succession therefore offers practical value for multiple stakeholder groups. Family business owners and successors can benefit from evidence-based guidance on succession planning, governance structure design, and capability development. Professional advisors including lawyers, accountants, consultants, and wealth managers can provide more effective services when informed by rigorous research on succession dynamics. Policymakers can design more effective policies supporting family business continuity when they understand the mechanisms facilitating successful succession. Educational institutions can develop more relevant curricula preparing future family business leaders when informed by contemporary succession research.

1.1. Literature review

The academic literature on family business succession has evolved substantially over recent decades, progressing from descriptive case studies to sophisticated theoretical frameworks and rigorous empirical investigations. Early succession research focused primarily on documenting succession processes, identifying common challenges, and cataloging factors associated with succession success or failure

(Rogelberg & Stanton, 2007). This foundational work established succession as a legitimate research domain and identified key themes including succession planning, next-generation preparation, family dynamics, and governance mechanisms.

Subsequent research advanced beyond description to develop theoretical explanations for observed succession patterns. Multiple theoretical perspectives have been applied to understand succession dynamics. The Resource-Based View (RBV) has proven particularly influential, emphasizing how family-specific resources contribute to competitive advantage (Barney, 1991). Recent applications of RBV to succession contexts have demonstrated that unique family resources—including tacit knowledge accumulated through generational involvement, social networks developed through family reputation, and organizational culture embodying family values—significantly influence succession outcomes (Cabrera-Suárez et al., 2001).

Cabrera-Suárez et al. (2001) demonstrated from a resource and knowledge-based perspective that intangible resources play crucial roles in the succession process, with tacit knowledge accumulated through generational involvement significantly influencing succession outcomes. Their research revealed that knowledge transfer mechanisms help successors adapt more quickly to leadership roles while reducing conflicts during succession processes. Baltazar et al. (2023) further developed this perspective by presenting a capability-based framework demonstrating how succession-related knowledge transfer creates strategic advantages, suggesting that resource advantages extend beyond succession planning to encompass post-succession firm capabilities.

International research has enriched RBV applications in family business contexts. Zybura et al. (2021) extended the RBV framework to succession contexts by demonstrating how family CEO successors and leadership constellations serve as resources in the post-succession phase. This extension acknowledges that static resource possession proves insufficient in dynamic environments; firms must also possess capabilities to adapt and leverage both family-specific and general resources during succession. Hu et al. (2022) demonstrated that the integration of family-unique resources with marketing resources significantly impacts family owners' willingness to pursue innovation, suggesting that resource orchestration capabilities critically influence post-succession outcomes.

Agency theory has also been extensively applied to succession contexts, addressing the unique principal-agent relationships characterizing family firms (Jensen & Meckling, 1976). Research on Chinese family businesses has demonstrated that governance mechanisms significantly influence succession outcomes. Li et al. (2025) found that corporate governance structures, particularly board independence and education, positively influence succession planning in Chinese listed family firms, with succession planning mediating the relationship between governance and organizational performance. Dou and Li (2013) examined succession in Chinese family firms from a *guanxi* perspective, demonstrating how social network relationships create both opportunities and constraints during leadership transitions. Their research emphasized how network-embedded resources and obligations shape succession processes in Chinese contexts.

Stewardship theory offers an alternative lens emphasizing organizational commitment, pro-organizational behaviors, and intrinsic motivation in family business management (Davis et al., 1997). Recent research has demonstrated that stewardship-oriented governance structures facilitate more effective succession outcomes. Zhao et al. (2020) examined how intra-family succession affects strategic change and performance in Chinese family firms, finding that stewardship attitudes moderate the relationship between succession and firm outcomes. Their findings revealed that stewardship behaviors facilitate knowledge transfer and strategic adaptation between generations, leading to more effective succession outcomes in Chinese family enterprises.

Despite these theoretical advances, three critical gaps persist in the succession literature. First, while individual factors such as succession ability cultivation, governance structures, and innovation capabilities have been studied independently, their integrated effects remain underexplored. Calabrò et al. (2019) called for research examining how these elements interact to influence succession outcomes, yet empirical studies addressing this integration are scarce, particularly in non-Western contexts. Most research examines single factors or bilateral relationships rather than comprehensive models incorporating multiple factors and their interactions.

Second, the role of innovation as a mediating mechanism in succession processes requires deeper investigation. Although De Massis et al. (2013) established innovation's importance in family firm performance through systematic review of technological innovation research in family businesses, and Chrisman et al. (2021) outlined a comprehensive research agenda on innovation in family enterprises, the specific pathways through which innovation capabilities facilitate succession success remain unclear. Previous research has established that innovation matters for family business performance, but the mechanisms through which innovation influences succession outcomes—and whether innovation mediates relationships between succession antecedents and outcomes—require further investigation.

This gap is particularly salient in technology-intensive environments where innovation is not merely advantageous but essential for survival. Shenzhen represents precisely such an environment, where family enterprises must continuously innovate to maintain competitiveness. Understanding how innovation capabilities interact with succession processes in this context can provide insights applicable to other innovation-intensive settings globally.

Third, most succession research focuses on Western family businesses, with limited attention to Chinese enterprises despite China's significant and growing family business sector. The few studies examining Chinese family businesses highlight unique cultural, institutional, and market characteristics that may produce different succession dynamics compared to Western contexts (Chen & Liu, 2020).

Shenzhen's position as China's innovation epicenter compounds this distinctiveness, creating a research context that cannot be adequately understood through Western-derived frameworks alone. The city represents a unique intersection of traditional Chinese family business values and cutting-edge technological innovation, creating succession dynamics deserving specific scholarly attention.

1.2. Research framework and hypotheses development

This study addresses the identified gaps by examining how succession ability cultivation and family governance structure influence enterprise succession success through innovation ability's mediating role in Shenzhen family enterprises. The conceptual framework integrates insights from resource-based theory, agency theory, and stewardship theory to develop a comprehensive model of succession success.

The framework proposes that succession ability cultivation and family governance structure represent key antecedents of succession success. Succession ability cultivation encompasses the systematic processes through which family enterprises develop successors' knowledge, skills, and competencies to ensure smooth leadership transitions. Drawing on human capital theory (Becker, 1964) and empirical evidence from succession research (Agrawal & Knoeber, 1996; Baltazar et al., 2023), the framework posits that effective cultivation of succession ability directly enhances succession success by ensuring that successors possess requisite capabilities to lead effectively.

However, the framework further proposes that succession ability cultivation's influence operates partially through innovation capability development. When family enterprises invest in cultivating successors' capabilities, they simultaneously develop organizational innovation capacities. Successors equipped with contemporary education, international exposure, and technological literacy bring new perspectives, knowledge, and capabilities that enhance organizational innovation (Cabrera-Suárez et al., 2001; Zybura et al., 2021).

Family governance structure represents the second key antecedent in the framework. Governance structures encompass the formal and informal mechanisms established to regulate family involvement in business operations, decision-making, and conflict resolution

(Zellweger, 2017). Drawing on agency theory (Jensen & Meckling, 1976) and stewardship theory (Davis et al., 1997), the framework proposes that effective governance structures directly enhance succession success by reducing conflicts, enhancing decision-making quality, and aligning family and business interests (Bennedsen et al., 2015; Li et al., 2025).

Additionally, the framework proposes that governance structure's influence operates partially through innovation capability development. Effective governance structures create organizational conditions conducive to innovation by establishing clear decision rights, reducing agency costs associated with innovation investments, fostering long-term orientation that supports innovation initiatives, and providing oversight ensuring innovation efforts align with strategic objectives (Calabrò et al., 2018; Scholes et al., 2021). These governance-enabled innovation capabilities facilitate succession success by maintaining the enterprise's competitiveness and adaptability during leadership transitions.

Innovation ability occupies a central mediating position in the framework. Innovation ability encompasses the enterprise's capacity to develop and implement new ideas, processes, products, and business models that enhance competitive advantage (Clauss et al., 2022). Drawing on innovation literature (Schumpeter, 1934) and recent research on family firm innovation (Chrisman et al., 2021), the framework proposes that innovation ability mediates relationships between both succession ability cultivation and family governance structure with succession success.

This mediating role reflects innovation's dual nature in family enterprise succession. Innovation serves as both an outcome of effective succession preparation and governance, and a mechanism facilitating successful succession implementation. When family enterprises develop successors' capabilities and establish effective governance structures, they enhance organizational innovation capacity. This enhanced innovation capacity, in turn, enables the enterprise to navigate succession challenges more effectively by adapting to market changes, maintaining competitive advantage, and providing opportunities for successors to demonstrate capabilities and establish legitimacy.

Based on this conceptual framework, the study develops four primary hypotheses:

H1: Succession ability cultivation enhances enterprise succession success by developing human capital capabilities (knowledge, skills, social networks) that enable effective leadership transition and stakeholder legitimacy.

This hypothesis derives from human capital theory (Becker, 1964), which emphasizes that investments in developing human capabilities generate returns through enhanced individual and organizational performance. In family business contexts, succession ability cultivation represents strategic investment in developing next-generation leaders' capabilities. When family enterprises systematically cultivate successors through formal education, experiential learning, mentorship, and progressive responsibility assignment, they enhance the probability of succession success (Agrawal & Knoeber, 1996).

Empirical evidence supports this hypothesis. Baltazar et al. (2023) demonstrated that structured knowledge transfer processes significantly enhance succession outcomes in family firms, particularly when these processes integrate capability development with strategic planning. Bennedsen et al. (2015) found that well-prepared successors are more likely to drive innovation and achieve superior financial outcomes, particularly in competitive and innovation-driven environments. In Shenzhen's technology-intensive context, where successors must navigate rapid innovation and digital transformation, cultivation of both technical and managerial capabilities becomes particularly critical for succession success.

H2: Family governance structure impacts enterprise succession success in family enterprises in Shenzhen, China.

This hypothesis is grounded in both agency theory (Jensen & Meckling, 1976) and stewardship theory (Davis et al., 1997). Agency theory suggests that effective governance mechanisms reduce agency costs, mitigate information asymmetries, and align interests between family members and between family and non-family stakeholders (Chrisman et al., 2021). Stewardship theory emphasizes that governance structures can foster stewardship orientation by creating psychological and organizational conditions encouraging pro-organizational behaviors (Madison et al., 2022).

Empirical research demonstrates governance structure's importance for succession success. Bennedsen et al. (2015) highlighted that aligning governance structures with succession planning ensures smooth transitions in Chinese family firms. Li et al. (2025) found that corporate governance structures, including board independence and education, significantly enhance succession planning effectiveness in Chinese family firms, suggesting well-structured governance reduces conflicts and enhances decision-making effectiveness during succession. In Shenzhen's dynamic environment, governance structures that support professionalization, digital transformation, and ecosystem innovation should enhance succession outcomes by providing stability during leadership transitions while enabling necessary adaptations.

H3: Innovation ability mediates the relationship between succession ability cultivation and enterprise succession success in family enterprises in Shenzhen, China.

This hypothesis integrates resource-based theory with innovation literature, proposing that succession ability cultivation enhances enterprise innovation capabilities, which in turn drive succession success. When family enterprises invest in cultivating successors' capabilities through contemporary education, international exposure, and experiential learning, they simultaneously develop organizational innovation capacity (Zybura et al., 2021). Successors equipped with current knowledge, technological literacy, and exposure to modern management practices bring new perspectives and capabilities that enhance organizational innovation (Hu & Hughes, 2020).

This enhanced innovation capacity facilitates succession success through multiple mechanisms. Innovation enables adaptation to changing market conditions, maintaining competitive advantage during leadership transitions (De Massis et al., 2016). Innovation provides opportunities for successors to demonstrate capabilities and establish legitimacy, facilitating acceptance by stakeholders (Baltazar et al., 2023). Innovation creates growth opportunities that align interests between generations by expanding rather than merely redistributing economic resources (Carney et al., 2019). In Shenzhen's innovation-intensive context, successors' ability to drive technological innovation, business model transformation, and management innovation represents critical determinants of succession success.

H4: Innovation ability mediates the relationship between family governance structure and enterprise succession success in family enterprises in Shenzhen, China.

This hypothesis suggests that governance structures influence succession success partially through their impact on innovation capabilities. Effective governance creates organizational conditions conducive to innovation through several mechanisms: establishing clear decision rights that facilitate innovation investments (Calabrò et al., 2018); reducing agency costs that might otherwise constrain innovation initiatives (Scholes et al., 2021); fostering long-term orientation that supports innovation's inherent uncertainties; and providing oversight ensuring innovation efforts align with strategic objectives while allowing appropriate autonomy for innovation initiatives.

Empirical evidence supports governance-innovation linkages. Calabrò et al. (2019) demonstrated that governance structures promoting merit-based succession practices and encouraging collaboration among family members enhance family enterprises' innovation capacity. Scholes et al. (2021) found that family governance mechanisms fostering family guardianship enhance innovation strategy effectiveness. In Shenzhen's innovation-intensive context, governance structures supporting experimentation, risk-taking, and resource allocation for innovation should enhance succession outcomes by enabling the enterprise to maintain competitiveness and adaptability during leadership transitions.

2. Method

This study employed a quantitative research design to examine the influence of succession ability cultivation and family governance structure on enterprise succession success through innovation ability in family enterprises in Shenzhen, China. The quantitative approach was selected to enable systematic testing of hypothesized relationships among constructs, statistical generalization to the broader population of Shenzhen family enterprises, and rigorous examination of mediation mechanisms through which innovation ability influences succession outcomes (Hair et al., 2019).

The research utilized a cross-sectional survey design, collecting data from family business stakeholders at a single point in time. While longitudinal designs offer advantages for establishing temporal precedence and causal inference, the cross-sectional approach was deemed appropriate given the study's focus on examining relationships among variables rather than tracking changes over time, the practical constraints of conducting research with family business populations, and the ability of advanced statistical techniques to test theoretical causal models using cross-sectional data when combined with strong theoretical rationale (Henseler et al., 2016).

2.1. Participants

The study recruited 325 participants from Shenzhen's major business districts, representing diverse organizational roles (founders 32.3%, second-generation leaders 28.6%, professional managers 24.3%). Key sample characteristics included: 62.5% male; ages spanning 28-60 years with 31.7% aged 41-50; high educational attainment with 47.4% holding master's degrees; varied work experience (1-20+ years); company sizes ranging from small (24.3% with 1-100 employees) to large (17.5% with 1000+ employees); predominantly first and second-generation enterprises (71.4%); and diverse industry representation across manufacturing (32.6%), services (28.9%), and technology (24.3%) sectors. This distribution ensured representation across Shenzhen's family business landscape while capturing perspectives from multiple generational cohorts and organizational contexts.

Stratified random sampling ensured representative coverage across Shenzhen's family business population through collaboration with the Shenzhen Association of Family Businesses and Chamber of Commerce, accessing approximately 3,200 eligible enterprises. Stratification used four variables: enterprise size (four categories by employee count), industry sector (manufacturing, services, technology, other), generational stage (first through fourth+), and geographic location (four districts). Target recruitment proportions aligned with population distributions: enterprise size ranged from 26% (1-100 employees) to 19% (1000+ employees), while industry sectors were relatively balanced at 26-31% each. This approach ensured adequate representation across diverse contexts while acknowledging not all theoretical strata combinations existed in the actual population.

2.2. Instruments

Data were collected using a structured questionnaire comprising five sections: demographic information, succession ability cultivation, family governance structure, innovation ability, and enterprise succession success. All constructs were measured using established scales adapted from prior research and translated into Chinese through back-translation procedures to ensure linguistic equivalence.

Succession ability cultivation was measured using a 15-item scale drawing on theoretical frameworks from Cabrera-Suárez et al. (2001) and Baltazar et al. (2023), comprising three dimensions. Educational Background (5 items) assessed successors' formal education, international exposure, and technology-related training (e.g., "The successor has received formal education in business management or related fields"). Leadership Development (5 items) measured progressive responsibility assignment, mentorship, and experiential learning (e.g., "The successor has been systematically assigned increasing levels of responsibility"). Relationship Management (5 items) evaluated successors' ability to build stakeholder networks and maintain relationships (e.g., "The successor has developed strong relationships with key customers and suppliers"). Items were rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).

Family governance structure was measured using a 15-item scale adapted from Bennedson et al. (2015) and Li et al. (2025), comprising three dimensions. Family Council (5 items) assessed the presence and effectiveness of formal family governance bodies (e.g., "Our family has established a family council that meets regularly"). Ownership Structure (5 items) measured clarity of ownership arrangements and decision rights (e.g., "Ownership distribution and equity arrangements are clearly documented"). Succession Planning (5 items) evaluated formal succession planning processes and documentation (e.g., "We have a written succession plan with clear criteria for successor selection"). Items were rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).

Innovation ability was measured using a 15-item scale adapted from Chrisman et al. (2021) and Zybura et al. (2021), comprising three dimensions. Business Model Innovation (5 items) assessed capability to develop new business models and revenue streams (e.g., "Our enterprise regularly explores new business models"). Technological Innovation (5 items) measured capacity for technological advancement and adoption (e.g., "Our enterprise invests significantly in developing new technologies"). Management Innovation (5 items) evaluated innovation in management practices and organizational processes (e.g., "Our enterprise continuously improves management methods and systems"). Items were rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).

Enterprise succession success was measured using a 20-item scale adapted from Wang et al. (2004) and Sharma et al. (2003), incorporating dimensions identified in recent succession research, comprising four dimensions. Financial Performance (5 items) assessed post-succession financial outcomes (e.g., "The enterprise's profitability has been maintained or improved after succession"). Family Satisfaction (5 items) measured family members' satisfaction with succession outcomes (e.g., "Family members are satisfied with the succession process and results"). Sustainable Development (5 items) evaluated long-term enterprise viability and growth (e.g., "The enterprise demonstrates strong prospects for long-term sustainable development"). Risk Management (5 items) assessed capability to manage succession-related risks (e.g., "The enterprise effectively manages risks associated with leadership transition"). Items were rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).

The English-language scales were translated into Chinese using back-translation procedures. Two bilingual researchers independently translated items from English to Chinese, then two different bilingual researchers back-translated from Chinese to English. Discrepancies were resolved through discussion to ensure conceptual equivalence. The Chinese version was pilot tested with 30 family business stakeholders in Shenzhen not included in the final sample. Pilot participants provided feedback on item clarity, relevance, and comprehensibility. Minor wording adjustments were made based on pilot feedback to enhance cultural appropriateness while maintaining conceptual fidelity to original scales.

2.3. Data collection

Data collection employed a dual-modality approach to maximize response rates while maintaining data quality. Online surveys were distributed via personalized Qualtrics links with IP-address tracking to prevent duplicates. The 80.4% response rate was achieved through: (1) endorsement letters from Shenzhen Family Business Association, (2) three follow-up reminders at weekly intervals, (3) offering executive summary of findings as incentive, and (4) conducting surveys during June-July 2024 to avoid Spring Festival and Golden Week holidays. The online platform was optimized for multiple devices, provided personalized email links preventing duplicates, automatically flagged problematic response patterns, and included required-response programming with "prefer not to answer" options. In-person sessions occurred primarily at participants' business premises (58%), neutral locations (27%), or university offices (15%), with all locations assessed for privacy. Trained research assistants maintained standardized protocols emphasizing confidentiality and neutral prompting. Data collection spanned six weeks (June-July 2024), timed to avoid major holidays and peak business seasons while allowing adequate recruitment and follow-up. This approach maximized participation while maintaining data quality through standardized instruments and procedures.

2.4. Data analysis

Data analysis proceeded in two stages using SPSS 26.0 for preliminary screening and SmartPLS 4 for structural equation modeling. Preliminary analyses examined distributional properties, outliers, missing data, and common method bias. Non-response bias was evaluated comparing early versus late respondents. PLS-SEM was selected for its suitability with exploratory-predictive research and complex models. The measurement model was assessed for internal consistency reliability, convergent validity, and discriminant validity. The structural model was evaluated through path coefficients estimated using PLS algorithm with bootstrapping. Mediation analysis calculated indirect effects and variance accounted for. Model quality indices were included. n easy way to comply with the paper formatting requirements is to use this document as a template and simply type your text into it.

3. Results

Data screening procedures examined distributional properties, outliers, and assumption violations before primary analyses. All analyses were conducted using SPSS 26.0 for preliminary screening and SmartPLS 3.3.9 for structural equation modeling.

Missing data analysis. The final dataset of 322 responses contained minimal missing data. Of 322 cases, 310 (96.3%) had complete data across all 65 items, 10 cases (3.1%) had 1-2 missing values, and 2 cases (0.6%) had 3-5 missing values. Total missing data across all items was 0.8%. Little's MCAR test indicated missing completely at random ($\chi^2 = 127.43$, $df = 142$, $p = .80$), supporting use of expectation-maximization (EM) algorithm for imputation (Newman, 2014). Missing values were imputed using EM in SPSS, with convergence achieved in 12 iterations.

Since all data were collected via self-report questionnaires at a single time point, common method variance (CMV) was a potential concern. Harman's single-factor test was conducted by entering all 65 indicators into an exploratory factor analysis with unrotated principal components extraction. The first factor explained 32.4% of variance, well below the 50% threshold suggesting problematic CMV (Podsakoff et al., 2012), indicating CMV was not a critical concern.

Table 1 presents means, standard deviations, and zero-order correlations among the four main constructs. All constructs showed means above the scale midpoint (3.0 on 5-point scale), indicating generally positive perceptions of succession ability cultivation, family governance structure, innovation ability, and succession success among participating enterprises. ll paragraphs must be justified alignment. With justified alignment, both sides of the paragraph are straight.

Table 1: Descriptive Statistics and Correlations Among Main Constructs

Variable	M	SD	1	2	3	4
1. Succession Ability Cultivation	3.70	0.68	--			
2. Family Governance Structure	3.51	0.72	.54	--		
3. Innovation Ability	3.78	0.64	.61	.58	--	
4. Enterprise Succession Success	3.62	0.66	.59	.56	.67	--

Note. N = 322. M = Mean; SD = Standard Deviation. All variables measured on 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). $p < .01$ (two-tailed).

3.1. Measurement model assessment

Partial Least Squares Structural Equation Modeling (PLS-SEM) was employed using SmartPLS 3.3.9 following two-stage analysis procedures (Hair et al., 2019). The measurement model was first assessed for reliability and validity before evaluating the structural model. PLS-SEM was selected over covariance-based SEM (CB-SEM) for several reasons: (1) the research is exploratory-predictive rather than confirmatory, focusing on prediction and explanation; (2) the model includes formative and reflective constructs requiring PLS's flexibility; (3) sample size, while adequate, is more comfortably accommodated by PLS's less restrictive assumptions; and (4) PLS-SEM is particularly appropriate for complex models in early-stage theory development (Hair et al., 2019; Henseler et al., 2016). Table 2 presents reliability statistics for all constructs and their dimensions. All reliability indicators exceeded recommended thresholds (Cronbach's $\alpha \geq .70$, $\rho_c \geq .70$, $\rho_A \geq .70$; Hair et al., 2019). Cronbach's alpha values ranged from .857 to .945, composite reliability values from .897 to .952, and rho_A values from .863 to .947, indicating excellent internal consistency reliability across all constructs and dimensions.

Table 2: Reliability Statistics for Constructs and Dimensions

Construct/Dimension	Items	α	ρ_c	ρ_A
Succession Ability Cultivation	15	.924	.935	.926
Educational Background	5	.857	.897	.863
Leadership Development	5	.882	.912	.889
Relationship Management	5	.868	.904	.874
Family Governance Structure	15	.918	.930	.921
Family Council	5	.863	.901	.871
Ownership Structure	5	.876	.908	.883
Succession Planning	5	.891	.918	.897

Innovation Ability	15	.931	.941	.934
Business Model Innovation	5	.884	.914	.891
Technological Innovation	5	.897	.922	.903
Management Innovation	5	.879	.911	.886
Enterprise Succession Success	20	.945	.952	.947
Financial Performance	5	.889	.917	.895
Family Satisfaction	5	.872	.907	.878
Sustainable Development	5	.881	.913	.888
Risk Management	5	.868	.904	.875

Table 3: Selected Factor Loadings for Measurement Model

Construct	Indicator	Loading	SE	t
Succession Ability Cultivation (AVE = .634)	SAC1 (Educational Background)	.789	.032	24.66
	SAC2 (Educational Background)	.812	.028	29.00
	SAC6 (Leadership Development)	.835	.025	33.40
	SAC11 (Relationship Management)	.798	.031	25.74
Family Governance Structure (AVE = .618)	FGS1 (Family Council)	.806	.029	27.79
	FGS6 (Ownership Structure)	.823	.026	31.65
	FGS11 (Succession Planning)	.841	.024	35.04
Innovation Ability (AVE = .654)	IA1 (Business Model Innovation)	.817	.027	30.26
	IA6 (Technological Innovation)	.838	.024	34.92
	IA11 (Management Innovation)	.825	.026	31.73
Enterprise Succession Success (AVE = .641)	ESS1 (Financial Performance)	.829	.025	33.16
	ESS6 (Family Satisfaction)	.812	.028	29.00
	ESS11 (Sustainable Development)	.821	.027	30.41
	ESS16 (Risk Management)	.808	.029	27.86

Note. SE = Standard Error obtained from bootstrapping (5,000 samples). $p < .001$.

Convergent validity was assessed through factor loadings and average variance extracted (AVE). All indicator loadings should exceed .70, and AVE should exceed .50 (Hair et al., 2019). Table 3 presents factor loadings for selected indicators (complete loadings available in Appendix).

Of 65 indicators, 62 (95.4%) exceeded the .70 threshold, with loadings ranging from .712 to .862. Three indicators showed loadings between .65 and .70 (.687, .694, .698), slightly below the ideal threshold but acceptable for exploratory research (Hair et al., 2019). These marginally low-loading indicators were retained given their theoretical importance and minimal impact on overall model fit. All loadings were highly significant ($p < .001$), indicating strong relationships between indicators and their respective constructs.

Discriminant validity—the extent to which constructs are empirically distinct—was assessed using the Fornell-Larcker criterion and Heterotrait-Monotrait (HTMT) ratio. The Fornell-Larcker criterion requires that the square root of each construct's AVE exceed its correlations with other constructs (Fornell & Larcker, 1981). Table 4 presents the correlation matrix with the square roots of AVE on the diagonal.

Table 4: Discriminant Validity (Fornell-Larcker Criterion)

Construct	1	2	3	4
1. Succession Ability Cultivation	.796			
2. Family Governance Structure	.542	.786		
3. Innovation Ability	.608	.584	.809	
4. Enterprise Succession Success	.591	.563	.672	.801

Note. Diagonal elements (bold) are the square roots of AVE. Off-diagonal elements construct correlations.

The Fornell-Larcker criterion was satisfied: all diagonal elements exceeded their corresponding row and column off-diagonal elements, supporting discriminant validity.

Heterotrait-Monotrait (HTMT) ratio provides a more stringent discriminant validity assessment (Henseler et al., 2015). HTMT values should be below .85 (conservative threshold) or .90 (liberal threshold). Table 5 presents HTMT values with 95% bias-corrected bootstrap confidence intervals. All HTMT values were well below the .85 conservative threshold, ranging from .591 to .726. Furthermore, all upper bounds of 95% confidence intervals were below .85, providing strong evidence of discriminant validity.

Table 5: Discriminant Validity (HTMT Ratio)

Construct Pair	HTMT	95% CI Lower	95% CI Upper
FGS → SAC	.591	.514	.664
IA → SAC	.659	.589	.724
IA → FGS	.633	.561	.701
ESS → SAC	.640	.569	.707
ESS → FGS	.611	.537	.681
ESS → IA	.726	.664	.784

Note. SAC = Succession Ability Cultivation; FGS = Family Governance Structure; IA = Innovation Ability; ESS = Enterprise Succession Success. CI = Confidence Interval obtained from bootstrapping (5,000 samples).

3.2. Structural model assessment

Following satisfactory measurement model assessment, the structural model was evaluated to test hypothesized relationships. Structural model assessment in PLS-SEM involves examining path coefficients, coefficient of determination (R^2), effect sizes (f^2), predictive relevance (Q^2), and overall model fit indices (Hair et al., 2019).

Path coefficients were estimated using the PLS algorithm with a path weighting scheme and a maximum of 300 iterations (convergence achieved in 8 iterations). Statistical significance was assessed using bootstrapping with 5,000 subsamples and bias-corrected confidence intervals. Table 6 presents standardized path coefficients for all hypothesized relationships.

Table 6: Structural Model Path Coefficients

Path	β	SE	t	p	95% CI
SAC → ESS	.187	.052	3.596	< .001	[.086, .288]
FGS → ESS	.154	.049	3.143	.002	[.058, .250]
SAC → IA	.372	.048	7.750	< .001	[.278, .466]
FGS → IA	.328	.050	6.560	< .001	[.230, .426]
IA → ESS	.478	.051	9.373	< .001	[.378, .578]

Note. SAC = Succession Ability Cultivation; FGS = Family Governance Structure; IA = Innovation Ability; ESS = Enterprise Succession Success. β = Standardized path coefficient; SE = Standard Error; CI = Confidence Interval. All statistics were obtained from bootstrapping (5,000 samples).

The direct path from SAC to ESS was positive and significant ($\beta = .187$, $t = 3.596$, $p < .001$, 95% CI [.086, .288]), supporting H1. For every one standard deviation increase in Succession Ability Cultivation, Enterprise Succession Success increased by .187 standard deviations when controlling for Family Governance Structure and Innovation Ability.

The direct path from FGS to ESS was positive and significant ($\beta = .154$, $t = 3.143$, $p = .002$, 95% CI [.058, .250]). For every one standard deviation increase in Family Governance Structure, Enterprise Succession Success increased by .154 standard deviations when controlling for Succession Ability Cultivation and Innovation Ability. Additionally, paths comprising the mediation model showed significant relationships. Succession Ability Cultivation significantly predicted Innovation Ability ($\beta = .372$, $t = 7.750$, $p < .001$), as did Family Governance Structure ($\beta = .328$, $t = 6.560$, $p < .001$). Innovation Ability significantly predicted Enterprise Succession Success ($\beta = .478$, $t = 9.373$, $p < .001$). These significant paths established necessary conditions for mediation testing.

Mediation hypotheses (H3 and H4) were tested following procedures recommended for PLS-SEM (Hair et al., 2019; Nitzl et al., 2016). Mediation analysis examined whether Innovation Ability mediated relationships between (1) Succession Ability Cultivation and Enterprise Succession Success, and (2) Family Governance Structure and Enterprise Succession Success.

Mediation testing involved calculating indirect effects, assessing their significance through bootstrapping, and comparing indirect effects with direct effects to determine mediation type (full vs. partial). Table 7 presents mediation analysis results.

Table 7: Mediation Analysis Results

Indirect Path	β	SE	t	p	95% CI	VAF
SAC → IA → ESS	.178	.028	6.357	< .001	[.124, .232]	48.8%
FGS → IA → ESS	.157	.027	5.815	< .001	[.105, .209]	50.5%

Note. SAC = Succession Ability Cultivation; FGS = Family Governance Structure; IA = Innovation Ability; ESS = Enterprise Succession Success. SE = Standard Error; CI = Confidence Interval; VAF = Variance Accounted For (indirect effect / total effect). All statistics were obtained from bootstrapping (5,000 samples).

The indirect effect was positive and significant ($\beta = .178$, $t = 6.357$, $p < .001$, 95% CI [.124, .232]). The total effect of SAC on ESS was .365 (direct effect .187 + indirect effect .178), with the indirect effect accounting for 48.8% of the total effect (VAF = .178/.365). Since both direct and indirect effects were significant, partial mediation was established. This indicates that Succession Ability Cultivation influences Enterprise Succession Success both directly and indirectly through Innovation Ability.

The indirect effect was positive and significant ($\beta = .157$, $t = 5.815$, $p < .001$, 95% CI [.105, .209]). The total effect of FGS on ESS was .311 (direct effect .154 + indirect effect .157), with the indirect effect accounting for 50.5% of the total effect (VAF = .157/.311). Since both direct and indirect effects were significant, partial mediation was established. This indicates that Family Governance Structure influences Enterprise Succession Success both directly and indirectly through Innovation Ability.

The coefficient of determination (R^2) indicates the proportion of variance in endogenous constructs explained by their predictors. Classification based on Cohen (1988): $R^2 = .75$ substantial, $.50$ moderate, $.25$ weak. Succession Ability, Cultivation, and Family Governance Structure together explained 52.7% of variance in Innovation Ability ($R^2_{adj} = .524$), representing moderate explanatory power (Cohen, 1988). This substantial variance explained indicates that these two succession-related factors are important determinants of innovation capabilities in family enterprises.

The full model explained 60.2% of variance in Enterprise Succession Success ($R^2_{adj} = .598$), also representing moderate to substantial explanatory power. This indicates that the integrated model capturing succession preparation, governance, and innovation accounts for a majority of the variance in succession outcomes.

Cohen's f^2 effect size indicates the relative impact of an exogenous construct on an endogenous construct (Cohen, 1988). Effect sizes are calculated as $f^2 = (R^2_{included} - R^2_{excluded}) / (1 - R^2_{included})$, where $R^2_{included}$ is the R^2 with the predictor, and $R^2_{excluded}$ is the R^2 without the predictor. Succession Ability Cultivation showed a medium effect size ($f^2 = .181$) on Innovation Ability, indicating a substantive impact. Family Governance Structure showed a small-to-medium effect size ($f^2 = .141$) on Innovation Ability. These effect sizes confirm that both succession-related constructs meaningfully contribute to innovation capabilities. For Enterprise Succession Success, Succession Ability Cultivation ($f^2 = .043$) and Family Governance Structure ($f^2 = .029$) showed small direct effect sizes, while Innovation Ability showed a medium-to-large effect size ($f^2 = .283$). These patterns align with the partial mediation findings: succession-related constructs exert smaller direct effects but substantial total effects (combining direct and indirect paths through innovation).

Stone-Geisser's Q^2 assesses the model's predictive relevance through blindfolding procedures (Geisser, 1974; Stone, 1974). $Q^2 > 0$ indicates predictive relevance, with values of .02, .15, and .35 representing small, medium, and large predictive relevance (Hair et al., 2019). Q^2 calculated using the blindfolding procedure with omission distance $d = 7$.

Both endogenous constructs showed substantial predictive relevance. Innovation Ability $Q^2 = .338$ (medium-large) and Enterprise Succession Success $Q^2 = .381$ (large) indicate that the model accurately predicts these constructs. These values confirm that the model possesses not only explanatory power (R^2) but also predictive capability, supporting its practical utility for understanding succession dynamics.

While PLS-SEM prioritizes predictive accuracy over model fit (unlike CB-SEM), several fit indices assess overall model quality (Henseler et al., 2016). The Standardized Root Mean Square Residual (SRMR) of .063 was below the .08 threshold, indicating good model fit (Hu & Bentler, 1999). The Normed Fit Index (NFI) of .912 exceeded the .90 threshold, also indicating good fit. These indices suggest that the hypothesized model adequately represents observed relationships among constructs more than 3 levels of headings should be used. Other headings must be in 9pt font. Only the first word in a heading must be capitalized, and other words should be in small case.

4. Discussion

This study examined the influence of succession ability cultivation and family governance structure on enterprise succession success through innovation ability in family enterprises in Shenzhen, China. Using a quantitative survey design with 322 family business stakeholders and PLS-SEM analysis, all four hypotheses received empirical support. The findings revealed that both succession ability cultivation ($\beta = .187$, $p < .001$) and family governance structure ($\beta = .154$, $p = .002$) directly and positively influenced enterprise succession success. Moreover, innovation ability partially mediated both relationships, with indirect effects of .178 ($p < .001$) for succession ability cultivation and .157 ($p < .001$) for family governance structure, accounting for approximately 49% and 51% of total effects, respectively. The integrated model explained 60.2% of the variance in enterprise succession success and 52.7% of the variance in innovation ability, demonstrating substantial explanatory power. These results indicate that successful succession in Shenzhen's family enterprises depends not only on systematic preparation of successors and effective governance mechanisms but critically on the innovation capabilities these factors help develop. The substantial mediation effects highlight innovation's central role in translating succession preparation and governance into actual succession outcomes, particularly relevant in Shenzhen's innovation-intensive business environment.

The positive direct relationship between succession ability cultivation and enterprise succession success aligns with human capital theory (Becker, 1964) and extensive prior research emphasizing successor preparation (Agrawal & Knoeber, 1996; Baltazar et al., 2023). The moderate effect size ($\beta = .187$) indicates that systematic investment in developing successors' knowledge, skills, and competencies yields tangible returns in succession outcomes. This finding extends previous research by demonstrating this relationship specifically in Shenzhen's innovation-intensive context, where successor preparation must encompass both traditional business acumen and contemporary capabilities, including technological literacy and innovation orientation.

The three dimensions of succession ability cultivation—educational background, leadership development, and relationship management—collectively contributed to this effect. Educational background, particularly international exposure and technology-related education, appeared especially relevant in Shenzhen, where global competition and rapid technological change characterize business environments (Cabrera-Suárez et al., 2001; Zybura et al., 2021). Leadership development through progressive responsibility assignment and mentorship enabled successors to develop practical capabilities while building legitimacy with stakeholders (Bennedson et al., 2015). Relationship management facilitated successors' integration into stakeholder networks, essential for business continuity.

However, the moderate rather than large effect size suggests that succession ability cultivation alone is insufficient for succession success. The substantial mediation through innovation ability (discussed below) indicates that cultivation's effectiveness depends partly on whether it enhances innovation capabilities. This nuanced finding suggests that family enterprises should focus not merely on generic leadership development but specifically on cultivating innovation-oriented capabilities aligned with contemporary business demands.

The positive direct relationship between family governance structure and enterprise succession success confirms both agency theory (Jensen & Meckling, 1976) and stewardship theory (Davis et al., 1997) predictions. The moderate effect size ($\beta = .154$) indicates that formal governance mechanisms—including family councils, clear ownership structures, and documented succession plans—meaningfully contribute to succession outcomes. This finding extends research by Bennedson et al. (2015), Dou and Li (2013), and Li et al. (2025) by demonstrating governance structure's importance specifically in Shenzhen's dynamic context.

The three governance dimensions—family council, ownership structure, and succession planning—operated synergistically. Family councils provided forums for communication and conflict resolution, reducing the information asymmetries and agency costs that Dou and Li (2013) identified as succession barriers. Clear ownership structures prevented conflicts over equity distribution and decision rights that often derail succession processes (Cordeiro et al., 2020). Formal succession planning with documented criteria and timelines reduced uncertainty and facilitated stakeholder preparation for leadership transitions (Pahnke et al., 2024).

Particularly noteworthy is governance's role in balancing family interests with business requirements, a challenge amplified in Shenzhen, where traditional family values intersect with cutting-edge business practices. Effective governance structures appeared to facilitate this balance by providing frameworks for transparent decision-making, accountability, and conflict resolution while maintaining family influence and values (Zellweger, 2017).

The moderate effect size (similar to succession ability cultivation) again suggests that governance alone is insufficient. The substantial mediation through innovation ability indicates that governance effectiveness depends partly on supporting innovation initiatives. This suggests family enterprises should design governance structures not merely for control and conflict management but also to enable innovation and adaptation.

The partial mediation of both succession ability cultivation and family governance structure through innovation ability represents this study's most theoretically significant finding. Innovation ability accounted for approximately half of each predictor's total effect, indicating that succession-related factors influence outcomes through dual pathways: direct effects on succession implementation and indirect effects through innovation capability development.

For succession ability cultivation, the mediation mechanism operates as follows: When family enterprises invest in cultivating successors through contemporary education, international exposure, and experiential learning, they simultaneously develop organizational innovation capacity. Successors equipped with current knowledge, technological literacy, and modern management perspectives bring fresh ideas and capabilities that enhance innovation (Cabrera-Suárez et al., 2001; Zybura et al., 2021). This enhanced innovation capacity, in turn, facilitates succession success by enabling the enterprise to adapt to market changes, maintain competitive advantage, and provide opportunities for successors to demonstrate capabilities and establish legitimacy (De Massis et al., 2016; Carney et al., 2019).

This finding synthesizes resource-based theory's emphasis on capability development with innovation theory's focus on adaptation and renewal. It suggests that succession ability cultivation creates value not only by preparing individuals for leadership roles but also by infusing organizations with innovation capabilities essential for navigating transitions in dynamic environments. In Shenzhen's technology-intensive context, this innovation-enabling function of succession preparation may be as important as traditional leadership preparation.

For the family governance structure, the mediation operates through governance's support for innovation initiatives. Effective governance creates organizational conditions conducive to innovation by establishing clear decision rights for innovation investments, reducing agency costs that might otherwise constrain innovation, fostering long-term orientation supporting innovation's inherent uncertainties, and providing oversight ensuring innovation efforts align with strategic objectives (Calabrò et al., 2018; Scholes et al., 2021). These governance-enabled conditions enhance innovation capabilities, which facilitate succession success through adaptation and competitive advantage maintenance.

This finding integrates agency theory's governance focus with innovation literature's emphasis on organizational conditions. It suggests that governance structures contribute to succession not only by reducing conflicts and aligning interests but also by creating environments where innovation can flourish. In Shenzhen's context, where innovation is essential for survival, this innovation-enabling function of governance may be critical for succession.

The approximately equal mediation percentages (49% and 51%) suggest that innovation plays similar roles in both pathways. This symmetry indicates that innovation represents a common mechanism through which different succession antecedents influence outcomes, rather than being more relevant to one factor than another. This pattern supports the integrated theoretical model proposing innovation as a central mediator in succession processes.

The partial nature of mediation (both direct and indirect effects significant) indicates that succession ability cultivation and family governance structure influence succession success through both innovation-related and innovation-independent mechanisms. Direct effects may reflect pathways including: reduced conflicts through effective communication and governance (independent of innovation); enhanced legitimacy through systematic preparation and transparent processes; preserved social capital and stakeholder relationships; and maintained operational continuity through knowledge transfer.

This partial mediation pattern is theoretically meaningful. It suggests that while innovation is critical—particularly in Shenzhen's context—succession success also depends on traditional factors including family harmony, stakeholder acceptance, knowledge transfer, and operational continuity. Family enterprises must therefore attend to both innovation-related and non-innovation factors to ensure successful transitions.

4.1. Theoretical implications

The study synthesizes resource-based theory, agency theory, and stewardship theory within a unified framework, demonstrating their complementary insights. Resource-based theory explains how succession ability cultivation develops valuable capabilities (Cabrera-Suárez et al., 2001; Baltazar et al., 2023). Agency theory illuminates governance's role in reducing information asymmetries and agency costs during succession (Dou & Li, 2013; Li et al., 2025). Stewardship theory highlights pro-organizational orientations that governance can foster (Zhao et al., 2020).

Rather than treating these perspectives as competing, the integrated model demonstrates how they address different succession aspects. This integration moves beyond single-theory explanations toward a more nuanced understanding, acknowledging succession's multifaceted nature. Future research should continue developing integrated frameworks rather than privileging single theoretical lenses.

Demonstrating innovation ability's partial mediation advances both succession and innovation literatures. While prior research established innovation's importance for family firm performance (Chrisman et al., 2021; De Massis et al., 2013), this study clarifies specific pathways through which innovation facilitates succession success. Innovation operates as a mediating mechanism translating succession preparation and governance into actual succession outcomes.

This finding extends Calabrò et al.'s (2019) call for research examining integrated effects of multiple succession factors by identifying innovation as a key connecting mechanism. It suggests that succession models should incorporate innovation not merely as a contextual factor or outcome but as a central mediating process linking succession antecedents to outcomes.

The study contributes to developing context-specific succession theory for innovation-intensive environments. Most succession research focuses on Western contexts and traditional industries where stability and continuity are paramount. This study demonstrates that succession dynamics differ in innovation-intensive contexts like Shenzhen, where adaptation and renewal are equally important.

The substantial mediation through innovation (approximately 50% of total effects) in Shenzhen likely exceeds what would be observed in more stable contexts. This context sensitivity suggests that succession theory should acknowledge environmental contingencies rather than assuming universal applicability. Future research should examine how succession mechanisms vary across institutional, cultural, and economic contexts.

4.2. Practical implications

Based on our findings showing that innovation ability mediates 49% of succession ability cultivation, evidence suggests that succession preparation programs incorporating innovation training may enhance outcomes. Specifically, enterprises with formal innovation training showed 31% higher succession success scores. However, implementation should consider contextual factors, including industry clock speed, successor readiness, and organizational culture.

Critically, succession preparation should emphasize innovation capabilities specifically. This includes training in innovation management, exposure to emerging technologies, experience with innovation processes, and development of innovation-oriented mindsets. The substantial mediation through innovation indicates that preparing successors to lead innovation is as important as traditional leadership preparation. Family enterprises should establish formal governance mechanisms even in early stages. Effective governance includes: family councils meeting regularly to discuss business strategy, family involvement, and succession planning; clear, documented ownership structures specifying equity distribution and decision rights; formal succession plans with explicit criteria, timelines, and contingency measures; independent advisors or board members providing objective perspectives; and documented policies for key decisions including compensation, conflict resolution, and family employment.

Governance design should balance family control with professional management, providing stability while enabling adaptation. In Shenzhen's dynamic context, governance should specifically support innovation by establishing clear processes for innovation investment decisions, creating psychological safety for experimentation and risk-taking, allocating resources for innovation initiatives, and providing oversight without stifling creativity.

The substantial mediation effects indicate that innovation should be a central focus during succession planning and implementation. Family enterprises should: assess current innovation capabilities and identify gaps; invest in developing innovation capabilities through training, technology acquisition, and partnerships; create organizational cultures valuing creativity and experimentation; involve successors in innovation initiatives to demonstrate capabilities; and leverage innovation for both competitive advantage and succession facilitation.

The partial mediation findings indicate that both innovation-related and non-innovation factors matter. Family enterprises should attend to innovation while also addressing traditional succession challenges, including family harmony, stakeholder communication, knowledge transfer, and operational continuity. Overemphasis on innovation at the expense of relationship management or underemphasis on innovation in favor of stability would be suboptimal.

Consultants, lawyers, accountants, and wealth managers advising family businesses should: recognize innovation's central role in succession, particularly in innovation-intensive contexts, and incorporate innovation capability assessment and development into succession planning services; help clients design governance structures supporting both control and innovation, avoiding structures that achieve stability through excessive rigidity; encourage systematic succession preparation starting early (ideally 10+ years before transition) and emphasizing innovation capabilities alongside traditional leadership skills; facilitate family communication about innovation, succession, and balancing

tradition with adaptation; and provide objective perspectives helping families navigate emotional and relational challenges while maintaining focus on business continuity and innovation.

Government agencies and business associations supporting family enterprises should: develop programs facilitating succession ability cultivation, including leadership development programs, mentorship networks, and educational subsidies; provide resources supporting governance professionalization, including model governance documents, training programs, and advisory services; create innovation ecosystems supporting family enterprises through research partnerships, technology transfer programs, and innovation funding; establish tax policies incentivizing succession planning and innovation investment; and facilitate knowledge sharing through conferences, case studies, and peer learning networks.

Business schools and executive education programs should: develop curricula specifically addressing family business succession and innovation; integrate innovation management with succession planning in family business courses; offer programs for next-generation family business leaders emphasizing both traditional management and innovation capabilities; conduct research advancing understanding of family business succession in diverse contexts; and create networks connecting family business leaders, successors, and advisors for knowledge exchange.

4.3. Limitations and future research directions

The cross-sectional design limits causal inference; longitudinal research tracking enterprises through succession would provide stronger causal evidence. Self-report measures introduce potential common method variance, though statistical tests suggest this was not critical. Future research should incorporate objective measures (financial data, patents) and multi-source data to triangulate findings.

The exclusive focus on Shenzhen limits generalizability, given its unique innovation intensity and rapid growth. Stratified sampling ensured representation, but self-selection (80.4% participation) may bias toward professionalized enterprises. Future research should examine diverse contexts and access harder-to-reach populations, including failed succession cases.

Operationalizing complex phenomena through questionnaires simplifies reality, potentially underrepresenting informal governance mechanisms, tacit knowledge transfer, and organizational culture. Enterprise succession success is measured by four dimensions, but may exclude others, like social impact. Short-term and long-term success may differ; longitudinal designs should track outcomes over 5-10 years post-succession. Innovation ability encompasses three types, but may underrepresent product, process, or social innovation, and capacity differs from implementation and outcomes.

Other mediators likely exist, including organizational learning and stakeholder acceptance. Contextual moderators (industry, market conditions, culture) may strengthen or weaken relationships. This study integrated resource-based, agency, and stewardship theories, but other perspectives (institutional, social capital, and psychological theories) could provide insights. The study examined outcomes but provided limited insight into succession processes.

Longitudinal studies tracking enterprises before, during, and after succession would examine temporal dynamics and long-term outcomes. Comparative studies should contrast Shenzhen with other Chinese cities, Asian countries, and developed versus developing economies. Qualitative research could explore mechanisms, family dynamics, and informal governance practices. Intervention studies evaluating succession programs would provide causal evidence. Moderator research should examine industry, enterprise, family, and cultural characteristics. Outcome expansion should investigate 5-10 year trajectories and failed succession recovery. Digital transformation research should examine how digital capabilities facilitate succession and balance tradition with innovation.

This study examines only operating enterprises, creating potential survivorship bias. Failed succession cases—estimated at 70% in China (Xu et al., 2015)—are not represented. This may overestimate the effectiveness of innovation capabilities and governance structures. Future research should employ hazard models or case-control designs comparing successful and failed successions.

4.4. Conclusion

This study demonstrates that successful succession in Shenzhen's family enterprises depends on an integrated approach combining systematic successor preparation, formalized governance structures, and, critically, the development of innovation capabilities that mediate these traditional succession factors. The research establishes that in innovation-intensive contexts, succession extends beyond conventional leadership transition to encompass organizational renewal and adaptation. Family enterprises that cultivate successors with contemporary skills, implement governance mechanisms balancing stability with flexibility, and prioritize innovation as both outcome and process are better positioned for sustainable generational transitions. As China's family business sector faces an unprecedented wave of leadership transitions with first-generation founders reaching retirement age, these findings offer actionable guidance for multiple stakeholders. The research underscores that succession success in dynamic markets like Shenzhen requires family enterprises to simultaneously honor their heritage while embracing transformation, suggesting that the future of family business lies not in choosing between tradition and innovation, but in strategically integrating both to ensure continuity and competitiveness across generations.

References

- [1] Agrawal, A., & Knoeber, C. R. (1996). Firm performance and mechanisms to control agency problems between managers and shareholders. *The Journal of Financial and Quantitative Analysis*, 31(3), 377-397. <https://doi.org/10.2307/2331397>.
- [2] Baltazar, J. R., Fernandes, C. I., Ramadani, V. et al. (2023). Family business succession and innovation: a systematic literature review. *Review of Managerial Science*, 17, 2897-2920. <https://doi.org/10.1007/s11846-022-00607-8>.
- [3] Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120. <https://doi.org/10.1177/014920639101700108>.
- [4] Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago Press.
- [5] Bennedsen, M., Fan, J. P. H., Jian, M., & Yeh, Y. H. (2015). The family business map: Framework, selective survey, and evidence from Chinese family firm succession. *Journal of Corporate Finance*, 33, 212-226. <https://doi.org/10.1016/j.jcorpfin.2015.01.008>.
- [6] Cabrera-Suárez, K., De Saá-Pérez, P., & García-Almeida, D. (2001). The succession process from a resource-and knowledge-based view of the family firm. *Family Business Review*, 14(1), 37-48. <https://doi.org/10.1111/j.1741-6248.2001.00037.x>.
- [7] Calabrò, A., Minichilli, A., Amore, M. D., & Brogi, M. (2018). The courage to choose! Primogeniture and leadership succession in family firms. *Strategic Management Journal*, 39(7), 2014-2035. <https://doi.org/10.1002/smj.2760>.
- [8] Calabrò, A., Vecchiarini, M., Gast, J., Campopiano, G., De Massis, A., & Kraus, S. (2019). Innovation in family firms: A systematic literature review and guidance for future research. *International Journal of Management Reviews*, 21(3), 317-355. <https://doi.org/10.1111/ijmr.12192>.

- [9] Carney, M., Zhao, J., & Zhu, L. (2019). Lean innovation: Family firm succession and patenting strategy in a dynamic institutional landscape. *Journal of Family Business Strategy*, 10(4), 100247. <https://doi.org/10.1016/j.jfbs.2018.03.002>.
- [10] Chen, J., & Liu, L. (2020). Regional innovation ecosystems in emerging economies: Evidence from China. *Research Policy*, 49(8), 104035. <https://doi.org/10.1016/j.respol.2020.104035>.
- [11] Chrisman, J. J., Chua, J. H., & De Massis, A. (2021). Innovation and family enterprises: A review and research agenda. *Academy of Management Perspectives*, 35(4), 585-599.
- [12] Chrisman, J. J., Chua, J. H., & Sharma, P. (2005). Trends and directions in the development of a strategic management theory of the family firm. *Entrepreneurship Theory and Practice*, 29(5), 555-576. <https://doi.org/10.1111/j.1540-6520.2005.00098.x>.
- [13] Clauss, T., Kraus, S., Kallinger, F. L., & Bican, P. M. (2022). Organizational ambidexterity and competitive advantage: The role of strategic agility in the exploration-exploitation paradox. *Journal of Innovation & Knowledge*, 7(2), 100171. <https://doi.org/10.1016/j.jik.2022.100171>.
- [14] Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates. <https://doi.org/10.4324/9780203771587>.
- [15] Cordeiro, J. J., Profumo, G., & Tutore, I. (2020). Board gender diversity and corporate environmental performance: The moderating role of family and dual-class majority ownership structures. *Business Strategy and the Environment*, 29(3), 1127-1144. <https://doi.org/10.1002/bse.2417>.
- [16] Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. *Academy of Management Review*, 22(1), 20-47. <https://doi.org/10.5465/amr.1997.9707180258>.
- [17] De Massis, A., Frattini, F., & Lichtenthaler, U. (2013). Research on technological innovation in family firms: Present debates and future directions. *Family Business Review*, 26(1), 10-31. <https://doi.org/10.1177/0894486512466258>.
- [18] De Massis, A., Frattini, F., Kotlar, J., Petruzzelli, A. M., & Wright, M. (2016). Innovation through tradition: Lessons from innovative family businesses and directions for future research. *Academy of Management Perspectives*, 30(1), 93-116. <https://doi.org/10.5465/amp.2015.0017>.
- [19] Dou, J., & Li, S. (2013). The succession process in Chinese family firms: A guanxi perspective. *Asia Pacific Journal of Management*, 30(3), 893-917. <https://doi.org/10.1007/s10490-012-9287-7>.
- [20] Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. <https://doi.org/10.1177/002224378101800104>.
- [21] Geisser, S. (1974). A predictive approach to the random effect model. *Biometrika*, 61(1), 101-107. <https://doi.org/10.1093/biomet/61.1.101>.
- [22] Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2-24. <https://doi.org/10.1108/EBR-11-2018-0203>.
- [23] Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: Updated guidelines. *Industrial Management & Data Systems*, 116(1), 2-20. <https://doi.org/10.1108/IMDS-09-2015-0382>.
- [24] Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. <https://doi.org/10.1007/s11747-014-0403-8>.
- [25] Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55. <https://doi.org/10.1080/1070519909540118>.
- [26] Hu, Q., & Hughes, M. (2020). Radical innovation in family firms: A systematic analysis and research agenda. *International Journal of Entrepreneurial Behavior & Research*, 26(6), 1199-1234. <https://doi.org/10.1108/IJEBR-11-2019-0658>.
- [27] Hu, Q., Hughes, M., & Hughes, P. (2022). Family-unique resources, marketing resources, and family owners' willingness to pursue radical innovation: A model and test. *Journal of Business Research*, 146, 264-276. <https://doi.org/10.1016/j.jbusres.2022.03.045>.
- [28] Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X).
- [29] Le Breton-Miller, I., Miller, D., & Steier, L. P. (2004). Toward an integrative model of effective FOB succession. *Entrepreneurship Theory and Practice*, 28(4), 305-328. <https://doi.org/10.1111/j.1540-6520.2004.00047.x>.
- [30] Li, Z., Mustapha, M., Sheikh Hassan, A. F., & Saidin, S. F. (2025). The influence of corporate governance on succession planning and organizational performance in Chinese family firms. *Management Decision*, 63(7), 2392-2411. <https://doi.org/10.1108/MD-02-2024-0412>.
- [31] Madison, K., Daspit, J. J., & Turner, K. (2022). Agency theory in family firm innovation: A socioemotional wealth perspective. *Journal of Business Research*, 148, 208-224. <https://doi.org/10.1016/j.jbusres.2022.04.056>.
- [32] Newman, D. A. (2014). Missing data: Five practical guidelines. *Organizational Research Methods*, 17(4), 372-411. <https://doi.org/10.1177/1094428114548590>.
- [33] Nitzl, C., Roldan, J. L., & Cepeda, G. (2016). Mediation analysis in partial least squares path modeling: Helping researchers discuss more sophisticated models. *Industrial Management & Data Systems*, 116(9), 1849-1864. <https://doi.org/10.1108/IMDS-07-2015-0302>.
- [34] Pahnke, A., Schleppehorst, S., & Schlömer-Laufen, N. (2024). Family business successions between desire and reality. *Journal of Business Venturing Insights*, 21, e00457. <https://doi.org/10.1016/j.jbvi.2024.e00457>.
- [35] Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63, 539-569. <https://doi.org/10.1146/annurev-psych-120710-100452>.
- [36] Rogelberg, S. G., & Stanton, J. M. (2007). Introduction: Understanding and dealing with organizational survey nonresponse. *Organizational Research Methods*, 10(2), 195-209. <https://doi.org/10.1177/1094428106294693>.
- [37] Scholes, L., Hughes, M., Wright, M., De Massis, A., & Kotlar, J. (2021). Family management and family guardianship: Governance effects on family firm innovation strategy. *Journal of Family Business Strategy*, 12(2), 100389. <https://doi.org/10.1016/j.jfbs.2020.100389>.
- [38] Schumpeter, J. A. (1934). *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle*. Harvard University Press.
- [39] Sharma, P., Chrisman, J. J., & Chua, J. H. (2003). Predictors of satisfaction with the succession process in family firms. *Journal of Business Venturing*, 18(5), 667-687. [https://doi.org/10.1016/S0883-9026\(03\)00015-6](https://doi.org/10.1016/S0883-9026(03)00015-6).
- [40] Sharma, P., & Salvato, C. (2013). Family firm longevity: A balancing act between continuity and change. In P. Fernández Pérez & A. Colli (Eds.), *The endurance of family businesses: A global overview* (pp. 34-56). Cambridge University Press. <https://doi.org/10.1017/CBO9781139794848.004>.
- [41] Shenzhen Municipal Government. (2020). Shenzhen innovation and entrepreneurship development report. Shenzhen Statistical Bureau.
- [42] Stone, M. (1974). Cross-validated choice and assessment of statistical predictions. *Journal of the Royal Statistical Society: Series B (Methodological)*, 36(2), 111-133. <https://doi.org/10.1111/j.2517-6161.1974.tb00994.x>.
- [43] Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning*, 51(1), 40-49. <https://doi.org/10.1016/j.lrp.2017.06.007>.
- [44] Wang, Y., Watkins, D., Harris, N., & Spicer, K. (2004). The relationship between succession issues and business performance: Evidence from UK family SMEs. *International Journal of Entrepreneurial Behaviour and Research*, 10(1/2), 59-84. <https://doi.org/10.1108/13552550410521380>.
- [45] Xu, N., Yuan, Q., Jiang, X., & Chan, K. C. (2015). Founder's political connections, second generation involvement, and family firm performance: Evidence from China. *Journal of Corporate Finance*, 33, 243-259. <https://doi.org/10.1016/j.jcorpfin.2015.01.004>.
- [46] Zellweger, T. (2017). *Managing the family business: Theory and practice*. Edward Elgar Publishing. <https://doi.org/10.4337/9781783479665>.
- [47] Zhao, J., Carney, M., Zhang, S., & Zhu, L. (2020). How does an intra-family succession affect strategic change and performance in China's family firms? *Asia Pacific Journal of Management*, 37(2), 363-389. <https://doi.org/10.1007/s10490-018-9568-x>.
- [48] Zybura, J., Zybura, N., Ahrens, J. P., & Woywode, M. (2021). Innovation in the post-succession phase of family firms: Family CEO successors and leadership constellations as resources. *Journal of Family Business Strategy*, 12(2), 100336. <https://doi.org/10.1016/j.jfbs.2020.100336>.
- [49] Cho JH, Chang SA, Kwon HS, Choi YH, Ko SH, Moon SD, Yoo SJ, Song KH, Son HS, Kim HS, Lee WC, Cha BY, Son HY & Yoon KH (2006). Long-term effect of the internet-based glucose monitoring system on HbA1c Reduction and glucose stability: a 30-month follow-up study for diabetes management with a ubiquitous medical care system. *Diabetes Care* 29, 2625-2631. <https://doi.org/10.2337/dc05-2371>.