Journal of Family Business Strategy 15 (2024) 100635

Contents lists available at ScienceDirect

Journal of Family Business Strategy

journal homepage: www.elsevier.com/locate/jfbs

Measuring family influence from the non-family employee perspective: The perceived family influence scale (PFIS)

Sven Wolff [a,*], Philipp Koehn [a], Philipp J. Ruf [b], Petra M. Moog [c], Giuseppe Strina [a]

[a] *University of Siegen, 57068 Siegen, Germany*
[b] *Bern University of Applied Sciences, Brückenstrasse 73, 3005 Bern, Switzerland*
[c] *Zurich University of Applied Science, Institute of Innovation and Entrepreneurship, Theaterstrasse 17, 8400 Winterthur, Switzerland*

ARTICLE INFO

Keywords:
Family influence
Non-family employees
Social constructivism
Scale development
Job satisfaction

ABSTRACT

To further our understanding of family influence in family businesses, this study introduces the Perceived Family Influence Scale (PFIS). Departing from existing owner-centric methodologies, the PFIS uses social constructivism theory to capture family influence from the perspective of non-family employees, a frequently neglected but integral stakeholder group within the family firm ecosystem. Following a rigorous multistep development process involving 600 non-family employees, we validate the PFIS and identify three core sub-dimensions of perceived family influence: culture, organizational decision-making, and image. We also demonstrate the practical applicability of the PFIS by examining the link between perceived family influence and non-family employee job satisfaction. Grounded in social constructivism, the PFIS is a reliable instrument that allows for the collection of more unbiased and holistic data on family influence, thereby refining our understanding of family firms and advancing the family business research field.

1. Introduction

Family influence is the predominant concept used to explain the idiosyncratic and complex nature of family firms (Chrisman et al., 2012; Chua et al., 2012; Lamb & Butler, 2018; Lindow et al., 2010). As such it became a key element of the modern family firm definition (Chua et al., 1999; Litz, 1995, 2008; Zachary, 2011). Family influence encompasses the distinctive values, goals, and decisions inherent to entrepreneurial families that significantly shape the characteristics of family firms (Berrone et al., 2012; Carney, 2005; Habbershon et al., 2003; Miller et al., 2003; Sharma et al., 1997; Zellweger et al., 2010). Given their importance (Sharma et al., 2012), robust family influence scales are essential (Irava & Moores, 2010) to advance our incomplete understanding of this concept (Holt et al., 2010; Rau et al., 2018). As a result, a variety of family influence scales have been developed (e.g., Anglin et al., 2017; Astrachan et al., 2002; Craig et al., 2014; Frank et al., 2017; Zellweger et al., 2012b) and applied in recent decades (Cox et al., 2022; Klein et al., 2005).

However, existing survey-based scales capture family influence only from the perspective of the sender, the entrepreneurial family, or owner-managers themselves, and not from the perspective of recipients, such as non-family stakeholders. Indeed, Poza et al. (1997) highlight a significant difference in perceptions between non-family stakeholders and the entrepreneurial family as e.g. family CEOs often view the practices, culture, and succession processes more positively than non-family stakeholders. Therefore, ignoring the perspectives of non-family stakeholders runs the risk of collecting biased information. This has led to broader discussions in the social sciences about ontological assumptions and epistemological stances, delving into the debate on the subjective and objective realities within scientific inquiry (Gergen, 1978, 1985; Morgan & Smircich, 1980; Steffy & Grimes, 1986). Thus, we advocate for an expansion of the methodology for measuring family influence by embedding our scale in the theory of social constructivism (Berger & Luckmann, 1967; Kukla, 2000; Morgan & Smircich, 1980).

We argue that to fully grasp the extent of family influence on a firm, it is essential to go beyond both objective metrics, such as ownership percentages, and the subjective viewpoints of the owning family. A comprehensive assessment must encompass the diverse perceptions of stakeholders who routinely navigate the repercussions of family influence within their daily operations. This approach is crucial for a nuanced understanding of how family dynamics permeate firm activities. Hence, our developed scale aims to spotlight the insights of non-family

* Corresponding author.
E-mail addresses: sven.wolff@uni-siegen.de (S. Wolff), philipp.koehn@uni-siegen.de (P. Koehn), julian-ruf@outlook.com (P.J. Ruf), moog@zhaw.ch (P.M. Moog), strina@wiwi.uni-siegen.de (G. Strina).

https://doi.org/10.1016/j.jfbs.2024.100635
Received 4 August 2023; Received in revised form 19 June 2024; Accepted 2 July 2024

employees, whose viewpoints are frequently marginalized in scholarly discussions (Barnett & Kellermanns, 2006; Mangiò et al., 2023), although they have a significant impact on their organizations (Yazici et al., 2022). These individuals often represent the largest segment of non-family stakeholders within family enterprises (Pimentel et al., 2020), embodying unique identities and perspectives in a workspace heavily influenced by familial relationships (Danes & Zachary, 2021; Labaki et al., 2013). Considering this complementary perspective is imperative for understanding how and when the perceived family influence of non-family stakeholders affects several critical dimensions, such as productivity, conflict resolution, innovation, business dynamics, and strategic decision-making. Therefore, this paper develops and validates the Perceived Family Influence Scale (PFIS), the first robust measure to capture family influence from the perspective of non-family employees.

In developing the PFIS, we followed a multistep approach (DeVellis, 2017; Hinkin, 1995; Pearson et al., 2014). In the first step, we generated initial scale items, both empirically and theoretically. In the second step, we refined the items through exploratory factor analysis and validated them through confirmatory factor analysis with a total sample of 600 non-family employees. The results of this analysis yielded three PFIS sub-dimensions: (1) culture; (2) organizational decision-making; and (3) image. In the third step, we used the PFIS to test the effect of perceived family influence on job satisfaction among 499 non-family employees.

Our study makes three important contributions to the family business literature. First, it introduces a robust scale for measuring family influence from the perspective of non-family employees. This scale provides a way to measure family influence from outside the entrepreneurial family, which, when combined with existing family influence scales or factual measures, such as ownership percentage, allows for a dyadic view of family influence as well as more comprehensive and holistic data. Second, given these advantages, the PFIS is an appropriate tool for advancing our knowledge of family influence in particular and the idiosyncratic and complex nature of family firms in general. Using the PFIS to test the effect of perceived family influence on the job satisfaction of non-family employees, our final contribution is to demonstrate the applicability of the PFIS for future research.

2. Theoretical background

2.1. Family influence

Family influence was first conceptualized in Donnelley's (1964) seminal work, identifying the influence of the entrepreneurial family on the firm, particularly in areas such as business succession, management involvement, family values, financial control, and independence, as a distinguishing characteristic of family firms compared to their non-family counterparts. This insight marked a paradigm shift from the previous approach that treated family and non-family firms alike (Zachary, 2011). Since then, family business research has grown steadily, quickly recognizing the uniqueness of family firms due to the overlap of the family and the business dimensions (Rosenblatt et al., 1985; Tagiuri & Davis, 1992), and the inherent influence of the family on the firm (Cramton, 1993). Subsequent studies (e.g., Chrisman et al., 2005b; Chua et al., 1999; Ensley & Pearson, 2005; Kellermanns et al., 2012; Lindow et al., 2010; Litz, 1995; Minichilli et al., 2010; Zellweger et al., 2010) extended these findings by emphasizing the importance of ownership structure (Barry, 1975; Lansberg et al., 1988), involvement in management (Barnes & Hershon, 1994; Burch, 1972), and trans-generational succession (Ward, 1987) as the essence of family firms. Sharma et al. (1997) proposed that family influence is a combination of family values, goals, culture, and the intention to pass the business on to subsequent generations, all of which shape the strategic decisions in family firms. Other studies support the notion that the involvement of the entrepreneurial family in either board or management roles, often across multiple generations, significantly shapes the visions, strategies, and policies of family firms (e.g., Carney, 2005; Miller et al., 2003; Zellweger et al., 2010). Scholars also suggested that family influence brings unique resources that contribute to the strong performance and longevity of family firms (e.g., Chrisman et al., 2005b; Habbershon et al., 2003; Habbershon & Williams, 1999).

found that entrepreneurial families prioritize the preservation of their socioemotional wealth, making decisions based not only on financial returns but also on maintaining control, preserving the firm's identity and spirit, and nurturing internal relationships. In addition, research shows that family influence affects other aspects, including entrepreneurial orientation (Kellermanns et al., 2012), commitment to corporate social responsibility (Campopiano et al., 2014), innovation capacity (De Massis et al., 2015) and adaptability to change (Chirico & Salvato, 2016). However, over time, the concept of the entrepreneurial family and its influence on the firm has evolved. Aldrich et al. (2021) recently noted the decline of the traditional entrepreneurial family, observing trends such as the diversification of business units, less patriarchy allowing professional opportunities for women, a decrease in multigenerational family involvement, and an increase in single and childless adults. De Massis et al. (2021) concur with these observations, noting that modern entrepreneurial families often engage in family boundary organizations within a family-related organizational ecosystem, signaling a need for research on these evolving family business dynamics. Mismetti et al. (2023) highlight a previously overlooked aspect: legal changes that alter family dynamics and, consequently, the entrepreneurial family's influence on the firm. These new perspectives on family firms and entrepreneurial families open avenues for understanding how family influence shapes business practices. Table 1 provides an overview of the different definitions of family influence.

2.2. Existing family influence scales

Given the importance of family influence in family firms, it remains a key criterion for differentiating family firms from non-family firms (Chrisman et al., 2003; Chrisman *et al.* 2012; Chua et al., 2012; Habbershon & Williams, 1999; Lamb & Butler, 2018; Lindow et al., 2010; Pearson et al., 2008). As a logical consequence, several measures of family influence have been developed. In particular, a prominent tool for measuring family influence is the F-PEC scale (Astrachan et al., 2002), which was developed to solve the dilemma of family business definition by measuring family influence through three subscales: power, experience, and culture. The F-PEC power subscale includes aspects such as the percentage of family ownership, governance structure (percentage of family members on the board), and management structure (percentage of family members actively involved in the firm's management team). The F-PEC experience subscale includes information on business succession (generation of ownership, generation active in management, and generation active on the board), and the number of family members actively contributing to the business. Finally, the F-PEC culture subscale considers the overlap between family values and business values, as well as the entrepreneurial family's commitment to the business (Astrachan et al., 2002; Klein et al., 2005; Rau et al., 2018).

A decade after the debut of the F-PEC scale, Zellweger et al. (2012b) initiated an exploratory empirical study to quantify the influence of family dynamics in entrepreneurial ventures, introducing the concept of family entrepreneurial orientation (FEO). This innovative scale delves into the entrepreneurial mindset prevalent in entrepreneurial families, highlighting the desire to engage in entrepreneurial activities across multiple generations. To capture the dual facets of family influence, the FEO scale includes both family- and business-related dimensions. Following Lumpkin et al. (2008), the family-related dimensions of the scale include a preservation orientation that emphasizes the importance of security, control, and stability, as well as a transgenerational orientation. The business-related dimensions are anchored in entrepreneurial traits, such as autonomy, innovativeness, proactiveness, and risk-taking,

Table 1
Definition of family influence and its impact on the firm.

Author (s) & year	Title	Source	Definition of family influence and its impact on the firm
Handler (1994)	Succession in family business: A review of the research	Family Business Review	Family influence is defined as intergenerational transfer of leadership, emphasizing the continuity and legacy aspects of family businesses.
Sharma et al. (1997)	Strategic management of the family business: Past research and future challenges	Family Business Review	Family influence entails the values, interests, goals, culture of the family, and transgenerational succession. All these facets of family influence affect the strategic management process in family firms.
Habbershon et al. (2003)	A unified systems perspective of family firm performance	Journal of Business Venturing	Family influence is defined as the family's impact on the allocation and use of tangible and intangible resources within the firm, including human capital, financial resources, and social capital.
Miller et al. (2003)	Lost in time: Intergenerational succession, change, and failure in family business	Journal of Business Venturing	Family influence manifests through the active participation of multiple family generations in the business, shaping its long-term strategic orientation and decision-making.
Chrisman et al. (2005a)	Trends and directions in the development of a strategic management theory of the family firm	Entrepreneurship Theory and Practice	Family influence in defined through the concept of "familiness", described as the unique bundle of resources a family firm has due to the interaction between the family, its individual members, and the business. This encompasses aspects such as culture, values, and family member involvement.
Carney (2005)	Corporate governance and competitive advantage in family-controlled firms	Entrepreneurship Theory and Practice	Family influence is the family's involvement in shaping the firm's strategic direction, goals, and objectives, reflecting the family's vision and long-term ambitions for the business.
Zellweger & Astrachan (2008)	On the emotional value of owning a firm	Family Business Review	Family influence is defined in terms of the emotional attachment and identification of the family with the business. In this context, the role of emotional ties and the family's commitment to the business are emphasized as key elements of family influence.
Distelberg & Sorenson (2009)	Updating systems concepts in family businesses: A focus on values, resource flows, and adaptability	Family Business Review	Family influence as the degree to which the family's values, norms, and traditions are embedded in the firm's practices and policies.
Zellweger et al. (2010)	Exploring the concept of familiness: Introducing family firm identity	Journal of Family Business Strategy	Family influence is the extent to which a family can affect the firm's strategic direction and policies, often through governance structures.
Berrone et al. (2012)	Socioemotional wealth in family firms: Theoretical dimensions, assessment approaches, and agenda for future research	Family Business Review	Family influence is defined as the family's efforts to preserve and enhance its socioemotional wealth, including aspects such as family control and influence, identification with the firm, and family member relationships.
Kellermanns et al. (2012)	Innovativeness in family firms: A family influence perspective	Small Business Economics	Family influence has an impact on entrepreneurial orientation, as family dynamics affect a firm's entrepreneurial activities and strategic decision-making.
Campopiano et al. (2014)	Firm philanthropy in small- and medium-sized family firms: The effects of family involvement in ownership and management	Family Business Review	Family influence affects corporate social responsibility (CSR) through family values and norms.
De Massis et al. (2015)	Product innovation in family versus nonfamily firms: An exploratory analysis	Journal of Small Business Management	Family influence affects innovation and adaptability in family firms, highlighting the role of family values and traditions in shaping innovative processes.
Chirico & Salvato (2016)	Knowledge internalization and product development in family firms: When relational and affective factors matter	Entrepreneurship Theory and Practice	Family influence as a dynamic capability, enabling family firms to adapt, integrate, and reconfigure internal and external competencies to address rapidly changing environments.

a framework originally proposed by Covin and Slevin (1991) and refined by Lumpkin and Dess (1996). Subsequently, Zellweger and colleagues (2012b) expanded their scale to include elements focused on resource allocation strategies, in line with Sirmon and Hitt (2003), and the formalization of strategic processes, a concept explored in Chrisman et al. (2005a). Craig et al. (2014) delved into the quantification of family influence within the firm, employing two specific metrics: family mission and family control. These measures, based on the unique characteristics of family firms, were supported by the foundational work of Smyrnios et al. (1998). Craig et al.'s (2014) approach involved a comprehensive assessment of family firms, considering various aspects, such as ownership and management control, day-to-day operational responsibilities, involvement of family members in the business, and the intention to pass the business from generation to generation. This multifaceted assessment provided a nuanced understanding of how family dynamics play a central role in shaping the governance and strategic direction of family-owned businesses. In addition, Frank et al. (2017) developed the family influence familiness scale (FIFS), which measures family influence through decision-making premises that express familiness (Habbershon et al., 2003; Habbershon & Williams, 1999). The development of this scale was based on a new system theory (Luhmann, 1995; Luhmann et al., 2013) with 20 items in six subscales: (1) ownership, management, and control (a decision premise in terms of the ownership, management, and control rights of family members); (2) proficiency level of active family members (a decision premise considering the active participation of family members in the business compared to non-family employees); (3) information sharing between active family members (a decision premise considering information exchange among family members actively involved in business affairs); (4) transgenerational orientation (a decision premise considering the longevity of the firm and intra-family business succession); (5) family-employee bond (a decision premise considering the relationships between the entrepreneurial family and non-family employees); (6) family business identity (a decision premise considering the self-perception of being a family business) (Frank et al., 2017).

Anglin et al. (2017) broke new ground by proposing an innovative method, distinct from traditional survey techniques, to assess family influence in firms. This archival-based measure was created and validated to provide a fresh perspective in the field. The genesis of this approach can be traced back to the insights of Zellweger et al. (2013), who posited that the deeper the entrepreneurial family's involvement in the firm, the greater the emphasis on achieving non-financial goals. Anglin et al. (2017) meticulously designed their measure around three key dimensions to effectively assess family influence in family-owned firms, where: (1) the visibility of the entrepreneurial family within the firm – a dimension of a family's prominence in the business – is an indicator of influence and is manifested when family members occupy key roles, when there is synchronicity between the family and the firm name, and when the family's status is used for branding purposes (Dutton et al., 1994); (2) the family's transgenerational sustainability intentions, an aspect that highlights the family's commitment to perpetuating its legacy within the firm across generations (Zellweger et al., 2012b); (3) the firm's ability to provide family self-enhancement, a dimension that reflects the belief that belonging to both the family and the firm bolsters the self-esteem of family members (Dukerich et al., 2002). Table 2 shows the variety of methods used to assess family influence.

2.3. Limitations of existing family influence scales

However, a closer look reveals that all survey-based measures predominantly reflect the perspective of the sender, be it the business family or owner-manager. This focus provides a unique but somewhat limited perspective, as it primarily captures family influence from the viewpoint of those directly involved in the firm's management or ownership. Nevertheless, adapting the scales for non-family recipients is almost impossible because the questions are rather specific and require knowledge that only family members have (e.g., F-PEC: ownership percentage, governance, value congruence between family members and the firm, feelings of family members; FIFS: sharing information among family members, family identity, emotional attachment to the firm). In addition, the theoretical basis of FIFS is decision premises rather than outcomes, which increases the difficulty of adapting the scale to the recipient of such decisions. However, considering only the perspective of the sender of a message runs the risk of collecting biased information. The findings of Poza et al. (1997) support this notion, showing a notable discrepancy between the perceptions of non-family stakeholders and entrepreneurial family members. In particular, family CEOs often view their decisions and actions as more beneficial to the firm than non-family stakeholders. A common practice in family firms is for family members to assume high-level positions and eventually become successors, reflecting the family's intention to maintain control of the firm across generations. Nevertheless, the literature shows that such family-centric decisions and practices, deemed advantageous by the entrepreneurial family, are often viewed quite differently by non-family stakeholders, including non-family employees (Poza et al., 1997). These practices can lead to perceptions of injustice among non-family employees (Sieger et al., 2011), as in the case of nepotism (Padgett & Morris, 2005) or ingroup-outgroup perceptions (Barnett & Kellermanns, 2006). This divergence in perceptions between the entrepreneurial family and non-family employees runs the risk of demotivating the latter, potentially impairing the firm's overall performance. This, in turn, could negatively affect the well-being of the entrepreneurial family, as there is often a correlation between the well-being of the firm and the family that owns it (Karofsky et al., 2001; Kellermanns & Eddleston, 2004; Olson et al., 2003). Scholars in other disciplines who have studied sender-recipient phenomena have shown, for example, that organizational elites present the organizational image as they want it to be seen and recognized by others (Whetten et al., 1992), not as it is perceived or as it really is. As a result, they present a particular image in an attempt to convey a socially desirable message (Gioia et al., 2000). The same may be true for family owners who are asked about family influence in their firm. In particular, deeming strong family influence as desirable could lead to intentional or unintentional exaggeration of the owner's responses. However, apart from the study of Poza et al. (1997), which shows that perceptions differ significantly between non-family stakeholders and the business family, to our best knowledge no studies have addressed the issue of perspective in the family business research stream.

In addition to the aforementioned limitations of the existing scales, most studies still use single items and binomial variables to measure family influence (Evert et al., 2016) and define family firms. Yet, several family business researchers agree that family influence cannot be adequately measured dichotomously (Anglin et al., 2017; Astrachan et al., 2002; Chrisman et al., 2012). Moreover, several authors (e.g., Miller et al., 2007; Shanker & Astrachan, 1996; Westhead & Cowling, 1998) have shown that different measures can lead to "markedly different conclusions about family firms" (Chrisman et al., 2012, p. 285). In fact, a replication study by Miller et al. (2007) shows that different family firm definitions (e.g., excluding lone founder firms) do not support the well-known study of Anderson and Reeb (2003) and their finding that family firms outperform non-family firms. Despite this well-known measurement problem, studies continue to use controversial definitions and measures of family firm influence. For example, Brigham et al. (2014) and Anglin et al. (2017) coded firms as family firms if a "principal shareholder (representing a 10 % or more ownership stake) represented by two or more related family members, where at least one of whom was either an executive member of the top management team and/or a board member" (Brigham et al., 2014, p. 79). The authors even claim to operationalize a conservative measure of family firms and are thus "more likely to identify companies that truly capture the essence of family business" (Brigham et al., 2014, p. 79). Looking at the debate on the definition of family firms and family influence, this claim is rather puzzling, since it does not capture the essence of family firms as described in the family business literature (Chrisman et al., 2005b; Mazzi, 2011; Mussolino & Calabrò, 2014). In conclusion, data collection often appears one-dimensional (centered on the entrepreneurial family), risks bias, and is fragmented, as researchers use different measures of family influence, often represented by single items, dichotomous variables, or subjective views.

In our search for alternative methodologies to measure family influence, we quickly encountered a general debate about the social sciences, ontological assumptions, epistemological stances, and the subjective vs objective view of reality in science (Morgan & Smircich, 1980). In light of this discourse, we critically reassessed the prevailing assumption that the designation of "family business" can be determined solely on the basis of quantifiable variables, such as the entrepreneurial family's share of the business (ownership) or an evaluation based on a member of the owning family (existing scales), which are the only methods used so far to measure family influence.

2.4. Social constructivism as foundation to reassess family influence

In this context, the theoretical framework of social constructivism, as articulated by Berger and Luckmann (1967), and its applications in sociology (Kukla, 2000; Morgan & Smircich, 1980), provides a powerful lens to reevaluate the concept of family business. Social constructivism argues that our understanding of reality, including the structures and definitions within the business world, is not merely a reflection of an objective truth, but constructed through social interactions and cultural narratives. This is particularly relevant when examining the notion of family business. Traditional views may define it based on tangible metrics, such as ownership percentages or family involvement in management. However, from a social constructivist perspective, such definitions are not static or universally applicable. Instead, they are socially and culturally constructed, and evolve based on the collective interpretations and understandings of those within the business community (Gergen, 1978; Morgan & Smircich, 1980; Steffy & Grimes, 1986). Therefore, family business can be understood differently in different social and cultural contexts. It transcends the boundaries of objective criteria and is significantly influenced by the collective perceptions and experiences of those in and around the business (Bruner, 2002; Harré & Gillett, 1994; Wertsch, 1997). This implies that the essence of a family business lies not only in ownership or family involvement, but also in the shared understanding and social construction of what that term means within a particular group or society (Palincsar, 1998). This approach is consistent with Vygotsky's (1978) emphasis on the social context of knowledge construction, which suggests that our understanding of reality is a product of our social and cultural interactions. Thus, the identity of a family business emerges not only from its structural or family composition, but also from the meanings and interpretations ascribed to it by its non-family stakeholders, reflecting a broader, more inclusive, and dynamically constructed reality.

Therefore, we propose measuring family influence by surveying non-

Table 2
Existing family influence scales.

Authors & year	Title	Source	Method	Dimensions of family influence
Astrachan et al. (2002)	The F-PEC scale of family influence: A proposal for solving the family business definition problem	Family Business Review	Surveying members of the entrepreneurial family	1. Power (ownership, percentage of shares) 2. Experience (governance, board constellation) 3. Culture (management, family or external managers)
Zellweger et al. (2012b)	From longevity of firms to transgenerational entrepreneurship of families: Introducing family entrepreneurial orientation	Family Business Review	Surveying members of the entrepreneurial family	1. Preservation orientation 2. Transgenerational orientation 3. Entrepreneurial orientation (autonomy, innovativeness, proactiveness, risk-taking) 4. Resource allocation 5. Formality of strategies
Craig et al. (2014)	Leveraging family-based brand identity to enhance firm competitiveness and performance in family businesses	Journal of Small Business Management	Surveying members of the entrepreneurial family	1. Ownership and managerial control 2. Daily operational responsibilities 3. Family involvement 4. Transgenerational succession
Anglin et al. (2017)	An archival approach to measuring family influence: An organizational identity perspective	Family Business Review	Archival-based approach	1. Visibility of the entrepreneurial family within the firm 2. Transgenerational sustainability intentions 3. Self-enhancement
Frank et al. (2017)	Capturing the familiness of family businesses: Development of the family influence familiness scale (FIFS)	Entrepreneurship Theory and Practice	Surveying members of the entrepreneurial family	1. Ownership, management, and control 2. Proficiency level of active family members 3. Sharing of information between active family members 4. Transgenerational orientation 5. Family-employee bond 6. Family business identity

family employees, as they constitute the most represented stakeholder group in many family firms (Pimentel et al., 2020) and often experience family influence. Moreover, they bring their unique identities and perceptions to the family business (Danes & Zachary, 2021), a setting in which they are confronted with the emotions and values of the entrepreneurial family (Labaki et al., 2013). In this context, Ramos et al. (2014) found that the emotional dynamics of the entrepreneurial family, and in particular psychological ownership (Bernhard & O'Driscoll, 2011), positively influence the extra role behavior and work engagement of non-family employees. As a result, non-family employees often play a pivotal role in enhancing firm performance (Llach et al., 2023; Vallejo, 2009), driving success by developing innovations (Ahluwalia et al., 2017; Eddleston et al., 2012; Mahto et al., 2010; Tabor et al., 2018), and improving internal processes (Damanpour & Gopalakrishnan, 2001; Hitt et al., 2000; Zhang & Bartol, 2010). Given their significant role in family firms (Yazici et al., 2022), it is highly relevant to capture their perceptions of family influence and how it affects their behavior.

Therefore, with the PFIS, we introduce a scale that allows measuring non-family employees' perceptions of family influence, making an important contribution to the ongoing discussion in the family business literature.

3. PFIS development, validation, and application

The development of the PFIS follows accepted procedures for scale development (DeVellis, 2017; Hinkin, 1995; Pearson & Lumpkin, 2011) and is based on a multistep approach that integrates qualitative and quantitative methods. According to this approach, the first step of scale development begins with the generation of an initial item pool, which we obtained through theoretical and empirical conceptualization. Our empirical conceptualization relies on inductive logic (Hinkin, 1998) using data from 18 narrative semi-structured interviews with non-family employees from Köhn et al. (2023). After developing the initial items, we conducted an internal pretest by discussing them with family business scholars in our department (Step 1). In the second step, we sent the first draft of the PFIS to 30,000 randomly selected non-family employees of family firms listed in Bureau van Dijk's Amadeus database over a three-month period. With the resulting dataset ($N = 600$), we conducted exploratory factor analysis (EFA) to improve and refine our scale, which we then validated through confirmatory factor analysis (CFA) (Step 2). Finally, to demonstrate the applicability of the PFIS, we conducted a regression analysis (Step 3) to assess the influence of perceived family influence on job satisfaction among non-family employees in our sample of 499 individuals. Our decision to use job satisfaction as our initial test for the scale stemmed from its known association with a strong family business culture, with the goal of assessing whether our scale would similarly reflect perceived family influence from the employee's perspective. Our detailed scale development process is described next and shown in Fig. 1.

3.1. Step 1: initial item generation

Following accepted approaches to scale development (DeVellis, 2017; Hinkin, 1995; Pearson & Lumpkin, 2011), our first step was to generate an initial item pool. In doing so, we combined elements of theoretical and empirical conceptualization. For the empirical part of the initial scale items, we relied on an inductive logic (Hinkin, 1998) and data from the qualitative study of Köhn et al. (2023). Their dyadic sample includes 18 semi-structured interviews with nine owner-managers and nine non-family employees of German manufacturing family firms located in North Rhine-Westphalia that are heterogeneous in terms of number of employees (ranging from 28 to 1200) and year of founding (the oldest in 1892, the youngest in 1973). Their multiple case study examines how the involvement of the entrepreneurial family influences the intrapreneurial motivation of non-family employees. Thus, the family's influence on the firm and its non-family employees plays a central role in their interviews.

To analyze their data, we applied the principles of within- and cross-case analysis (Eisenhardt, 1989; Eisenhardt & Graebner, 2007) and an inductive logic (Gioia et al., 2013). Following these approaches, we analyzed each case individually to identify all the dimensions of family influence. Through multiple readings, we extracted relevant data for our item generation and developed initial first-order codes using illustrative quotes for each case (Gioia et al., 2013). Following the within-case analysis, we compared these codes and explored their theoretical links, as suggested by Martin & Eisenhardt (2010), which served as the basis for the cross-case analysis. In this latter phase, we transformed the individual case codes into tentative second-order themes, identifying common patterns and differences. This categorization was a dynamic, collaborative effort among the authors that led to the formation of the agreed-upon second-order themes, which we then used to construct aggregated theoretical dimensions. Our process, guided by Locke (2012), included revisiting the first-order codes to validate the consistency of these dimensions with original interviewee quotes to ensure accuracy. Our comprehensive cross-case analysis revealed that family influence is an important category consisting of three key dimensions: (1) physical presence, (2) culture, (3) organizational decision-making.

Our data analysis also revealed a prominent aspect of non-family employees' perceptions of family influence in a family firm: the physical presence of the entrepreneurial family in the family firm. Non-family employees often observed that the owner-manager and entrepreneurial family are a constant presence in the firm, spending many hours each day, as illustrated by the representative quote: "… whether it is the junior or the senior, because they are omnipresent in the firm."

Their physical presence promotes accessibility and encourages the establishment and maintenance of personal contacts within the firm, as another employee highlighted: "I would say that there is a lot of emphasis on maintaining personal contact […] the door is open. […] the boss is also physically present in the firm."

Reflecting on these insights, we developed survey items to measure non-family employees' perceptions of the visibility and presence of the entrepreneurial family in the firm, such as "… are often seen in the firm" (v_31) or "… spend a lot of time in the firm" (v_34). We also referred to the experience dimension of Astrachan et al.'s (2002) F-PEC scale by including, for example, whether members of the entrepreneurial family "are represented or present at different hierarchical levels of the firm" (v_32). We developed a total of five items to assess the physical presence of the entrepreneurial family.

In addition, respondents emphasized that the entrepreneurial family's presence is not merely symbolic, as they are actively involved in supporting their non-family employees. For example, one non-family employee stated that the entrepreneurial family takes care of its employees and always has a sympathetic ear and an open door. The

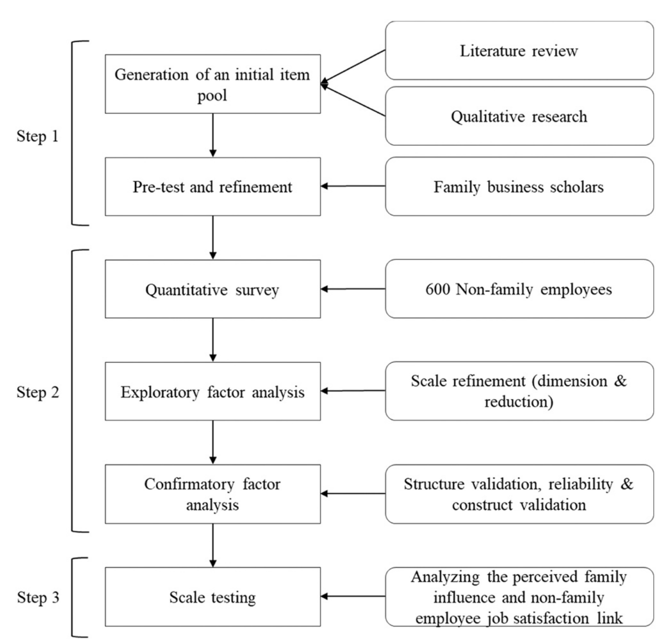


Fig. 1. Scale development.

entrepreneurial family's relationships even go so far as to support non-family employees in very precarious situations, such as family or health problems: "… the family also takes care of things when an employee has health or family problems. The family always has an open ear and simply cares for us."

Inspired by this perspective, we formulated items to assess the extent of the entrepreneurial family's care and support for employees, such as "… also have an open ear for employees' personal matters" (v_36), "… ensure that employees feel comfortable in the firm" (v_40) or "… also show understanding when employees have private problems" (v_44). This level of support and care exemplifies a unique culture within family firms, deeply influenced by the family. One respondent, comparing their experience in a non-family business, noted the distinct culture in family firms: "My former employer, who is not family-owned […] I did not know the management personally […] you had no relationship with the management […] and that is different here because here people know each other […] You can see that the climate here is different".

To capture the essence of this quotes, we also emphasize personal relationships as an essential element of the culture in family firms by formulating the following item: members of the entrepreneurial family "know most employees by name" (v_41), which is part of the nine initial items of the culture subdimension.

We also found that family influence is manifested through the values of the entrepreneurial family that are embedded in the firm's ethos, based on the connection between the entrepreneurial family and the firm: "There are company values that are really actively lived, and you also notice that it is a family business, not that it is family-run, but […] there is a connection between the family and the firm."

This view is consistent with the literature that suggests a deep connection between the entrepreneurial family and the firm that significantly influences organizational decisions (Anderson & Reeb, 2003; Chrisman et al., 2012; Martin & Gomez-Mejia, 2016; Schulze et al., 2003). Due to family ownership and/or active family involvement in the board, organizational decisions are strongly influenced by the interests of the entrepreneurial family (Koropp et al., 2014), leading to idiosyncratic decisions (Firfiray & Gomez-Mejia, 2021; Gomez-Mejia et al., 2011) and a unique atmosphere differentiating family firms from non-family firms (Berrone et al., 2012; Martin & Gomez-Mejia, 2016). Referring to the above quote from a non-family employee and our literature review, it became clear that family influence significantly shapes organizational decision-making in family firms. Therefore, we developed items on how non-family employees perceive the influence of the entrepreneurial family on organizational decisions by assessing whether the entrepreneurial family members "have a major influence on day-to-day decisions" (v_45), "are directly involved in almost all work processes of the firm" (v_48) or "make the final decisions in the firm alone" (v_49). In total, we generated eight initial items for the organizational decision-making subdimension.

In addition to interviews as the primary data source, Köhn et al. (2023) use secondary data for triangulation purposes. They used archival data, such as web pages or newspaper articles, which showed that all family firms interviewed actively and proudly advertise their status as family firms to attract new customers and employees. In this context, Zanon et al. (2019) show that the promotion of a strong family image leads to increased brand authenticity and customer-firm identification. This led us to propose that the family firm's image also plays a key role in how it is perceived by non-family members, both outside and inside the firm. Our proposal is supported by the recent study of Memili et al. (2010) who found that family ownership is positively correlated with the development of a family firm's image. Van Gils et al. (2019) also support this notion, finding that family influence in the form of transgenerational thinking and family non-economic goals drive the establishment of the family firm image. In addition, Zellweger et al. (2012a) assert that the image of a family business is the projection of family influence to external stakeholders. Therefore, we added image as a fourth dimension to measure perceived family influence, including five initial items such as whether members of the entrepreneurial family "present the firm externally as a family business" (v_53) "use the words 'family business' to actively advertise" (v_54), or "attach importance to the fact that the name of the family business is also known in the city/region" (v_57).

In concluding our empirical and theoretical conceptualization, we identified four dimensions that form the tentative PFIS subscales: physical presence, culture, organizational decision-making, and image. Based on these preliminary subscales, we articulated 27 items written in sentences assessed on a five-point Likert-type scale expressing agreement or disagreement with each statement. We used this scale design because it lends itself to capturing emotions or opinions about perceptions and experiences, and allows respondents to rate their responses (DeVellis, 2017). After formulating the initial scale items, we conducted an internal review to refine the first draft of the PFIS (Hinkin, 1998). To do so, we sent it to family business scholars, discussed the first draft with them, and incorporated their suggestions for improvement. The first revised version of the PFIS is shown in Table 3.

3.2. Step 2: scale improvement and validation

The next step in our scale development process was improving and validating the PFIS. We therefore conducted a survey using the revised initial items. Between July and October 2021, we emailed 30,000 randomly selected family businesses in Germany and asked them to participate in our survey. We chose to focus on Germany because it has a high density of family businesses in all industries and family firms are historically rooted in the national economy (Klein, 2000; Wolff et al., 2022). To contact potential participants, we used information from the Amadeus database (Bureau van Dijk, 2021) and only included firms that were listed as active, had an email address, had at least 5 employees, had been active for at least 5 years, and were not subsidiaries of other firms. In addition, the following sectors were excluded according to the NACE classification of economic activities, as family businesses are unlikely to be found in these: public administration and defense; compulsory social security; activities of households as employers; undifferentiated good- and service-producing activities of households for own use; activities of extraterritorial organizations and bodies. Our email included a cover letter explaining the general purpose of our study, the instructions, and a link directing participants to the online survey. To motivate as many potential participants as possible, we raffled off vouchers among the participants as a small incentive. A total 1643 people clicked on the link to the questionnaire, of which 1132 completed it, for a response rate of 3.77 %. Each firm could only participate once.

To avoid non-response bias, we tested for any statistical differences between early and late respondents. To do this, we divided the sample into three groups and compared the responses (Armstrong & Overton, 1977). Our explanatory variables showed no statistical differences between the responses.

We took several steps to address the possibility of bias due to common methods. First, we followed a multidimensional approach to our study and scale development by using interview data, building on known questions from the literature, and discussing the questions with other researchers. Second, in the quantitative survey, we assured participants of anonymity and did not specify the purpose of the data collection so as not to influence their response behavior. Finally, we randomized the questions within blocks of questions to exclude any influence of question order (Podsakoff et al., 2003).

We checked the representativeness of our sample by comparing the key data of the contacted firms with the key data of the sample obtained from the survey. We compared the distribution of the number of employees (contacted mean 36.99, sample mean 41.02) and industries, and found a very similar structure.

To ensure that the questionnaire reached our target group, we asked several questions to determine whether the firm that employs the respondent was a family business and what position the respondent held in the firm. First, we filtered out all respondents who were owners of the firm. Second, we removed all firms that did not meet the Chua et al. (1999) family business definition criteria. According to this definition, a firm is a family firm if at least one family member is actively involved in the firm's management and at least 50 % of shares are held by members of the entrepreneurial family (Chua et al., 1999). The addition of these criteria yielded a sample of 600 cases, which formed the basis for our subsequent factor analyses of the PFIS and includes firms with 5 to 230 employees (mean 41). These 600 non-family employees were drawn from 600 different German firms. The age of the individuals ranges from 19 to 85 years (mean 47.7), 49 % are female and 51 % male. The majority of the firms where these individuals work can be categorized as manufacturing, mining, and quarrying (27 %), followed by construction (22 %), wholesale and retail trade (22 %). In addition, participants from other sectors included other services (8 %), professional, scientific, technical, administration, and support services (6 %), information and communications (7 %), public administration, defense, education, human health, social work (4 %), and others (3 %). For all our calculations, we used the statistical program R Studio (version 2022.12.0) with the lavaan package with default parameter specifications.

3.2.1. Exploratory factor analysis

In the next step, we conducted an exploratory factor analysis (EFA) to investigate whether the conceptualized structure of our empirically and theoretically developed latent factors is represented in an exploratory analysis. We used the maximum likelihood method combined with varimax rotation for the analysis (Hair et al., 2019). The initial solution of the EFA is presented in Table 4.

The factor loadings of this initial solution, the eigenvalues, and the screeplot indicated that a solution with only three factors was more appropriate. We also iteratively removed from the analysis all items that loaded on a factor less than 0.3 or cross-loaded on multiple factors with a loading distance below 0.2 (Hair et al., 2019). This left the culture, organizational decision-making, and image factors as shown in Table 4 (questions in italics were excluded from further analysis). We then subjected the factors obtained from the EFA to confirmatory factor analysis (CFA) to validate the developed scale (Hair et al., 2019).

3.2.2. Confirmatory factor analysis

We specified the CFA model in R and used maximum likelihood for the calculations. We also examined the item loadings, which showed similar results to the EFA (all > 0.53), and the standardized residuals, which had very low values (all < 0.275). The fit indices of the initial CFA model were already good, but the modification index indicated room for improvement. After a substantive review, three recommendations were made to improve model fit, and we added three covariances between error terms. According to Kline (2016), modification indices suggest specific areas where model fit can be enhanced by allowing covariances between error terms, which can capture additional shared variance not accounted for by the original model structure. We ensured that the added error correlations were theoretically justified and aligned with shared content influences apparent in the respective items, such as for example items v_36 "*Members of the entrepreneurial family also have an open ear for employees' personal matters*" and v_44 "*Members of the entrepreneurial family also show understanding when employees have private problems*", reflecting respondents' perceptions of familial engagement with employees' personal matters. We then reran the updated CFA model. The results are presented in Tables 5 and 6 and Fig. 2.

The model fit diagnostics indicate that the model fits the data well, with a value of 0.961 for the Comparative Fit Index (CFI) and a value of 0.953 for the Tucker-Lewis Index (TLI). These values are both well above the recommended threshold of 0.95 for CFI (Hu & Bentler, 1999) and 0.9 for TLI (Bentler & Bonett, 1980). The root mean square error of approximation (RMSEA) for the model is 0.048, with a lower confidence interval (CI) of 0.042 and an upper CI of 0.054. The RMSEA value is well below the threshold of 0.06 and the Standardized Root Mean Square

Table 3
Theory-based questions and latent constructs used for the initial construction of the PFIS.

Question Members of the entrepreneurial family…		Source of the idea for the Question
Physical presence*		(Ainsworth & Cox, 2003; Astrachan et al., 2002; Berrone et al., 2012; Chua et al., 1999; Jaskiewicz, Combs, & Rau, 2015; Köhn et al., 2023)
v_31	*…are often seen in the firm**	
v_32	*…are represented or present at different hierarchical levels of the firm**	
v_33	*…also lend a hand when necessary**	
v_34	*…spend a lot of time in the firm**	
v_35	*…take part in firm celebrations as a family**	
Culture		
v_36	…also have an open ear for employees' personal matters	(Ainsworth & Cox, 2003; Astrachan et al., 2002; Chua et al., 1999; Fletcher et al., 2012; Frank et al., 2017; Huang et al., 2015; Köhn et al., 2023; Ruf et al., 2021; Salvato & Melin, 2008)
v_37	…maintain a close relationship with employees	
v_38	…take the time to listen to employees' ideas	
v_39	…can be approached by employees from all departments	
v_40	…ensure that employees feel comfortable in the firm	
v_41	*…know most employees by name**	
v_42	…ensure that employees are aware of the firm's history	
v_43	…recruit staff and secure jobs for the long term	
v_44	…also show understanding when employees have private problems	
Organizational decision-making		
v_45	…have a major influence on day-to-day decisions	(Astrachan et al., 2002; Berrone et al., 2012; Carney, 2005; Chua et al., 1999; Cruz et al., 2011; Dyer, 1987; Fries et al., 2021; Handler, 1989; James et al., 2017; Köhn et al., 2023; Miller et al., 2017; Miller & Le Breton-Miller, 2014; Mussolino & Calabrò, 2014;Tabor et al., 2018)
v_46	…have great influence on the long-term orientation of the firm	
v_47	…like to distribute work instructions themselves	
v_48	…are directly involved in almost all work processes of the firm	
v_49	…make the final decisions in the firm alone	
v_50	*…take responsibility for solving problems in the firm**	
v_51	…like to select new employees themselves	
v_52	*…consider it important to get to know new employees personally**	
Image		
v_53	…present the firm externally as a family business	(Berrone et al., 2012; Campopiano & De Massis, 2015; Craig et al., 2008; Frank et al., 2017; Klein et al., 2005; Köhn et al., 2023; Memili et al., 2010; Micelotta & Raynard, 2011; Salvato & Melin, 2008; Stough et al., 2015; Van Gils et al., 2019; Zanon et al., 2019; Zellweger et al., 2012a)
v_54	…use the words 'family business' to actively advertise	
v_55	*…present the firm to our customers as a family business**	
v_56	…are engaged in the common good within the city/region	
v_57	…attach importance to the fact that the name of the family business is also known in the city/region.	

* Not included in the final scale.

Residual (SRMR) for the model is 0.068, below the recommended threshold of 0.08. Thus, both values indicate excellent model fit (Hu & Bentler, 1999).

Regarding convergent validity, we first evaluated the standardized factor loadings of the items, each of which is above the threshold of 0.5, all factors contain at least three variables, and all loadings are highly significant, as required for convergent validity (Chin, 1998; Hair et al., 2019). While some loadings fall between 0.5 and 0.7, this is acceptable in social sciences research, provided the overall model fit is strong and the theoretical foundation is robust. (Hair et al., 2019; Kline, 2016). We decided to retain these variables based on theoretical considerations, as they make a meaningful contribution in the overall context, as recommended by Hair et al. (2019). Furthermore, Cronbach's alpha with values between 0.83 and 0.91 and composite reliability between 0.84 and 0.92 for the factors are in an excellent range (Cronbach, 1951; Nunnally & Bernstein, 1994). The average variance extracted (AVE) between 0.49 and 0.65 is deemed acceptable in this case due to the high composite reliability and Cronbach's alpha for all constructs (Fornell & Larcker, 1981; Hair et al., 2019).

To test for discriminant validity, we first checked that all cross-loadings were lower than the indicator loadings. Our analysis also shows that the Fornell-Larcker criterion is met, as discriminant validity within measures exists when the square root of AVE is greater than any corresponding row or column entry of the correlation matrix (Table 7) (Fornell & Larcker, 1981).

To further validate the robustness of our CFA, we randomly divided our sample into two subsamples. We then conducted separate confirmatory factor analyses on each subsample. Both analyses consistently validate the previously identified factor structure, strengthening the validity of our findings (see Fig. 3 and Fig. 4 in the Supplementary Material).

The final scale consists of three distinct subscales: culture, organizational decision-making, and image, each defined next.

The culture subscale is derived from questions that explore interpersonal relationships, employee-centricity, and organizational values. It emphasizes the nature of the internal work environment, advocating for open, empathetic relationships, and fostering a family atmosphere in the firm. This facet encapsulates the firm's cultural fabric, emphasizing core values such as openness, empathy, and long-term orientation.

Organizational decision-making is derived from questions about the direct involvement of family members in business decisions and processes. This aspect sheds light on their active engagement in steering the firm's operational and strategic direction, underscoring their strong influence, decision-making authority, substantive participation, and central role in guiding the firm.

The image subscale is derived from questions that focus on the external image the firm portrays and its identity as a family business, delving into the deliberate efforts of family members to position the firm externally as a family-centric entity. This facet includes the strategic use of the "family business" identity in advertising, community engagement, and branding strategies, highlighting the firm's distinct positioning and values.

3.3. Step 3: the effect of perceived family influence on non-family employees' job satisfaction

As a first practical test of the PFIS, we performed an OLS regression analysis with the PFIS as the independent variable and job satisfaction as the dependent variable. In a second model, we tested the influence of each subscale on job satisfaction. Our sample was derived from our survey, but with one additional restriction: respondents had to indicate their weekly hours of work and monthly salary. Since not all respondents

Table 4
Exploratory factor analysis of the PFIS (Initial solution with 4 factors).

	Question	Factor loadings			
	Members of the entrepreneurial family…	**1**	**2**	**3**	**4**
Physical presence*					
v_31	*…are often seen in the firm**	*0.330*	*0.310*		*0.782*
v_32	*…are represented or present at different hierarchical levels of the firm**				*0.308*
v_33	*…also lend a hand when necessary**	*0.463*	*0.316*		*0.573*
v_34	*…spend a lot of time in the firm**	*0.325*	*0.301*		*0.749*
v_35	*…take part in firm celebrations as a family**				
Culture					
v_36	…also have an open ear for employees' personal matters	0.852			
v_37	…maintain a close relationship with employees	0.709			
v_38	…take the time to listen to employees' ideas	0.785			
v_39	…can be approached by employees from all departments	0.578			
v_40	…ensure that employees feel comfortable in the firm	0.785			
v_41	*…know most employees by name**	*0.468*	*0.313*		
v_42	…ensure that employees are aware of the firm's history	0.579			
v_43	…recruit staff and secure jobs for the long term	0.646			
v_44	…also show understanding when employees have private problems	0.813			
Organizational decision-making					
v_45	…have a major influence on day-to-day decisions		0.746		
v_46	…have great influence on the long-term orientation of the firm		0.474		
v_47	…like to distribute work instructions themselves		0.731		
v_48	…are directly involved in almost all work processes of the firm		0.666		
v_49	…make the final decisions in the firm alone		0.653		
v_50	*…take responsibility for solving problems in the firm**	*0.517*	*0.455*		
v_51	…like to select new employees themselves		0.632		
v_52	*…consider it important to get to know new employees personally**	*0.532*	*0.440*		
Image					
v_53	…present the firm externally as a family business			0.914	
v_54	…use the word "family business" to advertise actively			0.780	
v_55	*…present the firm to our customers as a family business**	*0.447*		*0.375*	
v_56	…are engaged in the common good within the city/region			0.895	
v_57	…attach importance to the fact that the name of the family business is also known in the city/region			0.605	

N = 600. Maximum likelihood extraction with varimax rotation, values below 0.3 suppressed.
* Not included in the final scale.

answered these questions, the subsample for this analysis consists of 499 non-family employees. Table 8 provides a description of the variables.

The dependent variable is the Bacharach et al. (1991) job satisfaction scale, which consists of five items asking respondents to rate their satisfaction with various aspects of their job on a 4-point Likert-type scale (e.g., "The chance your job gives you to do what you are best at"). We used the mean of our three PFIS subscales as the independent variable, calculated by averaging the responses to the individual questions in each subscale. We calculated the overall mean of the PFIS derived from the mean values of the subscales. To account for potential confounding variables and improve the accuracy of our results, we included several control variables in our regression analysis that are known to influence job satisfaction. These included respondent age, gender (Block et al., 2015; Clark, 1997), hours worked per week (Clark & Oswald, 1996), salary (Clark, 1997), firm size, and industry (Block et al., 2015; Querbach et al., 2022).

Table 9 presents the descriptive statistics and correlations between the variables, and Table 10 the results of the OLS regression analysis.

The second model indicates a significant positive relationship between the PFIS total scale and job satisfaction (0.28, $p < 0.001$), suggesting that individuals who perceive a stronger family influence at work are more satisfied with their jobs. Specifically, the third model shows that the perceived family culture has the strongest significant positive effect on job satisfaction (0.41, $p < 0.001$), while the perceived family organizational decision-making has a significant negative influence (-0.13, $p < 0.01$). The perceived image of the firm as a family business also has a small but significant positive effect on job satisfaction (0.09, $p < 0.05$). In conclusion, the first test proves that the PFIS is a useful predictor of job satisfaction, demonstrating its practical utility and value for future research.

4. Discussion

Family influence is a critical determinant of the uniqueness of family firms (Chrisman et al., 2012; Chua et al., 2012; Lamb & Butler, 2018; Lindow et al., 2010), and thus a fundamental aspect of the modern family business definition (Chua et al., 1999; Litz, 1995, 2008; Zachary, 2011). As a result, the family business literature relies on robust instruments to measure family influence (Irava & Moores, 2010). Although multidimensional scales have been introduced to measure family influence (e.g., Anglin et al., 2017; Astrachan et al., 2002; Craig

Table 5
Confirmatory factor analysis of the PFIS.

Variable	Estimate	Std. err	Std. all	Z	P (>|z|)
Culture					
v_36	1.000	-	0.837	-	-
v_37	1.050	0.053	0.773	19.922	0.000
v_38	1.053	0.046	0.827	22.932	0.000
v_39	0.583	0.065	0.633	9.001	0.000
v_40	1.122	0.052	0.855	21.500	0.000
v_42	0.906	0.061	0.633	14.859	0.000
v_43	0.707	0.058	0.695	12.229	0.000
v_44	0.919	0.032	0.784	29.091	0.000
Organizational decision-making					
v_45	1.000	-	0.804	-	-
v_46	0.452	0.054	0.531	8.052	0.000
v_47	1.030	0.058	0.740	17.795	0.000
v_48	1.035	0.055	0.738	18.963	0.000
v_49	0.784	0.057	0.589	13.872	0.000
v_51	0.834	0.063	0.652	13.317	0.000
Image					
v_53	1.000	-	0.852	-	-
v_54	1.127	0.059	0.842	19.163	0.000
v_56	0.976	0.029	0.851	33.613	0.000
v_57	0.772	0.051	0.664	15.138	0.000

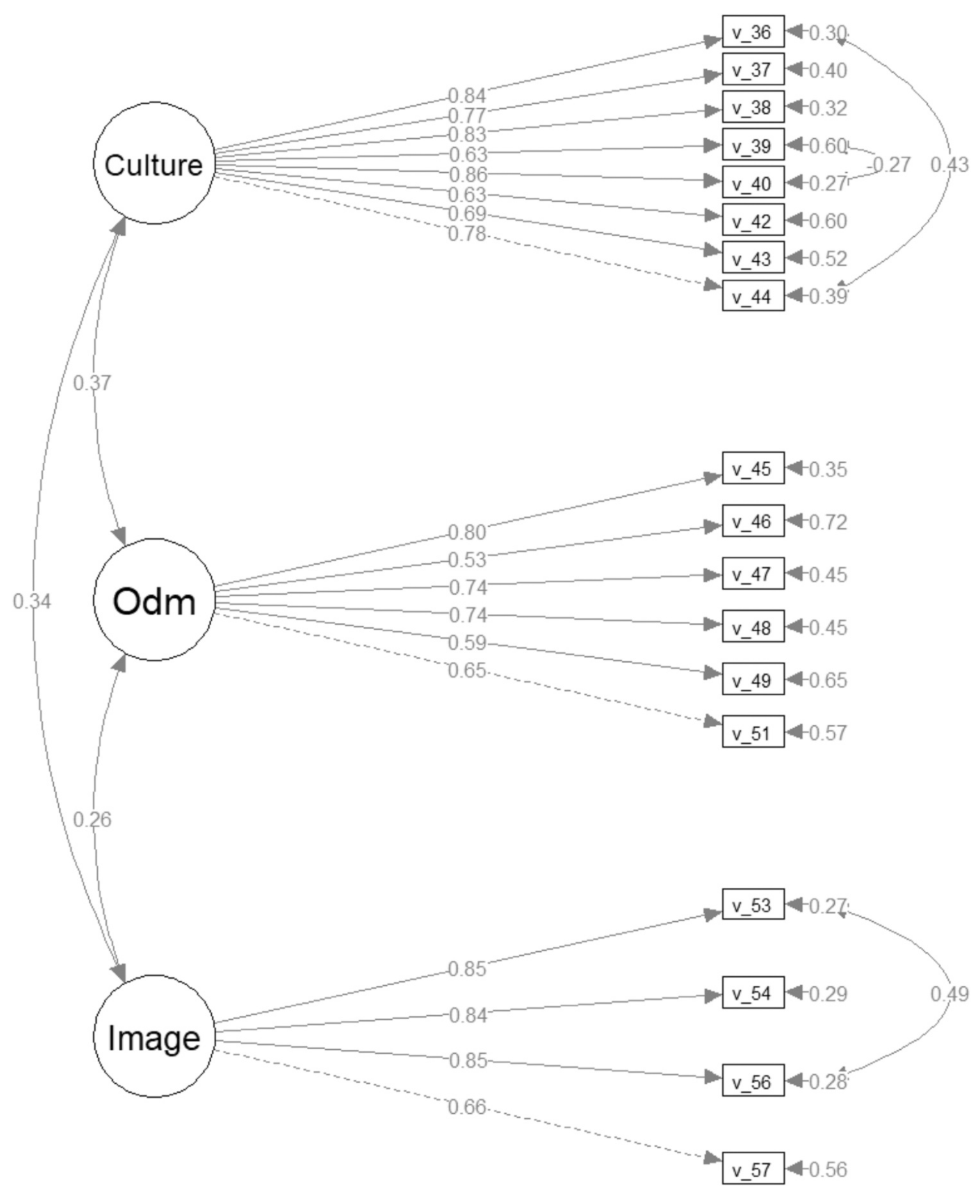
Table 6
Model fit diagnostics CFA PFIS.

Variable	Estimate
Chi-square	307.885 (129 df, $p < 0.001$)
Comparative Fit Index (CFI)	0.961
Tucker Lewis Index (TLI)	0.953
RMSEA	0.048
RMSEA 90 % CI lower bound	0.042
RMSEA 90 % CI upper bound	0.054
Robust RMSEA	0.054
SRMR	0.068
N	600

Note: Robust values reported.

et al., 2014; Frank et al., 2017; Zellweger et al., 2012b), their potential has not been fully realized, as many studies use single items to measure the multidimensional concept of family influence (Evert et al., 2016). Moreover, the aforementioned family influence scales survey only members of the entrepreneurial family and neglect the perspective of non-family stakeholders, such as non-family employees. Yet, their perceptions appear to be very important in capturing an unbiased and more holistic impression of family influence. As a result, our understanding of family influence is still incomplete (Holt et al., 2010; Rau et al., 2018). Our study addresses this gap by developing the PFIS, which measures non-family employees' perceptions of family influence. In doing so, we contribute theoretically, methodologically, and empirically to a better understanding of family influence.

From a theoretical perspective, our literature-based conceptualization of family influence shows the roots of family influence and its historical development in the general management literature and later in the family business literature. We highlight the first understanding of family influence (Donnelley, 1964), which is quite similar to our current understanding. However, family business scholars (e.g., Chrisman et al., 2005b; Chua et al., 1999; Ensley & Pearson, 2005; Kellermanns et al., 2012; Lindow et al., 2010; Litz, 1995; Minichilli et al., 2010; Zellweger et al., 2010) recognize ownership structure (Barry, 1975; Lansberg et al., 1988), involvement in management (Barnes & Hershon, 1994; Burch,



N = 600, showing the standardized factor loadings and factor covariances

Fig. 2. Plot of the results of the PFIS confirmatory factor analysis.

Table 7
Cronbach's Alpha, AVE, Composite Reliability, and Larcker test for discriminant validity.

	Cronbach's Alpha	AVE	Composite Reliability	Culture	Organizational decision-making	Image
Culture	0.91	0.58	0.92	0.76		
Organizational decision-making	0.83	0.49	0.84	0.33**	0.70	
Image	0.89	0.65	0.86	0.33**	0.23**	0.81

The diagonal values in bold represent the square root of the average variance extracted, and the off-diagonal values represent the squared inter-construct correlations. $^{*}p < 0.05$. $^{**}p < 0.01$.

1972), and transgenerational succession (Ward, 1987) as formative aspects of family influence. We also show that family influence significantly affects various aspects of family firms, including strategy-making (Carney, 2005; Miller et al., 2003; Sharma et al., 1997; Zellweger et al., 2010), resource allocation (Chrisman et al., 2005b; Habbershon et al., 2003; Habbershon & Williams, 1999), and decision-making (). Significantly, the PFIS introduces "perception" as a new facet of family influence, enriching our understanding of this concept. This advancement is particularly relevant in light of the evolving nature of modern family firms, as highlighted in Aldrich et al. (2021). Today, these firms are increasingly viewed as boundary-spanning organizations rather than isolated business units (De Massis et al., 2021), and are more often influenced by external in-law entry in the entrepreneurial family (Mismetti et al., 2023).

From a methodological perspective, the PFIS is a complementary measure to existing family influence scales. While previous survey-based scales (Astrachan et al., 2002; Craig et al., 2014; Frank et al., 2017; Zellweger et al., 2012b) measure family influence from the perspective of the entrepreneurial family, the PFIS is the first instrument to measure how non-family employees, who are important stakeholders in family firms (Pimentel et al., 2020), perceive family influence. Thus, the PFIS methodologically allows capturing a more unbiased and holistic picture of family influence.

From an empirical perspective, we demonstrate that the PFIS is applicable to future quantitative empirical research. We used the PFIS to test the effect of perceived family influence on the job satisfaction of non-family employees. In doing so, our research ties in with recent studies on the impact of family influence on the job satisfaction of non-family employees (Pimentel et al., 2020; Querbach et al., 2022). Moreover, our results show that the effects of the PFIS are not uniform across all three dimensions, confirming the notion that different measures of family influence or different definitions can lead to markedly different results (Chrisman et al., 2012; Miller et al., 2007). While culture and image have a positive effect on the job satisfaction of non-family employees, the entrepreneurial family's organizational decision-making has the opposite effect. This can be explained by the fact that the greater use of a family managers' decision-making power in the day-to-day work of non-family employees hinders their autonomy, which is related to job satisfaction (DeCarlo & Agarwal, 1999). The heterogeneity of the individual family influence dimensions is consistent with several studies on the impact of family influence on family firms (e.g., Arzubiaga et al., 2018; Calabrò et al., 2019; Gomez-Mejia et al., 2018; Neckebrouck et al., 2018; Querbach et al., 2022; Rondi et al., 2019; Sageder et al., 2018). Thus, the PFIS is a valid alternative for measuring family influence and highlights the importance of including the different dimensions and definitions of family firms, making the use of binomial or single-item measures even more implausible. In summary, our results show that for non-family employees, overall higher perceived family influence has a positive effect on their job satisfaction (Table 6).

4.1. Theoretical and practical implications

With the development and validation of the PFIS, we significantly advance the under-researched area of non-family employees' perceptions of family influence in family firms (Yazici et al., 2022), responding to the scholarly call for precise measurement tools in this area (Irava & Moores, 2010). As a paradigm shift from traditional approaches that primarily view family influence from the perspective of the entrepreneurial family or the owner-manager (Astrachan et al., 2002; Craig et al., 2014; Frank et al., 2017; Zellweger et al., 2012b), the introduction of the PFIS is our first and most important contribution to the family business literature. Rooted in social constructivism theory (Berger & Luckmann, 1967), our development approach recognizes that the essence of family influence in family firms transcends perceptions of the entrepreneurial family or mere objective metrics, such as ownership percentages or active management roles (Bruner, 2002; Harré & Gillett, 1994; Wertsch, 1997). Rather, it is a complex social construct shaped by interactions and cultural narratives as interpreted by all stakeholders within the family business ecosystem (Gergen, 1978; Morgan & Smircich, 1980; Steffy & Grimes, 1986). Thus, the PFIS shifts the focus to these frequently overlooked perspectives by capturing the perceptions of non-family employees (Barnett & Kellermanns, 2006; Mangiò et al., 2023), often the strongest coalition of non-family stakeholders in family business ecosystems (Pimentel et al., 2020), allowing for a more nuanced understanding of family influence. Consequently, the PFIS serves as an innovative tool to gather more comprehensive and unbiased information, representing an alternative reality of family influence and family firms (Gioia et al., 2000; Morgan & Smircich, 1980; Whetten et al., 1992). Its utility extends beyond current understanding (Holt et al., 2010; Rau et al., 2018) and addressed gaps in our knowledge of the unique and complex dynamics of family firms (Chrisman et al., 2012; Chua et al., 2012; Lamb & Butler, 2018; Lindow et al., 2010). Therefore, the PFIS is not just a measurement tool, but a lens through which the multifaceted reality of family firms can be better understood and appreciated.

Second, combining the PFIS with existing family influence scales or factual measures, such as ownership percentages, allows us to view family influence from a dyadic perspective, comparing the perspectives of the entrepreneurial family and non-family employees, which have been found to differ significantly in certain aspects (Poza et al., 1997). Therefore, the PFIS, in combination with other measures, is an appropriate tool to collect more comprehensive and holistic data on family influence. This was not possible before, as the scales for measuring family influence could not easily be applied to other stakeholder groups. In this context, replication studies might be of interest as well (Brinkerink et al., 2022), as the PFIS would use a completely different data point as existing studies thus far.

Third, we demonstrate the applicability of the PFIS by testing the effect of perceived family influence on the job satisfaction of non-family employees. Our results show that although strong family involvement in organizational decision-making leads to lower job satisfaction among non-family employees, strong family culture and image counteract this effect, so that the overall effect of perceived family influence on the job satisfaction of non-family employees is positive. Based on our evidence that the PFIS is applicable to quantitative empirical research and that it has a proven, verifiable impact on non-family employees in family firms in terms of job satisfaction, family business scholars are encouraged to use the PFIS in future research efforts. For example, it would be very interesting to investigate how perceived family influence affects the innovation behavior (Ahluwalia et al., 2017; Eddleston et al., 2012;

Table 8
Variable description.

#	Variable	Description
1	Job satisfaction	Scale consisting of 5 questions according to Bacharach et al. (1991). Respondents were asked how satisfied they are with: - *The progress you are making toward the goals you set for yourself in your present position.* - *Your present job in light of your career expectations.* - *Your present job when you compare it to jobs in other organizations.* - *The chance your job gives you to do what you are best at.* - *Your present job when you consider the expectations you had when you took the job.* Measured on 4-point Likert-type scale ranging from very dissatisfied = 1 to very satisfied = 4
2	PFIS	Scale consisting of three sub-dimensions: culture, organizational decision-making, and image
3	PFIS-Culture	Construct with 8 questions related to the family business culture in the firm. Latent variable derived from the mean values of the questions. Measured on a 5-point Likert-type scale ranging from strongly disagree = 1 to strongly agree = 5
4	PFIS-Organizational decision-making	Construct with 6 questions related to the owner family control and influence in the firm. Latent variable derived from the mean values of the questions. *Measured on a 5-point Likert-type scale ranging from strongly disagree = 1 to strongly agree = 5.*
5	PFIS-Image	Construct with 4 questions related to the family business image/external presentation of the firm. Latent variable derived from the mean values of the questions. *Measured on a 5-point Likert scale ranging from strongly disagree = 1 to strongly agree = 5*
6	Age	Age of the respondent (in 2021)
7	Female	Dummy = 1 for females
8	Employees	Number of employees
9	Working hours per week	Number of work hours per week
10	Monthly wage less than 1000€	Dummy = 1 for monthly salary up to 1000 euro
11	Monthly wage 1001 to 2000 €	Dummy = 1 for monthly salary between 1001 and 2000 euro
12	Monthly wage 2001 to 3000 €	Dummy = 1 for monthly salary between 2001 and 3000 euro
13	Monthly wage 3001 to 4000 €	Dummy = 1 for monthly salary between 3001 and 4000 euro
14	Monthly wage 4001 to 5000 €	Dummy = 1 for monthly salary between 4001 and 5000 euro
15	Monthly wage 5001 to 6000 €	Dummy = 1 for monthly salary between 5001 and 6000 euro
16	Monthly wage more than 6000 €	Dummy = 1 for monthly salary above 6000 euro
17	Agriculture, forestry, and fishing	Dummy = 1 for the agriculture, forestry, and fishing industry
18	Manufacturing, mining, …	Dummy = 1 for the manufacturing, mining, quarrying, and other industries
19	Construction	Dummy = 1 for construction industry
20	Wholesale and retail trade…	Dummy = 1 for wholesale and retail, transportation and storage, accommodation, and food service activities
21	Information and communication	Dummy = 1 for the information and communication industry
22	Financial and insurance activities	Dummy = 1 for financial and insurance activities
23	Real estate activities	Dummy = 1 for real estate activities
24	Professional, scientific, …	Dummy = 1 for professional, scientific, technical, administration, and support services
25	Public administration, …	Dummy = 1 for public administration, defense, education, human health, and social work activities
26	Other services	Dummy = 1 for other services

Mahto et al., 2010; Tabor et al., 2018) of non-family employees and how perceived family influence affects non-family employees' attachment to the entrepreneurial family (Bammens et al., 2010; Berrone et al., 2010; Cennamo et al., 2012; König et al., 2013), and thus their organizational identification (Dutton et al., 1994; Mael & Ashforth, 1992; Terry, Hogg, & McKimmie, 2000). Furthermore, the PFIS can be used to examine how perceived family influence affects the intrapreneurial behavior of non-family employees (Gawke et al., 2019), thereby advancing our understanding of intrapreneurship in family firms and how it affects the job fit (Kristof, 1996; Resick et al., 2007; Saks & Ashforth, 1997) of non-family employees.

In addition to our theoretical contributions, we also offer implications for practitioners. First, the PFIS is a useful tool for owner-managers to measure perceived family influence in their organization and determine which family influence dimensions are more or less pronounced. For example, if non-family employees perceive the culture as unpleasant and the relationships within the firm as impersonal, owner-managers can take certain steps to improve the organizational climate, such as establishing an open-door policy or attending to employees' needs. Second, the PFIS allows owner-managers to assess whether their family influence has a positive or negative impact on non-family employees. Considering the results of our regression analysis, we see, for example, that culture and image have a positive effect on the job satisfaction of non-family employees, but a higher use of organizational decision-making power by family managers has a negative effect. Therefore, knowing how certain family influence dimensions affect non-family employees will help owner-managers adjust family influence in ways that benefit employees and, ultimately, the family firm. Third, using the PFIS to ask non-family employees how they perceive family influence could have a positive effect on their motivation and productivity. We base this assumption on the seminal Hawthorne experiments conducted between 1924 to 1932. The purpose of these experiments was to determine whether lighting levels in production facilities affect worker productivity. The results suggested that lighting levels had virtually no effect on worker productivity, but rather the fact that workers were highly attentive during the experiments and in constant communication with researchers and managers (Franke & Kaul, 1978).

This may also be the case when non-family employees are asked how they perceive family influence in their organization, as they feel seen and heard and that their opinions and thoughts matter. This attention and appreciation can boost their self-esteem and, as a result, their commitment and productivity.

4.2. Limitations and future research

Despite these contributions, our study has some limitations. The first is geographic. Although we contacted more than 30,000 family firms from different industries, all non-family employees in our sample work in German family firms. Given that national culture has a crucial impact on firm culture (Boubakri et al., 2021; Ringov & Zollo, 2007), we acknowledge that future research could identify additional aspects of perceived family influence that we have not considered. In addition, Germany is known for its high individualistic orientation, similar to most affluent Western societies (Minkov & Kaasa, 2022), so the scale

Table 9
Mean, standard deviation, and correlations.

#	Variable	M	SD	Min	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1	Job satisfaction	3.20	0.74	1	4																									
2	PFIS	4.05	0.66	1	5	.31**																								
3	PFIS-Culture	4.21	0.77	1	5	.44**	.73**																							
4	PFIS-Organizational decision-making	4.14	0.76	1	5	.01	.66**	.35**																						
5	PFIS-Image	3.80	1.13	1	5	.23**	.80**	.36**	.23**																					
6	Age	47.12	12.46	19	85	.22**	.09*	.13**	-.01	.07																				
7	Female	0.48	0.50	0	1	-.07	.01	-.04	.10*	-.02	-.13**																			
8	Employees	42.37	40.11	5	230	.08	-.07	-.11*	-.23**	.10*	-.03	-.03																		
9	Working hours per week	44.17	11.60	14	100	.18**	.13**	.17**	.03	.10*	.16**	-.41**	-.05																	
10	Monthly salary less than 1000€	0.01	0.11	0	1	-.12**	-.07	-.06	.01	-.08	.00	.12*	-.04	-.14**																
11	Monthly salary 1001 to 2000 €	0.07	0.25	0	1	-.17**	.07	.00	.10*	.04	-.03	.18**	-.05	-.35**	-.03															
12	Monthly salary 2001 to 3000 €	0.17	0.38	0	1	-.10*	-.06	-.05	-.04	-.04	-.22**	.28**	-.03	-.23**	-.05	-.12**														
13	Monthly salary 3001 to 4000 €	0.20	0.40	0	1	-.07	-.02	-.08	.03	.00	-.15**	.16**	.00	-.11*	-.05	-.13**	-.23**													
14	Monthly salary 4001 to 5000 €	0.13	0.33	0	1	.01	-.04	-.02	.05	-.09*	-.01	.02	.02	.07	-.04	-.10*	-.18**	-.19**												
15	Monthly salary 5001 to 6000 €	0.16	0.37	0	1	.03	.02	.01	-.01	.03	.08	-.18**	.01	.15**	-.05	-.12**	-.20**	-.22**	-.17**											
16	Monthly salary more than 6000 €	0.26	0.44	0	1	.24**	.06	.14**	-.08	.07	.27**	-.38**	.04	.35**	-.07	-.16**	-.27**	-.29**	-.23**	-.26**										
17	Agriculture, forestry, and fishing	0.02	0.13	0	1	.05	-.00	-.03	.06	-.02	-.02	.13**	-.06	-.04	-.01	.03	.03	-.02	.14**	-.06	-.08									
18	Manufacturing, mining,…	0.26	0.44	0	1	-.04	-.06	-.05	-.07	-.02	.01	-.03	.10*	-.05	-.07	.02	-.04	-.05	-.07	.03	.11*	-.08								
19	Construction	0.23	0.42	0	1	.03	.16**	.13**	.16**	.09	-.05	.02	-.07	.03	.03	.05	-.05	.04	.02	.05	-.08	-.07	-.33**							
20	Wholesale and retail trade…	0.22	0.41	0	1	.01	.06	.00	-.00	.10*	.03	.00	-.01	.02	.07	-.02	.06	.05	-.00	-.04	-.07	-.07	-.32**	-.29**						
21	Information and communication	0.06	0.25	0	1	-.10*	-.19**	-.11*	-.15**	-.16**	-.01	-.07	-.02	.01	-.03	-.04	-.01	-.05	.05	.06	-.01	-.03	-.16**	-.14**	-.14**					
22	Financial and insurance activities	0.01	0.10	0	1	.04	-.01	-.02	-.02	.00	.11*	-.06	-.03	.02	-.01	-.03	-.05	-.05	-.04	.12**	.03	-.01	-.06	-.06	-.05	-.03				
23	Real estate activities	0.01	0.12	0	1	.01	.08	.05	.03	.09*	-.02	.09*	-.08	-.03	-.01	-.03	-.01	-.02	.11*	-.05	.01	-.02	-.07	-.07	-.06	-.03	-.01			
24	Professional, scientific, …	0.06	0.25	0	1	.08	-.06	.01	.02	-.12**	-.02	-.05	-.06	.04	-.03	-.07	.01	-.03	.02	-.05	.09*	-.03	-.16**	-.14**	-.14**	-.07	-.03	-.03		
25	Public administration, …	0.04	0.19	0	1	.02	-.05	-.05	-.07	-.01	.02	.03	.10*	-.06	-.02	-.01	.03	.07	-.01	-.03	-.04	-.02	-.12**	-.11*	-.10*	-.05	-.02	-.02	-.05	
26	Other services	0.08	0.27	0	1	-.03	-.03	-.00	-.01	-.04	.00	.01	.04	-.00	.04	.04	.02	.00	-.07	-.05	.04	-.04	-.18**	-.16**	-.16**	-.08	-.03	-.04	-.08	-.06

N = 499. M = mean, SD=standard deviation. * p < .05. ** p < .01.

Table 10
Regression analysis – Perceived family influence on job satisfaction.

		Job satisfaction		
		Model 1	Model 2	Model 3
2	PFIS		0.28***	
3	PFIS-Culture			0.41***
4	PFIS-Organizational decision-making			-0.13**
5	PFIS-Image			0.09*
6	Age	0.16***	0.14**	0.11**
7	Female	0.10*	0.08	0.09
8	Employees	0.08	0.09*	0.08
9	Work hours per week	0.03	-0.01	-0.02
	Monthly salary			
11	1001 to 2000 €	0.14	0.07	0.06
12	2001 to 3000 €	0.39*	0.32*	0.27*
13	3001 to 4000 €	0.44**	0.37*	0.34*
14	4001 to 5000 €	0.40**	0.36**	0.33**
15	5001 to 6000 €	0.49**	0.42**	0.38**
16	more than 6000 €	0.71***	0.62***	0.54**
	Industry			
17	Agriculture, forestry, and fishing	0.08	0.08	0.10*
19	Construction	0.11*	0.06	0.06
20	Wholesale and retail, transportation and storage, accommodation, and food service	0.08	0.06	0.06
21	Information and communication	-0.06	-0.02	-0.03
22	Financial and insurance activities	0.02	0.03	0.03
23	Real estate activities	0.02	-0.00	-0.01
24	Professional, scientific, technical, administration, and support services	0.09*	0.10*	0.10*
25	Public administration, defense, education, human health, and social work activities	0.04	0.05	0.05
26	Other services	0.01	0.01	0.00
	Observations	499	499	499
	R2	0.164	0.235	0.327
	R2 adjusted	0.131	0.202	0.296

Notes: N = 499. Standardized estimation coefficients reported. * $p < 0.05$** $p < 0.01$*** $p < 0.001$.
Reference categories: salary (below 1000€), industry (manufacturing, mining, quarrying, and other).

may be best used in countries with a comparable cultural context, where perceptions of family influence among non-family employees may be similarly influenced by individualistic values and societal norms. Therefore, we encourage future research to apply the PFIS in international contexts or even cross-national research settings to increase its generalizability. In particular, it would be interesting for future research to test the scale in a more collectivist context. The second limitation of our work is that we collected our data by surveying individual respondents from each firm. This key informant approach has the limitation that a single employee may not always be representative of the entire firm. Future research could solicit information from multiple employees of the same firm to obtain a more accurate picture of each firm. Third, as we only examined the perceptions of non-family employees who are external to the family but still internal stakeholders of the firm, future research could focus on external non-family stakeholders, such as suppliers, communities, or other business associates. It would be interesting to see if they perceive the influence in a similar or completely different way to family members or internal non-family stakeholders. Fourth, while the developed scale effectively measures the perceived family influence of non-family employees, it is important to note that its applicability is yet mostly limited to the understanding of this perception. An investigation of the inference of these perceptions and possible resulting behaviors in relation to family business outcomes is a planned subject of further research. Finally, for our sample, we only considered family firms where the entrepreneurial family holds at least 50 % of shares and at least one family member is actively involved in management. In the future, it would be interesting to see whether other family firm definitions (e.g., only 10 % of shares are held by the entrepreneurial family, the business must be in its second generation, etc.) lead to different results.

5. Conclusion

In this study, we examined the literature on family influence, which allowed us to define family influence as the influence of the entrepreneurial family on the firm that makes family firms unique. Our review of the literature also revealed that current family influence scales measure family influence only from the perspective of the entrepreneurial family and neglect other perspectives of non-family members, such as non-family employees. Using insights from social constructivism theory, we developed the Perceived Family Influence Scale (PFIS), the first valid and reliable scale to measure family influence from the perspective of non-family employees. We encourage future research to use the PFIS as it allows for the collection of unbiased and more holistic data that will expand our knowledge of the fascinating yet complex nature of family influence and family firms. We also invite entrepreneurial families to use the PFIS as a helpful tool to measure family influence in their organization and how it affects non-family employees. This will allow them to adjust their family influence in a way that benefits their non-family employees and ultimately the family firm. Thus, the PFIS is not only a valuable tool for advancing family business research, but also for improving management practice in family firms.

CRediT authorship contribution statement

Sven Wolff: Conceptualization, Project administration, Investigation, Data curation, Formal analysis, Methodology, Visualization, Writing – original draft, Writing – review & editing. **Philipp Koehn:** Conceptualization, Investigation, Writing – original draft, Writing – review & editing, Methodology. **Philipp J. Ruf:** Conceptualization, Investigation, Data curation, Formal analysis, Methodology, Visualization, Writing – original draft, Writing – review & editing. **Petra M. Moog:** Supervision, Resources. **Giuseppe Strina:** Supervision, Resources.

Data availability

The data that have been used are confidential.

Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at doi:10.1016/j.jfbs.2024.100635.

References

Ahluwalia, S., Mahto, R. V., & Walsh, S. T. (2017). Innovation in small firms: does family vs. non-family matter. *Journal of Small Business Strategy, 27*(3), 39–49. https://libjournals.mtsu.edu/index.php/jsbs/article/view/810.

Ainsworth, S., & Cox, J. W. (2003). Families divided: Culture and control in small family business. *Organization Studies, 24*(9), 1463–1485. https://doi.org/10.1177/0170840603249004

Aldrich, H. E., Brumana, M., Campopiano, G., & Minola, T. (2021). Embedded but not asleep: Entrepreneurship and family business research in the 21st century. *Journal of Family Business Strategy, 12*(1), Article 100390. https://doi.org/10.1016/j.jfbs.2020.100390

Anderson, R. C., & Reeb, D. M. (2003). Founding-family ownership and firm performance: Evidence from the S&P 500. *The Journal of Finance, 58*(3), 1301–1328. https://doi.org/10.1111/1540-6261.00567

Anglin, A. H., Reid, S. W., Short, J. C., Zachary, M. A., & Rutherford, M. W. (2017). An archival approach to measuring family influence: An organizational identity perspective. *Family Business Review, 30*(1), 19–36. https://doi.org/10.1177/0894486516669254

Armstrong, J. S., & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. *Journal of Marketing Research, 14*(3), 396–402. https://doi.org/10.2307/3150783

Arzubiaga, U., Kotlar, J., De Massis, A., Maseda, A., & Iturralde, T. (2018). Entrepreneurial orientation and innovation in family SMEs: Unveiling the (actual) impact of the board of directors. *Journal of Business Venturing, 33*(4), 455–469. https://doi.org/10.1016/j.jbusvent.2018.03.002

Astrachan, J. H., Klein, S. B., & Smyrnios, K. X. (2002). The F-PEC scale of family influence: A proposal for solving the family business definition problem. *Family Business Review, 15*(1), 45–58. https://doi.org/10.1111/j.1741-6248.2002.00045.x

Bacharach, S. B., Bamberger, P., & Conley, S. (1991). Work-home conflict among nurses and engineers: Mediating the impact of role stress on burnout and satisfaction at work. *Journal of Organizational Behavior, 12*(1), 39–53. https://doi.org/10.1002/job.4030120104

Bammens, Y., Van Gils, A., & Voordeckers, W. (2010). The role of family involvement in fostering an innovation-supportive stewardship culture. *Academy of Management Proceedings, 2010*(1), 1–6. https://doi.org/10.5465/ambpp.2010.54495865

Barnes, L. B., & Hershon, S. A. (1994). Transferring power in the family business. *Family Business Review, 7*(4), 377–392. https://doi.org/10.1111/j.1741-6248.1994.00377.x

Barnett, T., & Kellermanns, F. W. (2006). Are we family and are we treated as family? Nonfamily employees' perceptions of justice in the family firm. *Entrepreneurship Theory and Practice, 30*(6), 837–854. https://doi.org/10.1111/j.1540-6520.2006.00155.x

Barry, B. (1975). The development of organisation structure in the family firm. *Journal of General Management, 3*(1), 42–60. https://doi.org/10.1177/030630707500300105

Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin, 88*(3), 588–606. https://doi.org/10.1037/0033-2909.88.3.588

Berger, P.L., & Luckmann, T. (1967). The social construction of reality: A treatise in the sociology of knowledge. Anchor.

Bernhard, F., & O'Driscoll, M. P. (2011). Psychological ownership in small family-owned businesses: Leadership style and nonfamily-employees' work attitudes and behaviors. *Group & Organization Management, 36*(3), 345–384. https://doi.org/10.1177/1059601111402684

Berrone, P., Cruz, C., & Gomez-Mejia, L. R. (2012). Socioemotional wealth in family firms: Theoretical dimensions, assessment approaches, and agenda for future research. *Family Business Review, 25*(3), 258–279. https://doi.org/10.1177/0894486511435355

Berrone, P., Cruz, C., Gomez-Mejia, L. R., & Larraza-Kintana, M. (2010). Socioemotional wealth and corporate responses to institutional pressures: Do family-controlled firms pollute less? *Administrative Science Quarterly, 55*, 82–113. https://doi.org/10.2189/asqu.2010.55.1.82

Block, J. H., Millán, J. M., Román, C., & Zhou, H. (2015). Job satisfaction and wages of family employees. *Entrepreneurship Theory and Practice, 39*(2), 183–207. https://doi.org/10.1111/etap.12035

Boubakri, N., Chkir, I., Saadi, S., & Zhu, H. (2021). Does national culture affect corporate innovation? International evidence. *Journal of Corporate Finance, 66*, Article 101847. https://doi.org/10.1016/j.jcorpfin.2020.101847

Brigham, K. H., Lumpkin, G. T., Payne, G. T., & Zachary, M. A. (2014). researching long-term orientation. *Family Business Review, 27*(1), 72–88. https://doi.org/10.1177/0894486513508980

Brinkerink, J., De Massis, A., & Kellermanns, F. (2022). One finding is no finding: Toward a replication culture in family business research. *Journal of Family Business Strategy, 13*(4), Article 100521. https://doi.org/10.1016/j.jfbs.2022.100521

Bruner, J.S. (2002). Acts of meaning. Harvard University Press.

Burch, P.H. (1972). The managerial revolution reassessed: Family control in America's large corporations. Lexington Books.

Bureau van Dijk, 2021, Bureau van Dijk—A Moody's Analytics Company. Retrieved from www.bvdinfo.com.

Calabrò, A., Vecchiarini, M., Gast, J., Campopiano, G., 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

Campopiano, G., & De Massis, A. (2015). Corporate social responsibility reporting: A content analysis in family and non-family firms. *Journal of Business Ethics, 129*(3), 511–534. https://doi.org/10.1007/s10551-014-2174-z

Campopiano, G., De Massis, A., & Chirico, F. (2014). Firm philanthropy in small- and medium-sized family firms: The effects of family involvement in ownership and management. *Family Business Review, 27*(3), 244–258. https://doi.org/10.1177/0894486514538450

Carney, M. (2005). Corporate governance and competitive advantage in family-controlled firms. *Entrepreneurship Theory and Practice, 29*(3), 249–265. https://doi.org/10.1111/j.1540-6520.2005.00081.x

Cennamo, C., Berrone, P., Cruz, C., & Gomez-Mejia, L. R. (2012). Socioemotional wealth and proactive stakeholder engagement: Why family-controlled firms care more about their stakeholders. *Entrepreneurship Theory and Practice, 36*(6), 1153–1173. https://doi.org/10.1111/j.1540-6520.2012.00543.x

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (Vol. 8, pp. 295–336). Lawrence Erlbaum Associates Publishers.

Chirico, F., & Salvato, C. (2016). Knowledge internalization and product development in family firms: When relational and affective factors matter. *Entrepreneurship Theory and Practice, 40*(1), 201–229. https://doi.org/10.1111/etap.12114

Chrisman, J. J., Chua, J. H., & Litz, R. (2003). A unified systems perspective of family firm performance: An extension and integration. *Journal of Business Venturing, 18*(4), 467–472. https://doi.org/10.1016/S0883-9026(03)00055-7

Chrisman, J. J., Chua, J. H., Pearson, A. W., & Barnett, T. (2012). Family involvement, family influence, and family-centered non-economic goals in small firms. *Entrepreneurship Theory and Practice, 36*(2), 267–293. https://doi.org/10.1111/j.1540-6520.2010.00407.x

Chrisman, J. J., Chua, J. H., & Sharma, P. (2005a). Trends and directions in the development of a strategic management theory of the family firm. *Entrepreneurship Theory and Practice, 29*(5), 555–575. https://doi.org/10.1111/j.1540-6520.2005.00098.x

Chrisman, J. J., Chua, J. H., & Steier, L. (2005b). Sources and consequences of distinctive familiness: An introduction. *Entrepreneurship Theory and Practice, 29*(3), 237–247. https://doi.org/10.1111/j.1540-6520.2005.00080.x

Chua, J. H., Chrisman, J. J., & Sharma, P. (1999). Defining the family business by behavior. *Entrepreneurship Theory and Practice, 23*(4), 19–39. https://doi.org/10.1177/104225879902300402

Chua, J. H., Chrisman, J. J., Steier, L. P., & Rau, S. B. (2012). Sources of heterogeneity in family firms: An introduction. *Entrepreneurship Theory and Practice, 36*(6), 1103–1113. https://doi.org/10.1111/j.1540-6520.2012.00540.x

Clark, A. E. (1997). Job satisfaction and gender: Why are women so happy at work? *Labour Economics, 4*(4), 341–372. https://doi.org/10.1016/S0927-5371(97)00010-9

Clark, A. E., & Oswald, A. J. (1996). Satisfaction and comparison income. *Journal of Public Economics, 61*(3), 359–381. https://doi.org/10.1016/0047-2727(95)01564-7

Covin, J. G., & Slevin, D. P. (1991). A conceptual model of entrepreneurship as firm behavior. *Entrepreneurship Theory and Practice, 16*(1), 7–26. https://doi.org/10.1177/104225879101600102

Cox, K. C., Lortie, J., Marshall, D. R., & Kidwell, R. E. (2022). Beyond the balance sheet: The effects of family influence on social performance. *Journal of Business Research, 143*, 318–330. https://doi.org/10.1016/j.jbusres.2022.01.013

Craig, J. B., Dibrell, C., & Davis, P. S. (2008). Leveraging family-based brand identity to enhance firm competitiveness and performance in family businesses. *Journal of Small Business Management, 46*(3), 351–371. https://doi.org/10.1111/j.1540-627X.2008.00248.x

Craig, J. B., Dibrell, C., & Garrett, R. (2014). Examining relationships among family influence, family culture, flexible planning systems, innovativeness and firm performance. *Journal of Family Business Strategy, 5*(3), 229–238. https://doi.org/10.1016/j.jfbs.2013.09.002

Cramton, C. D. (1993). Is rugged individualism the whole story? Public and private accounts of a firm's founding. *Family Business Review, 6*(3), 233–261. https://doi.org/10.1111/j.1741-6248.1993.00233.x

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16*, 297–334. https://doi.org/10.1007/BF02310555

Cruz, C., Firfiray, S., & Gomez-Mejia, L. R. (2011). Socioemotional wealth and human resource management (HRM) in family-controlled firms. In A. Joshi, H. Liao, & J. J. Martocchio (Eds.), *Research in personnel and human resources management* (Vol. 30, pp. 159–217). Emerald Group Publishing Limited. https://doi.org/10.1108/S0742-7301(2011)0000030006.

Damanpour, F., & Gopalakrishnan, S. (2001). The dynamics of the adoption of product and process innovations in organizations. *Journal of Management Studies, 38*(1), 45–65. https://doi.org/10.1111/1467-6486.00227

Danes, S. M., & Zachary, R. K. (2021). Families and entrepreneurship. In A. Farazmand (Ed.), *Global Encyclopedia of Public Administration, Public Policy, and Governance* (pp. 1–17). Springer International Publishing. https://doi.org/10.1007/978-3-319-31816-5_4198-1.

DeCarlo, T. E., & Agarwal, S. (1999). Influence of managerial behaviors and job autonomy on job satisfaction of industrial salespersons. *Industrial Marketing Management, 28*(1), 51–62. https://doi.org/10.1016/S0019-8501(98)00022-4

De Massis, A. D., Frattini, F., Pizzurno, E., & Cassia, L. (2015). Product innovation in family versus nonfamily firms: An exploratory analysis. *Journal of Small Business Management, 53*(1), 1–36. https://doi.org/10.1111/jsbm.12068

De Massis, A., Kotlar, J., & Manelli, L. (2021). Family firms, family boundary organizations, and the family-related organizational ecosystem. *Family Business Review, 34*(4), 350–364. https://doi.org/10.1177/08944865211052195

DeVellis, R.F. (2017). Scale development: Theory and applications (4th edition). Sage Publications.

Distelberg, B., & Sorenson, R. L. (2009). Updating systems concepts in family businesses: A focus on values, resource flows, and adaptability. *Family Business Review, 22*(1), 65–81. https://doi.org/10.1177/0894486508329115

Donnelley, R. G. (1964). The family business. *Harvard Business Review, 42*(4), 93–105.

Dukerich, J. M., Golden, B. R., & Shortell, S. M. (2002). Beauty is in the eye of the beholder: The impact of organizational identification, identity, and image on the cooperative behaviors of physicians. *Administrative Science Quarterly, 47*(3), 507–533. https://doi.org/10.2307/3094849

Dutton, J. E., Dukerich, J. M., & Harquail, C. V. (1994). Organizational images and member identification. *Administrative Science Quarterly, 39*(2), 239–263. https://doi.org/10.2307/2393235

Dyer, W. G. (1987). Cultural change in family firms: Anticipating and managing business and family transitions. *Administrative Science Quarterly, 32*(4), 635–637. https://doi.org/10.2307/2392903

Eddleston, K. A., Kellermanns, F. W., & Zellweger, T. M. (2012). Exploring the entrepreneurial behavior of family firms: Does the stewardship perspective explain differences? *Entrepreneurship Theory and Practice, 36*(2), 347–367. https://doi.org/10.1111/j.1540-6520.2010.00402.x

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review, 14*(4), 532–550. https://doi.org/10.5465/amr.1989.4308385

Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal, 50*(1), 25–32. https://doi.org/10.5465/amj.2007.24160888

Ensley, M. D., & Pearson, A. W. (2005). An exploratory comparison of the behavioral dynamics of top management teams in family and nonfamily new ventures: Cohesion, conflict, potency, and consensus. *Entrepreneurship Theory and Practice, 29*(3), 267–284. https://doi.org/10.1111/j.1540-6520.2005.00082.x

Evert, R. E., Martin, J. A., McLeod, M. S., & Payne, G. T. (2016). Empirics in family business research: Progress, challenges, and the path ahead. *Family Business Review, 29*(1), 17–43. https://doi.org/10.1177/0894486515593869
Firfiray, S., & Gomez-Mejia, L. R. (2021). When is ambivalence good for family firms? Understanding the impact of family managers' emotional ambivalence on decision making. *Entrepreneurship Research Journal, 11*(3), 177–189. https://doi.org/10.1515/erj-2021-0181
Fletcher, D., Melin, L., & Gimeno, A. (2012). Culture and values in family business—A review and suggestions for future research. *Journal of Family Business Strategy, 3*(3), 127–131. https://doi.org/10.1016/j.jfbs.2012.06.001
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
Frank, H., Kessler, A., Rusch, T., Suess-Reyes, J., & Weismeier-Sammer, D. (2017). Capturing the familiness of family businesses: Development of the family influence familiness scale (FIFS). *Entrepreneurship Theory and Practice, 41*(5), 709–742. https://doi.org/10.1111/etap.12229
Franke, R. H., & Kaul, J. D. (1978). The Hawthorne experiments: First statistical interpretation. *American Sociological Review, 43*(5), 623–643. https://doi.org/10.2307/2094540
Fries, A., Kammerlander, N., & Leitterstorf, M. (2021). Leadership styles and leadership behaviors in family firms: A systematic literature review. *Journal of Family Business Strategy, 12*(1), Article 100374. https://doi.org/10.1016/j.jfbs.2020.100374
Gawke, J. C., Gorgievski, M. J., & Bakker, A. B. (2019). Measuring intrapreneurship at the individual level: Development and validation of the employee intrapreneurship scale (EIS). *European Management Journal, 37*(6), 806–817. https://doi.org/10.1016/j.emj.2019.03.001
Gergen, K. J. (1978). Toward generative theory. *Journal of Personality and Social Psychology, 36*(11), 1344–1360. https://doi.org/10.1037/0022-3514.36.11.1344
Gergen, K. J. (1985). Social constructionist inquiry: Context and implications. In K. J. Gergen, & K. E. Davis (Eds.), *The Social Construction of the Person* (pp. 3–18). Springer New York. https://doi.org/10.1007/978-1-4612-5076-0_1.
Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods, 16*(1), 15–31. https://doi.org/10.1177/1094428112452151
Gioia, D. A., Schultz, M., & Corley, K. G. (2000). Organizational identity, image, and adaptive instability. *Academy of Management, 25*(1), 63–81. https://doi.org/10.5465/amr.2000.2791603
Gomez-Mejia, L. R., Cruz, C., Berrone, P., & De Castro, J. O. (2011). The bind that ties: Socioemotional wealth preservation in family firms. *The Academy of Management Annals, 5*(1), 653–707. https://doi.org/10.1016/j.rausp.2016.08.002
Gomez-Mejia, L. R., Patel, P. C., & Zellweger, T. M. (2018). In the horns of the dilemma: Socioemotional wealth, financial wealth, and acquisitions in family firms. *Journal of Management, 44*(4), 1369–1397. https://doi.org/10.1177/0149206315614375
Habbershon, T. G., & Williams, M. L. (1999). A resource-based framework for assessing the strategic advantages of family firms. *Family Business Review, 12*(1), 1–25. https://doi.org/10.1111/j.1741-6248.1999.00001.x
Habbershon, T. G., Williams, M., & MacMillan, I. C. (2003). A unified systems perspective of family firm performance. *Journal of Business Venturing, 18*(4), 451–465. https://doi.org/10.1016/S0883-9026(03)00053-3
Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2019). Multivariate data analysis (8th edition). Cengage.
Handler, W. C. (1989). Methodological issues and considerations in studying family businesses. *Family Business Review, 2*(3), 257–276. https://doi.org/10.1111/j.1741-6248.1989.00257.x
Handler, W. C. (1994). Succession in family business: A review of the research. *Family Business Review, 7*(2), 133–157. https://doi.org/10.1111/j.1741-6248.1994.00133.x
Harré, R., & Gillett, G. (1994). The discursive mind. Sage Publications.
Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. *Journal of Management, 21*(5), 967–988. https://doi.org/10.1177/014920639502100509
Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational Research Methods, 1*(1), 104–121. https://doi.org/10.1177/109442819800100106
Hitt, M. A., Dacin, T. M., Levitas, E., Arregle, J.-L., & Borza, A. (2000). Partner selection in emerging and developed market contexts: Resource-based and organizational learning perspectives. *Academy of Management Journal, 43*(3), 449–467. https://doi.org/10.5465/1556404
Holt, D. T., Rutherford, M. W., & Kuratko, D. F. (2010). Advancing the field of family business research: Further testing the measurement properties of the F-PEC. *Family Business Review, 23*(1), 76–88. https://doi.org/10.1177/0894486509349943
Hu, L., & 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/10.1080/10705519909540118
Huang, M., Li, P., Meschke, F., & Guthrie, J. P. (2015). Family firms, employee satisfaction, and corporate performance. *Journal of Corporate Finance, 34*, 108–127. https://doi.org/10.1016/j.jcorpfin.2015.08.002
Irava, W. J., & Moores, K. (2010). Clarifying the strategic advantage of familiness: Unbundling its dimensions and highlighting its paradoxes. *Journal of Family Business Strategy, 1*(3), 131–144. https://doi.org/10.1016/j.jfbs.2010.08.002
James, A. E., Jennings, J. E., & Jennings, P. D. (2017). Is it better to govern managers via agency or stewardship? Examining asymmetries by family versus nonfamily affiliation. *Family Business Review, 30*(3), 262–283. https://doi.org/10.1177/0894486517717532
Jaskiewicz, P., Combs, J. G., & Rau, S. B. (2015). Entrepreneurial legacy: Toward a theory of how some family firms nurture transgenerational entrepreneurship. *Journal of Business Venturing, 30*(1), 29–49. https://doi.org/10.1016/j.jbusvent.2014.07.001
Karofsky, P., Millen, R., Yilmaz, M. R., Smyrnios, K. X., Tanewski, G. A., & Romano, C. A. (2001). Work-family conflict and emotional well-being in American family businesses. *Family Business Review, 14*(4), 313–324. https://doi.org/10.1111/j.1741-6248.2001.00313.x
Kellermanns, F. W., & Eddleston, K. A. (2004). Feuding families: When conflict does a family firm good. *Entrepreneurship Theory and Practice, 28*(3), 209–228. https://doi.org/10.1111/j.1540-6520.2004.00040.x
Kellermanns, F. W., Eddleston, K. A., Sarathy, R., & Murphy, F. (2012). Innovativeness in family firms: A family influence perspective. *Small Business Economics, 38*(1), 85–101. https://doi.org/10.1007/s11187-010-9268-5
Klein, S. B. (2000). Family businesses in Germany: Significance and structure. *Family Business Review, 13*(3), 157–181. https://doi.org/10.1111/j.1741-6248.2000.00157.x
Klein, S. B., Astrachan, J. H., & Smyrnios, K. X. (2005). The F-PEC scale of family influence: Construction, validation, and further implication for theory. *Entrepreneurship Theory and Practice, 29*(3), 321–339. https://doi.org/10.1111/j.1540-6520.2005.00086.x
Kline, R.B. (2016). Principles and Practice of Structural Equation Modeling (4th ed.). Guilford Press.
Köhn, P., Ruf, P. J., & Moog, P. (2023). Why are non-family employees intrapreneurially active in family firms? A multiple case study. *Journal of Family Business Strategy, 14*(3), Article 100532. https://doi.org/10.1016/j.jfbs.2022.100532
König, A., Kammerlander, N., & Enders, A. (2013). The family innovator's dilemma: How family influence affects the adoption of discontinuous technologies by incumbent firms. *Academy of Management Review, 38*(3), 418–441. https://doi.org/10.5465/amr.2011.0162
Koropp, C., Kellermanns, F. W., Grichnik, D., & Stanley, L. (2014). Financial decision making in family firms: An adaptation of the theory of planned behavior. *Family Business Review, 27*(4), 307–327. https://doi.org/10.1177/0894486514522483
Kristof, A. L. (1996). Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology, 49*(1), 1–49. https://doi.org/10.1111/j.1744-6570.1996.tb01790.x
Kukla, A. (2000). Social constructivism and the philosophy of science. Psychology Press.
Labaki, R., Michael-Tsabari, N., & Zachary, R. K. (2013). Exploring the emotional nexus in cogent family business archetypes. *Entrepreneurship Research Journal, 3*(3), 301–330. https://doi.org/10.1515/erj-2013-0034
Lamb, N. H., & Butler, F. C. (2018). The influence of family firms and institutional owners on corporate social responsibility performance. *Business & Society, 57*(7), 1374–1406. https://doi.org/10.1177/0007650316648443
Lansberg, I. S., Perrow, E. L., & Rogolsky, S. (1988). Family business as an emerging field. *Family Business Review, 1*(1), 1–8. https://doi.org/10.1111/j.1741-6248.1988.00001
Lindow, C. M., Stubner, S., & Wulf, T. (2010). Strategic fit within family firms: The role of family influence and the effect on performance. *Journal of Family Business Strategy, 1*(3), 167–178. https://doi.org/10.1016/j.jfbs.2010.08.004
Litz, R. A. (1995). The family business: Toward definitional clarity. *Family Business Review, 8*(2), 71–81. https://doi.org/10.1111/j.1741-6248.1995.00071.x
Litz, R. A. (2008). Two sides of a one-sided phenomenon: Conceptualizing the family business and business family as a Möbius strip. *Family Business Review, 21*(3), 217–236. https://doi.org/10.1177/08944865080210030104
Llach, J., Sanchez-Famoso, V., & Danes, S. M. (2023). Unmasking nonfamily employees' complex contribution to family business performance: A place identity theory approach. *Journal of Family Business Strategy, 14*(4), Article 100593. https://doi.org/10.1016/j.jfbs.2023.100593
Locke, K. (2012). Grounded theory in management research. Sage Publications.
Luhmann, N. (1995). Social systems. Stanford University Press.
Luhmann, N., Baecker, D., & Gilgen, P. (2013). Introduction to systems theory. Polity.
Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review, 21*(1), 135–172. https://doi.org/10.2307/258632.
Lumpkin, G. T., Martin, W., & Vaughn, M. (2008). Family orientation: Individual-level influences on family firm outcomes. *Family Business Review, 21*(2), 127–138. https://doi.org/10.1111/j.1741-6248.2008.00120.x
Mael, F., & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior, 13*(2), 103–123. https://doi.org/10.1002/job.4030130202
Mahto, R. V., Davis, P. S., Pearce, I. I., J. A., & Robinson Jr, R. B. (2010). Satisfaction with firm performance in family businesses. *Entrepreneurship Theory and Practice, 34*(5), 985–1001. https://doi.org/10.1111/j.1540-6520.2010.00393.x
Mangiò, F., Mismetti, M., Lissana, E., & Andreini, D. (2023). That's the Press, Baby! How journalists co-create family business brands meanings: A mixed method analysis. *Journal of Business Research, 161*, 113842. https://doi.org/10.1016/j.jbusres.2023.113842
Martin, G., & Gomez-Mejia, L. (2016). The relationship between socioemotional and financial wealth: Re-visiting family firm decision making. *Management Research: Journal of the Iberoamerican Academy of Management, 14*(3), 215–233. https://doi.org/10.1108/mrjiam-02-2016-0638
Martin, J. A., & Eisenhardt, K. M. (2010). Rewiring: Cross-business-unit collaborations in multibusiness organizations. *Academy of Management Journal, 53*(2), 265–301. https://doi.org/10.5465/amj.2010.49388795
Mazzi, C. (2011). Family business and financial performance: Current state of knowledge and future research challenges. *Journal of Family Business Strategy, 2*(3), 166–181. https://doi.org/10.1016/j.jfbs.2011.07.001

Memili, E., Eddleston, K. A., Kellermanns, F. W., Zellweger, T., & Barnett, T. (2010). The critical path to family firm success through entrepreneurial risk taking and image. *Journal of Family Business Strategy, 1*(4), 200–209. https://doi.org/10.1016/j.jfbs.2010.10.005

Micelotta, E. R., & Raynard, M. (2011). Concealing or revealing the family? Corporate brand identity strategies in family firms. *Family Business Review, 24*(3), 197–216. https://doi.org/10.1177/0894486511407321

Miller, D., & Le Breton-Miller, I. (2014). Deconstructing socioemotional wealth. *Entrepreneurship Theory and Practice, 38*(4), 713–720. https://doi.org/10.1111/etap.12111

Miller, D., Le Breton-Miller, I., Amore, M. D., Minichilli, A., & Corbetta, G. (2017). Institutional logics, family firm governance and performance. *Journal of Business Venturing, 32*(6), 674–693. https://doi.org/10.1016/j.jbusvent.2017.08.001

Miller, D., Le Breton-Miller, I., Lester, R. H., & Cannella, A. A. (2007). Are family firms really superior performers. *Journal of Corporate Finance, 13*(5), 829–858. https://doi.org/10.1016/j.jcorpfin.2007.03.004

Miller, D., Steier, L., & Le Breton-Miller, I. (2003). Lost in time: Intergenerational succession, change, and failure in family business. *Journal of Business Venturing, 18*(4), 513–531. https://doi.org/10.1016/S0883-9026(03)00058-2

Minichilli, A., Corbetta, G., & MacMillan, I. C. (2010). Top management teams in family-controlled companies: 'Familiness', 'faultlines', and their impact on financial performance. *Journal of Management Studies, 47*(2), 205–222. https://doi.org/10.1111/j.1467-6486.2009.00888.x

Minkov, M., & Kaasa, A. (2022). Do dimensions of culture exist objectively? A validation of the revised Minkov-Hofstede model of culture with World Values Survey items and scores for 102 countries. *Journal of International Management, 28*(4), Article 100971. https://doi.org/10.1016/j.intman.2022.100971

Mismetti, M., Rondi, E., & Bettinelli, C. (2023). Family business system dynamics in the aftermath of in-law entry: A reflection on emotions and strategic change. *Longest Range Planning, 56*(5), Article 102250. https://doi.org/10.1016/j.lrp.2022.102250

Morgan, G., & Smircich, L. (1980). The case for qualitative research. *The Academy of Management Review, 5*(4), 491–500. https://doi.org/10.2307/257453

Mussolino, D., & Calabrò, A. (2014). Paternalistic leadership in family firms: Types and implications for intergenerational succession. *Journal of Family Business Strategy, 5*(2), 197–210. https://doi.org/10.1016/j.jfbs.2013.09.003

Neckebrouck, J., Schulze, W., & Zellweger, T. (2018). Are family firms good employers? *Academy of Management Journal, 61*(2), 553–585. https://doi.org/10.5465/amj.2016.0765

Nunnally, J.C., & Bernstein, I.H. (1994). Psychometric theory (3rd edition). McGraw-Hill.

Olson, P. D., Zuiker, V. S., Danes, S. M., Stafford, K., Heck, R. K. Z., & Duncan, K. A. (2003). The impact of the family and the business on family business sustainability. *Journal of Business Venturing, 18*(5), 639–666. https://doi.org/10.1016/S0883-9026(03)00014-4

Padgett, M. Y., & Morris, K. A. (2005). Keeping it "all in the family:" Does nepotism in the hiring process really benefit the beneficiary? *Journal of Leadership & Organizational Studies, 11*(2), 34–45. https://doi.org/10.1177/107179190501100205

Palincsar, A. S. (1998). Social constructivist perspectives on teaching and learning. *Annual Review of Psychology, 49*(1), 345–375. https://doi.org/10.1146/annurev.psych.49.1.345

Pearson, A. W., Carr, J. C., & Shaw, J. C. (2008). Toward a theory of familiness: A social capital perspective. *Entrepreneurship Theory and Practice, 32*(6), 949–969. https://doi.org/10.1111/j.1540-6520.2008.00265.x

Pearson, A. W., Holt, D. T., & Carr, J. C. (2014). Scales in family business studies. In L. Melin, M. Nordqvist, & P. Sharma (Eds.), *The Sage handbook of family business* (pp. 551–572). Sage Publications.

Pearson, A. W., & Lumpkin, G. T. (2011). Measurement in family business research: How do we measure up? *Family Business Review, 24*(4), 287–291. https://doi.org/10.1177/0894486511426967

Pimentel, D., Serras Pires, J., & Almeida, P. L. (2020). Perceptions of organizational justice and commitment of non-family employees in family and non-family firms. *International Journal of Organization Theory & Behavior, 23*(2), 141–154. https://doi.org/10.1108/ijotb-07-2019-0082

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879

Poza, E. J., Alfred, T., & Maheshwari, A. (1997). Stakeholder perceptions of culture and management practices in family and family firms—A preliminary report. *Family Business Review, 10*(2), 135–155. https://doi.org/10.1111/j.1741-6248.1997.00135.x

Querbach, S., Waldkirch, M., & Kammerlander, N. (2022). Benefitting from benefits—A comparison of employee satisfaction in family and non-family firms. *Journal of Family Business Strategy, 13*(2), Article 100351. https://doi.org/10.1016/j.jfbs.2020.100351

Ramos, H. M., Man, T. W. Y., Mustafa, M., & Ng, Z. Z. (2014). Psychological ownership in small family firms: Family and non-family employees' work attitudes and behaviours. *Journal of Family Business Strategy, 5*(3), 300–311. https://doi.org/10.1016/j.jfbs.2014.04.001

Rau, S. B., Astrachan, J. H., & Smyrnios, K. X. (2018). The F-PEC revisited: From the family business definition dilemma to foundation of theory. *Family Business Review, 31*(2), 200–213. https://doi.org/10.1177/0894486518778172

Resick, C. J., Baltes, B. B., & Shantz, C. W. (2007). Person-organization fit and work-related attitudes and decisions: Examining interactive effects with job fit and conscientiousness. *Journal of Applied Psychology, 92*(5), 1446–1455. https://doi.org/10.1037/0021-9010.92.5.1446

Ringov, D., & Zollo, M. (2007). The impact of national culture on corporate social performance. *Corporate Governance: The International Journal of Business in Society, 7*(4), 476–485. https://doi.org/10.1108/14720700710820551

Rondi, E., De Massis, A., & Kotlar, J. (2019). Unlocking innovation potential: A typology of family business innovation postures and the critical role of the family system. *Journal of Family Business Strategy, 10*(4), Article 100236. https://doi.org/10.1016/j.jfbs.2017.12.001

Rosenblatt, P.C., de Mik, L., Anderson, R.M., & Johnson, P.A., 1985, The family in business (1st edition). Jossey-Bass Publishers.

Ruf, P. J., Graffius, M., Wolff, S., Moog, P., & Felden, B. (2021). Back to the roots: Applying the concept of individual human values to understand family firm behavior. *Family Business Review, 34*(1), 48–70. https://doi.org/10.1177/0894486520944282

Sageder, M., Mitter, C., & Feldbauer-Durstmüller, B. (2018). Image and reputation of family firms: A systematic literature review of the state of research. *Review of Managerial Science, 12*(1), 335–377. https://doi.org/10.1007/s11846-016-0216-x

Saks, A. M., & Ashforth, B. E. (1997). A longitudinal investigation of the relationships between job information sources, applicant perceptions of fit, and work outcomes. *Personnel Psychology, 50*(2), 395–426. https://doi.org/10.1111/j.1744-6570.1997.tb00913.x

Salvato, C., & Melin, L. (2008). Creating value across generations in family-controlled businesses: The role of family social capital. *Family Business Review, 21*(3), 259–276. https://doi.org/10.1177/08944865080210030107

Schulze, W. S., Lubatkin, M. H., & Dino, R. N. (2003). Toward a theory of agency and altruism in family firms. *Journal of Business Venturing, 18*(4), 473–490. https://doi.org/10.1016/S0883-9026(03)00054-5

Shanker, M. C., & Astrachan, J. H. (1996). Myths and realities: Family businesses' contribution to the US economy–A framework for assessing family business statistics. *Family Business Review, 9*(2), 107–123. https://doi.org/10.1111/j.1741-6248.1996.00107.x

Sharma, P., Chrisman, J. J., & Chua, J. H. (1997). Strategic management of the family business: Past research and future challenges. *Family Business Review, 10*(1), 1–35. https://doi.org/10.1111/j.1741-6248.1997.00001.x

Sharma, P., Chrisman, J. J., & Gersick, K. E. (2012). 25 years of family business review. *Family Business Review, 25*(1), 5–15. https://doi.org/10.1177/0894486512437626

Sieger, P., Bernhard, F., & Frey, U. (2011). Affective commitment and job satisfaction among non-family employees: Investigating the roles of justice perceptions and psychological ownership. *Journal of Family Business Strategy, 2*(2), 78–89. https://doi.org/10.1016/j.jfbs.2011.03.003

Sirmon, D. G., & Hitt, M. A. (2003). Managing resources: Linking unique resources, management, and wealth creation in family firms. *Entrepreneurship Theory and Practice, 27*(4), 339–358. https://doi.org/10.1111/1540-8520.t01-1-00013

Smyrnios, K., Tanewski, G., & Romano, C. (1998). Development of a measure of the characteristics of family business. *Family Business Review, 11*(1), 49–60. https://doi.org/10.1111/j.1741-6248.1998.00049.x

Steffy, B. D., & Grimes, A. J. (1986). A critical theory of organization science. *The Academy of Management Review, 11*(2), 322–336. https://doi.org/10.2307/258463

Stough, R., Welter, F., Block, J., Wennberg, K., & Basco, R. (2015). Family business and regional science: "Bridging the gap. *Journal of Family Business Strategy, 6*(4), 208–218. https://doi.org/10.1016/j.jfbs.2015.11.002

Tabor, W., Chrisman, J. J., Madison, K., & Vardaman, J. M. (2018). Nonfamily members in family firms: A review and future research agenda. *Family Business Review, 31*(1), 54–79. https://doi.org/10.1177/0894486517734683

Tagiuri, R., & Davis, J. A. (1992). On the goals of successful family companies. *Family Business Review, 5*(1), 43–62. https://doi.org/10.1111/j.1741-6248.1992.00043.x

Terry, D. J., Hogg, M. A., & McKimmie, B. M. (2000). Attitude-behaviour relations: The role of in-group norms and mode of behavioural decision-making. *British Journal of Social Psychology, 39*(3), 337–361. https://doi.org/10.1348/014466600164534

Vallejo, M. C. (2009). The effects of commitment of non-family employees of family firms from the perspective of stewardship theory. *Journal of Business Ethics, 87*(3), 379–390. https://doi.org/10.1007/s10551-008-9926-6

Van Gils, A., Huybrechts, J., Minola, T., & Cassia, L. (2019). Unraveling the impact of family antecedents on family firm image: A serial multiple-mediation model. *Journal of Family Business Strategy, 10*(1), 17–27. https://doi.org/10.1016/j.jfbs.2019.02.001

Vygotsky, L.S. (1978). Mind in society. Harvard University Press.

Ward, J.L. (1987). Keeping the family business healthy: How to plan for continuing growth, profitability, and family leadership. Palgrave Macmillan.

Wertsch, J.V., 1997, Voices of the mind: A sociocultural approach to mediated action. Harvard University Press.

Westhead, P., & Cowling, M. (1998). Family firm research: The need for a methodological rethink. *Entrepreneurship Theory and Practice, 23*(1), 31–56. https://doi.org/10.1177/104225879802300102

Whetten, D.A., Lewis, D., & Mischel, L.J. (1992). Towards an integrated model of organizational identity and member commitment. Paper presented at the 1992 annual meeting of the Academy of Management, Las Vegas.

Wolff, S., Guenther, C., Moog, P., & Audretsch, D. B. (2022). The geography of the continuum of entrepreneurship activities—A first glance based on German data. *The Journal of Technology Transfer, 48*, 1243–1273. https://doi.org/10.1007/s10961-022-09961-x

Yazici, O., Memili, E., & Patel, P. (2022). Non-family employees in family firms and turnover intentions: The relevance of identification and justice perceptions. *Entrepreneurship Research Journal, 12*(2), 107–135. https://doi.org/10.1515/erj-2019-0325

Zachary, R. K. (2011). The importance of the family system in family business. *Journal of Family Business Management, 1*(1), 26–36. https://doi.org/10.1108/20436231111122263

Zanon, J., Scholl-Grissemann, U., Kallmuenzer, A., Kleinhansl, N., & Peters, M. (2019). How promoting a family firm image affects customer perception in the age of social media. *Journal of Family Business Strategy, 10*(1), 28–37. https://doi.org/10.1016/j.jfbs.2019.01.007

Zellweger, T. M., & Astrachan, J. H. (2008). On the emotional value of owning a firm. *Family Business Review, 21*(4), 347–363. https://doi.org/10.1177/08944865080210040106

Zellweger, T. M., Eddleston, K. A., & Kellermanns, F. W. (2010). Exploring the concept of familiness: Introducing family firm identity. *Journal of Family Business Strategy, 1*(1), 54–63. https://doi.org/10.1016/j.jfbs.2009.12.003

Zellweger, T. M., Kellermanns, F. W., Eddleston, K. A., & Memili, E. (2012a). Building a family firm image: How family firms capitalize on their family ties. *Journal of Family Business Strategy, 3*(4), 239–250. https://doi.org/10.1016/j.jfbs.2012.10.001

Zellweger, T. M., Nason, R. S., & Nordqvist, M. (2012b). From longevity of firms to transgenerational entrepreneurship of families: Introducing family entrepreneurial orientation. *Family Business Review, 25*(2), 136–155. https://doi.org/10.1177/0894486511423531

Zellweger, T. M., Nason, R. S., Nordqvist, M., & Brush, C. G. (2013). Why do family firms strive for nonfinancial goals? An organizational identity perspective. *Entrepreneurship Theory and Practice, 37*(2), 229–248. https://doi.org/10.1111/j.1540-6520.2011.00466.x

Zhang, X., & Bartol, K. M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of Management Journal, 53*(1), 107–128. https://doi.org/10.5465/amj.2010.48037118