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Breaking the Mold: Traits That Shape Succession Success in Small Family Businesses

Zeshan Ahmad^{1*}, Hina Iftikhar², Tahira Iram³, Norizah Mohd Mustamil⁴

- ¹ Department of Business Administration, South Star Management Institute, Duy Tan University, Vietnam
- ² Universiti Technology Mara, Malaysia
- ³ LaRGE Research Center, University of Strasbourg, France
- ⁴ Faculty of Business and Economics, Universiti Malaya, Malaysia

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PALABRAS CLAVE Éxito percibido en la sucesión, Rasgos de personalidad, Disposición a liderar, Hija sucesora, Teoría de la activación de rasgos, Pequeña empresa familiar Abstract This study examined how entrepreneurial personality traits influence perceived succession success, considering the daughter successor's willingness to lead as a mediating factor. This study targeted the daughter successors designated as chairwomen or managing directors in the small-family business (S-FB) retail sector. A purposive sampling technique was used, and the sample size was 236. Using trait activation theory, we induced two filter questions to determine the unbiased relationship of exogenous, endogenous, and mediating variables. The daughter successor's innovativeness traits have a positive significance, while internal locus of control and autonomy traits have non-significant associations with perceived succession success. Daughters with traits of innovativeness and a strong internal locus of control show a positive significance, whereas autonomy does not significantly relate to their willingness to take on leadership roles. Furthermore, the daughter successor's readiness to lead partially mediates the relationship between innovativeness and perceived succession success, fully mediates the connection between an internal locus of control and succession success, and shows no mediation between autonomy traits and perceived succession success in S-FB. The successor's unwillingness to lead results in succession failure and the closing down of family businesses. Through the support of trait activation theory, this study revealed that the allocation of job responsibilities and the provision of values, traditions, and cultural cues congruent with the successor's personality traits not only increase her interest in leading but also enhance the likelihood of succession success for her family business..

Rompiendo moldes: rasgos que determinan el éxito de la sucesión en pequeñas empresas familiares

Resumen Este estudio examina cómo los rasgos de personalidad emprendedora influyen en la percepción del éxito de la sucesión, considerando la disposición de la hija sucesora a liderar como un factor mediador. La investigación se centra en hijas designadas como presidentas o directoras generales en pequeñas empresas familiares del sector minorista. Se empleó una técnica de muestreo intencional, obteniéndose una muestra de 236 casos. Los resultados indican que la capacidad de innovación de la hija sucesora tiene un efecto positivo y significativo, mientras que el locus de control interno y la autonomía muestran asociaciones no significativas con el éxito percibido de la sucesión. Las hijas que presentan rasgos de innovación y un fuerte locus de control interno exhiben una relación positiva con su disposición a asumir roles de liderazgo, mientras que la autonomía no se relaciona de manera significativa con dicha disposición. Asimismo, la disposición de la hija sucesora a liderar media parcialmente la relación entre la innovación y el éxito percibido de la sucesión, media completamente la relación entre el locus de control interno y el éxito de la sucesión, y no muestra un efecto mediador entre la autonomía y el éxito percibido en las pequeñas empresas familiares. La falta de disposición para asumir el liderazgo suele derivar en el fracaso del proceso sucesorio y, en consecuencia, en el cierre de la empresa familiar. A partir de la teoría de la activación de rasgos, este estudio revela que la asignación de responsabilidades laborales y la promoción de valores, tradiciones y señales culturales coherentes con los rasgos de personalidad de la sucesora no solo incrementan su motivación para liderar, sino que también aumentan la probabilidad de lograr una sucesión exitosa en la empresa familiar.

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*Corresponding author:

E-mail: malikzeeshan1@hotmail.com

1. Introduction

Succession transition is a critical phenomenon for family business longevity (Ahmad, et al., 2024). This phenomenon revolves around the attitudes and behaviours of the descendant entrepreneur, specifically their personality traits (Wijayati et al., 2021). A significant number of Small- Family Businesses (S-FBs) cannot survive during the succession transition phase. The survival rate of S-FB is alarmingly low, with nearly 70% of familycontrolled small businesses facing challenges in continuing beyond the first generation. Furthermore, among the S-FBs that do make it to the second generation, 90% ultimately fail by the time they reach the third generation. The low survival rate is due to the selection of an inappropriate successor (Ahmad et al., 2023). Each potential successor possesses unique personality traits, which lead to different visions and cognitive abilities when resolving complex business issues like succession. Consequently, while some successors are equipped to successfully transition their S-FB to subsequent generations, others may not (Aboelmaged et al., 2024).

The successors, whether son or daughters, can play an equally important role in the family business's development and longevity. However, the role of a daughter successor has often been ignored in emerging economies. While there is increasing recognition of this issue, existing literature has predominantly focused on general succession processes and male successors. This has created a significant empirical gap in understanding daughter successors' unique challenges and contributions. In addition, many daughter successors were either denied the opportunity to be a successor or faced significant barriers, making them hesitant to lead their family business. Brundin et al. (2023) revealed that 15% of female owners leave their family businesses due to various psychological, social, and religious barriers. The ability to navigate these barriers are linked with an individual's personality traits (Z. Ahmad et al., 2022). However, there is still a critical void in empirically examining how specific entrepreneurial personality traits of female successors, particularly innovativeness, internal locus of control, and autonomy, affect succession success in S-FB.

Trait activation theory (TAT) supports that when assigned tasks or cultural cues align with the personality traits of the daughter successor, it can enhance their interest in achieving high performance (Ahmad et al., 2023; Tett et al., 2021). However, the existing literature lacks thorough understanding of how TAT specifically applies to family business succession, particularly

regarding how environmental and cultural cues activate or suppress female successors' entrepreneurial traits. This study argues that successors use their capabilities, supported by their personality traits, to make calculated decisions that help them overcome the barriers (ideal situation). In reality, second-generation S-FBs often do not assign tasks or manage cultural cues in a way that aligns with the female daughter's successor's personality traits. This misalignment can lead to reluctance on the part of the daughter successors to lead their S-FBs, which can ultimately result in succession failure. Despite the grievous issues faced by the daughter successor, which contributed to this failure, the literature is still limited (Maseda et al., 2022). Every S-FB faces various challenges (i.e., financial, economic, leadership, etc.). The impact of these ramifications can last from one to ten years. The consequences of irrational decisionmaking of successors, often influenced by their personality traits, can be severe and irreversible, affecting subsequent generations. As such, a successor with a diverse range of personality traits and successor with a strong/weak ability to rationalise the outcome of a decision may be better equipped to handle various crises, directly impacting the success or failure of their family business's succession (Ahmad et al., 2022). Given the critical role that the personality traits of daughter successors play in increasing the survival rate of S-FBs, the first research question is:

R.Q.1. Which personality traits of a daughter successor increase the perceived succession success of S-FB?

Family business researchers argued that the true outcome of personality traits on business performance should be investigated through a mediating mechanism. However, the existing literature lacks a comprehensive understanding of these mechanisms, particularly regarding how a successor's willingness to lead serves as a psychological bridge between personality traits and successful outcomes in succession. The successor's personality traits are not the only factor that influences the likelihood of a successful transition in S-FB; the successor's willingness to engage and handle business affairs responsibly is also crucial (Tang & Hussin, 2020). Furthermore, it has been noted that succession cannot be considered successful without the successor's willingness to handle the business diligently. Richards et al. (2019) pointed out that the higher the willingness to lead, the greater the probability of achieving set goals and subsequently perceived success in succession. Despite the undeniable importance of a daughter

successor's willingness to lead in relation to personality traits, perceived succession success remained unexplored. This gap represents a significant area that needs further investigation in family business succession research, where the psychological mechanisms linking personality traits to performance outcomes have not been adequately addressed. Therefore, the second research question is:

R.Q.2. Does the daughter successor's willingness to lead mediate between the personality traits and perceived succession success of S-FB?

Task and organisational level situational cues of TAT help to explain the relationship between entrepreneurial traits such as innovativeness, internal locus of control, and autonomy, and willingness of daughter successor to lead, as well as their perceived succession success (Judge & Zapata, 2015). The alignment or misalignment of organisational level cues (i.e., values, traditions, customs) with the successor's entrepreneurial personality trait can activate or deactivate their specific trait and influence the success or failure of the succession. In addition, TAT provides framework for understanding mediating mechanisms that predict how a person's personality traits can drive their behaviour and performance (Jayawickreme et al., 2019). When both the nature of tasks (task level cues) and values and traditions (organisational level cues) of S-FB align with the successor's personality traits, this combination attracts the successor to spend more time performing those assigned attractive tasks. In this scenario, aligning these situational instigates the daughter successor's willingness to lead and increases the likelihood of succession success across generations.

This study makes several key contributions. First, it examines the relationship between the entrepreneurial traits of daughter successors and perceived succession success. Second, it investigates how the successor's willingness to lead mediates this relationship. Third, it uses the TAT to explain the model in the context of S-FB. The sample size in this study consisted of 236 daughter successors designated as chairwomen and managing directors in the small-scale retail family business in Malaysia. Smart-PLS was used to do bootstrapping after evaluating common method biases, reliability, and validity. This study revealed that daughter successors' innovativeness traits have a positive significance, while internal locus of control and autonomy traits have nonsignificant associations with perceived succession success. Daughters with traits of innovativeness and a strong internal locus of control show a positive significance, whereas autonomy does not significantly relate to their willingness to take on leadership roles. Furthermore, the daughter successor's readiness to lead partially mediates the relationship between innovativeness and perceived succession success, fully mediates the connection between an internal locus of control and succession success, and shows no mediation between autonomy traits and perceived succession success in S-FB.

This study is important for the retail sector policymakers and predecessors as it offers insights on selecting a suitable successor for their S-FB. It emphasizes aligning successors' personality traits with their roles and ensuring compatibility with business operations and culture. By adopting such practices, predecessors can boost successors' interest in leadership and improve the chances of successful generational transitions, enhancing the survival rate of S-FBs.

2. Theoretical Framework and Literature Review

2.1. Theoretical framework

Several theories support the existence of personality traits in different contexts, including social investment theory, social cognitive theory, Jung's theory (Finn, 2011), and the personality-job fit theory (O'Reilly, 1977). Social investment theory posits that changes in personality traits over time are influenced by an individual's commitments to social roles and institutions (Roberts et al., 2005). In contrast, Social Cognitive Theory explains personality as a dynamic interaction among thoughts, behaviours, and the environment, emphasizing the roles of observational learning and self-efficacy. Unlike fixed trait theories, this approach highlights personality's adaptability to changing situations. Jung's theory categorizes personality types based on opposing attitude and function types (Kotsch, 2000). Personality-job fit theory suggests that individuals perform best when aligned with their firm's environment and culture. Although Jung's and personality-job fit theories have been applied in small to medium-sized enterprises, they don't fully explain the model of this study. Trait activation theory, however, is compatible and can effectively support the proposed framework.

This study employs TAT to clarify the proposed model by examining how individuals express their traits in response to environmental cues, which reveal those traits (Tett & Burnett, 2003). These cues can originate from organizational, social, and task contexts (Judge & Zapata, 2015). In Malaysia, these cues are complex, combining traditional values that emphasize collective decision-making and hierarchical respect with

modern practices that prioritize individual leadership and innovation. For female successors, the role of TAT is crucial, as cultural gender norms can either suppress or activate entrepreneurial traits, leading to a unique interaction between personality expression and cultural expectations. Ultimately, these cues influence the traits relevant to job responsibilities and organizational outcomes, directly impacting job performance (Tett & Burnett, 2003). TAT suggests that work outcomes shaped by personality traits fall into two categories: (1) attitude and (2) performance. 'Attitude' reflects how well an individual aligns with their tasks, affecting their willingness to lead. In Malaysian family businesses, this alignment is influenced by cultural cues such as family honour (mianzi), respect for elders, and gender expectations, which can either enhance or inhibit a daughter successor's leadership traits. A stronger fit between personality traits and task requirements often leads to a greater willingness to lead. Additionally, a business's performance hinges on the successor's commitment to completing tasks, with personality predicting business performance and profitability. It follows that an individual's traits also influence their perceived performance and willingness to lead (Maier et al., 2019). Ultimately, effective performance indicates a successful transition of the family business across generations, linking personality traits to both willingness to lead and perceived succession success.

Researchers have differing views on the Big Five personality significance of the traits. Some argue that these traits fail to effectively distinguish between individuals with entrepreneurial qualities and other business executives. Additionally, the Big Five traits are not specific to situations or mechanisms, limiting their ability to explain entrepreneurial behaviour (Sahin et al., 2019). To address these limitations, our study focuses on three key entrepreneurial personality traits: innovativeness, internal locus of control, and autonomy. This selection is particularly relevant in the Malaysian context, where traditional family business structures can influence the expression of these traits in female successors, shaped by cultural factors like collective harmony and gender role expectations. The connection between innovativeness, locus of control, and autonomy is significant in family businesses. Individuals aiming for innovation must believe they can control outcomes and work independently (Burcharth et al., 2017). Those with a high internal locus of control are more likely to make independent decisions, believing their actions directly impact the firm's success and growth (Cobb-Clark, 2015).

Research indicates that individuals with an

internal locus of control are more likely to use creative strategies in challenging situations due to their willingness to take risks (Hong et al., 2018). Autonomy is also vital for fostering innovation in family businesses; when given the freedom to make decisions, individuals can innovate without being hindered by tradition or external interference. Similarly, a successor's internal locus of control and inclination towards autonomy enhance their innovativeness (Ejiobi-Okeke & Samuel, 2021). Thus, autonomy, innovativeness, and internal locus of control are key factors that should be studied together, as these traits may increase a successor's willingness to lead and improve perceived succession success.

2.2. Literature review

2.2.1. Family business succession: A comprehensive overview

Family business succession represents one of the most extensively researched areas in family business literature, with scholars examining various dimensions of this critical organizational transition (Baltazar et al., 2023). Recent systematic reviews reveal that succession research has evolved from basic process models to sophisticated frameworks examining psychological, cultural, and performance outcomes (Ge & Campopiano, 2021). However, despite this extensive body of work, significant gaps remain in understanding the role of successor characteristics, particularly personality traits, in determining succession outcomes.

Succession research has traditionally focused on structural and procedural aspects, with limited attention to psychological factors that drive succession success (Gagné et al., 2021). Recent studies emphasize that motivation and individual characteristics of successors are critical determinants of succession effectiveness, yet empirical investigations remain scarce (Ramon, 2021). This gap is particularly pronounced when examining specific personality traits and their activation mechanisms in succession contexts. Furthermore, existing succession literature predominantly adopts a gender-neutral approach, failing to recognize the unique challenges and contributions of female successors (Maseda et al., 2022). This oversight represents a significant limitation given the increasing participation of women in family business leadership and succession processes.

2.2.2. Gender and female succession in family businesses

Recent bibliographic analyses reveal that women's involvement in family firms has garnered increasing attention, yet female succession

remains underexplored (Maseda et al., 2022). The literature indicates that female leadership in family firms can yield superior entrepreneurial outcomes compared to non-family firms, suggesting unique advantages that warrant investigation (Hernández-Linares et al., 2023). Systematic reviews of women entrepreneurship in family businesses identify female succession as a dominant emerging theme requiring further research (Bağış et al., 2022). Contemporary research highlights that daughters' succession intentions are significantly influenced by national gender inequality contexts, indicating the importance of cultural and institutional factors (Lyons et al., 2024). However, existing studies lack comprehensive frameworks examining how personality traits of female successors interact with these contextual factors to influence

succession outcomes.

Recent conceptual work emphasizes the need for gender-perspective frameworks in understanding female succession processes (Franco et al., 2023). Empirical evidence from matrilineal societies suggests that female successors bring unique innovation capabilities to family businesses, yet the underlying personality mechanisms remain unexplored (Games & Sari, 2023). Additionally, research indicates that gender effects on organizational performance in succession contexts vary significantly, suggesting the importance of individual-level factors such as personality traits.

2.2.3. Research gaps and study positioning
Based on this comprehensive literature review,
several critical gaps emerge that this study
addresses:

Table 1. Literature gaps and study contributions

Gap	Existing Literature Limitations	Contribution		
Succession Research Focus	Predominantly structural/procedural focus (Baltazar et al., 2023)	Examines psychological mechanisms through personality traits		
Motivational Mechanisms	Limited empirical investigation of successor motivation (Gagné et al., 2021).	Empirically tests willingness to lead as mediating mechanism		
Female Succession	Gender-neutral approaches dominate (Maseda et al., 2022).	Focuses specifically on daughter successors		
Personality Traits	Lack of specific trait-performance relationships (Ramon, 2021)	Examines innovativeness, internal locus of control, and autonomy		
Theoretical Framework	Limited application of TAT in succession contexts	Applies Trait Activation Theory to explain trait-performance links		
Cultural Context	Insufficient attention to emerging economy contexts (Lyons et al., 2024).	Examines Malaysian small family businesses		
Gender-Performance Link	Inconsistent findings on gender effects (Soost & Moog, 2021)	Provides trait-based explanation for female successor effectiveness		

This positioning demonstrates that while succession research is extensive, critical gaps exist in understanding the psychological mechanisms through which female successors' personality traits influence succession outcomes. The application of Trait activation theory to explain these relationships in the context of small family businesses in emerging economies represents a significant theoretical and empirical contribution to the field.

2.3. Perceived succession success

Sharma et al. (2001) defined perceived succession success as "the actions and events that lead to the transition of leadership from one family member to another in family firms. The two family members may be part of the nuclear or extended family and may or may not belong to the same generation" (p.19). The succession process ensures the continuity, longevity, and sustainability of business through generations.

Literature has shown that succession in family businesses is a complex and challenging process (LeCounte, 2022). It is perceived as successful when the successor can effectively manage business affairs, meet the needs of stakeholders, and achieve sustainable business performance (Georgiou et al., 2023).

2.4. Successor's willingness to lead

The success of a family business largely depends on the successor's readiness to take on leadership responsibilities (Wang et al., 2019). This readiness refers to a heir or family member's eagerness and motivation to manage and control the business affairs. Several factors contribute to this willingness, including successor's interest, passion, and a sense of obligation to preserve and advance the family legacy. The willingness of a potential successor is crucial, as they influence succession planning and overall transition in leadership. If a successor is not enthusiastic or

dedicated to assuming leadership, it could pose challenges for the short-term stability and long-term growth of the family business (Marques et al., 2022).

2.5. Direct relationship

2.5.1. Innovativeness and perceived succession success

An individual's willingness and interest to seek new ways of performing tasks is termed 'innovativeness' (Salhieh & Al-Abdallat, 2022). Innovativeness is a fundamental component of entrepreneurship (Presenza & Messeni Petruzzelli, 2019). Ownership of family business influences the successor's potential and ability to innovate. Khaw et al. (2023) studied thirty-seven Malaysian family firms highlighted innovativeness as an essential factor in the success of family business. Family firms that exhibited higher levels of innovativeness achieved better

long-term business performance and were more competitive against non-family firm (Sherlock et al., 2022).

Similarly, Kubota and Takehara (2019) a study conducted on Japanese family firms found that innovativeness positively impacted the sales and profitability of family firms in a competitive market. However, some scholars argue that excessive focus on innovation can harm family firms' traditional strengths and stability (De Massis et al., 2018). Rondi et al. (2019) found that family firms often prioritize preservation of socioemotional wealth over innovative risktaking, suggesting that innovativeness may not always align with family business objectives. Additionally, Calabrò et al. (2021) demonstrated that in specific contexts, family firms' conservative approach and resistance to change can contribute more to succession success than aggressive innovation strategies. Koentjoro and Gunawan (2020) Proposed a framework highlighting the importance of family firms leveraging their innovation management capabilities to drive competitive advantage and ensure long-term success. Lorenzo et al. (2022) stressed as essential for family firms to cultivate a culture of innovation and encourage family members to embrace new ideas to preserve the family firm's legacy and sustain growth. Therefore, it can be argued that a direct relationship exists between innovativeness and perceived success in succession planning within family businesses. Based on this, we proposed the hypothesis:

H1: Daughter successor's innovativeness is positively associated with the perceived succession success.

2.5.2. Innovativeness and willingness to lead McElheran (2015) found that a business leader's willingness to lead the market is based on their tendency to adopt innovative technologies. Debellis et al. (2021) suggested that while family firms possess superior innovation management abilities, they tend to be less willing to engage in technological innovations. However, contrasting findings by Kraus et al. (2012) indicate that family firms often exhibit innovation rigidity due to traditional mindsets and risk-averse tendencies, particularly when succession involves female heirs who may face additional resistance to innovative approaches. Organizations with an innovative culture are significantly associated with the willingness of employees with innovative traits to share new ideas. Literature has recognized the importance of innovativeness in family firms and its impact on the successor's support to take initiatives to achieve a competitive advantage (Cesaroni et al., 2021). However, there is still limited research specifically focusing on the relationship between the innovativeness traits of a daughter's successor and her willingness to lead in a family business (Mussolino et al., 2019). Conversely, some studies suggest that innovative traits may decrease willingness to lead in traditional family businesses. A study by Ali (2019) revealed that individuals with openness traits are more inclined to take on innovative job responsibilities. The lens of TAT further suggests that female successors demonstrate a greater willingness to lead the family business when a successor with an innovative trait is assigned innovative tasks. Building on this literature review, it can be hypothesised that a daughter successor with an innovativeness trait is more likely to join a family that values innovation and actively supports innovative practices. Thus, we proposed:

H4: Daughter successor's innovativeness is positively associated with their willingness to lead.

2.5.3. Internal locus of control and perceived succession success

An individual's belief to have control over events in their life is termed as an internal locus of control (Rauch & Frese, 2007). Individuals dominating the internal locus of control trait believe in controlling their actions, fate, and future outcomes. Cirillo et al. (2022) investigated generational engagement and discovered that family members in top management spanned various generations. The majority of these individuals exhibited a strong internal locus of control and achieved significant entrepreneurial success. Vodă and Florea (2019) undertook multiple semi-structured interviews with UK family firms. They revealed that an

entrepreneur's internal locus of control improves the family business's performance and legacy preservation. Galvin et al. (2018) suggested that people with a stronger internal locus of control than an external one are more adept at tackling complex and creative tasks. However, it can also lead to ignoring external advice and stakeholder input, overconfidence, and poor decision-making in uncertain business environments, which may hinder business performance.

Hsiao et al. (2016) found that family business owners with a greater internal locus of control were more likely to engage in higher levels of business planning. Tseng et al. (2022) found that ventures led by entrepreneurs with an internal locus of control performed better than those with an external locus of control. The concept of locus of control has been extensively studied in the SME context. Still, limited research focuses on the relationship between internal locus of control and family business performance (Hamzah & Othman, 2023). Still, no direct relationship exists between the daughter successor's internal locus of control trait and perceived succession success. So, this study proposes the hypothesis:

H2: Daughter successor's internal locus of control is positively associated with the perceived succession success.

2.5.4. Internal locus of control and willingness to lead

The literature has extensively examined entrepreneurs' internal locus of control. Research consistently indicates that individuals with a stronger internal locus of control are more inclined to seek leadership roles in organizations (Afsar et al., 2020). This is because individuals who possess an internal locus of control tend to believe they can influence their outcomes and shape their destinies. The planned behaviour support theory explains that students with a family business background and a high internal locus of control were identified as having strong succession intentions. Individuals with a relatively high internal locus of control are more willing to take financial risks, but buffering effects may vary across generations. However, some studies challenge this relationship, suggesting that excessive internal locus of control may lead to overconfidence and poor decision-making in leadership contexts (Chen & Silverthorne, 2008). Additionally Mueller and Thomas (2001) found that in certain cultural contexts, external locus of control individuals demonstrated higher entrepreneurial intentions, contradicting the conventional wisdom about internal control orientation. Qurrahtulain et al. (2022) compared that women have a low internal locus of control and are less likely to make critical decisions than men; thus, their willingness to take leadership roles in groups is lower. Earlier studies have indicated a favourable connection between self-efficacy and the willingness to lead, reinforcing the association between an internal locus of control and successors' readiness to lead. Consequently, this research aims to explore the direct correlation between internal locus of control and successors' willingness to lead within family business contexts. So, the proposed hypothesis is:

H5: Daughter successor's internal locus of control is positively associated with their willingness to lead.

2.6. Autonomy and perceived succession success

Autonomy is a trait that enables individuals to identify problems and opportunities, set priorities concerning those problems, and have the authority to take action to provide solutions (Seeber et al., 2020). Autonomy is an entrepreneurial personality trait essential for the growth of new enterprises. Despite this, the autonomy trait has received little attention in entrepreneurial studies (Ravenelle, 2019). However, the significance of autonomy in the light of entrepreneurial achievement is theoretically supported (De Clercq & Brieger, 2022). Conversely, some scholars argue that excessive autonomy can lead to isolation and poor decision-making in family business contexts, as successors may lack the collaborative mindset necessary for sustainable leadership (Santiago-Torner et al., 2025). Still, a gap exists in the literature that could be filled empirically by examining the relationship between the trait of autonomy, a successor's willingness to lead, and the perceived succession success in the context of S-FB.

Chen et al. (2025) showed that a successor should have managerial competence, and the predecessor must provide conducive conditions for the successor's development. Tang and Hussin (2020) suggested that a successor chosen by the first-generation owner has authority and control. Such successors with decision-making control contribute to excellent performance in their business. Succession is most likely to be successful when a successor possesses the autonomy to deal with the business's affairs (Chan et al., 2020). An individual's autonomy is essential for mitigating succession issues and the longevity of Australian family firms (Becerra et al., 2020). Literature indicates that autonomy influences the performance of family firms, but autonomy traits of the daughter successors contribute to the transaction of their S-FB, which needs investigation. So, the proposed hypothesis is:

H3: Daughter successor's autonomy is positively associated with perceived succession success.

2.7. Autonomy and successor's willingness to lead

Gao and Jiang (2019) developed a scenario among autonomous work teams that found valid and constructive reasons to link the autonomy trait with a leader's willingness to lead and yield improved performance. In contrast, Zarrouk et al. (2020) found that the autonomy trait may have diverse impacts on business performance if an individual shows their willingness to achieve set targets. However, excessive autonomy can lead to isolation and reduced willingness to take on leadership roles, particularly in collectivist cultures where interdependence is valued. Similarly, (Rodríguez-Cifuentes et al., 2020) found that high autonomy traits may decrease leadership motivation when individuals perceive leadership as constraining their independence. Previous studies indicate that an entrepreneur's autonomy trait is linked to a successor's willingness to lead. However, existing literature cannot answer the question of the relationship between the daughter successor's autonomy trait and her willingness to lead the S-FB. So, the derived hypothesis is:

H6: Daughter successor's autonomy is positively associated with their willingness to lead.

2.8. Successor's willingness to lead and perceived succession success

Successor's interest and willingness to lead the business are prerequisites for a successful succession transition (Ringo & Kibambila, 2025). Rautamäki and Römer-Paakkanen (2016) also revealed that, a successor's propensity to lead the business increases the likelihood of succession success. However, some scholars argue that willingness alone may not guarantee success, as external market conditions and organizational readiness play equally critical roles (Bornhausen & Wulf, 2024). A forced succession due to circumstances can sometimes yield better outcomes than voluntary succession, challenging the assumption that willingness is always beneficial. If a successor is reluctant to lead the family business (for whatever reason), the succession is unlikely to be successful. Thus, the deduced hypothesis is:

H10: A daughter successor's willingness to lead is positively associated with the perceived succession success.

2.9. Mediating mechanism

2.9.1. Daughter successor's willingness to lead between innovativeness and perceived succession success

Prasanna et al. (2019) highlighted that a willingness to lead a firm by adopting innovative approaches leads it towards success. Kagendo (2018) found that leaders who support innovation and creative activities in Kenyan firms enhance the willingness of employees to boost team performance and overall business success. Such business success results in the longevity and transition of family businesses to the subsequent generation. TAT explains that the successor's innovativeness traits activate and arouse her willingness to lead when the nature of the assigned work to the successor is related to creativity, adventurism, and innovativeness. This willingness is accentuated in S-FBs with a cutting-edge image and a diverse and cultured workforce. Thus, aligning a successor's innovative personality traits with the assigned tasks (creativity, innovative performance) increases her willingness to lead. However, the likelihood of a successful transition increases with willingness when innovation-related cultural cues (cuttingedge image, workforce diversity) also support her. On the contrary, the incongruence between the innovativeness trait of the successor and the nature of the assigned tasks and the cultural values of the S-FB may reduce the willingness to lead and, subsequently, the perceived succession success. The deduced hypothesis is, therefore:

H7: The relationship between innovativeness and perceived succession success is mediated by willingness to lead

2.9.2. Daughter Successor's Willingness to Lead between Internal Locus of Control and Perceived Succession Success

Hamzah and Othman (2023) proposed that a high internal locus of control is associated with motivated individuals, which results in better performance or higher success rates. Successful family firms are likelier to transact with subsequent generations (Sreih et al., 2019). TAT signals that daughter successors high in internal locus of control are willing to make decisions as they are judgmental and perceptive towards future events. Their willingness is accentuated in S-FBs, where the cultural cues and traditions support strategic planning projects or risky ventures. Thus, the internal locus of control trait daughter successor's willingness to lead increases when she has the freedom and support of her business to make decisions based on her own judgment and rationality. A positive outcome due to her vision instigates her to work hard and make decisions that preserve the family business's prosperity across generations. Based on these arguments, the proposed hypothesis is:

H8: The relationship between internal locus of control and perceived succession success is mediated by willingness to lead

2.9.3. Daughter successor's willingness to lead between autonomy and perceived succession success

Bergner (2020) investigated the differences among individuals based on their cognitive abilities and suggested that those who possess the autonomy trait are more willing to lead and able to achieve high performance based on their analytical skills and diversity of experience. Sørlie et al. (2022) found that the contextual aspects of an autonomous working environment positively influence a leader's willingness to lead and achieve excellent organizational performance. A high-performing firm is more likely to be able to transition to the next generation successfully. When seen through the lens of TAT, a successor possessing the autonomy trait is highly motivated to accomplish tasks (i.e., social welfare, architecture, leadership) more effectively. However, their willingness to lead the firm would emphasize the S-FBs whose values and traditions support the successor's autonomy in decisionmaking. The scenario mentioned above leads to the assumption that a succession process will be more effective if the successor is motivated and enjoys their work in the culture of S-FB that supports the autonomy provision. Thus, the proposed hypotheses is:

H9: The relationship between autonomy and perceived succession success is mediated by willingness to lead

2.10. Control variables

In family business succession, various factors have been identified as potential predictors. Among multiple factors, an important consideration is the level of education and generation-level involvement of the successor (Ahmad & Yaseen, 2018). Numerous studies have indicated that successors with higher levels of education are better equipped to take over the family business and navigate its challenges effectively. For example, Soares et al. (2021) found that successors with higher educational levels were more likely to engage in innovative practices and adopt new technologies, leading to better overall performance of the family business. In addition to education, the generation level of the successor also plays a significant role in predicting succession success. Li et al. (2020) suggested that second-generation successors are likelier to possess the necessary skills and knowledge for successful business succession. However, this relationship is not straightforward, as the research by López-Pérez et al. (2025) highlights that third-generation successors may face unique challenges and have different expectations compared to second-generation successors. Therefore, it is important to consider both the level of education and the generation-level involvement as control variables when predicting succession success in family businesses.

3. Method

3.1. Participants and procedure

This study used a pre-designed self-administered questionnaire based on prior personality traits and family firm research (Ahmad et al., 2023). This study selected Malaysia because it presents an ideal context for this research due to its unique blend of traditional family business structures and rapid economic modernisation, where female succession remains culturally sensitive yet increasingly necessary. The country's diverse ethnic composition (Malay, Chinese, and Indian) offers varied cultural perspectives on gender roles in business leadership. In contrast, its position as a developing economy with a strong family business presence provides substantial empirical ground for studying succession dynamics in emerging market contexts. This study focused on three cities of Selangor state, Malaysia: Shah Alam, Subang Jaya, and Petaling Jaya. These are the biggest revenue-generating states and contain a large number of S-FBs. The probability of S-FB failure is high in this city due to rapidly changing market trends and the entrance of expat entrepreneurs with international exposure and heavy investment (Abdul Hamid, 2013). The list of small and medium businesses was obtained from the Small Medium Enterprise Corporation (SME-Corp) Malaysia. Relying on the list, author sorted out S-FB based on the following criteria: (1) the business must be at least five years old (Faccio et al., 2016); (2) has 5 to 30 employees and an annual sale turnover between RM 300,000- RM 3 Million (Lim & Teoh, 2021) and (3) the business identifies itself as family-owned, and /or a single-family owns 50% or above shares (Chua et al., 1999). We chose to examine the retail sector because it accounts for 13.1% of Malaysia's GDP (Ahmed et al., 2024) and focusing on a single sector would offer better insight into that sector without complexities. Focusing on a single sector reduces industry-specific variability and allows for more precise analysis of succession dynamics within a homogeneous business environment. However, this sector-specific approach may limit the generalizability of findings to other industries with different operational characteristics, family involvement patterns, and succession challenges (Qalbia & Santoso, 2025).

We targeted female successors designated for key positions like chairwomen or managing directors, and their S-FBs belong to the 2nd generation and onwards. We set this criterion because family businesses start losing grip on their longevity from the 2nd generation or onwards (Tan et al., 2019). Moreover, vision and rationality, based on the personality traits of such key position-holding successors, can influence the succession process of S-FBs.

The lack of an accurate and updated sampling frame led us to use a non-probability purposive sampling (Isaga et al., 2015). We used TAT to explain the proposed model. According to TAT, the personality trait of an individual activates and urges her to achieve high job performance when the nature of the assigned task and the cultural cues of that firm match with her traits. Based on the TAT, the author asked two filter questions to assess personality traits on succession success accurately. These questions are: 1) Are you satisfied with the nature of the assigned task? 2) Are you satisfied with your S-FB's culture, values, and traditions? The answer "yes" proceeded to their further participation in the study.

A panel of three experts in the family business domain evaluated the content validity of the closed-ending questionnaire. In June 2021, the questionnaire was delivered to the targeted successors of S-FBs through Google Forms. One hundred thirty-eight responses were received; a response rate of 39%. Participants ranged in age from 26 to 63, M_{age} = 35.23. So, it can be deduced that family businesses are transitioning leadership to younger generations earlier in their careers. Of these participants, 64.2 % belonged to the 2nd generation, 29.5% to the 3rd generation, and 6.3% to the 4th generation. The dominance of second-generation successors indicates that most participating family businesses are still in their early generational phases, or these S-FBs are struggling to enter subsequent generations. We found no S-FB under the surveillance of the 5th generation. 13.2% had a postgraduate degree, 44.4 % had an undergraduate degree, 26.3% completed high school, and 16.1% completed secondary school. Based on these results, it can be deduced that educational attainment was notably high, with 57.6% of successors holding university-level qualifications (undergraduate or postgraduate), demonstrating the increasing emphasis on formal education in preparing successors for leadership roles. The substantial representation of highly educated successors suggests a shift from traditional experiential learning to more structured educational preparation in contemporary family business succession planning.

3.2. Common method bias

In the study, the daughter successor's personality traits, innovativeness, internal locus of control, and autonomy are treated as exogenous constructs, the successor's willingness to lead as a mediator, and perceived succession success as endogenous constructs. The data was collected at one point, so there was a chance of common method biases. We conducted Harman's singlefactor test, which revealed that the factors accounted for 42.842% of the variance, falling below the 50% threshold typically associated with common method bias. In addition, this study found no significant differences between the respondents and non-respondents from our ANOVA and Mann-Whitney U tests, indicating that the non-response bias in this study is trivial (Ahmad et al., 2024). These findings suggest that common method bias is not a concern in the context of this study.

3.3. Measures and control variables

This study adopted scales to measure the constructs. A six-item succession success scale was developed (Cabrera-Suárez & Martín-Santana, 2012) with a reported Cronbach's alpha of 0.89, demonstrating strong internal consistency, and treated as a formative construct. The successor's willingness to lead is measured (Venter et al., 2005) five-item scale ($\alpha = 0.84$) and treated as a reflective construct. The entrepreneurial personality traits, autonomy, innovativeness, and internal locus of control, were reflective measurement constructs validated by (Cuesta et al., 2018) with composite reliability scores ranging from 0.78 to 0.86, confirming adequate construct reliability. This study also used a nomological approach to decide whether specific constructs are formative or reflective, in addition to literature support (Finn & Wang, 2014) Each item of these constructs was recorded on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Control variables: Previous research has shown that family members' priorities regarding the well-being of businesses shift to family well-being across generations (Parada et al., 2019). Every family business is at a different generation level, impacting its dynamics and decision-making processes. Literature indicates that family businesses' performance varies according to their generation. Therefore, we controlled the generation level of the family business. The responses were measured, ranging from

(1=2nd generation, 2=3rd generation, and 3=4th generation). Literature indicates that cognitive approach and capabilities to take calculated initiatives depend on the successor's level of education. Every successor has a different level of education, and it has varying effects on the succession. Literature also indicates that successors with postgraduate education either leave their S-FB or transform it into a large-scale enterprise (Ahmad & Yaseen, 2018). So, we also used the successor's education (1 = secondary school, 2 = high school, 3 = undergraduate, 4 = post-graduate) as a control variable.

4. Results

4.1. Measurement model analysis

The data were screened for outliers, and 2 participants were removed. Table 2 presents the descriptive statistics. The correlational estimates in Table 2 were consistent with this study. The convergent validity of multi-item reflective constructs (innovation, internal locus of control,

autonomy, succession success, willingness to lead) was assessed by the loading and significant level of each item of its respective constructs. The factor loading of items of each construct (see Table 2) was between 0.60 and 0.956, except for 4 items. So those items were removed. Composite reliability and Cronbach's alpha value of all constructs were equal to or higher than 0.837, which indicates a suitable range of reliability and validity of constructs (Nunnally & Bernstein, 1994). Through the Q₂² statistical test (a cross-validated redundancy index), carried out by the blindfolding method (Santos-Jaén et al., 2022), the predictive relevance of the independent latent variables have been evaluated. The findings in Table 1 reveal that all $Q_{\rm g}^2$ are positive, confirming the satisfactory explanatory qualities of the model (Evermann & Tate, 2016). Every variable exceeds the suggested threshold of 0.708, and Cronbach's alpha is greater than 0.7. The average variance extracted (AVE) is also greater than 0.5, indicating reliability and convergent validity (Ahmad, 2025).

Table 2. Factor loading of reflective constructs

Results of the Outer model for 37 elements, indicating five constructs

Elements	Loading	t-value	<i>p</i> -value	Q _B ²	α	CR	AVE
Innovativenes	S				0.946	0.954	0.975
INN.Q.1	0.827	16.569	0.000				
INN.Q.2	0.823	27.026	0.000				
INN.Q.3	0.879	36.862	0.000				
INN.Q.4	0.84	31.707	0.000				
INN.Q.5	0.805	19.760	0.000				
INN.Q.6	0.801	21.724	0.000				
INN.Q.7	0.845	32.305	0.000				
INN.Q.8	0.852	29.365	0.000				
INN.Q.9	0.746	15.994	0.000				
INN.Q.10	0.789	23.632	0.000				
Internal Locus	of Control				0.859	0.892	0.542
ILC.Q.1							
ILC.Q.2	0.796	18.825	0.000				
ILC.Q.3	0.772	12.559	0.000				
ILC.Q.4	0.693	13.802	0.000				
ILC.Q.5	0.718	11.687	0.000				
ILC.Q.6							
ILC.Q.7	0.731	15.277	0.000				
ILC.Q.8	0.705	16.652	0.000				
ILC.Q.9	0.734	19.569	0.000				
ILC.Q.10							
Autonomy					0.879	0.902	0.508
AU.Q.1	0.796	28.094	0.000				
AU.Q.2	0.588	9.009	0.000				
AU.Q.3	0.76	28.339	0.000				

Elements	Loading	t-value	p-value	Q _B ²	α	CR	AVE
AU.Q.4	0.643	9.784	0.000				
AU.Q.5	0.603	10.871	0.000				
AU.Q.6							
AU.Q.7	0.721	12.602	0.000				
AU.Q.8	0.774	12.441	0.000				
AU.Q.9	0.788	13.256	0.000				
AU.Q.10	0.704	12.847	0.000				
Perceived Succ	cession Success	3			0.968	0.974	0.861
PSS.Q.1	0.934	46.533	0.000	0.216			
PSS.Q.2	0.935	89.307	0.000	0.302			
PSS.Q.3	0.907	36.142	0.000	0.193			
PSS.Q.4	0.956	79.827	0.000	0.255			
PSS.Q.5	0.917	34.621	0.000	0.182			
PSS.Q.6	0.917	36.880	0.000	0.228			
Daughter's Wil	lingness to Lea	ad			0.837	0.878	0.592
DWL.Q.1	0.709	12.133	0.000	0.136			
DWL.Q.2	0.791	13.686	0.000	0.099			
DWL.Q.3	0.807	11.082	0.000	0.44			
DWL.Q.4	0.709	9.149	0.000	0.033			
DWL.Q.5	0.837	13.102	0.000	0.322			

QB 2 : cross-validated redundancies index performed by a 7-step distance-blindfolding procedure. α : Chronbach's alpha; CR: composite reliability; AVE: average variance extracted; *: All loadings are significant at the 0.005 level. Source: Author's own calculation.

Regarding the reliability and validity of an endogenous reflective construct, Table 3 indicates that the indicators for the succession success

construct do not exhibit collinearity issues, as each indicator's VIF value is below five (Sarstedt et al., 2021).

Table 3. Endogenous reflective constructs' reliability & validity

		Multi Collinearity	Convergent Validity	_		
			t-value	Outer loading	VIF	Redundancy Analysis
FBP	Indicators	Outer Weight	>1.96	>0.5	<5	>0.7
	RCM	0.138	4.528	0.536	1.340	0.771
	EFF	0.264	13.75	0.877	3.210	
Perceived	ICP	0.216	9.704	0.726	2.591	
Succession Success	ASI	0.283	10.265	0.811	2.341	
Juccess	SE	0.250	7.904	0.626	1.673	
	SESP	0.214	7.172	0.458	1.218	

Source: Author's own calculation

Table 4. Means, standard deviation and correlation of the latent model variables

1	2	3	4	5	6	7
0.686						
0.757	0.673					
0.565	0.680	0.821				
0.198	0.232	-0.238	0.821			
0.139	0.159	-0.358	0.750	0.792		
0.343	0.396	0.582	0.042	0.114	0.927	
0.462	0.565	0.607	0.070	0.132	0.621	0.772
	0.757 0.565 0.198 0.139 0.343	0.686 0.757 0.673 0.565 0.680 0.198 0.232 0.139 0.159 0.343 0.396	0.686 0.757 0.673 0.565 0.680 0.821 0.198 0.232 -0.238 0.139 0.159 -0.358 0.343 0.396 0.582	0.686 0.757 0.673 0.565 0.680 0.821 0.198 0.232 -0.238 0.821 0.139 0.159 -0.358 0.750 0.343 0.396 0.582 0.042	0.686 0.757 0.673 0.565 0.680 0.821 0.198 0.232 -0.238 0.821 0.139 0.159 -0.358 0.750 0.792 0.343 0.396 0.582 0.042 0.114	0.686 0.757 0.673 0.565 0.680 0.821 0.198 0.232 -0.238 0.821 0.139 0.159 -0.358 0.750 0.792 0.343 0.396 0.582 0.042 0.114 0.927

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	1	2	3	4	5	6	7
mean	4.376	4.329	4.105	3.793	4.157	4.641	1.261
SD	1.021	1.435	1.323	1.520	1.341	1.412	0.873

Note. n=236. INN= Innovativeness; ILC= Internal locus of control; AU= Autonomy; DWL=Daughter's willingness to Lead; PSS=Perceived Succession Success

After determining reliability and convergent validity, predictive relevance and discriminant validity (HTMT) are the last to be assessed in Table 5. According to Henseler et al. (2016), the threshold value for the HTMT is suggested

to be 0.90. The path model with an HTMT value of 0.85 is presumed to be more distinguished. Each construct's HTMT values were within the acceptable range.

Table 5. Discriminant validity

Discriminant Validity	AU	DWTL	ILC	INN	SS
AU	0.718				
DWL	0.459	0.773			
ILC	0.713	0.573	0.736		
INN	0.567	0.607	0.684	0.821	
PSS	0.355	0.621	0.412	0.584	0.928

Note. n=236. INN= Innovativeness; ILC= Internal locus of control; AU= Autonomy; SS= Perceived Succession Success

4.2. Empirical analysis and results

4.2.1. Structural equation modelling

The results of the control variables reveal that the generation level of S-FB and the successor's education level significantly influence the succession phase of S-FB. Partial least squaresstructured equation modelling (PLS-SEM) was implemented to examine the hypothesised relationship between the constructs using SmartPLS (Ahmad & Oon, 2025; Mhwise et al., 2025). The results (see Table 6) showed that innovativeness is positively related to succession success ($\beta = 0.386$, p < 0.00), which indicates that, indicating that daughter successors with higher innovative traits are more likely to achieve successful business transitions. Moreover, successor willingness to lead (B = 0.391, p < 0.00) demonstrates that creative and forwardthinking individuals are more motivated to take leadership roles.. Internal locus of control has no

relationship with succession success ($\beta = -0.138$, ns), which indicates personal control beliefs alone may not guarantee positive succession outcomes. However, it has a positive and significant relationship with daughter's willingness to lead ($\beta = 0.314$, p < 0.013), showing that individuals who believe in their ability to control outcomes are more inclined toward leadership. Autonomy has no significant relationship with the daughter's willingness to lead ($\beta = 0.031$, ns), indicating that preference for independence may not translate into leadership motivation and succession success ($\beta = 0.039$, ns), implying that independent decision-making tendencies do not directly contribute to successful transitions. The daughter's willingness to lead is also associated with succession success ($\beta = 0.459$, p < 0.00), confirming that motivated successors are more likely to achieve successful business transitions. Hence, hypotheses H1, H4, H5 and H10 are accepted, while H2, H3, H6 are rejected.

Table 6. Direct effect

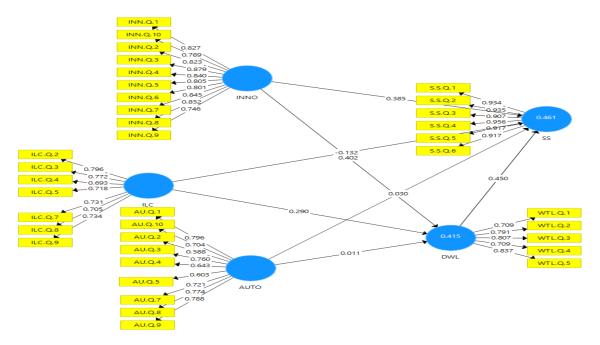
Causal Path	Hypothesis	B-coefficient	SD	T-Value	f ²	P-Value	VIF	Supported
H1	INN →PSS	0.386	0.074	4.499	0.143	0.000	1.82	Accepted
H4	$INN { o} DWL$	0.391	0.067	4.184	0.328	0.000	1.02	Accepted
H2	ILC →PSS	-0.138	0.072	1.321	0.012	0.187	1.32	Rejected
H5	$ILC \rightarrow DWL$	0.314	0.061	2.501	0.362	0.013	1.18	Accepted
H3	$AU \rightarrow PSS$	0.039	0.073	0.359	0.018	0.720	2.98	Rejected
H6	AU→DWL	0.031	0.065	0.202	0.021	0.840	3.14	Rejected
H10	$DWL \rightarrow PSS$	0.459	0.019	5.863	0.251	0.000	2.31	Accepted

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Generation level \rightarrow PSS	0.362	0.035	4.381
Education → PSS	0.271	0.182	2.976

Note. n=236. INN= Innovativeness; ILC= Internal locus of control; AU= Autonomy; PSS=Perceived Succession Success. R² adjusted: DWL=daughter successor's willingness to lead: 0.418; Perceived succession success: 0.392. Standardized path values reported. SD: Standard deviation; f²: effect size, (small=0.02), (medium=0.15) and (Large= 0.35); VIF: Inner model variance inflation factors. Significance, standard deviations. Only total effects are shown. Source: Author's own calculation.

Figure 1. Direct effect of exogenous variables on the endogenous variable



4.2.2. Mediation analysis

We employed the bootstrapped bias-corrected confidence interval method within structural equation modelling (SEM) to assess our mediation effects. (Tibbe & Montoya, 2022). To obtain confidence intervals, we used 2000 samples and the bias-corrected percentile method to generate 95% confidence intervals. The mediation effect is shown in Table 7. Regarding the mediating effects, the results show a significant indirect effect of innovativeness ($\beta = 0.183$, p < 0.000) demonstrating that, innovativeness enhances succession success primarily by fostering daughters' motivation and confidence to assume leadership roles, rather than directly impacting organizational outcomes and internal locus of control ($\beta = 0.150$, p <

0.049) on perceived succession success through the daughter successor's willingness to lead shows that, daughters with stronger internal locus of control are more likely to embrace leadership responsibilities, which subsequently translates into improved succession performance perceptions. While autonomy ($\beta = 0.013$, p < 0.843) does not influence succession success, the daughter successor's willingness to lead indicates that autonomy-oriented personality traits may influence succession outcomes through alternative pathways independent of leadership willingness, or may have limited relevance in family business contexts where interdependence is valued. So, H7 and H8 are accepted, while H9 is rejected.

Table 7. Indirect effect

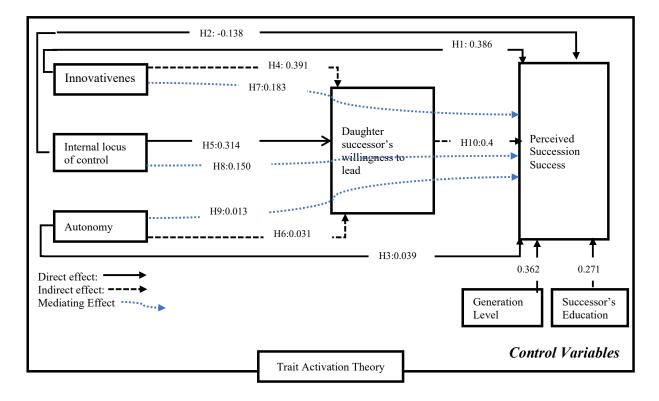
Causal Dath	Uvnothosis	P. sooffisiont	T Value	P-Value	Confidence Interval		
Causal Path	Hypothesis	B-coefficient	T-Value	P-value	CI-LL	CI-UL	
H7	INN→DWL→PSS	0.183	3.995	0.000	0.099	0.281	
H8	$ILC \rightarrow DWL \rightarrow PSS$	0.150	1.985	0.049	0.027	0.269	
H9	$AU \rightarrow DWL \rightarrow PSS$	0.013	0.198	0.843	-0.087	0.089	

Note. n=236. INN= Innovativeness; ILC= Internal locus of control; AU= Autonomy; DWL=Daughter's willingness to Lead; PSS=Perceived Succession Success

INN.Q2 0.927
INN.Q3 0.927
INN.Q3 0.927
INN.Q3 0.923
INN.Q4 0.934
INN.Q5 0.841
INN.Q6 0.841
INN.Q6 0.841
INN.Q6 0.841
INN.Q8 0.770
INN.Q8 0.770
INN.Q8 0.993 0.776 0.819 0.697 0.850
IN.Q.Q 0.770
IN.Q.Q

Figure 2. Indirect effect of the mediating variable between exogenous and endogenous variables

Figure 3. Statistical model



4.3. Evaluation of the predictive performance

A model's predictive performance reflects its capacity to produce new forecasts. Consequently, predictive validity (or out-of-sample prediction) shows how a specific outcome variable can be forecasted using a defined set of variable measures (Sharma et al., 2023). Table 8 shows the model's predictive power across all

constructs, indicated by Q^2 values exceeding 0. A comparable conclusion emerges when examining the RMSE and MAE results of the PLS-SEM against those of the linear regression model (LM). PLS-SEM consistently yields minor errors and higher Q^2 in nearly all findings, reinforcing the model's predictive capabilities (Shmueli et al., 2019).

Table 8. PLS predict assessment

			Coi	nstruct Predict	ion Summary	/		
				Q ² _predict				
Daughter S	Successor's	s Willingne	ss to Lead		0.371			
Perceived	Succession	n Success F	rocess		0.263			
			Inc	licator Predict	ion Summary	,		
PLS-SEM					Linear regi	ression m	odel	
	RMSE	MAE	MAPE	Q ² _predict	RMSE	MAE	MAPE	Q ² _predict
DWL.Q.1	0.849	0.632	22.732	0.136	0.96	0.711	24.397	-0.106
DWL.Q.2	0.889	0.61	23.678	0.099	0.872	0.61	22.488	0.132
DWL.Q.3	0.688	0.554	17.933	0.44	0.655	0.466	13.768	0.492
DWL.Q.4	0.956	0.699	25.189	-0.033	0.89	0.626	22.037	0.105
DWL.Q.5	0.727	0.582	15.919	0.322	0.738	0.587	15.729	0.3
PSS.Q.1	0.623	0.465	12.345	0.216	0.692	0.475	12.168	0.033
PSS.Q.2	0.72	0.485	17.306	0.302	0.798	0.541	15.429	0.143
PSS.Q.3	0.666	0.523	13.825	0.193	0.727	0.503	13.055	0.039
PSS.Q.4	0.669	0.478	13.558	0.255	0.767	0.532	13.895	0.021
PSS.Q.5	0.658	0.477	12.896	0.182	0.745	0.496	12.661	-0.051
PSS.Q.6	0.627	0.437	11.94	0.228	0.709	0.471	12.007	0.015
PLS: Partial	least squa	res path mo	del; RMSE: I	Root mean squar	ed error; MAE:	Mean abso	lute error. Q	2: PLS-predict inc

PLS: Partial least squares path model; RMSE: Root mean squared error; MAE: Mean absolute error. Q²: PLS-predict index performed with 2 k-fold and 10 repetitions. Source: Authors.

5. Discussion

This study investigated two research questions:

1) whether there is a direct relationship between
a successor's entrepreneurial personality traits
(innovativeness, internal locus of control,
autonomy) and perceived succession success.
2) Whether the daughter successor's willingness
to lead mediates between exogenous and
endogenous variables.

The results of the direct effect indicate that innovativeness has a positive relationship with perceived succession success. This suggests that innovative traits in daughter successors make them effective thinkers and tacticians. They can maintain their S-FBs' performance by using minimal resources. They effectively handle complex matters like succession planning, by offering out-of-the-box solutions. They believe in providing prompt and intelligent responses to various and evolving succession situations. Daughter successors who possess innovativeness trait are able to foresee the growth of their S-FBs. They proactively plan for succession by implementing innovative policies and strategies ahead of time. These innovative trait daughter successors are also willing to start new projects/ subsidiaries within their S-FBs and tackle challenges to ensure their business's sustainability and growth.

In line with TAT, assigning innovative tasks to an innovative trait daughter successor who is set to succeed increases her willingness to perform exceptionally well. She would like to spend more time on the growth of her family business. TAT

also suggests that technological advancement and creativity reinforce cultural cues and values related to innovation. These values inspire the daughter's successors to work hard and improve their perception of success in the succession process.

A non-significant relationship between the internal locus of control trait and the perceived succession success indicates that reluctance of daughter successors to trust their abilities and efforts to manage the succession process successfully. This reluctance could stem from feelings of social powerlessness, insufficient familial support, and complexities in the operation of the business. As a result, these daughter successors may more to rely on luck (i.e., external locus of control) rather than endeavouring to overcome weaknesses, improve their learning capabilities, and explore new opportunities. Still, daughter successors with an internal locus of control in a Muslim country like Malaysia are willing to lead their S-FBs. Due to social and religious constraints, a daughter successor may be less likely to take bold initiatives compared to a male successor. On the other hand, TAT suggest that, if family businesses allocate adequate resources, the daughters may be empowered to take on leadership roles. In a Muslim country like Malaysia, the religious and conservative values of S-FBs may limit their ability to address critical issues professionally, leading to a perception of poor succession success.

The non-significant influence of autonomy on perceived succession success and daughter successors' willingness to lead reveals complex

cultural and contextual dynamics that may override individual personality traits in family business settings. This finding contrasts sharply with Western studies, where autonomy consistently predicts leadership effectiveness (Ryan & Deci, 2000). This suggests that collectivistic cultural values in South Asian contexts may deactivate autonomy-oriented behaviours perceived as challenging family hierarchy and consensusbuilding traditions. The psychological and social barriers faced by daughter successors-including male family members' conservative attitudes and insufficient familial support—create structural constraints that neutralize the potential benefits of autonomous personality traits. This cultural specificity is further evidenced by research in individualistic societies where autonomy enhances succession outcomes (Lambrecht & Lievens, 2008), while studies in similar collectivistic contexts like China and India report comparable findings where relational harmony supersedes individual autonomy (Liu & Xie, 2023) . The prevalence of patriarchal values in traditional family businesses may systematically suppress autonomous decision-making among female successors, creating a paradox where the very trait that should enhance leadership effectiveness becomes a liability within existing organizational cultures, ultimately diminishing both leadership willingness and succession success perceptions A partial complementary mediating effect indicates that a successor's willingness to lead may be increased by sharing constructive customs, traditions, techniques, and innovative working modes. This sharing contributes to the development and on-going progress of the S-FB. Daughter successors who possess the innovativeness trait are eager to listen to and act on new ideas proposed by their predecessors, experts, and siblings, all in an effort to enhance business sustainability and longevity across generations. They strive to find novel ways to fulfil required duties and take pride in their own achievements as well as those of the business. These achievements boost their enthusiasm for more progressive results and increase likelihood of succession success. The excitement of a daughter successor to achieve better performance establishes a competitive advantage. For example, the complicated situation precipitated by the COVID-19 pandemic has pushed many businesses to fight for survival. However, an innovative daughter successor will be willing to implement novel ideas and strategies for her business's survival across generations. Hence, successors with innovative traits are more capable of leading a business even during recessions and are likely to be able to manage successful succession transitions.

The full mediating effect of the daughter successor's willingness to lead indicates that the success of succession S-FB depends upon successor possessing an internal locus of control trait. Specifically, the daughter successor's satisfaction with her work and her pride in being part of S-FB motivate her to achieve goals and resolve problems to facilitate a successful succession transition. Thus, a developed sense of belongingness and self-confidence enhances her willingness to lead, contributing to the overall success of the succession. TAT explains that the provision of confidence, trust, and supportive values of S-FB activate the daughter successor's internal locus of control and enable her to take the necessary and progressive actions for her business's successful succession transition.

The insignificant mediating effect of the daughter successor's willingness to lead between the autonomy trait and perceived succession success reveals a complex paradox within the Malaysian family business context. While successors with high autonomy traits naturally welcome the opportunity to become their boss, which positively influences their willingness to take over the family business, translating this willingness into actual succession success becomes problematic due to deeply entrenched structural barriers. Unlike findings from Western contexts, where autonomy consistently predicts leadership effectiveness (Deci & Ryan, 2000), our results suggest that daughter successors in Pakistan may be constrained by religious obligations, cultural taboos, traditional gender roles, and competing familial responsibilities that limit their ability to exercise autonomous decision-making even when occupying prime leadership positions wholly. This cultural specificity contrasts sharply with studies from more egalitarian societies such as Scandinavian countries, where gender barriers in family businesses are significantly lower (Hytti et al., 2017). The disconnect between autonomydriven willingness and succession outcomes may also reflect the collectivistic nature of Malaysian family businesses, where individual autonomy can conflict with collective family decisionmaking processes, undermining autonomous leadership styles' effectiveness. Consequently, daughter successors may resort to divesting their stakes or transferring control to male relatives possessing robust entrepreneurial capabilities. This highlights the need for systemic interventions that address cultural mindset shifts and institutional support mechanisms to unlock the full potential of female succession in family enterprises.

5.1. Theoretical implications

The findings of this study have important theoretical implications for understanding the relationship between entrepreneurial personality traits and the success of succession in family businesses. This study expands the understanding by emphasizing the importance of innovativeness, locus of control, and autonomy in family business succession. Previous research has highlighted the significance of these traits in entrepreneurial success in general, but their specific relevance in the context of family business succession has been relatively unexplored. The literature justifies innovativeness, locus of control, and autonomy in the context of family business succession. This study contributed to the literature by investigating the relationship between entrepreneurial personality (innovativeness, locus of control, and autonomy) in the context of S-FB. It highlighted which entrepreneurial traits have a significant impact on increasing the likelihood of succession success. It provided insights into the potential mediating role of the daughter successor's willingness to lead between entrepreneurial personality traits and perceived succession success. In addition, this study used TAT to explain the underlying mechanisms between these personality traits and perceived succession success through the mediating mechanism of the daughter successor's willingness to lead.

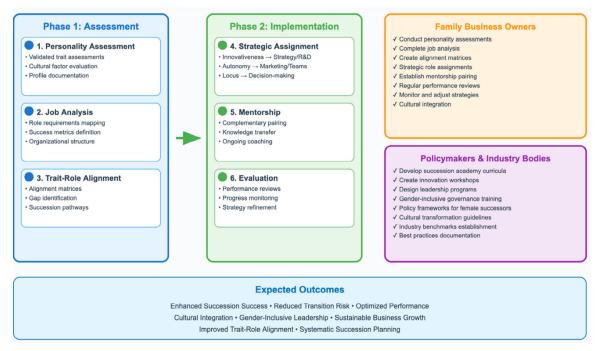
5.2. Practical implications

The personality traits of successors in S-FBs can have either productive or devastating effects that can be felt across generations. The present study has empirically highlighted the need to consider

the personality traits of female successors and how they may impact successful succession transitions. To operationalize these findings, family business owners should implement a structured Trait-task assessment framework comprising: (1) validated personality assessments using established scales, (2) systematic job analysis to identify role requirements, and (3) alignment matrices matching traits to specific responsibilities. For instance, highly innovative successors should be assigned to strategic planning, new product development, or market expansion roles, while low innovativeness successors excel in operational management and quality control functions. Similarly, successors with strong autonomy traits should be directed to business functions such as marketing, customer liaising, running social events, or managing teams. In contrast, those with lower autonomy may provide outstanding outcomes in analytical tasks requiring structured approaches.

Policy recommendations include establishing formal succession academies offering differentiated training programs: innovationfocused workshops for creative successors, leadership development programs for autonomous individuals, and competency-building modules for those with a strong internal locus of control. Family businesses should implement mentorship pairing systems that match successors with successful leadership styles mentors whose profiles. complement their personality Additionally, cultural transformation initiatives are essential, particularly in traditional contexts, requiring family councils to establish genderinclusive governance structures and challenge restrictive norms that may suppress beneficial traits like autonomy in female successors.

Figure 4. Trait-based implementable succession planning framework



Source: Sketched by the Authors

5.3. Limitations and future research directions

This research has several significant limitations that warrant careful consideration. The geographic scope is limited to three cities in one Malaysian state, restricting generalizability across Malaysia's diverse regional contexts and preventing broader population inferences due to potential sampling bias inherent in convenience sampling methods. The exclusive focus on daughter successors creates a gender-specific limitation precludes understanding of succession dynamics across gender lines. At the same time, the cross-sectional design captures only a snapshot of succession processes, potentially missing the temporal dynamics and causal relationships that longitudinal studies could reveal. Cultural specificity presents another constraint, findings from an Islamic and emerging economy context may not translate to secular or developed nations with different family structures, gender norms, and business practices. Self-report bias is particularly concerning given the sensitive nature of family business relationships and succession perceptions, potentially leading to socially desirable responses or inflated correlations between constructs. Future research should address these limitations through longitudinal designs that track succession processes over time, cross-cultural comparative studies spanning Islamic and non-Islamic contexts, and mixedgender samples that enable comparative analysis of son versus daughter successors. Future studies should compare female and male successors to explore gendered differences in personality trait activation and successor commitment.

Additionally, research should examine how entrepreneurial legacy and transgenerational innovation shape the long-term impact of female leadership in family firms. Additionally, incorporating situational moderators within the trait activation theory framework and exploring the consistency of entrepreneurial traits across generational transitions would provide deeper theoretical insights and more robust empirical foundations for family business succession research. Future research should incorporate a dyadic research design, collecting data from successors, predecessors, and family stakeholders to provide a more holistic view of how successor traits and family expectations interact to shape leadership transitions.

Additionally, authors should explore how organisational-level cues, such as traditions, interact with individual traits. It is also essential to incorporate gender roles in congruity theory to explain how societal expectations influence trait activation in female successors. Furthermore, future studies should investigate whether family firms with strong patriarchal values suppress the trait activation process for female successors.

6. Conclusion

The current study offers valuable insights into the significant role that the personality traits of daughter successors play in achieving

a successful succession transition. It is also important to acknowledge their willingness to lead S-FB. Additionally, TAT findings suggest that assigning job responsibilities and instilling values and traditions that align with their personality traits can enhance their motivation to lead and improve the chances of a successful succession transition. This study pointed out the importance of the personality traits of successors in improving the declining survival rate of S-FBs. In addition, this study pointed out that daughter successors should be assigned such tasks and provided with cultural cues that match their personality traits. Such initiatives will increase the daughter's successor's willingness to lead and the likelihood of a successful succession transition across generations.

Author contribution statement

The authors contributed equally to the work.

Conflict of interest statement

Declaration of interest: none

Ethical statement

The authors confirm that informed consent was obtained from all participants involved. The authors confirm that data collection for the research was conducted anonymously and there was not possibility of identifying the participants.

Declaration on the use of generative Al in the writing process

After the preparation of this work, the authors used Grammarly in order to proofread. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication.

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Data availability statement

The data that support the findings of this study are available from the corresponding author, Zeshan Ahmad, upon reasonable request.

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