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- Special Issue Editorial - WOMEN IN SMALL AND MEDIUM SIZED FAMILY FIRMS
- Gender diversity and performance in family small and medium-sized businesses
- Women's entrepreneurial orientation in small family firms
- Toward a specific framework of a gendered CSR for family SMEs
- Daughters' involvement and female succession in family businesses
- Student entrepreneurship
- Supporting learning process on SMEs investigating the causes of corporate crisis
- Leadership, organizational adaptability and firm performance in Italian family companies



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EDITORIAL

WOMEN IN SMALL AND MEDIUM SIZED FAMILY FIRMS:
THEORY AND PRACTICE

Giorgia Maria D'Allura
University of Catania
gdallura@unicit.it

Mariasole Bannò
University of Brescia
mariasole.banno@unibs.it

Alexandra Dawson
Concordia University, Montreal, QC, Canada
alexandra.dawson@concordia.ca

Mariateresa Torchia
International University of Monaco,
Omnes Education Research Center.
mtorchia@monaco.edu

Francesca Maria Cesaroni
University of Urbino
francesca.cesaroni@uniurb.it

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Abstract

Research on the presence and role of women in family firms has increased in the last decades. However, most of the current knowledge has been developed by studying large firms, leaving the unique and distinctive challenges of women's involvement in small family firms still underexplored. This editorial offers, first, an interpretative lens of the articles in this special issue through the microfoundation approach of the Antecedents, Decisions and Outcomes (ADO) framework. Second, it summarizes the studies included, focusing on different key aspects of women's roles in family SMEs. Finally, it suggests directions for future research, in order to deepen our understanding of antecedents, contextual factors, and outcomes relating to the role of women in family SMEs. Women are still not a valued asset. Consistent with the goals that inspired this special issue, the findings also have important practical implications, as they provide valuable indications and suggestions for firms to be more inclusive towards women.

1. Introduction

The presence of women in key roles in business has increased over the last decades (Powell, 2018; Seierstad et al., 2017). Family Small and Medium-Sized Enterprises (SMEs) represent an interesting arena to improve our understanding of women's advancement in business. First, SMEs are the engines of economic growth (e.g., Audretsch, 2007; Rao et al., 2021; Van Gils, 2005), and most of them are family-owned (La Porta et al., 1999; Maseda et al., 2021). Second, family SMEs have different organizational goals, resources, risk-taking propensities, and investment horizons than non-family SMEs (Chua et al., 1999; Kotlar et al., 2014; Sharma et al., 1997). Third, scholars have debated whether family firms are more or less gender-inclusive than their non-family counterparts (Jimenez, 2009). To date, it is not yet clear whether the family context supports or hinders women's presence in key roles (Brunninge et al., 2007; D'Allura & Bannò, 2018; Jimenez, 2009; Wang, 2010).

The aim of this special issue is to investigate the role of women in family SMEs, considering that, due to their size, these firms offer an interesting perspective for analysis. We called for an investigation, through a micro-foundation approach, to develop knowledge concerning the antecedents of women's involvement in these firms and the role of family SMEs as a context that may favor or hinder women's involvement in key roles (e.g. ownership, board and management). Finally, our call had the intention to develop our knowledge about the influence of women's involvement in firms' decisions and performance (financial and non-financial outcomes).

As ownership is usually more concentrated in SMEs, shareholders are often represented directly, and the control function is less important because shareholder rights and managerial responsibilities reside in the same people (Forbes & Milliken, 1999). In this respect, we consider that studying women owners is more relevant in family SMEs compared to large firms. For instance, women owners have been described as pursuing different goals, not necessarily related to pure profitability (Anna et al., 2000). This is relevant in SMEs, seeing that owners may affect their relationship with employees and the culture in the organization more directly, with a greater focus on external stakeholders, customers and CSR goals and actions (Allen & Langowitz, 2013; Bannò et al., 2021b).

Furthermore, family SME boards tend to be more homogeneous, less structurally complex, and less formalized (Forbes & Milliken, 1999). Consequently, the range and depth of tasks developed by each member are more varied and intense than in large firms. Thus, each board member has a greater chance to influence decisions, especially women that may have non-traditional backgrounds and provide unique perspectives, experiences, and work styles as compared to their male counterparts (Daily & Dalton, 2003).

After Sharma (2004) suggested that family business scholars explore contextual and individual factors that encourage women into key roles and their impact on firms' goal and performance, this topic seems to have taken a new momentum in the field. With our special issue, we aim to contribute to current literature and inspire future contributions. Family businesses seem to represent the most suitable context to offer opportunities to women because, as family members, they are part of the pool of individuals that family owners typically count on (Campopiano et al., 2017). Although men often hold more key roles than women, recent literature suggests that family firms present natural conditions to have more women in key roles, often due to the presence of daughters or due to marriages (Brunninge et al., 2007; Chadwick & Dawson, 2018; D'Allura & Bannò, 2018; Songini & Gnan, 2009). Indeed, family firms seem to provide an enabling context for women family members providing them with better opportunities than non-family firms (Campopiano et al., 2017). On the other hand, the family business context can be an obstacle, as traditional gender roles prevailing in both family and business may be perceived as being inconsistent with corporate hierarchies (Heinonen & Hytti, 2011; Nelson & Constantinidis, 2017). Consequently, the available roles for women are often marginal, informal or invisible (Bannò et al., 2021a; Cole, 1997; Dumas, 1992; Gillis-Donovan & Moynihan-Bradt, 1990; Hollander & Bukovitz, 1990;). Furthermore, Sentuti et al. (2019) maintain that a dichotomous perspective (i.e. visible vs invisible, excluded vs included) is no longer effective to investigate women's role in family businesses, as their participation can take place in very different ways.

While a vast stream of research has analyzed women in key roles (Hughes et al., 2012; Jennings & Brush, 2013), the debate about women's key roles in family SMEs as well as the effects of their presence still has to be solved (Campopiano et al., 2017). Our aim for this special issue is to serve as a reference point to advance knowledge and inspire future research in this direction.

This editorial provides, in Section 2, an interpretative lens to discuss women's role in family SMEs; Section 3 presents an in depth overview of the contributions to this special issue; Section 4 illustrates the opportunities for advancing our understanding of the phenomenon; finally, Section 5 provides concluding remarks.

2. Women in family SMEs: a microfoundation approach

In this editorial, we offer an interpretative lens of the articles in this special issue through the microfoundation approach of Antecedents, Decisions and Outcomes (ADO) framework (Foss & Pedersen, 2019; Paul & Benito, 2018) (Figure 1).

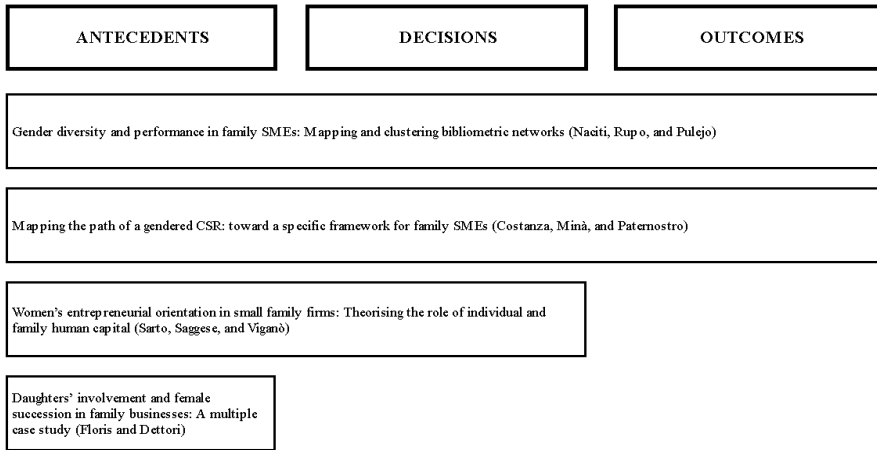
A microfoundation approach entails that macro-concepts, macro-constructs and causal relationships concerning the interaction of macro-variables have to be reconducted to their constituents: the persons and the interactions among them (Abell et al., 2008). Accordingly, in this editorial we adopt microfoundations as a multilevel explanation that privileges the micro level (i.e., women in key roles) and that gives particular importance to contextual factors when studying gender concerns.

Antecedents are analyzed by distinguishing between those related to microfoundation, the firm-level context, and the external context. In particular microfoundation refers to the characteristics of women in key roles such as competencies, education, and entrepreneurial personality; the firm-level context is depicted by the specific and proximal aspects (i.e., firms' characteristics) and the external context is depicted by more macro and distant aspects such as the cultural context.

All four articles address antecedents (Costanza et al., 2021; Floris and Dettori, 2021; Naciti et al., 2021; Sarto et al., 2021), three articles refer to characteristics of the strategic decisions and two articles identify outcomes of strategies.

As concerns microfoundation, our special issue recognizes that women's decisions and behaviors are shaped and/or influenced by the context especially at firm-level relating to the specific aspects of family SMEs (Costanza et al., 2021; Floris and Dettori, 2021; Naciti et al., 2021; Sarto et al., 2021). Further, even if many theories often overlook individuals or consider them as uniform, in our special issue, individuals are varied and their traits differ with the context (Floris & Dettori, 2021; Sarto et al., 2021). In fact, the amount of power of women in key roles is conditioned by the context, which affects the opportunities available, motivations and cognition, and in turn affects the outcomes (Costanza et al., 2021; Naciti et al., 2021).

Figure 1.



The Antecedents, Decisions and Outcomes (ADO) framework

3. Articles in the special issue

This special issue includes four studies, focusing on different key aspects of women's roles in family SMEs. Family SMEs pursue both economic and non-economic objectives (Chrisman et al., 2012). These objectives are particularly salient in family SMEs, seeing that, given their size, the family plays a key role typically holding an ownership majority and being directly involved in the management (Chrisman et al., 2014). Accordingly, two of the papers in this special issue provide timely literature reviews on women's role in family SMEs with regard to outcomes in terms of financial performance (Naciti et al., 2021) and corporate social responsibility, more specifically the inclusion of gender equality goals in firms' CSR (Costanza et al., 2021).

The other two papers in this special issue are empirical, adopting a qualitative methodology through case studies. This inductive approach is appropriate to advance research that is not fully developed and to provide conceptual insight and spur future research (Bansal & Corley, 2012). One of these papers (Sarto et al., 2021) focuses on women's entrepreneurial orientation (EO), which is key for innovative behavior and growth but can also be a challenge for family SMEs. Given their size, these firms may lack the resources required for EO and may have goal conflicts, creating obstacles for the ability and willingness of these firms to engage in entrepreneurship (Arzubiaga et al., 2018). The other paper (Floris & Dettori, 2021) considers daughters as successors, focusing on the support (or lack thereof) from the family as a result of motherhood. Indeed, motherhood can be a challen-

ge, threatening women's roles and professional identity within the family business. At the same time though, family SMEs can allow greater flexibility than larger firms, allowing women to navigate gendered expectations more easily (Hytti et al., 2017).

The abstracts for the four studies can be found below.

In their bibliometric analysis, Naciti et al. (2021) analyze studies investigating the relationship between gender diversity in family SMEs and performance. Through their literature review of 125 articles, the authors highlight key aspects of women's profiles within family SMEs by identifying networks and clusters among citation data. This allows them to distinguish among three clusters of family SMEs, identifying firms with women involved in corporate governance and performance, firms where women have a formal engagement in the family business, and firms in which women only have an ancillary role.

Costanza et al. (2021) develop a literature review on the role of women in corporate social responsibility (CSR). Through thematic analysis they identify four research phases on the topic of gendered CSR, i.e., the inclusion of gender equality goals in firms' CSR, and propose a conceptual framework to systematize prior literature contextualizing it in light of family SMEs. They also offer key research avenues and offer future research questions to move this topic forward.

Sarto et al. (2021) focus more specifically on one aspect of women's involvement in family SMEs by analyzing their entrepreneurial orientation, considering how it may be influenced by individual characteristics and human capital. Based on multiple qualitative case studies, the authors find that conservatism and lateral thinking affect women's entrepreneurial orientation in family SMEs. These relationships are moderated by educational level, functional background in finance and previous experience in the family firm.

Floris & Dettori (2021) conclude our special issue and draw on a family embeddedness perspective to consider daughters' succession in family SMEs, in particular when they become mothers. Based on four qualitative case studies, the study concludes that these women may typically experience family discouragement, a family-coach approach, family persuasion, or role demotion. They also highlight the importance of the intertwining among family support, family protectiveness and daughter self-efficacy.

Understanding the role of women in family SMEs, their motivation to enter the business, their impact and contribution to the business are crucial. This special issue contributes to the current debate in different ways.

As concerns Antecedents, the contribution of Sarto et al. (2021) advan-

ces the theoretical reasoning about women's entrepreneurial orientation. Using direct interviews with women entrepreneurs they found that women entrepreneurs are conservative and lateral thinking, and this affects their entrepreneurial orientation. Family context together with educational level and functional background in finance moderate the relationship, but further investigation is still needed. Floris & Dettori (2021) contribute to practice highlighting the importance of the intertwining among family support, family protectiveness and daughter self-efficacy. In the meanwhile, they open the black box on the role of women in the succession process, inspiring deeper investigation into a topic that may have relevant practical implications.

The contributions of Naciti et al. (2021) and Sarto et al. (2021) analyze the reasons and characteristics of the context that lead women to different strategic Decisions. They point out that there is a clear need to incorporate gender issues to understand how strategic decisions are made.

Concerning Outcomes, the article of Naciti and colleagues (2021) advances our theoretical understanding of the role of women in SMEs by mapping the relationship between gender diversity in family SMEs and performance. One of their main results highlights a shift in the literature from issues of family conflict, succession, and female compensation to a new investigation of the role of women in firm boards in relation to *financial performance*. Such evidence may have relevant practical implications inspiring future research in order to support women empowerment as a driving force to achieve the firm's goals. Costanza et al. (2021), by systematizing prior literature on gender and CSR, also offer a contextualization in family SMEs in terms of outcomes. With their research agenda, their contribution is a starting point for future research to move this topic forward.

Table 1. Articles in this special issue

Authors	Title	Focus	Type of article	Methodology	Sample	Key findings
Naciti, Rupo, and Pulejo	Gender diversity and performance in family small and medium-sized business: Mapping and clustering bibliometric networks	Relationship between women's roles in family SME and performance	Conceptual	Literature review	125 articles	The authors propose a typology of three types of family SMEs based on women's involvement
Costanza, Minà, and Paternostro	Mapping the path of a gendered CSR: Toward a specific framework for family SMEs	Gendered corporate social responsibility (CSR), i.e. the inclusion of gender equality goals in firms' CSR	Conceptual	Literature review	104 articles	The authors propose a conceptual framework to systematize prior literature and identify future research directions in light of family SMEs
Sarto, Saggese, and Viganò	Women's entrepreneurial orientation in small family firms: Theorizing the role of individual and family human capital	Influence of individual characteristics and human capital on entrepreneurial orientation of women	Empirical	Case studies	Six small Italian family firms with women as owner-managers (16 interviews)	Conservatism and lateral thinking affect women's entrepreneurial orientation in family SMEs
Floris and Dettori	Daughters' involvement and female succession in family businesses: A multiple case study	Women successors' experiences after motherhood	Empirical	Case studies	Four small Italian family firms with daughters as successors (8 interviews)	Women typically experience family discouragement, a family-coach approach, family persuasion, or role demotion

4. Opportunities for advancing the understanding of women's role in family SMEs

While the articles included in this special issue offer an interesting perspective on the role of women in family SMEs, there is still room for further research on the topic. In line with the ADO framework, it would be useful to further deepen our understanding of antecedents, contextual factors and actual outcomes about the role of women in family SMEs.

First, it would be interesting to know more about the antecedents, in particular what are the mechanisms in place to favor the entrance and also the inclusion and integration of women in family SMEs. Indeed, while the family firm context can favor the presence of women in the business, it is not well understood what their real contribution is to the strategic decision making process. Do they occupy key roles or do they face a "glass ceiling" in their career advancement? What are the mechanisms that can be put into

place to avoid this situation? What is the role of the founder and of the family in supporting the inclusion and integration of women in family SMEs?

Second, there is a need to understand better how the external context (e.g., institutions, culture, traditions and historical backgrounds) influences the role of women in family SMEs (Bannò et al., *forthcoming*). If we imagine, for example, countries where the primogeniture rule is in place we could observe that traditionally it is the first male born child that will take over the business, thus women are not considered in the succession pipeline (Calabrò et al., 2018). Studies have shown that women's ascension to leadership in family businesses and the control for daughters can occur under "special circumstances" such as in the absence of male heirs or when the family business encounters a crucial transition or crisis event (Haberman & Danes, 2007). In this context it would be interesting to understand the family dynamics: for example, how conflicts among siblings or between parents and children arise and how those conflicts are managed by the family and their impact on family SMEs performance.

Third, while women in key roles and their impact on firms' outcomes have been studied, further research could explore this link in family SMEs. Particularly, the role of women in family SMEs can be addressed by using a wide perspective, by considering for example social aspects and family dynamics thus impacting the operations, sustainability, and succession of family businesses. Furthermore, we suggest developing the stream of literature on the role of women in business by taking into account the fact that women contribute to family SMEs not because of their gender characteristics but because of their competences, experiences, background and because of what they bring in the workplace. We need to take into consideration from a theoretical point of view if and how women are involved. Further, we need to finally abandon purely quantitative approaches that verify the presence of women as a control variable; meanwhile, we should introduce specific theories (i.e. feminist theory) to advance our understanding of the value of diversity inside the firm.

Finally, from a methodological perspective, both conceptual and empirical—qualitative and quantitative—research could address these topics. Thus it is important to approach these questions with a multidisciplinary approach and using different methods to capture all the nuances and facets of this complex phenomenon.

5. Conclusions

Consistent with the goals that inspired this special issue, the selected articles allow us to expand our knowledge on antecedents, decisions and outcomes about the involvement of women in key roles in family SMEs.

The findings in this special issue have important practical implications, as they provide valuable indications and suggestions for firms to be more inclusive towards women. Women are still not a valued asset. If women are simply involved to conform to legal constraints or to preserve family relationships, we risk not to fully capture their value and contribution. Ability and competence are gender free and firms (and society) need to value women by creating a context that supports their contributions, such as an inclusive atmosphere in the boardroom. Our hope, through the findings and reflections in our special issue, is to inspire the building of an inclusive context where women can fully express their ability and competences. We believe that it is time to reduce the negative consequences of women's exclusion from business key roles and research going in this direction will help in this sense.

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RESEARCH ARTICLES



GENDER DIVERSITY AND PERFORMANCE IN FAMILY
SMALL AND MEDIUM-SIZED BUSINESSES: MAPPING AND
CLUSTERING BIBLIOMETRIC NETWORKS

Valeria Naciti
University of Messina
vnaciti@unime.it

Daniela Rupo
University of Messina
daniela.rupo@unime.it

Luisa Pulejo
University of Messina
luisa.pulejo@unime.it

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Abstract

Over the past few years, firms have increasingly begun to consider inclusion and gender diversity as a source of competitive advantage and, in particular, as a key factor for growth. Prior literature has addressed the topics of gender diversity and performance in large and medium enterprises finding controversial results in this relationship. In this context, less attention has been paid to family SMEs and to exploring the key factors of such relationships.

This article answers the call for a deeper understanding on women's experience and role in family SMEs, supporting the claim to adopt new methodological research tools.

Accordingly, this paper explores the connections between gender diversity in family SMEs and performance as reflected in established research, through a bibliometric analysis conducted on 125 articles published in the period 1999-2021. Keyword analysis reveals the existence of three independent clusters of research which can be traced back to the following three topics: Women's involvement in Corporate Governance and Performance (Green Cluster), Women's formal engagement in Family Business (Blue Cluster), and Female Ancillary Role (Red Cluster). In each of these clusters, it is possible to identify key aspects of women's profile within family SMEs. This study offers valuable results from both the academic and business perspectives. The bibliometric analysis carried out clearly illustrates the different stages of this field of study, as well as the emerging lines of research, which can be studied in greater depth.

1. Introduction

Over the past few years, firms have increasingly begun to consider inclusion and gender diversity as a source of competitive advantage and a key factor for growth. Furthermore, the beneficial effect of higher levels of diversity on business results is increasingly manifest. As evidenced by the results of a study conducted by McKinsey (McKinsey, 2020) - which analyzed a sample of over 1,000 firms in 2017 - there is a positive correlation between the presence of women in management teams and financial performance. In detail, top-quartile firms for gender diversity were not only 21% more likely than fourth-quartile firms to exceed national industry peers on EBIT margin but were also 27% more likely to have industry-leading performance on long-term value creation, as evaluated by economic profit margin.

Much empirical evidence points to a positive relationship between gender equality and large firm performance; however, the presence of high heterogeneity in the results of the studies conducted so far (Schneid, 2015; Bartolacci et al., 2017; Naciti, 2019;) should also be emphasized. In the analysis of Carter, Simkins and Simpson (2003), a positive relationship was highlighted between the presence of women and Tobin's Q; similarly, analyzes by Erhardt et al. (2003), Smith et al. (2006), Christiansen Lin et al. (2016) and Darko et al. (2016) observed how a gender-diversified board of directors has a positive impact on performance as measured by ROA and ROE. Conversely, other studies such as Adams and Ferreira (2009) and Hassan et al. (2018) found that the presence of women has negative effects on some performance indicators. Conversely, other studies such as Adams and Ferreira (2009) and Hassan et al. (2018) found that the presence of women has negative effects on some performance indicators.

In short, firms with more women in top positions may perform better.

These numbers support the thesis that it is increasingly important to promote gender diversity and inclusiveness in firms to strengthen organizational effectiveness (Naciti, 2019).

In this context, gender diversity has been studied through the lens of Diversity Management (DM) which can be defined as a strategic approach aimed at eliminating organizational barriers created by diversity (McNerney, 1994). Indeed, DM emerged in response to the need to effectively manage the different human resources working in organizations. Negative aspects linked to diversity are inherent to the underestimation of minorities' skills and inner characteristics. It has been shown that though most research on gender diversity focuses on large firms, attention to the relationship between gender diversity and organizational performance has also been paid to family small and medium-sized enterprises (SMEs).

The available data show that women's participation in family firm boards of directors (BoD) has risen, owing in part to the establishment of

corporate governance standards in numerous Western nations, notably the United States and Europe (Diaz et al., 2018; Chamochumbi et al., 2018).

In Italy, for example, the percentage of listed family firms with at least one female director increased from 53.3% in 2007 to 92.7% in 2016. However, it is apparent that this was not a natural occurrence, but rather the result of the implementation of the so-called “pink quotas” (Law no. 120/2011). This is supported by the fact that in unlisted family firms the percentage of BoDs with at least one woman has stayed essentially stable over the previous 10 years, given that these firms are not subject to legal responsibilities (Diaz et al., 2018).

Women in leadership and management positions, particularly in family businesses, should have a say in strategy, choices, and outcomes. The adoption of management techniques is linked to the influence of strategies, choices, and outcomes. In other words, women’s participation in family SMEs may be connected to the expansion of the firm’s management mechanisms or the level of “professionalization,” (Songini and Gnan, 2009). In truth, professionalization of family SMEs does not always require women’s engagement; it may be handled by professional managers with relevant competences and capacities, regardless of gender.

Although prior literature has addressed the topics of gender diversity and performance, less attention has been paid to the evolution of studies that analyze their relationship. To the best of our knowledge, there are no studies that provide a bibliometric analysis on the link between gender diversity and performance in family business, which this study has attempted to present.

Following the methodology proposed by Van Eck and Waltman (2017), this paper employs co-occurrence keywords and co-citation-based clustering analysis of literature over the last 2 decades, from 1999 to 2021. This methodology identifies the main theoretical building blocks of gender diversity in family SMEs, by revealing the type and intensity of connections existing between them, thus uncovering the different paths that scholars have taken in the past. Based on the results of this analysis, the paper then proposes possible theoretical extensions that might be explored in future research. Using co-citation bibliometric analysis, co-occurrence keywords, and chronological keyword analysis, this study explores answers to the following research questions:

- RQ1. Which channels (authors, journals, and articles) are the most influential in the research of gender diversity in family SMEs and performance?
- RQ2. How are articles clustered, which research streams are likely to emerge in family business studies, and what has been the evolution over time of studies focused on gender diversity in family SMEs and performance?

- RQ3. What are the main topics (keywords) underlying the relationship between gender diversity and performance in family SMEs?

This article answers the call for a deeper understanding on women's experience and role in family SMEs and the claim to adopt new methodological tools (Bannò et al., 2021). It provides both managerial and theoretical implications. The bibliometric study clearly outlines the different stages in this field of knowledge and allows to identify lines of research that can be explored further, as well as being useful drivers for family business decision makers to enhance all the performance benefits related to gender diversity.

The paper proceeds as follows: Section 2 briefly reviews the extant general research on diversity management in corporate settings. Section 3 explains the criteria used for identifying past publications on gender diversity and performance as well as the analytical methods employed to analyze them. Section 4 presents the results of the analysis. Finally, Section 5 discusses the implications of findings and draws conclusions.

2. Theoretical Background

2.1 General research in diversity management

The stream of research on Diversity Management (DM) dates back to the early 1990s in the United States, when firms began for the first time to consider the problem of promoting an increasingly "diverse" society (Flood & Romm, 1996). Interest in DM became financial with the dissemination of certain theories, such as "The Bottom-Line Value of Diversity" (McNeney, 1994), which strongly advised organizations to immediately take the positive effect of diversity on performance onboard (Lorbiecki and Jack, 2000).

Therefore, organizations realized that traditional governance had become insufficient to meet the needs of the demand from a global market (Ozbilgin and Taltli, 2008). Thus, diversity in the workplace became a central theme for organizations (Addabbo et al., 2020). According to Cox (1994), diversity can support organizations by providing a wide range of ideas, skills, and knowledge that can improve capabilities to solve problems and make better decisions. Many researchers have emphasized the important role of DM in organizations. Early scholars on this topic, such as Thomas and Ely (1996), suggested that effective leadership links diversity to employee effectiveness. Effective leadership promotes diversified teams to enhance different perspectives and appreciate different opinions and ideas. Research has shown mixed results on the impact of diversity in permanent law, race, and genus of organizational activity. In general, when speaking of DM, the most widespread protection measures in the historical

reference period are those related to the management of gender differences (gender diversity), age differences (age management), and cultural differences (cultural diversity).

Although today the significant impact of the presence of women on the proper functioning of the firm is recognized, their contribution is often underestimated (Constantinidis and Cornet, 2008; Barrett and Moores, 2009; Scott, 2020). Proof of this is the fact that women are involved in decision making processes to a relatively limited extent, and that their commitment is not adequately remunerated in terms of salary and firm position (Martinez Jimenez, 2009). Yet, at the same time, gender diversity is an intrinsic element of society (Mor Barak et al., 2016).

Studies of women as directors or managers in large firms are not new to management literature. Indeed, some scholars have shown that higher diversity in the workforce is expected to bring higher returns (Adams & Ferreira 2009; Marinova et al., 2016; Fernando et al., 2020), but others fail to support this claim (Darmadi, 2013; Duppatti et al., 2020). Moreover, research has shown that gender diversity in organizations leads to improved reputation, both directly and indirectly (Pulejo, 2011; Ajaz et al., 2020). Directly, because it has been demonstrated that firms with a higher percentage of female board directors are favorably viewed in sectors that operate close to the final customer. Indirectly, female directors are more likely to notice, and less likely to commit, fraud (Cumming et al., 2015). Furthermore, gender diversity policies seem also to be correlated with increased corporate social responsibility (CSR), as well as having better overall organizational performance. Additionally, it has been demonstrated that gender diversity on boards increases the diversity of ideas by introducing different perspectives and problem-solving approaches (Kakabadse et al., 2015).

The reason for this specific focus is related to the fact that financial performance can be considered “global” since it is directly or indirectly influenced by the choice of every person working in the organization – for example, physicians choosing one treatment instead of another influence the decision regarding the consumption of resources and thus overall expenditure. This is not always the case when dealing with other performance dimensions, such as quality of care – e.g., the quality of a certain specialist treatment is exclusively attributable to the performance of the people involved in the delivery of that service and not to other people. Moreover, financial results are more easily comparable between organizations that may have different organizational structures, and which may operate in different governance settings.

Management literature identifies various determinants of firm performance. In the last decade, a growing number of studies have focused on gender diversity as a driver to foster performance (Campbell & Mínguez-Vera, 2008; Fernando et al., 2020; Galletta et al., 2022). Much empirical

evidence points to a positive relationship between gender diversity and performance; however, the presence of high heterogeneity in the results of studies conducted so far should also be emphasized (Naciti, 2019; Martinez-Jimenez et al., 2020). In the analysis of Carter et al. (2003), a positive relationship was highlighted between the presence of women and Tobin's Q; similarly, Darko et al. (2016) and Moreno-Gómez et al. (2018) observed how a gender-diversified board of directors has a positive impact on performance as measured by ROA and ROE.

2.2 Gender Diversity in family businesses and SMEs

By focusing on family SMEs, it can be seen that a traditional cultural model prevails based on the attribution of distinct roles to men and women. There are pros and cons of diversity in family SMEs: firstly, due to the closeness of the head of the household to the firm, women can have more immediate access to governance/managerial roles, without running into the obstacles that are present in the labor market; secondly, the small size favors personal relationships and more immediate access to leadership roles; on the contrary, the culture of family SMEs prevents women from reaching top positions (Nasmara, 2021). Moreover, since the boundaries between business and family are often thin and poorly defined in family businesses, the same patterns and relational dynamics prevailing in the family environment tend to recur within the firm (Sundaramurthy and Kreiner, 2008). The consequence is that also within the firm, women often find themselves forced to fill, sometimes even for free, ancillary and support functions compared to the male figure, to whom positions of greater responsibility and power are reserved (Eagly and Carli, 2018). The unpaid work of women is conceived as a natural extension of the support and assistance role that women traditionally play within the family.

Studies up to now have been oriented towards analyzing the degree of the presence of women in family businesses and identifying the individual and contextual factors that affect the role of women within these businesses, the objectives pursued, and the contribution offered to the management (Sharma, 2004; Brundin et al., 2014). Women are present in every firm, and their presence in both leadership and managerial roles is also important in the case of family businesses that are, by definition, businesses *"governed and/or managed with the intention to shape and pursue the vision of the business held by a dominant coalition controlled by members of the same family or a small number of families in a manner that is potentially sustainable across generations of the family or families"* (Chua et al., 1999, p.25).

Although the relationship between gender diversity in top-middle management and performance has been widely analyzed in large firms, only a few studies have focused on family SMEs (Fairlie and Robb, 2009; Cruz

et al., 2012; Arzubigi et al., 2018; Nekhili et al., 2018) and a call for deeper investigation within the context of family small firms has been launched. Through an analysis of literature, this study intends to shed light on specific features explaining this linkage within the context of family SMEs, trying to identify the drivers and mechanisms that can support the explanation of the relationship investigated, envisaged as key factors in interpreting the impact of gender diversity on performance. In brief, the bibliometric analysis allows for interpretation of existing literature, revealing peculiarities of research fields. Since prior studies have been mainly focused on large firms, this research attempts to enhance our knowledge of gender diversity also in family SMEs.

3. Research design

3.1 Sample and data collection

Past publications on gender diversity in family SMEs and performance have been drawn from the Web of Science electronic database and then analyzed with VOSviewer software, which is a tool for constructing and visualizing bibliometric networks.

Thomson Reuters' Web of Science (WOS) is widely regarded as one of the most important bibliographic databases. While WOS data may appear to be less commonly utilized in literature reviews, using Scopus data to create networks with VOSviewer presents a significant problem since the data is not in a suitable format - Scopus data is more diverse than WoS data, and conversion is a difficult process (Linnenluecke et al., 2020).

A publication search was conducted by using the tag listed in Table 1, where TS refers to the "topic" of the publication (Naciti et al., 2021). Two of the authors independently reviewed the publications and compared their results, resulting in changes to the categorization scheme.

Following the sample criterion used by Testa et al. (2020) and Lazzaretti et al. (2017), we restricted the examination to only English-language texts from 1999 to 2021 (see Table 1). The result is a set of 125 articles, cited 1690 times up to 2021, with 13.52 citations per article on average and a h-index of 20 (see Table 1).

Table 1. Sample criteria

Rationale and objective	This paper seeks to understand the connections between gender diversity in family SMEs and performance, proposing a bibliometric analysis of existing publications
Study design	The study applies a bibliometric analysis to summarize existing literature evidence based on a rigorous process
Eligibility criteria	We considered only articles published in peer-reviewed journals for eligibility; we identified studies by searching Web of Science electronic databases and applying the codes defined by the authors; we mapped and clustered bibliometric data.
Publication time frame	1999 to 2021
Language	English
Search strategy	<p>We selected the following codes to be searched in the source database:</p> <ol style="list-style-type: none"> 1) TS=(“women” AND “family business” AND “performance”) 2) TS=(“gender diversity” AND “family business” AND “performance”) 3) TS=(“women” AND “family SME” AND “performance”) 4) TS=(“gender diversity” AND “family SME” AND “performance”) 5) TS=(“women” AND “family firm” AND “performance”) 6) TS=(“gender diversity” AND “family firm” AND “performance”) <p>Codes were separately searched on the title, abstract, and keywords sections of each record for both the identification and screening phase.</p>
Sample	<p>Results found: 125</p> <p>Sum of the Times Cited: 1690</p> <p>Average Citations per Item: 13.52</p> <p>H-index: 20</p>

3.2 Methodology

To analyze the selected papers, we adopted a methodology proposed by Waltman et al. (2010), for mapping and clustering bibliometric networks. This method can assist researchers with summing up existing literature evidence based on a rigorous, unequivocal, and straightforward stepwise iterative process. From among many similar tools, we performed the analysis using the VOSviewer software.

The software uses citation data to identify networks and clusters in various shapes and colors. These clusters are based on a link analysis, which includes the strength of linkages between the sample articles (Terminology used by the software is shown in Table 2.)

Table 2. Terminology used by VOSviewer software (Van Eck and Waltman, 2018)

Term	Description
Items	Objects of interest (e.g., publications, researchers, keywords, authors)
Link	Connection or relation between two items (e.g., co-occurrence of keywords)
Link strength	Attribute of each link, expressed by a positive numerical value. In the case of co-authorship links, the higher the value, the higher the number of publications the two researchers have co-authored
Network	Set of items connected by their links.
Cluster	Cluster Sets of items included in a map. One item can belong to only one cluster.
Weight attribute: number of links	The number of links of an item with other items.
Weight attribute: total link strength	The cumulative strength of the links of an item with other items.

The interest in gender diversity and performance in family SMEs, as theorized in this paper, likewise comprises a first evaluation of the significance of this literature gap: in this perspective, this methodological approach can provide feedback on the relevance of the gap.

Furthermore, bibliometric analysis solves some limitations of the literature review methodology by quantifying the existing literature. Indeed, literature reviews – a typical approach to transforming literature content into objective and systematic forms for identifying, specifying, mapping, and evaluating content – have often failed to recover related intellectual domains (Tranfield et al., 2003).

Additionally, this methodology gives a premise to dissecting enormous bibliometric information and grouping and envisioning it. It allows us to identify the main topics—in terms of keywords—that have most frequently appeared in literature on gender diversity and performance in family SMEs. In other words, the occurrence of a topic in literature and its co-occurrence structures represent the prominence of the topic and the strengths of the connections between them, respectively. The size of the circle shows how many times a keyword/author occurs, and colors identify which cluster the keywords belong to. Moreover, the frequency of the publications ('items' hereafter) denotes the prominence of a keyword. The strength of the connections between two keywords, say i and j , is the number of items, each one containing both keywords in the title, abstract, or author keywords (Naciti et al., 2021).

Furthermore, to examine whether the frequency of keywords in literature has changed over time, we employed a chronological analysis of keywords with weighted average of the years. The average year of occur-

rence for a keyword i is calculated by:

$$y_i = \frac{\sum_t (n_{it} t)}{\sum_t n_{it}}$$

Where n_{it} represents the number of items where keyword i occurs in year t ($t = 1999, 2009, \dots, 2021$)

Finally, we broke down the most frequently cited items and related journals in literature on gender diversity in family SMEs and performance and their co-occurrence network. The co-citation clustering procedure looks at the theoretical foundations of sampled publications and tries to distinguish which hypothetical pillars have been reviewed by examined distributions to address the topics.

4. Results

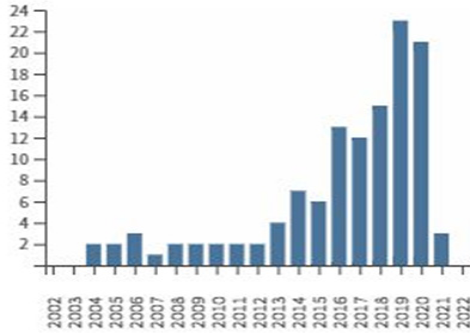
Bibliometric analysis methodologies develop across two categories: (1) performance analysis and (2) science mapping. In essence, performance analysis considers the contributions of research sections, whereas science mapping considers the links among them. The next subsections describe results from both categories.

4.1 An Overview of the selected items

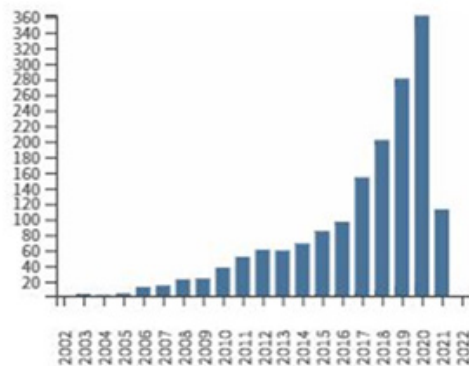
Following the criteria set out above, we identified 125 items. More than half of these (74) were published over the last 5 years (Figure 1, a). This shows that recent years have seen rapid growth in this field, with the fewest papers published during the first years and the greatest number published in 2019. Moreover, these items have been cited in recent years (Figure 1, b) confirming that the topic still represents a new research frontier for scholars.

Fig. 1: Total Items by Year (a) and sum of Times Cited by Year (b)

a)



b)



4.2 Sources

Table 3 shows the journals where at least two items of our sample have been published. The sources with a high number of publications are the *Journal of Family Business Management* (8), the *Journal of Family Business Strategy* (6), the *International Small Business Journal: Researching Entrepreneurship* (6), and the *International Journal of Gender and Entrepreneurship* (5). Thus, the main contributions to the field have been published in management and business journals.

The most cited sources are the *Small Business Economics* (230), the *International Small Business Journal: Researching Entrepreneurship* (170), the *Journal of Business Venturing* (154), and the *Family Relations* (93).

Table 3. Sources with a minimum of two items

SOURCE	ITEMS	CITATIONS
Small Business Economics	3	230
International Small Business Journal: Researching Entrepreneurship	6	170
Journal of Business Venturing	2	154
Family Relations	3	93
Family Business Review	2	84
Journal of Family Business Strategy	6	77
International Journal of Gender and Entrepreneurship	5	42
History of The Family	4	36
International Entrepreneurship and Management Journal	2	31
Education and Training	2	26
Journal Of Management & Organization	2	26
Academia-Revista Latinoamericana De Administracion	2	23
Journal of Business Ethics	2	22
International Journal of Human Resource Management	2	20
International Journal of Entrepreneurial Behavior & Research	2	18
Journal of Family Business Management	8	11
Journal of Enterprising Culture	2	9
Maritime Studies	2	4

4.3. Authors

The 125 items were written by 289 authors. Only 19 have published at least 2 articles (Table 4), while four have been cited more than 50 times. The most cited authors are Danes, Sharon M. (108), Welsh, Dianne H. B. (92), Kaciak, Eugene (84), and Memili, Esra (71).

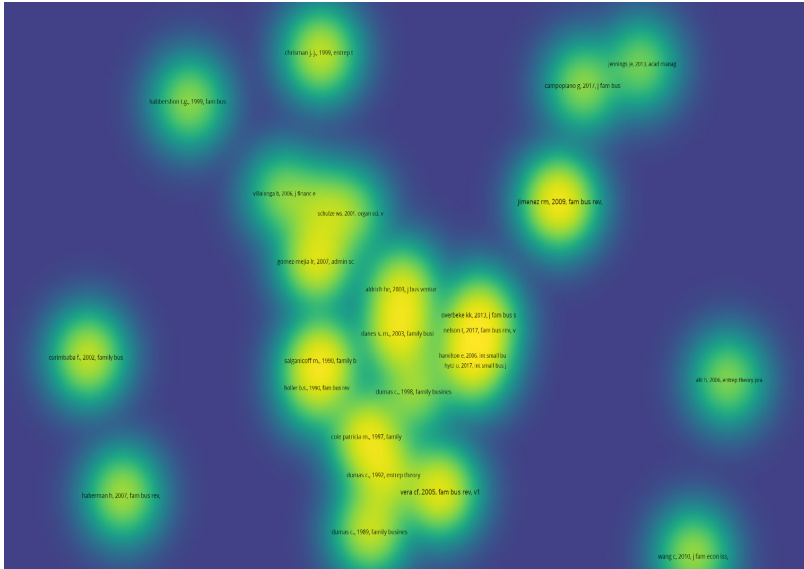
Table 4. Authors with a minimum of two items

AUTHOR	ITEMS	CITATIONS
Danes, Sharon M.	3	108
Welsh, Dianne H. B.	5	92
Kaciak, Eugene	4	84
Memili, Esra	2	71
Bilimoria, Diana	2	39
Campopiano, Giovanna	3	36
De Massis, Alfredo	2	33
Rinaldi, Francesca Romana	2	33
Sciascia, Salvatore	2	33
Ramadani, Veland	3	30
Dana, Leo-Paul	2	23
Hisrich, Robert D.	2	22
Nason, Robert S.	2	18
Byrne, Janice	2	10
Fattoum, Salma	2	10
Clinton, Eric	2	9
Mcadam, Maura	4	9
Beatriz Hernandez-Lara, Ana	2	4
Pablo Gonzales-Bustos, Juan	2	4

Co-citation analysis defines the frequency with which pairs of scientific items are cited together in source articles. The most cited articles contain key concepts, methods, or experiments in a specific field. This analysis informs us as to which items define the intellectual structure of the main issues related to women and performance in family SMEs. The analysis reveals (Fig. 2) that 6896 authors have been considered within the papers, but only 26 have been cited at least 10 times. The publication years of these papers span from 1989 to 2017.

Density analysis highlights that a large and highly concentrated area of the research (yellow zone) is based on the studies of Overbeke et al. (2013), who examined the drivers that influence succession in family businesses, using gender theory combined with the theory of planned behavior; Nelson and Constantinidis (2017) who also investigated family business succession under the lens of gender theory as socially constructed to identify further research avenues; Vera and Dean (2005), investigating on the challenges of daughters in family SMEs in the United States, found that women are not necessarily making the succession process easy for their female counterparts; finally, Hamilton (2006) analyzed the complex relationships in a family business, putting the family at the heart of the research as opposed to an individual owner-manager, pointing out the evidence of clear resistance to patriarchy.

Fig. 2: Density analysis of co-citation of the authors



4.4. Keywords

Co-occurrence of keyword analysis uses the authors' provided keywords to investigate the conceptual structure of the field (Ji et al., 2018). Despite the existence of common traits between topics, multidisciplinary fields of study such as gender and performance require deep analysis of the literature to develop new insights. Thus, a keyword analysis (Fig. 3) was performed to evaluate the specifics of the debate on gender diversity in family SMEs and performance.

WOS data contain two types of keywords: Author Keywords, which are given by the original authors, and KeyWords Plus, which are derived by Thomson Reuters from the titles of cited references. KeyWords Plus are terms or phrases that appear often in the titles of an article's references, but not necessarily in the title of the article or as Author Keywords and are created by an artificial computer system (Zhang et al., 2016). KeyWords Plus keywords, according to Garfield (1990), can capture an article's substance in greater depth and diversity.

For our purposes, we have used the KeyWords Plus function to harmonize the keywords authors used in their papers: analysis reveals that 399 keywords were used. However, only 55 appear at least twice on the list.

In terms of clusters, the normalization method of the strength of word association used by VOSviewer indicates that there are three in total, which can be distinguished by their colors, here entitled Women's Involvement in

Corporate Governance and Performance (Green Cluster), Women's Formal Engagement in Family Business (Blue Cluster), and Female Ancillary Role (Red Cluster). To locate a research stream in each of these clusters, we proceeded to read the articles linking them to the keywords found in the title of the references cited. Moreover, this analysis led us to the identification of three women's profiles within family businesses, described below.

The first cluster, in blue, consists of 18 keywords and includes keywords that primarily refer to the topic of gender and family business. Indeed, the most important words in this cluster are *family business* with a link strength of 87 and *gender* with a link strength of 67. Due to the size of the nodes and to a large number of connections with other groups of words, this is considered to be the main cluster, which seems logical since this cluster contains basic terms from the academic articles that address the presence of women in family SMEs. The word "entrepreneurship" is linked to words like "succession", "embeddedness", and "self-employment" in the blue cluster, which are not exactly related to the word "performance" (our main research filter) or even the phrase "corporate governance" (Cassia et al., 2011).

The profile identified by this cluster refers to a category of women that are effectively part of the management of the firm and take part in the governance, but their participation as members and administrators is justified exclusively by the exercise of a formal role, hence their presence in the BoD does not result in any real power to give direction to corporate strategy.

The second cluster, green, is characterized by high connections to the main cluster, as we can see a large number of short, thick lines connecting these two groups. This cluster has words that are primarily related to the words "corporate governance" and "performance", where "performance" with a link strength of 24 is one of the most influential words in this group. Words like "engagement" and "ownership" may be found in the performance cluster. As a result, women in the second profile have a formal and significant function in the organization. These are women who have positions of responsibility in the family SMEs, are part of the decision-making process and participate actively in its management.

The third cluster, in red, contains words that complement the two previous clusters since it deals with strategies, business, female entrepreneurship, marriage. In this case, where the connections are weaker as the words are more scattered, there is no high density as in the blue and green clusters. Words like "unpaid work", "marriage", and "stereotypes" appear in this cluster, leading to another profile: women who carry out tasks in the firm, aiding men in their jobs, but without having a formal position or getting paid (Haberman and Danes, 2007). The aid supplied to human work by spouses, mothers, sisters, and daughters is considered as an extension of the family care activity in this scenario (Nelson and Constantinidis, 2017).

Fig.3: Co-occurrence of keyword analysis

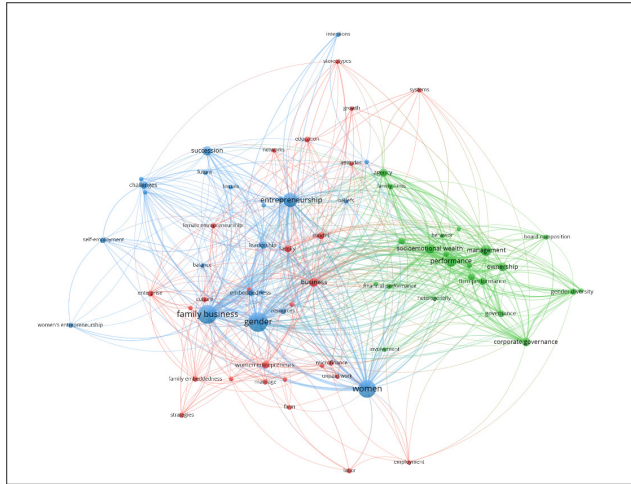


Fig 4 shows the weighted average year of keyword occurrence of 125 items. The change from blue to dark green, light green, and yellow represents the average years of keyword occurrence from 2010 to 2020. Transition in this period reflects the evolution of the topic in gender diversity in family SMEs and performance over the last decade (Naciti et al., 2021). Overall, we observe that, initially, the main objective of researchers was to discover the role of women in corporate governance and management. On the other hand, emerging lines of research focus on very current topics, such as performance and ownership.

From the 125 items, selecting the most cited in the last four years, it emerges that they are addressed to investigating the relationship between the entrepreneurial orientation of the firm, gender leadership, and female participation in the board of directors. We can somehow observe a shift in the research stream that opens the way to further development of the research line, as will be commented on below.

Cluster), and Female Ancillary Role (Red Cluster). In each of these clusters, by matching the keywords with the articles, we identified key aspects of women's profiles within family businesses. In particular, we saw that the red cluster concerns studies focused on women who carry out an activity in the firm, assisting the male figure in his work, but without having any role or being paid. In this case, the assistance provided by wives-mothers-sisters-daughters to human work is seen as an extension of the family care activity (Haberman and Danes, 2007; Nelson and Constantinidis, 2017).

The second profile (blue cluster) concerns those women who have been attributed only a formal role in the firm. As mentioned, we identified a category of women that are part of the decision-making process, but who do not fully exercise their rights as members and administrators. Hence, the role of women in family entrepreneurship is almost always one of assuming a role apparently of "support", consistent with the family stereotype which they were obliged to take up, often also in conflict with a situation in which they expressed their own ability but still in a formally subordinate way (Ratten et al., 2017). In some cases, for instance, where they inherited the activities or were called on to replace husbands, fathers or brothers who died, however, women often managed to regain the value of their commitment, but still in social contexts that penalized female entrepreneurial figures who were too autonomous, authoritarian, or independent.

Finally, the third profile (green cluster) refers to women that have a substantial role in the firm. These are women who work in the family business in positions of responsibility (Ratten et al., 2017), they are entrepreneurs, and may be members of the firm (Cesaroni et al., 2021), having a role in the governing and management bodies, assisting the male figure in all decision-making processes as co-leaders, while the male figure is recognized as the only point of reference for all the main stakeholders of the firm (Xian et al., 2021).

Overall, we observe that only the green cluster refers to women who have a substantial and responsible role closely linked to the topic of performance. Indeed, previous studies show how women executives bring experience and knowledge to the board of directors which, if contemplated and expressed, can help BoDs consider the implications of strategic decisions for a wider range of corporate stakeholders, leading to improved performance, in terms of both financial and social results (Bocquet et al., 2019; Salloum et al., 2019; Shehata et al., 2017; Galletta et al., 2021).

With reference to research question (2) on the evolution over time of studies, the overlay chronological analysis of keywords highlights that, more recently, the focus of research is shifting from issues of family conflict, succession features, and female compensation toward the investigation of the role of women in company boards in relation to *financial performance*. This reveals a gradual change in the perspective of research, no longer guided by the need to investigate gender inequality (and, under a normative ap-

proach of research, to overcome it), but inspired by an awareness that it makes more sense to discover key elements of value in gender empowerment as a driving force to achieve the firm's objectives. Indeed, the emerging topic that seems to boost the rising number of studies in this field is the role of women in family SMEs as a moderating factor in financial performance. As outlined by some empirical contributions (Arzubiaga et al., 2018; Nekhili et al., 2018; Ramadani et al., 2019; Alkhaled and Berglund, 2018) entrepreneurial orientation and performance are stronger in firms with higher levels of gender diversity on the board. The active participation of women in strategic choices seems to positively effect financial performance, playing a moderating role in family members' involvement, in contrast to the negative relationship observed in prior research between family ownership and control of the business and financial performance. It should be highlighted that an external female figure appears to be more capable of driving this change. In other words, we cannot but observe that barriers to women's involvement in family firms remains much higher for family members: this is likely due to the commingling of roles that does not allow female SME members to receive adequate recognition, nor to implement their full potential of management skills.

This study offers valuable results from both the academic and business perspectives. The bibliometric analysis clearly illustrates the different stages of this field of study, as well as the emerging lines of research, which can be studied in greater depth.

First, in the analysis of 125 articles, as regards performance, it was found that this is an area of rising interest. Furthermore, processing the keywords we found no reference to performance indicators such as ROE, ROA, and Tobin's q. Numerous studies adopt qualitative approaches of analysis-interviews, case studies, and surveys, while few quantitative studies have been conducted on the relationship between gender diversity (or female directors) and performance in family SMEs (Maseda et al., 2019). We believe that this gap is due to the lack of databases on financial reports but also to relatively poor information disclosed by family SMEs, which makes it difficult to have access to reliable and statistically relevant sources.

Second, the analysis of keywords, identifying the "words" that have appeared most frequently in literature, helps us to identify the major drivers and mechanisms underlying the main topic of gender diversity in family SMEs. Unlike the studies that have been conducted so far on large firms (Ott,2011; Bolouta,2013; Orazalin and Baydauletov, 2020; Galletta et al., 2022), keyword analysis reveals that nothing has emerged on "social performance", "environmental performance" or "sustainability performance". Indeed, over the past few decades, the concept of corporate social responsibility has gained importance and meaning, making it a topic that is widely covered in scientific articles, books, and conferences today.

Implementing and disseminating corporate social performance can reap significant benefits for a firm's reputation and legitimacy (Naveed et al., 2021; Naciti and Centorrino, 2022). This is one of the areas of a firm where women are of vital importance, as having more women in leadership has a positive impact on the firm and corporate social responsibility outcomes.

Therefore, another avenue for the academic world could be to investigate performance following a "triple bottom line" approach, thus considering the three spheres of performance (financial, social and environmental). Admittedly, the shortage of studies in this field is more affected by the lower level of disclosure, a non-financial one, also, associated with small firms, and risks amplifying the knowledge gap regarding results and their determinants in this specific setting.

Third, the role of women in small and medium family businesses must be explicitly and empirically studied as their role is essential and unavoidable in this typology of businesses for the innovation process (D'Allura et al., 2019; Floris et al., 2020), and in the involvement of stakeholders, (Nair, 2020; Bannò et al., 2020), but research on this topic is scarce.

Finally, as seen through the lens of the bibliometrics study conducted here, the growth of academic dialogue offers possible future research avenues from a transdisciplinary perspective. Consequently, we have identified some research issues to pursue as future research questions (see Table 5).

Research streams	Future research questions
Women's involvement in Corporate Governance and Performance	1. What are the relevant features explaining gender diversity and financial performance in family SMEs?
	2. Is there an association between women's involvement in decision-making positions and social and environmental performance in family SMEs?
	3. Can women in top positions in family SMEs improve the innovation process and stakeholder engagement?
	4. Are women's skills, personal experience and education associated with a) the position held and b) the levels of financial, social and environmental performance of the company?
Women's formal engagement in Family Business	5. What is the nature and source of women's integration in family SMEs that leads them to have only a formal role?
	6. Is it possible to envisage a process of gradual recognition of the role of women in the strategic decision-making process in family businesses, despite the initial formal involvement of women?
	7. Is there differentiation of wages and positions in the long run?
	8. Is family bonding vs the selection of women outside the family members somewhat an expression of professionalization of the roles attributed to women?
Female Ancillary Role	9. To what extent do cultural issues, as well as country-specific institutional factors and local regulation (and incentives related to business creation and tax benefits), affect women's engagement in family SMEs in an ancillary role?
	10. Is the family SME sector (industry) an explanatory aspect of the ancillary nature of women's engagement?
	11. Regarding the planning of top position succession in family SMEs and the engagement of women, to what extent does it represent a necessary choice, leading to substantial subordination to male leading figures?

In addition to the literature implications explained above, this document also offers managerial implications. The discussion can assist managers to acquire consciousness of the relevance of gender diversity in improving the effectiveness of strategic choices, hence, to find benefits in women being substantially involved in governing bodies and executive positions. The findings highlight the need to overcome the gender pay gap and boost women's empowerment as an opportunity to obtain better results, in diverse dimensions of performance.

Despite the great value of the outcomes obtained in this investigation, it suffers from some limitations. The essential constraint of our study is that it was carried out utilizing only one information base (Web of Science) to acquire the record test, while a more noteworthy assortment of items and themes could be obtained utilizing extra data sets. This additionally

restricts the understanding of the outcomes. Future lines of exploration should examine the solidification of the emerging research lines featured in this analysis and keep on investigating the development of the presence of gender diversity in family SMEs.

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**MAPPING THE PATH OF A GENDERED CSR: TOWARD A SPECIFIC
FRAMEWORK FOR FAMILY SMES**

*Francesca Costanza
Lumsa University
f.costanza1@lumsa.it*

*Anna Minà
Lumsa University
a.mina1@lumsa.it*

*Sergio Paternostro
Lumsa University
s.paternostro@lumsa.it*

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Abstract

Extant literature on gender equality issues and corporate social responsibility (CSR) is copious but fragmented. Additionally, it is mainly focused on large firms and public companies. There is, therefore, an opportunity to assess the 'state of the art' of existing inquiry. Through a content analysis of 104 papers, we identify key themes, methodological approaches, and phases of research development. These efforts converge on a conceptual framework bringing together the landscape of current knowledge, which we then adapt to shed light on gendered CSR in family SMEs, and to formulate a research agenda. With this research approach, we fit in the debate on gender diversity in family SMEs', shedding light on the role of women in contributing to financial and non-financial performance; thereby we wish to provide a contribution to the call for papers "Piccola Impresa/Small Business - Women in Small and Medium Family Firms: Theory and Practice".

1 . Introduction

Over the last few decades, business, society and policymakers have devoted growing attention to gender issues in every societal aspect (Council of the European Union, 2006; European Commission, 2015, 2020; Schofield & Goodwin, 2017). Accordingly, the academic community has also stressed the relevance of “gendered corporate social responsibility” (henceforth GCSR), namely the inclusion of gender equality goals in firms’ corporate social responsibility (CSR) initiatives (Velasco *et al.*, 2013; Velasco *et al.*, 2014).

The extant literature on GCSR is copious, rather fragmented, and mainly focused on large firms and public companies (Grosser & Moon, 2005; Rao & Tilt, 2016a, 2016b)¹. Nonetheless, small and medium-sized enterprises (SMEs) and family SMEs, with their distinctive traits (Spence & Rutherford, 2003), represent the backbone of various major economies (e.g., European Commission, 2018), and play essential roles in poverty alleviation and equal distribution of national income and resources (Wu, 2017). For this reason, scholars have, more recently, started to devote attention to the theorization of CSR tailored to such kinds of firms (Spence, 2016; Murillo & Lozano, 2006). However, to our best knowledge, this body of literature pays scarce attention to the gender dimension (with noteworthy exceptions, e.g., in Spence, 2016); thus, further research is needed to bridge this gap.

This paper has a twofold aim. First, it summarizes existing GCSR literature, calling attention to its strengths and weaknesses. Second, it proposes a new research framework to encourage new studies focused on GCSR in family SMEs. Given the peculiarities of family SMEs, we believe it is helpful to adopt a research approach explicitly oriented to (and focused on) this kind of firms. Our research questions are thus:

- a. What are the main features of previous studies on GCSR?
- b. Is it possible to detect critical development phases in research on GCSR?
- c. How can existing research on GCSR be reorganized in order to encourage further studies?
- d. How can GCSR research be oriented to family SMEs?

To address the above research questions, we used a two-step research process.

First, we examined existing literature on GCSR. In detail, we performed a systematic literature review and analyzed GCSR research’s evolutionary phases. In the light of this investigation, we then built a conceptual framework. In the second step, we adapted the framework to family SMEs, enucleating a research agenda to foster new studies. In this

¹This is unsurprising since research on CSR mostly considers large firms (Castejon & Lopez, 2016).

regard, we believe in adopting a multifaced research approach connecting various focuses, perspectives, theories, and methods (Tagesson *et al.*, 2009). Consistently with Karam and Jamali (Karam & Jamali, 2017), and Larrieta-Rubín de Celis and colleagues (2015), we distinguish between general and specific focuses of GCSR and internal and external perspectives on GCSR. Our first result is a conceptual framework integrating the literature review with conceptualization efforts. This framework has a general scope and is based on stakeholder theory (Freeman, 1984). Our second result is a second GCSR framework tailored to family SMEs. We build on Spence's theorization of CSR in SMEs (Spence, 2016), in turn, grounded in stakeholder theory and the feminist ethics of care (Held, 2006).

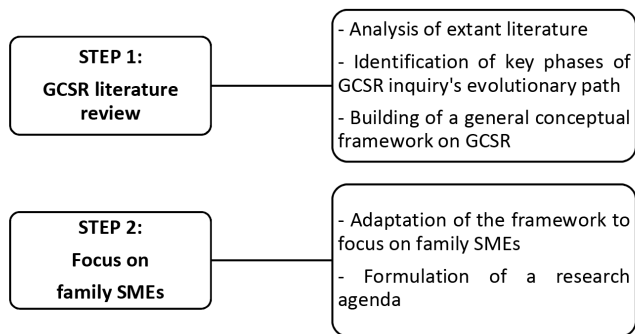
Our study wishes to constructively contribute to the Special Issue "Piccola Impresa/Small Business - Women in Small and Medium Family Firms: Theory and Practice", which searched for studies fitting in the debate on the role of gender diversity in family SMEs'. Indeed, we pursue the scope to orient future studies intertwining CSR with the gender dimension in the context of family SMEs. Furthermore, the Special Issue encouraged "to propose different and novel approaches for examining small and medium sized firms combined with family business concepts and women role". Our contribution is aligned with this call. Indeed, our inquiry had to collide with the lack of existing studies targeting GCSR in family SMEs, showing a significant gap in the literature. Bridging this gap is crucial in defining the role of women in shaping non-financial (social) performance in family SMEs. Addressing this topic therefore contributes to completing what has already been highlighted in the literature on the influence of women (for instance, their participation in boards) on financial performance in family SMEs. The awareness to be facing an under-investigated topic in literature represented for us a challenge and at the same time an opportunity. Accordingly, we set a research design that, starting from existing literature on GCSR in general terms, gradually comes to a specific conceptualization for family SMEs.

The remainder of the paper is structured as follows. Section 2 provides methodological details on the selection of relevant literature. Section 3 offers a thematic analysis of GCSR literature, and describes key phases of the development of GCSR inquiry. Section 4, then, illustrates the conceptual framework emerging from the literature review. Section 5 describes the specific conceptual framework for orienting GCSR studies to family SMEs. Section 6 proposes a research agenda for further inquiry. Finally, the "Conclusion" section summarizes and discusses the main contributions and limitations of this paper.

2. Methodology

The overall research process was divided into two main steps (see Figure 1). In the first step, we focused on assessing the 'state of the art' of research on GCSR. We identified critical phases of the evolutionary path of GCSR inquiry. Then, we built a novel conceptual framework concerning general GCSR, informed by stakeholder theory. In the second step, since extant literature is mostly focused on large firms, we drew on previous findings to outline new specific research avenues on GCSR in family SMEs. We thus developed a specific framework tailored to family SMEs and grounded in Spence's theorization (Spence, 2016).

Fig. 1: Research steps.

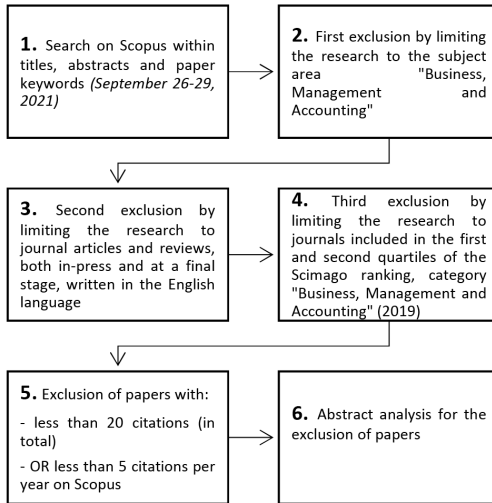


Source: own elaboration.

To systematically review extant literature and minimize interpretation bias, we conducted our research based on the guidelines of Tranfield and colleagues (Tranfield *et al.*, 2003).

We extracted papers from the Scopus database, since it offers a broader coverage of peer-reviewed literature than other similar scientific databases (Falagas *et al.*, 2008). To select relevant and influential papers, we followed the procedure represented in Figure 2.

Fig. 2: Paper selection stages.



Source: own elaboration.

Initially, we performed multiple search rounds within titles, abstracts, and paper keywords, in order to consider all relevant articles and ensure accuracy in search results (above Stage 1). We searched by entering several combinations of widely used terms, synonyms (or close concepts, such as company/business/firm, family firm/family business), and acronyms (e.g., CSR, SME). To embrace the gender perspective, we believed it useful not to limit our search to the word ‘gender’, and to enclose other terms characterized by semantic proximity. Then, we added ‘women’ into the search engine, to inclusively capture the gender identity of transgender and cis women (GOLIN, 2021), going beyond the biological category of ‘female’ (Grosser & Moon, 2019). In so doing, we also considered that women are the central category of any feminist theory (Alcoff, 1988). Finally, to be sure not to exclude from our literature review other scholar contributions referring to feminism or feminist theories, we set the generic keyword ‘feminis*’.

Table 1 shows the strings used in each literature search round. Note that the selection process of the extant literature was iterative: we firstly looked for papers specifically targeting our research aim, i.e., GCSR in family SMEs (1st Round). Then we tried other combinations of words, gradually broadening our approach. In particular, we looked for publications linking: gender, CSR, and SMEs (2nd Round); gender, CSR, and family businesses (3rd Round); and gender and CSR (4th Round).

Tab. 1: Search rounds.

1ST ROUND	((gender OR women OR feminis*) AND (csr OR corporate social responsibility) AND ((sme OR small OR medium) compan* OR business* OR firm*) AND (family firm OR family business))
2ND ROUND	((((gender OR women OR feminis*) AND (csr OR corporate social responsibility) AND ((sme OR small OR medium) compan* OR business* OR firm*)))
3RD ROUND	((gender OR women OR feminis*) AND (csr OR corporate social responsibility) AND (family firm OR family business))
4TH ROUND	((gender OR women OR feminis*) AND (csr OR corporate social responsibility))
Total number of papers, excluding duplications	
	104

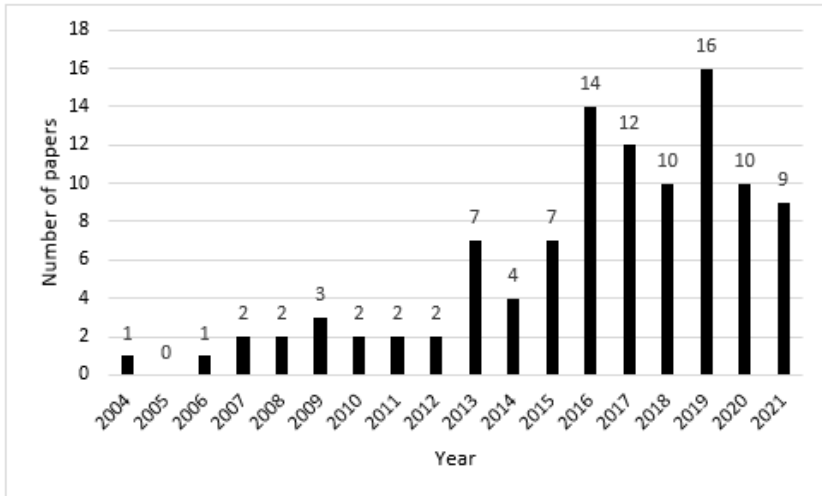
Source: own elaboration.

The article sampling criteria were aimed at balancing representativeness (i.e., the identification of all the potential themes and concepts related to our research aims) with relevance (in terms of scientific validation and literature impact). Accordingly, we considered peer-reviewed articles written in English, registered in the Scopus database, and published in journals in the first two quartiles of the Scimago ranking (Stages 1-4 in Figure 2).

To privilege the most impactful papers, we selected papers with more than 20 Scopus citations. Since the time of publication can affect the number of citations, we added an alternative sample inclusion criterion: at least 5 citations per year (Stage 5). Reading the abstracts (and when required introductions) allowed us to exclude papers not directly contributing to the inquiry, since they were either out of topic or only marginally related to GCSR (Stage 6). To reduce subjectivity in this stage, two of us read the abstracts (and introductions) separately. In case of disagreement, the judgment of the third author was decisive. At the end of this process, our dataset was composed of 104 papers (see Appendix A for the complete list).

The articles from the dataset show an (almost) exponential publication trend within the timeframe 2005-2021 (Figure 3).

Fig. 3: Distribution of papers in the final dataset per year.



Source: own elaboration.

Next, in order to perform the thematic analysis, we adopted the following criteria:

- The focus of the article: We distinguished works targeting “general” or “specific” GCSR, similarly to Karam and Jamali’s general framework of GCSR in SMEs and multinational corporations (MNCs) in developing countries (Karam & Jamali, 2017). However, contrary to this framework, under the umbrella category of “general GCSR,” we included papers dealing with GCSR in general terms or within large firms (overlooking here the peculiarities of family businesses). On the other hand, papers dealing with GCSR in the contexts of family SMEs, and, by analogy, SMEs and/or family businesses, were considered as belonging to the “specific GCSR” category.

- The perspective on GCSR adopted in the article: This could be internal or external (Larrieta-Rubín de Celis *et al.*, 2015; Arrive & Feng, 2018; Skudiene & Auruskeviciene, 2012). The internal perspective privileges gender equality concerning inside-firm stakeholders (e.g., owners, managers, workers) and processes (e.g., human resource management, occupational health and safety, adaptation to change, and management of environmental impacts). On the contrary, the external perspective concerns gender equality in out-of-the-company-borders stakeholders (e.g., local communities, business partners, suppliers, and consumers), human rights, and worldwide environmental issues. We also included papers investigating external influences (cultural, institutional and/or educational) on GCSR in this category.

Thus far, four research phases were seen to be characterized by homogeneous patterns and regularities in embracing particular focuses, perspectives, or methodological approaches. In contrast, the dividing lines between one phase and another were represented by the inclusion of new themes (belonging respectively to different focuses and/or perspectives) and/or methodological approaches.

Finally, to achieve a synthesis, we proceeded, by successive approximations, to systematize current knowledge and reveal potential research directions concerning family SMEs. Having ascertained that current research on GCSR privileges large firms as a focus, we first created an overarching conceptual framework mapping all the themes, links, and research gaps emerging from the reviewed literature on general GCSR. Afterward, we adapted this framework to family SMEs, and thus built a specific research agenda.

3. Thematic Analysis

3.1 Critical Phases of GCSR inquiry

The thematic analysis of existing literature on GCSR covers 16 years of evolving research (see Table 2, and Appendix B). We recognize four specific phases:

- Birth (2005-2008): early development of studies on GCSR, with a general focus, and adopting an internal perspective;
- Childhood (2008-2011): the emergence of quantitative studies with a general focus, and an internal perspective on GCSR;
- Adolescence (2012-2015): consolidation of studies with a general focus and adopting an internal perspective, and the emergence of an external perspective of GCSR;
- Youth (2016-2021): consolidation of general GCSR research adopting both internal and external perspectives, and the emergence of specific GCSR focuses adopting both internal and external perspectives.

The labeling of each phase is, clearly, based on the metaphor of human development (Dagnino & Minà, 2018). Just as individuals face certain stages characterized by internal homogeneity concerning activities, there are breaking points (or discontinuities) between one developmental phase and another, and at the same time, each phase inherits something of the previous ones, representing the “primordial germ.”

Tab. 2: Key phases of GCSR research.

Phase	No. of articles	Key features	Prevalent methodological approaches
Birth (2005-2008)	6	Early development of studies relating to gender and CSR, with a general focus, and adopting an internal perspective	Qualitative/ conceptual
Childhood (2009-2011)	7	Emergence of quantitative studies on general and internal GCSR	Quantitative
Adolescence (2012-2015)	20	Consolidation of general and internal GCSR, and the emergence of studies on general GCSR adopting an external perspective	Quantitative
Youth (2016-2021)	71	Consolidation of general GCSR, adopting both internal and external perspectives, and the emergence of specific GCSR focuses	Quantitative

Source: own elaboration.

The key features of each phase will be analyzed in-depth in the following sub-sections.

3.1.1 Birth (2005-2008)

This represents the early development of studies conceptualizing a relationship between gender and CSR. Overall, this phase is connoted by a general focus (i.e., on large firms or CSR in general terms), and adopts an internal perspective on GCSR (as mentioned above). It is also characterized by the prevalence of qualitative or conceptual approaches, such as content analyses on CSR reports, and reflections on weaknesses and shortcomings in two research areas: CSR practices and information disclosure.

The seminal work of Grosser and Moon (2005) was the starting point of the Birth phase. They investigated the potential compatibility of gender mainstreaming and CSR in reporting workplace issues. The authors postulated gender equality criteria in CSR tools, such as human capital management reporting. They also noted the inadequacy of gender equality information in CSR frameworks. A similar observation from Vuontisjärvi (2006) pointed out that human resource reporting in the largest Finnish firms lacked information on equal opportunities and employee work-life balance. Again, Grosser and Moon (2008) discussed new forms of reporting on gender equality information in the workplace. However, they detected comparability issues and firms' motivational barriers in gendering corporate social reporting. Among other factors, gender then started to be considered relevant in catalyzing organizational commitment to CSR (Brammer *et al.*, 2007). Indeed, this represented the germ for a reflection on

gender and leadership patterns in CSR. In Marshall's view (2007), the CSR field is "dominated by male voices" (p. 170), whereas it could benefit from female-specific leadership styles and sensibilities.

3.1.2 *Childhood (2009-2011)*

The childhood phase of GCSR research inquiry witnessed the flourishing of quantitative studies, prevalently exploring the effect of firm boards' gender diversity on CSR. The beginning of this phase dates from 2009, with the publication of several important works relating to the presence of women on corporate boards and firms' CSR performance (Huse *et al.*, 2009; Rodriguez-Dominguez *et al.*, 2009). Arguably, there is also an interest in the ethical sensitivity of female managers and entrepreneurs (Oumlil & Balloun, 2009).

Rodriguez-Dominguez *et al.* (2009) investigated the impact of boards with a higher number of female directors on creating codes of ethics in a sample of Italian, Spanish, and UK public firms. The controversial results they obtained opened the way for hypothesizing specific areas of GCSR's effectiveness. Other studies on samples of US-based companies confirmed a positive association between board gender diversity, firms' CSR ratings, and corporate reputation (Bear *et al.*, 2010; Mallin & Michelon, 2011).

In this phase, the bulk of papers (6 out of 7) adopted quantitative methodologies, including: statistical analyses on a sample of firms (Mallin & Michelon, 2011; Jia & Zhang, 2011; Bear *et al.*, 2010; Rodriguez-Dominguez *et al.*, 2009); and surveys of board members (Huse *et al.*, 2009) and managers (Oumlil & Balloun, 2009). Only one conceptual paper (Kemp *et al.*, 2010) dealt with using discourses as strategic resources to boost organizational changes in integrating gender and CSR policy and practice.

3.1.3 *Adolescence (2012-2015)*

In the third evolutionary phase, just like an adolescent searching for an identity in a transitional period, GCSR was ambivalent: it leveraged certainties and consolidated points while experimenting with new trajectories. This is the key to reading the dynamics of this phase, which revealed the consolidation of studies adopting the general focus and the internal perspective (e.g., Hafsi & Turgut, 2013; Huang, 2013), and the emergence of an external perspective of GCSR, whose definition was envisaged in the last stretch of this phase (Larrieta-Rubín de Celis *et al.*, 2015).

Concerning the consolidation of general and internal GCSR, the research addressed two main facets of CSR: CSR performance and CSR disclosure.

Concerning CSR performance, extant studies find a link between the gender composition of boards and CSR results and ratings (Hafsi & Turgut,

2013; Huang, 2013; Harjoto *et al.*, 2015; Setó-Pamies, 2015). Women on boards positively relate to financial performance and ethical and social compliance. In turn, ethical and social compliance positively affect the value of firms (Isidro & Sobral, 2015).

Concerning CSR disclosure, according to Frias-Aceituno and colleagues (Frias-Aceituno *et al.*, 2013), gender diversity on boards is one of the most critical factors (together with others such as firm size and management bodies) in the dissemination of corporate social information. In particular, the inclusion of at least three female members on corporate boards of directors seemed to be correlated with a higher quality of CSR reporting (Fernandez-Feijoo *et al.*, 2014).

Finally, despite the prevalent literature targeting the effect of board compositions on CSR, Kabongo *et al.* (2013) undertook an empirical study with a broader concept of diversity, an operational one, implemented at management, employee, and supply chain levels.

Overall, the papers of the Adolescence phase continued to privilege quantitative methodologies (except Kilgour, 2013), mainly focusing on general GCSR, and consolidating the internal perspective (Larrieta-Rubín de Celis *et al.*, 2015). The latter was grounded in a European Union Green Paper (European Commission, 2001), where gendered governance was framed within inside-firm research on human resource management, occupational health and safety, adaptation to change, and management of environmental impacts. However, as already mentioned, the Adolescence phase also witnessed the emergence of an external perspective. This phase considered “gender equality in areas such as local communities, business partners, suppliers and consumers, human rights and worldwide environmental issues” (Larrieta-Rubín de Celis *et al.*, 2015, p. 93).

In this vein, Renouard and Lado (2012) investigated ethical, cultural, and economic dynamics underlying the acceptance of multinational oil firms in a Nigerian context, highlighting their potential role in mitigating gender inequalities and discriminations within host communities. Chakrabarty and Bass (2014) associated the propensity of microfinance institutions to create written ethical codes with the decision to serve women borrowers in local contexts where this social category tends to face poverty and disempowerment. Finally, Kilgour (2013) complained about a lack of attention to the gender discourse in CSR initiatives, while García-Sánchez *et al.* (2013) investigated the effect of feminist and collectivist societal values on firms’ willingness to publish integrated reporting.

3.1.4 Youth (2016-2021)

The Youth phase was characterized by greater generativity (number of papers more than tripled compared to the previous phase), the consoli-

dation and enlargement of already existing research trajectories, and the ability to travel new ones. First, the “traditional” themes faced since the Birth and Infancy phases (framed within general and internal GCSR) continued to maintain some interest. Second, the external perspective on GCSR gained momentum. Third, “specific GCSR” finally emerged, developing a body of inquiry (thus far just seven studies) routed towards new focuses for GCSR (i.e., family SMEs, SMEs, and family firms), and embracing both the internal and external perspectives (although with an apparent prevalence for the former).

The border-year between the Adolescence and Youth phases was 2016, when Spence (2016) proposed a theorization of CSR in small businesses based on feminist ethics of care (Held, 2006). Also, Karam and Jamali (2017) adopted feminist theories to advance the CSR debate. They presented a cross-cultural, analytic framework for CSR in developing countries (according to the external perspective). Other studies focused on internal GCSR, in particular, the impacts of board and management gender diversity in the context of small firms (Peake *et al.*, 2017) and large family firms (Cordeiro *et al.*, 2020; Campopiano *et al.*, 2019), as well as a comparison between family and non-family firms (Sundarasan *et al.*, 2016; Rodríguez-Ariza *et al.*, 2017).

The border between Adolescence and Youth was also characterized by the contribution of Rao & Tilt (2016a). This critical literature review adopted an internal perspective on boards’ gender diversity and CSR decision-making processes, and called for a qualitative investigation to understand the link.

Otherwise, the internal perspective on GCSR continued to privilege quantitative methods in exploring the relationship between boards’ gender diversity and CSR performance (McGuinness *et al.*, 2017; Yasser *et al.* 2017; Liao *et al.*, 2018) and reporting (Cucari *et al.* 2018; Cabeza-García *et al.*, 2018; Amorelli & García-Sánchez, 2020). In this context, the presence of gendered boards appeared to relate positively to more proactive and comprehensive CSR strategies (Shaukat *et al.*, 2016), resulting as a mediator for financial performance (Galbreath, 2018; Cook & Glass, 2018). Again, the inclusion of at least three female members in corporate boards of directors related to higher-quality CSR report disclosure (Al-Shaer & Zaman, 2016).

In two cases, internal perspective GCSR went beyond the analysis of board diversity: targeting employees’ gender as a moderator of the relationship between CSR’s perception and the level of engagement at work (Chaudhary, 2017); and studying the effect of responsible human resource management on female turnover and the moderating effect of gender supervision (Nie *et al.*, 2018).

Besides these studies, GCSR received new lymph from research consolidating the external perspective and encompassing novel roles for consumers and local communities. The retrieved papers paid attention to

dynamics occurring outside company boundaries, while still adopting quantitative methodologies. In particular, in order to assess the outcomes of sustainability strategies, extant studies investigated the significance of gender differences in customers' CSR expectations and perceptions (Calabrese *et al.*, 2016; Hur *et al.*, 2016). Some authors acknowledged gender relevance in filling the gap between consumers' environmental attitudes and behaviors (Jones *et al.*, 2017). Other contributions oriented CSR research to impacts on local communities, accounting for gender issues in the development of local CSR programs (Grosser, 2016), and considering women among the so-called "fringe stakeholders" group in developing countries (McCarthy & Muthuri, 2018). For example, Uduji and colleagues investigated the effect of multinational oil companies' CSR initiatives on rural women livestock keepers in Nigerian oil-producing communities (Uduji & Okolo-Obasi, 2019; Uduji *et al.*, 2020a, 2020b), and Ozkazanc-Pan reflected on the "intersections of gender, ethics, and responsibility as they relate to corporate actions in the Global South" (Ozkazanc-Pan, 2019).

Concerning methodology, the Youth phase continued to register a clear preference for quantitative approaches (57 out of 71 studies). It routed to more sophisticated and broader statistical analyses on samples of firms, structural equation modeling, and surveys of managers, employees, and, concerning the external perspective, local populations. The remaining studies offered meta-analyses (2 papers), literature reviews (5 papers), conceptualizations (3 papers), and only four qualitative case studies (1 interpretive ethnographic research, 2 interview-based studies, and 1 participatory visual mapping-based research).

4. A Conceptual Framework for General GCSR Inquiry

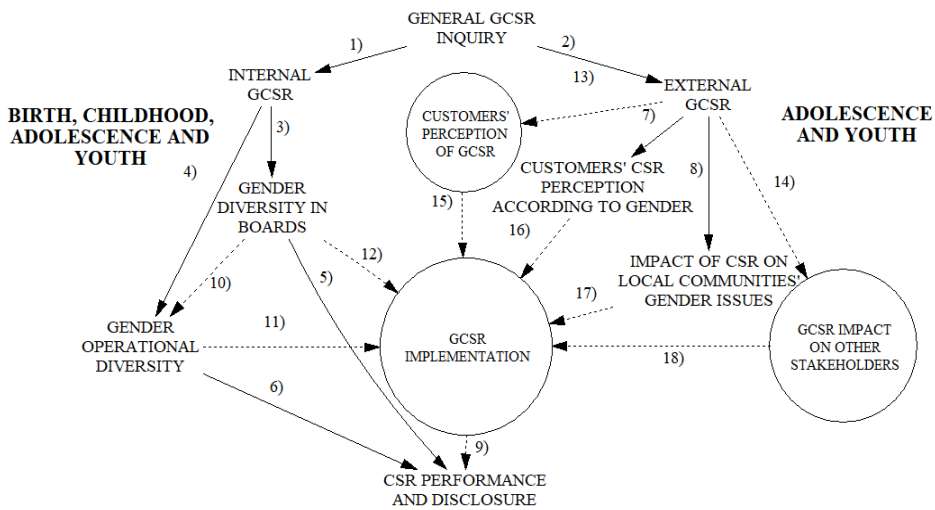
This section reorganizes existing research on GCSR in order to propose two conceptual frameworks and encourage further studies. Figure 5 portrays the general framework. It draws on the stakeholder approach (Freeman, 1984), a choice justified by the significant impact of stakeholder theory on CSR literature (Donaldson & Preston, 1995; Mitchell *et al.*, 1997; Friedman & Miles, 2002). Indeed, stakeholder theory represents the most used conceptual perspective informing the analyzed literature (chosen by 31 papers, as a stand-alone theory, or combined with other theories).

On this basis, from the root of the framework critical themes of current and prospective research branch out, articulated in two main areas: internal and external GCSR (Larrieta-Rubín de Celis *et al.*, 2015), aligned also with the general bipartition of CSR initiatives into internal and external CSR (Arrive & Feng, 2018; Skudiene & Auruskeviciene, 2012). Accordingly, during our paper analyses, we first identified key research themes

and their connections. Then, we grouped them according to the dichotomic criteria of general or specific focus and internal or external perspective. The themes of these primary “coordinates” were logically organized by spatial collocation and arrow connections (labeled with numbers).

Solid-line arrows and unboxed labels perimeter themes and relations covered by existing literature, whereas circular boxes and dashed-line arrows indicate different research themes and relations we propose for future research.

Fig. 5: Conceptual framework for general GCSR inquiry.



Legend – Unboxed labels: themes already covered by general GCSR. **Circular boxes:** potential research themes from our conceptualization. **Numbers:** links between themes. **Solid-line arrows:** existing links. **Dashed-line arrows:** potential links.

Source: own elaboration.

Thus far, internal GCSR (Link 1), crossing all evolutionary phases, has two main focuses: gender diversity in boards (e.g., Rodriguez-Dominguez *et al.*, 2009; Mallin & Michelon, 2011) (Link 3), and operational gender diversity, e.g., in management and employees (Kabongo *et al.*, 2013; Chaudhary, 2017; Nie *et al.*, 2018) (Link 4).

Links 3 and 4 have as a common point an investigation of the impact of women’s representation in the workplace (mainly in boards of directors) on CSR performance and/or disclosure (e.g., Shaukat *et al.*, 2016; Al-Shaer & Zaman, 2016) (Links 5 and 6).

Building on Grosser and Moon’s systematization of feminist organizational studies (Grosser & Moon, 2019), we can frame an interest for these themes in two feminist theoretical perspectives: liberal feminism, and psychoanalytic feminism.

The liberal feminism approach (Metcalf & Woodhams, 2012) is concerned with women's distribution of opportunities in firms, which are, in turn, considered gender-neutral, so that gender equality requires the mere correction of sex/gender imbalances through women-centered human resource management (Grosser & Moon, 2019, p. 324). Accordingly, gender diversity in boards may be understood as one of the potential diversities connoting such governing bodies. In line with resource dependence theory, board diversity intercepts many kinds of resources from the environment, and allows for compliance with social and environmental responsibilities by creating valuable relationships with different stakeholders (Pfeffer, 1972; Hillman *et al.*, 2000).

On the other side, psychoanalytic feminism postulates that firms are not gender-neutral and represent an instrument to perpetuate the patriarchal psychosexual order of gender relations (Calas & Smircich, 2006). Aligned with this perspective, gender studies should emphasize the differential benefits women can bring to firms (Grosser & Moon, 2019, p. 325). Thus, it is possible to frame feminine sensitivity to ethical and environmental issues (and supposed attitude to CSR initiatives) within social role theory, in line with which social expectations about the role of women would determine their behaviors, and this would result in more empathetic and participative leadership styles (Eagly *et al.*, 2003). However, several voices have questioned whether "female advantage actually advantages females" (Fletcher 1994, p. 74) or, instead, reinforces gender stereotypes (Grosser & Moon, 2019, p. 325).

The reviewed literature does not clarify the impact of gendered diversity in boards on operational diversity (Link 10). The prevalence of quantitative studies linking gender and CSR fails in explaining: how organizational gender diversity affects CSR performance and disclosure (Link 9); and what the underlying mechanisms and the causal structure responsible for the numerical results are. The framework thus incorporates the 'GCSR implementation' theme in order to recognize this research gap, since it can be helpful in bringing perspective to in-depth explorations of how gender diversity in firms practically translates to CSR results.

This inclusion could pave the way for qualitative studies on boards and operational gender diversity (Links 11 and 12), suitable for providing new insights and a systemic view of GCSR dynamics (Rao & Tilt, 2016a).

The right side of Figure 5 maps external GCSR inquiry (Link 2). Contrary to the internal perspective privileging inside-firm stakeholders, this articulation concerns external stakeholders and characterizes the Adolescence phase, in particular. In this regard, most attention is paid to gender in the marketplace, with research assessing consumer gender's role in perceiving CSR (Calabrese *et al.*, 2016; Hur *et al.*, 2016; Jones *et al.*, 2017) (Link 7), and the impact of CSR on local communities' gender issues (Renouard & Lado, 2012; Uduji & Okolo-Obasi, 2019; Uduji *et al.*, 2020a, 2020b) (Link 8).

The focus on CSR's consumer perception according to gender does not fully consider the potential of the responsible consumer in addressing CSR strategies (Mohr *et al.*, 2001; Lee & Cho, 2019), and should be complemented by analyses on how consumers (in general terms and/or according to gender) perceive GCSR (link 13). Furthermore, the external perspective should be enlarged to consider the 'GCSR impact on other stakeholders,' such as business partners and policymakers (Link 14).

Current research on external GCSR is limited to the quantitative detection of impacts and perceptions, therefore not analyzing how firms can operationally use stakeholder information to guide the implementation of GCSR strategies. Future investigations could fill this gap (Links 15, 16, 17, and 18) through qualitative and mixed research methods, suitable for dealing with the complexity of GCSR. Thus, the 'GCSR implementation' theme performs a bridging function, holistically reconciling the interrelatedness of the internal and external perspectives.

Finally, we interpret the fact that most of the literature on GCSR focuses on large firms by considering that CSR research (in general terms, without including gender issues) initially privileged larger dimensions, and, in a second moment, paid attention to SMEs and family SMEs (Castejon & Lopez, 2016; Hsu & Cheng, 2012; Murillo & Lozano, 2006). Accordingly, it is possible to envision a similar trend for GCSR inquiry, under consideration as a relatively "immature", close research field. In the next section, we go on to explore the applicability of the emergent framework to family SMEs, in order to encourage further studies in this sphere.

5. Adapting the Framework to Family SMEs

The conceptual framework described in the previous section maps the themes, links and research gaps that emerged from the reviewed literature on general GCSR.

This output already in itself represents a valuable contribution of our work, and, together with the identification of GCSR inquiry's evolutionary path, answers the initial research questions (a), (b), and (c). Now, since more than 90% of our sample papers concerned general GCSR, the tailoring of the framework to family SMEs forms the second step of our synthesis.

Therefore, this section completes our analysis by dealing with the remaining initial research question: (d) How can GCSR research be oriented to family SMEs?

As already stated above, large firms are the privileged target of both gendered and 'tout court' CSR studies. However, some scholars have discussed a specific approach of family SMEs to CSR (Castejon & Lopez, 2016; Murillo & Lozano, 2006), investigating barriers and facilitators (Cantele &

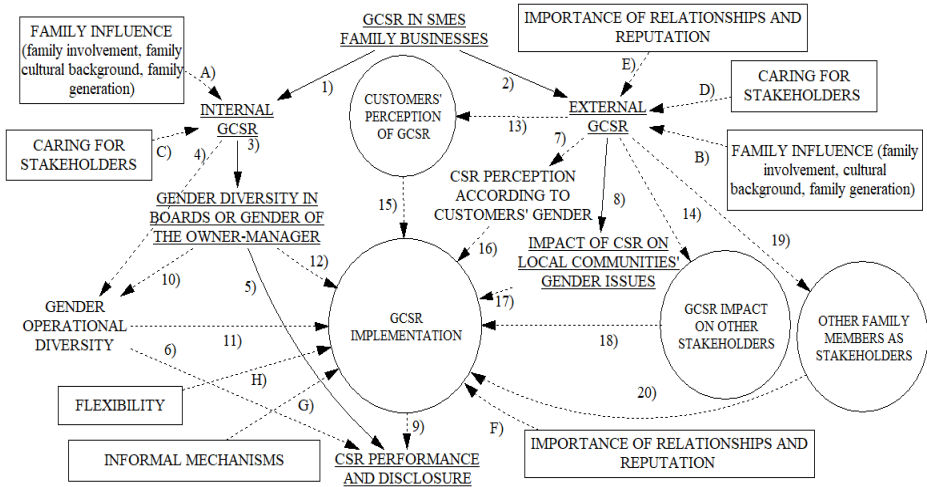
Zardini, 2019), also in emerging economies (Zou *et al.*, 2021). It is, therefore, possible to imagine, also for GCSR, a similar developmental path than the close research field. Our literature review seems to unveil the germs of such a branching out. In particular, the last evolutionary phase that we identified (Youth) contained seven papers concerning what we have termed “specific GCSR.” By not focusing on large firms or GCSR in general terms, this alternatively targets family SMEs (Peake *et al.*, 2017), SMEs (Spence, 2016; Karam & Jamali, 2017), and family firms, also in comparison with non-family firms (Cordeiro *et al.*, 2020; Campopiano *et al.*, 2019; Sundarasan *et al.*, 2016; Rodríguez-Ariza *et al.* 2017).

Since there was no conspicuous body of literature on GCSR in the context of family SMEs, we attempt here to extend the conceptual framework above (Figure 5) to a specific focus on family SMEs. Our ultimate goal is a family SME-tailored version of the framework (illustrated in Figure 6).

Accordingly, some labels from the previous framework had to be changed. Again, the numbering refers to between-theme links, while solid-line and dashed-line arrows highlight, respectively, existing links (from previous investigations), and potential links for future research.

To allow for the applicability of remaining themes to family SMEs inquiry, we have integrated, into our GCSR discourse, elements derived from the general model elaborated by Spence (2016). From a graphical point of view, these elements are represented by rectangular boxes, accounting for the potential influences of family SMEs on the characterization of research themes/perspectives (with links indicated in capital letters). Finally, we conceptualize new potential themes for future research in circular boxes.

Fig. 6: Conceptual framework for GCSR in family SMEs.



Legend: Unboxed labels: themes covered by GCSR. Labels underlined: themes covered by specific GCSR concerning family SMEs. Rectangular boxes: family SMEs' influences (from Spence's theory). Circular boxes: potential research themes from our conceptualization. Numbers: links between themes. Capital letters: links between family SMEs' influences and themes. Solid-line arrows: existing links. Dashed-line arrows: potential links.

Source: own elaboration.

5.1 Describing the framework focused on family SMEs

The structure of the specific framework maintains the bipartition in internal and external GCSR (Links 1 and 2 in Figure 6), since the retrieved studies adopted both perspectives, though with a clear preference for the internal one (6 studies out of 7).

Almost all the themes and arrow directions from the previous version are conserved, with the same numbering. The only exception is the label 'gender diversity in boards or gender of the owner-manager,' which is substituted for 'gender diversity in boards.' This adjustment acknowledges the key role often played by the owner within small firms (Spence, 2016).

Concerning the internal perspective, this is prevalent in Spence's theoretical work (Spence, 2016), which proposes a comprehensive framework for CSR in SMEs grounded in stakeholder theory and feminist ethics of care (Held, 2006). The latter is a philosophical approach postulating that decisional processes based on emotions, empathy, and responsiveness foster moral reflection. Given the commonalities between the empirical findings of CSR in SMEs and the main features of feminist ethics of care, the latter is treated by Spence as "a suitable lens through which to extend CSR theory in a way that is relevant to small firms" (Spence, 2016, p. 27), con-

siderable as a concept close to emotional-based responsibility. Given the breadth and depth of this work, targeting SMEs and enclosing inquiry on family dynamics, we believe it helpful to refer to it in several parts of our framework, as described later.

The theme 'gender diversity in boards or gender of the owner-manager' was treated by four papers in our review, connecting it with 'CSR performance and disclosure' (Link 5). In detail, Peake and colleagues (Peake *et al.*, 2017) assessed the moderating role of firm managers' gender in motivating CSR behaviors within small family firms. Distinguishing between corporate social responsibility and philanthropy, Campopiano and others (Campopiano *et al.*, 2019) demonstrated that female directors were more prone to CSR engagement if they were not members of the controlling family, while they opted for philanthropic engagement only if they were members of the controlling family. In Sundarasan and colleagues' study (2016), women directors positively affected the performance of CSR initiatives in both family and non-family firms. Finally, Rodríguez-Ariza and others (2017), although confirming the positive impact of the gendered board on CSR, found that this occurrence is less pronounced in family than non-family firms, arguing that, in family firms, the commitment to CSR is strictly related to the family orientation to such practices.

The right side of the specific framework, devoted to external GCSR (Link 2 in Figure 6), was seen to be less investigated within our literature sample. Notably, only the study by Karam and Jamali (Karam & Jamali, 2017) adopted this perspective, in order to propose a gendered, wide-ranging analysis distinguishing SMEs and MNCs, and attributable to the 'impact of CSR on local communities' gender issues' (Link 8), already present in the general framework. However, this theme assumes a specific connotation concerning SMEs: "While SMEs tend to focus their CSR activities on local intra-national community issues and have a low sphere of influence, MNCs focus on global high visibility issues derived from international business networks and have a high sphere of influence" (Karam & Jamali, 2017, p. 462).

The remaining themes from the general framework, not explicitly addressed by the inquiry on family SMEs, may be considered promising hooks to stimulate new studies on specific GCSR. For this reason, almost all the links in Figure 6 (excluding the aforementioned 1, 2, 3, and 8) are connoted by dashed-line arrows to indicate prospective research. However, given the scope of orienting further studies on GCSR to family SMEs, it is opportune for the framework to acknowledge the peculiarities of small and medium family businesses. For such reasons, critical elements from Spence's theory (Spence, 2016) are integrated and adapted into our framework (using the rectangular box notation in Figure 6, with links indicated in capital letters).

These elements (family influence, caring for stakeholders, the importance of relationships and reputation, flexibility, and informal mechanisms; Spence, 2016) represent family SMEs' potential influences on the existing research themes/perspectives (Links A-H). These will be detailed in the next section, where we propose an analysis of the specific framework, conducive to a reflection on applicability to the "small size" family enterprise and the definition of a research agenda.

5.2 Analyzing family SMEs' influences

This section analyzes the family SMEs' influences already identified and represented in rectangular boxes in Figure 6. Due to the scarcity of literature sources on specific GCSR, our conceptual effort will combine analogy and building on non-GCSR literature on SMEs, family SMEs, and family firms.

5.2.1 Family influence

Starting from the top of the framework, the theme 'family influence' relates to internal and external GCSR (Figure 6, Links A and B). Many reasons justify this association. First, the governance and management of family firms embody the vision of a particular family or few families (Chua *et al.*, 1999). From this perspective, the family should be treated as a stand-alone internal stakeholder, since the 'family factor' affects decisions, the labor force, company legacy, and ultimately, the family firms' performance (Mitchell *et al.*, 2011; Castejon & Lope, 2016; Ahmad *et al.*, 2020).

Compared to their non-family counterparts, family firms seem to be more widely engaged in CSR, with family members looking at the business as a sort of extension of their commitment to the common good, and avoiding company malpractices that might undermine the family reputation (Dyer & Whetten, 2006). Furthermore, family SMEs seem to be widely concerned about business legality, increasingly so with family involvement in management, and in later family generational stages (Dawson *et al.*, 2020). If, in non-family firms, there exists a general tendency of gendered boards to promote CSR initiatives and their disclosure, this is not evident in family firms, where the work of female managers is influenced by the family's orientation to CSR and its attitude to privilege certain stakeholders over others (Rodríguez-Ariza *et al.*, 2017).

Thus, when dealing with family influence on GCSR, it may be worth investigating specific factors (indicated in lowercase in the 'family influence' box) such as family involvement, family cultural background, and family generation. Indeed, in family firms, family involvement can relate to several aspects, including ownership, governance, and management (Astrachan *et al.*, 2002). Likewise, it is possible to distinguish between profes-

nalized family businesses, hiring external management (Trento & Bannò, 2016; D'Allura & Bannò, 2019), and non-professionalized ones, which are entirely family-directed (Dekker *et al.*, 2015). Additionally, the family cultural background is a key element in family businesses, since "the family's commitment and vision of itself are shaped by what the family holds as important ... core family values are the basis for developing a commitment to the business" (Carlock & Ward, 2001, p. 35).

Family firms also seek out so-called "socioemotional wealth" (Gómez-Mejía *et al.*, 2007; Torchia *et al.*, 2018), consisting of "non-financial aspects of the firm that meet the family's affective needs, such as identity, the ability to exercise family influence, and the perpetuation of the family dynasty (Gómez-Mejía *et al.*, 2007, p. 106). Accordingly, generational shift is a constitutive element of family businesses (Heck *et al.*, 1999; Cesaroni & Sentuti, 2017), where the family generation (in ownership, governance, and/or management) can influence corporate structures and processes (Astrachan *et al.*, 2002). In this regard, the emotion management can play a fundamental role in family business governance and continuity (Labaki & D'Allura, 2021).

In addition, according to the theory of Spence, SMEs' CSR follows the feminist value of caring for close relatives, specifically children (Spence, 2016, p. 26). This archetype, translated by Spence in CSR terms, leads to a moral concern for one's 'closest neighbors', particularly employees (both family and non-family members), and external stakeholders privileged according to the criterion of proximity. For this reason, we have added a circular box to conceptualize the new research theme entitled 'other family members as stakeholders'; i.e., family not directly involved in the business ownership, governance, or management (Dekker *et al.*, 2015).

5.2.2 *Caring for stakeholders and the importance of relationships and reputation*

Our general GCSR framework is informed by stakeholder theory (Freeman, 1984; Freeman *et al.*, 2007). Stakeholder theory can also be applied to family SMEs with specific connotations. As stated above, family firms tend to adopt proximity criterion in privileging stakeholder categories. For instance, key internal stakeholders are both employees (Uhlener *et al.*, 2004) and family (Castejon & Lopez, 2016). Specific attention is also paid to small local competitors, suppliers, local community, and customers (Spence, 2016, p. 30). In this regard, the 'caring for stakeholders' influence, attached to both internal (Figure 6, Link C) and external perspectives (Figure 6, Link D), has been inserted to indicate that feminist ethics of care may also inform stakeholder relations, and this insight could be explored further in literature.

Nevertheless, many scholars argue that, in dealing with small firms' CSR, stakeholder theory needs to be oriented and/or complemented by social capital theory (Perrini, 2006; Spence & Schmidpeter, 2003; Russo &

Perrini, 2010). The latter leverages interrelationships between small firms and their stakeholders, as well as reputational mechanisms, justifying the inclusion of the ‘importance of relationships and reputation’ in our framework, in relation to both external GCSR (Figure 6, Link E) and GCSR implementation (Figure 6, Link F). Extant research argues that family firms are more oriented to the building of social capital than non-family firms (Miller *et al.*, 2009), since the family tends to transfer its values to the business and disseminate them across the community (Benavides-Velasco *et al.*, 2013). Family firms’ interactions with the community result in a rise of social capital, which can be directed toward new projects for the community, and put pressure on other firms to undertake more responsible behaviors (Danes *et al.*, 2009; Fitzgerald *et al.*, 2010).

This theme also finds correspondence in Spence’s theorization when it identifies the following attribute of small business’ social responsibility: “Relationship-based dependence on personal integrity, reputation, and trust with business partners” (Spence, 2016, p. 30). Furthermore, families in family firms seek their continuity (and the transmission of their values) across generations (Broccardo *et al.*, 2019). Family firms are also often characterized by a longer strategic horizon, and pay more attention to their reputation than non-family counterparts (Sharma & Irving, 2005). Such aspects catalyze their orientation to CSR efforts (Berrone *et al.*, 2010; Laguir *et al.*, 2016), even at the expense of economic rewards (Berrone *et al.*, 2012). Accordingly, gender moderates family firms’ participation in socially oriented projects (Peake *et al.*, 2017). Finally, female managers’ work can be influenced by family orientation to CSR and its privileging of specific stakeholders over others (Rodríguez-Ariza *et al.*, 2017).

5.2.3 Flexibility and informal mechanisms

When dealing with family SMEs, it is worth remarking that a board of directors is not always present, even though it is presumable to find such a governing body as we move from micro / small to medium size enterprises. For this reason, in Figure 6, the ‘internal GCSR’ branch contains the theme of ‘gender diversity in boards or gender of the owner-manager’, instead of ‘gender diversity in boards’. Indeed, family SMEs are frequently led by an owner-manager, who plays a decisive role since ownership and control overlap (Quinn, 1997; Hasle *et al.*, 2012).

This can result in flat, non-hierarchical power structures, with company work non-specialized and flexible, where “each person has to do whatever is necessary on an ad hoc basis” (Spence, 2016, p. 34). Contrary to large firms, often, in family SMEs, governance and reporting systems are not (or are less) formalized. Thus, CSR initiatives, like any other practice in SMEs, tend to be personal, implicit, informal, not externally communicated

(Fassin, 2008; Vázquez-Carrasco & López-Pérez, 2013), lacking in formal tools (e.g., codes, reports, socio-environmental standards), and requiring time, finances, and skills to implement that SMEs are not ready to provide (Russo & Tencati, 2009, p. 340). However, this does not mean that SMEs do not practice any corporate social responsibility. Instead, they may substantially apply CSR principles by caring for stakeholders and paying attention to sustainability issues, but not label such activities as CSR (Hsu & Cheng, 2012). CSR reporting in family SMEs may also be a terrain of tensions between familial and external expectations, with relationships among family members and between family and non-family members acting as mediators (Discua Cruz, 2020). Finally, compared to large companies, family SMEs' orientation to CSR often depends on decisions taken by owner-managers (Jenkins, 2006), whose gender (together with other demographic characteristics, as well as non-demographic characteristics, such as moral integrity) may affect engagement in CSR initiatives (Peake *et al.*, 2017).

6. Future research agenda

The thematic analysis of the 104 articles led us to identify an evolutionary path of inquiry, and to build two conceptual frameworks: one concerning general GCSR and one specific to GCSR in family SMEs. From the latter, several potential (though not exhaustive) research guidelines have emerged. These are presented below, aligned with the bipartition in internal and external perspectives on GCSR.

6.1 Research avenues in internal GCSR

Internal GCSR seems to be fruitful also for family SMEs. For instance, we expect a flourishing of studies analyzing the effects of gender and feminist ethics of care on family SMEs' management, operations, and CSR implementation.

Additional inquiries may consider key features of family influences (Link A in Figure 6), and caring for stakeholders (Link C). We also call for studies incorporating the flexibility and informality typical of family SMEs into the GCSR discourse, especially concerning GCSR implementation. Drawing on our general framework, we encourage more qualitative and mixed methods-based inquiries to stimulate a deeper understanding of the complexities of such themes and connections, and to favor further conceptual developments and theory building.

Resulting research questions might include: Do female/male leaders in family SMEs adopt feminist ethics of care? What are the effects of family patriarchal/matriarchal order on SMEs' CSR orientation? Under what con-

ditions can feminine conformation to masculine stereotypes coexist with feminist ethics of care within family SMEs? Is managerial and/or operational gender diversity in family SMEs affected by different levels of family involvement (in ownership, governance, and management)? In what ways can feminine ownership/governance/management in family SMEs affect CSR implementation? Does family cultural background affect gender diversity in family SMEs? Is family SMEs' inclination to GCSR affected by family generation? How does the personal integrity of male/female owner-managers affect GCSR in family SMEs? Are female owner-managers more prone to operational diversity than their male counterparts? What is the effect of family SMEs' blurred roles on GCSR? What is the effect of family SMEs' informality on GCSR? Does (and how does) GCSR impact CSR formalization and communication?

6.2 Research avenues in external GCSR

As resulting from our literature review on GCSR, the external perspective of GCSR is relatively underdeveloped compared to the internal one. This may be ascribable to the tendency of family SMEs to privilege stakeholders according to the criterion of proximity. In this regard, the spectrum of relevance for family SMEs ranges from internal stakeholders to the closest external stakeholders. Arguably, the literature on family firms downplays internal social responsibility in favor of external stakeholders (environment and community) who can help the family foster image and reputation (Cruz *et al.*, 2014; Cennamo *et al.*, 2012). The underlining assumption is that family SMEs' performance is strictly related to local community embeddedness (Adler & Kwon, 2002). For this reason, we call for studies on external GCSR in family SMEs that investigate (together or separately) three specific kinds of family SMEs' influences: family characteristics (Link B), possible nuances of caring for stakeholders (Link D), and the importance of relationships and reputation within family SMEs (Link E).

In addition, we encourage further investigation on the relationships between gender and family aimed at understanding: whether and in what cases does the family's external stakeholder orientation neutralize and/or catalyze GCSR mechanisms; and in what other situations gendered emotional responsibility can affect or re-direct family orientation to certain categories of stakeholders. In this regard, we believe that the consideration of the importance of relational and reputational mechanisms in family SMEs should not be overlooked.

Furthermore, the main 'external focuses' have thus far been consumers and community issues, as indicated in our general framework, and we acknowledge the emerging need to deepen the consumer's perception of GCSR, as well as investigate GCSR impact on other stakeholders. In our

specific framework, we thus broaden the scope of inquiry by suggesting the new research theme ‘other family members as stakeholders’.

Our idea is not just to consider the one-way effect of family SMEs’ GCSR on external stakeholders. On the contrary, drawing on social capital theory (Miller *et al.*, 2009; Benavides-Velasco *et al.*, 2013; Russo & Perrini, 2010), we call for studies on the potential feedback effect of key stakeholder information on GCSR implementation.

Subsequent research questions may, therefore, include: In what ways does feminist ethics of care influence external GCSR? How do family features affect external GCSR? How does GCSR impact family SMEs’ key stakeholders? How does GCSR impact family members not directly involved in the SMEs’ family business? Is GCSR in family SMEs related to a better or different understanding of stakeholders than in large firms? Are large firms and family SMEs different in using stakeholder information and social ties to implement GCSR initiatives? Does consumer gender influence the perception of CSR in family SMEs? How do consumers react to GCSR initiatives in family SMEs?

Table 3 synthesizes the described potential research avenues.

Tab. 3: Synopsis of suggested research avenues.

Research avenues on the internal perspective	Research avenues on the external perspective
Effect of family features on SMEs’ CSR orientation, and on gender diversity (managerial/operational)	Effect of family features on external GCSR
Conformation to stereotypes and feminist ethics of care in family SMEs	Effect of relational and reputational mechanisms in family SMEs on external GCSR
Leadership and feminist ethics of care in family SMEs (e.g., caring for internal stakeholders)	Feminist ethics of care and external GCSR (e.g., caring for close stakeholders)
Personal integrity of male/female owner-managers and GCSR	GCSR’s impact on family SMEs’ key stakeholders
Female owner-managers propensity to operational diversity	GCSR’s impact on family members not directly involved in the SMEs family business’
Women’s involvement in family SMEs and CSR implementation	GCSR’s understanding of stakeholders
Effect of family SMEs’ blurred roles and informality on GCSR	GCSR’s use of stakeholder information and social ties for GCSR’s implementation
GCSR’s impact on formalization and communication	Consumer gender and perception of CSR in family SMEs
	Consumers’ reactions to GCSR initiatives in family SMEs

Source: own elaboration.

7. Conclusions

Gender and CSR are themes that management literature has recently combined (Grosser & Moon, 2019; Rao & Tilt, 2016a, 2016b). Now, it is possible to recognize the emergence of a GCSR literature (Velasco *et al.*, 2013; Velasco *et al.*, 2014). However, the research is fragmented and mostly aligned with traditional CSR's focus on large firms (Hsu & Cheng, 2012; Castejon & Lopez, 2016). On the other hand, the CSR literature on family SMEs mostly fails to consider gender issues.

Our paper, responding to the call for paper "Piccola Impresa/Small Business -Women in Small and Medium Family Firms: Theory and Practice", wished to bridge this gap. Since the Special Issue sought for novel research contributing to the debate on gender diversity in family SMEs', we considered that an overall understanding of this kind of firms cannot disregard the role of women in shaping CSR strategies and activities and, accordingly, affecting financial and non-financial performance. In searching for studies about GCSR in the context of family SMEs, we had to recognize that such a focus has been overlooked in literature. On the contrary, this could represent a promising area of investigation. Accordingly, our research design reorganizes existing literature on GCSR in general terms, and gradually comes to a specific conceptualization to stimulate further studies on family SMEs.

Four research questions led the research: (a) What are the main features of previous studies on GCSR? (b) Is it possible to detect critical development phases in research on GCSR? (c) How can existing research on GCSR be reorganized in order to encourage further studies? (d) How can GCSR research be oriented to family SMEs?

To address them, we proceeded in two steps, the first aimed at a systematic literature review, analyzing existing inquiry. These analytic efforts converged on the proposal of a general conceptual framework mapping current and future research avenues. In the second step, having acknowledged the GCSR focus on large firms, we adapted the framework to family SMEs, enucleating a research agenda to foster new studies in this sphere.

Our paper offers three main contributions. First, in facing research questions (a), (b) and (c) we have systematized the fragmented knowledge combining gender and CSR in general terms. In this regard, our literature review presents GCSR research thus far, articulated in four developmental phases: Birth, Childhood, Adolescence, and Youth. These phases describe a research path, ranging from early studies combining gender and CSR with a general focus and adopting an internal perspective, to the exploration of an external perspective and the most recent emergence of specific (and still rare) focuses on SMEs, family businesses and family SMEs. Based on the reviewed literature, we offered a general framework on GCSR, which portrays critical themes of current and prospective research.

Second, we have built on the GCSR framework to reflect on GCSR in the context of family SMEs. This way we contributed to research questions (d) and thus took up the call for further research on CSR in small businesses (Spence, 2016; Gellert & De Graaf, 2012; Karam & Jamali, 2017), in which GCSR is a poorly investigated phenomenon. Specifically, our literature review and the construction of a general framework were instrumentally ground for a conceptualization on GCSR in family SMEs. The latter considers qualifying factors such as family influence, caring for stakeholders, the importance of relationships and reputation, flexibility, and informal mechanisms.

Third, we have proposed a structured research agenda (still addressing research question d). Then, at the end of our study, we were able to identify some potential (though not exhaustive) research guidelines on the internal and external GCSR, also providing examples of prospective research questions.

Finally, our study is not without limitations. First, the paper selection for our literature review was based on specific keywords and other selection criteria aimed at privileging relevant and influential papers. Future research might enlarge the current dataset by searching in other scientific databases than Scopus, modifying the selection criteria (e.g., establishing a different minimum number of citations, in absolute and/or average terms), or considering other literature sources, such as book chapters and conference papers.

Furthermore, in adapting our general conceptual framework of GCSR to family SMEs, we leveraged a limited number of papers on specific GCSR, and did not distinguish between different “sizes” of family SMEs. Future research might consider this aspect, and build differentiated frameworks (with other morphologies) for micro, small and medium-sized firms.

Appendix A

Summary of papers collected and analyzed, pointing out reference theory/ies, their belonging to general or specific GCSR, embracement of external/internal GCSR, and method/s of inquiry.

# /N.	Author (year)	Journal	Cit	Reference Theory/ies	Focus	Perspective	Method/s of Inquiry
1	<i>Karam & Jamali (2017)</i>	Journal of Business Ethics	27	Cross-cultural management, feminist considerations of power, business social contract, business case for CSR, critically oriented CS R scholarship, and CSR through a political theory lens.	Specific GCSR (focus on SMEs in developing countries)	External	Conceptual
2	<i>Peake et al. (2017)</i>	Journal of Business Ethics	25	Enlightened self-interest, social capital	Specific GCSR (focus on small family firms)	Internal	Statistical analyses on a sample of firms
3	<i>Spence (2016)</i>	Business & Society	91	Stakeholder theory, Carrol's CSR pyramid, feminist ethic of care	Specific GCSR (focus on small firms)	Internal	Conceptual
4	<i>Cordeiro et al. (2020)</i>	Business Strategy and the Environment	28	Resource dependence, socio-emotional wealth, and secondary agency theories	Specific GCSR (focus on large family firms)	Internal	Statistical analyses on a sample of firms
5	<i>Campopiano et al. (2019)</i>	Journal of Cleaner Production	17	Self-construal theory	Specific GCSR (focus on large family firms)	Internal	Statistical analyses on a sample of firms
6	<i>Sundarasan et al. (2016)</i>	Corporate Governance (Bingley)	56	Agency theory	Specific GCSR (focus on large family firms)	Internal	Statistical analyses on a sample of firms
7	<i>Rodríguez-Ariza et al. (2017)</i>	Business Ethics	48	Triple bottom line, socio-emotional wealth perspective	Specific GCSR (focus on large family firms)	Internal	Statistical analyses on a sample of firms
8	<i>Beji et al. (2021)</i>	Journal of Business Ethics	17	Diversity of board, diversity in board, agency theory	General GCSR	Internal	Statistical analyses on a sample of firms
9	<i>Pekovic & Vogt (2021)</i>	Review of Managerial Science	14	Stakeholder, resource dependence and agency theories	General GCSR	Internal	Statistical analyses on a sample of firms
10	<i>Amorelli & García-Sánchez (2021)</i>	Corporate Social Responsibility and Environmental Management	10	Agency, stakeholder, resource dependence theories	General GCSR	Internal	Literature review
11	<i>Khatib et al. (2021)</i>	Business Strategy and the Environment	16	Agency, resource dependence, human capital, stakeholder, critical mass theories	General GCSR	Internal	Literature review
12	<i>Atif et al. (2021)</i>	Journal of Corporate Finance	12	Critical mass theory	General GCSR	Internal	Statistical analyses on a sample of firms

13	<i>Jouber (2021)</i>	Corporate Governance (Bingley)	8	Neo-institution theory	General GCSR	Internal	Statistical analyses on a sample of firms
14	<i>Ghaleb et al. (2021)</i>	Cogent Business and Management	5	CSR and real earnings management	General GCSR	Internal	Statistical analyses on a sample of firms
15	<i>Yarram & Adapa (2021)</i>	Journal of Cleaner Production	10	Token and critical mass theories	General GCSR	Internal	Statistical analyses on a sample of firms
16	<i>Govindan et al. (2021)</i>	International Journal of Production Economics	13	Agency and stakeholder theories	General GCSR	Internal	Statistical analyses on a sample of firms
17	<i>Orazalin & Baydauletov (2020)</i>	Corporate Social Responsibility and Environmental Management	27	Upper echelons and resource dependence theories	General GCSR	Internal	Statistical analyses on a sample of firms
18	<i>Uduji et al. (2020a)</i>	Journal of Enterprising Communities	11	Sustainability and CSR in general terms	General GCSR	External	Statistical analyses on a sample of local population
19	<i>Zaid et al. (2020)</i>	Journal of Cleaner Production	27	Agency theory	General GCSR	Internal	Statistical analyses on a sample of firms
20	<i>Jain & Zaman (2020)</i>	British Journal of Management	24	Stakeholder-agency theory	General GCSR	Internal	Statistical analyses on a sample of firms
21	<i>Farrukh et al. (2020)</i>	Corporate Social Responsibility and Environmental Management	19	Stakeholder, organizational behavior, and organizational psychology theories	General GCSR	Internal	Structural equation modeling
22	<i>Uduji et al. (2020b)</i>	International Journal of Tourism Research	17	CSR, sustainable tourism, and women empowerment	General GCSR	External	Statistical analyses on a sample of local population
23	<i>García-Sánchez et al. (2020)</i>	Corporate Social Responsibility and Environmental Management	17	Upper echelon, social role, institutional and neo-institutional theories	General GCSR	External	Statistical analyses on a sample of firms
24	<i>García Martín & Herrero (2020)</i>	Corporate Social Responsibility and Environmental Management	23	Agency and stakeholder theories	General GCSR	Internal	Statistical analyses on a sample of firms
25	<i>Amorelli & García-Sánchez (2020)</i>	Corporate Social Responsibility and Environmental Management	34	Resource dependence, social identity, critical mass, and token theories	General GCSR	Internal	Statistical analyses on a sample of firms
26	<i>Ozkazanc-Pan (2019)</i>	Journal of Business Ethics	30	CSR, postcolonial feminism	General GCSR	External	Conceptual

27	<i>Valls Martínez et al. (2019)</i>	Corporate Social Responsibility and Environmental Management	17	Socialization, resource dependence, legitimacy, agency, stakeholder, and stakeholder agency theories	General GCSR	Internal	Statistical analyses on a sample of firms
28	<i>Khan et al. (2019)</i>	Corporate Social Responsibility and Environmental Management	20	Resource-based view theory	General GCSR	Internal	Statistical analyses on a sample of firms
29	<i>Uđuji & Okolo-Obasi (2019)</i>	Social Responsibility Journal	30	Carrol's CSR pyramid	General GCSR	Internal	Statistical analyses on a sample of local population
30	<i>Issa & Fang (2019)</i>	Gender in Management	26	Stakeholder theory	General GCSR	Internal	Statistical analyses on a sample of firms
31	<i>Lagasio & Cucari (2019)</i>	Corporate Social Responsibility and Environmental Management	44	Corporate voluntary disclosure	General GCSR	Internal	Meta-analytical review
32	<i>Pucheta-Martínez et al. (2019)</i>	Business Ethics	16	Agency, resource dependency, gender socialisation, and social identity theories	General GCSR	Internal	Statistical analyses on a sample of firms
33	<i>Katmon et al. (2019)</i>	Journal of Business Ethics	50	Resource-based view theory	General GCSR	Internal	Statistical analyses on a sample of firms
34	<i>Orazalin (2019)</i>	Corporate Governance (Bingley)	25	Resource dependence, stakeholder, and legitimacy theories	General GCSR	Internal	Statistical analyses on a sample of firms
35	<i>Pucheta-Martínez & Gallego-Álvarez (2019)</i>	Corporate Social Responsibility and Environmental Management	23	Agency and stakeholder theories	General GCSR	Internal	Statistical analyses on a sample of firms
36	<i>Galvão et al. (2019)</i>	Journal of Cleaner Production	24	Social cognitive theory	General GCSR	External	Statistical analyses on a sample of students
37	<i>Francoeur et al. (2019)</i>	Journal of Business Ethics	37	Stakeholder management and institutional theories	General GCSR	Internal	Statistical analyses on a sample of firms
38	<i>Grosser & Moon (2019)</i>	Journal of Business Ethics	29	Feminist theories, feminist organization studies	General GCSR	Internal	Literature review
39	<i>Harjoto & Rossi (2019)</i>	Journal of Business Research	31	Upper echelon theory, gender socialization and ethics of care theories.	General GCSR	External	Statistical analyses on a sample of firms
40	<i>Furlotti et al. (2019)</i>	Corporate Social Responsibility and Environmental Management	28	Gender schema theory	General GCSR	Internal	Statistical analyses on a sample of firms

41	<i>Cabeza-García et al. (2018)</i>	European Management Review	36	Agency theory and resource dependence theory	General GCSR	Internal	Statistical analyses on a sample of firms
42	<i>Rosati et al. (2018)</i>	Corporate Social Responsibility and Environmental Management	24	Eco-feminist theories	General GCSR	Internal	Survey to employees and statistical analysis of sustainability reports
43	<i>Cook & Glass (2018)</i>	Human Relations	33	Token and critical mass theories	General GCSR	Internal	Statistical analyses on a sample of firms
44	<i>Liao et al. (2018)</i>	Journal of Business Ethics	93	Institutional and critical mass theories	General GCSR	Internal	Statistical analyses on a sample of firms
45	<i>Cucari et al. (2018)</i>	Corporate Social Responsibility and Environmental Management	112	Stakeholder, resource dependency, voluntary disclosure theory and legitimacy theories	General GCSR	Internal	Statistical analyses on a sample of firms
46	<i>Galbreath (2018)</i>	Business and Society	78	Stakeholder theory	General GCSR	Internal	Statistical analyses on a sample of firms
47	<i>Lawoo (2018)</i>	Journal of Business Ethics	20	Post-structuralist/ radical feminism	General GCSR	External	Interpretative ethnographic case studies
48	<i>Pucheta-Martínez et al. (2018)</i>	Academia Revista Latinoamericana de Administracion	21	Agency and stakeholder theories	General GCSR	Internal	Literature review
49	<i>McCarthy & Muthuri (2018)</i>	Business and Society	24	Stakeholder theory	General GCSR	External	Participatory visual methods
50	<i>Nie et al. (2018)</i>	Business Ethics	27	Social role theory and similarity attraction paradigm	General GCSR	Internal	Statistical analyses on a sample of employees
51	<i>Haski-Leventhal et al. (2017)</i>	Journal of Business Ethics	32	Moral orientation and moral development theories	General GCSR	External	Survey to students
52	<i>Mahmood & Orazalin (2017)</i>	Journal of Cleaner Production	25	Stakeholder and resource dependence theories	General GCSR	Internal	Statistical analyses on a sample of firms
53	<i>Yasser et al. (2017)</i>	Corporate Social Responsibility and Environmental Management	61	Stakeholder and institutional theories	General GCSR	Internal	Statistical analyses on a sample of firms
54	<i>Alonso-Almeida et al. (2017)</i>	Business Ethics	24	Leadership styles and gender, Corporate social responsibility perceptions and gender	General GCSR	Internal	Survey to a sample of managers, and structural equation
55	<i>Jones et al. (2017)</i>	Corporate Social Responsibility and Environmental Management	41	Social Identity, consumer behavior and attitudes, gender, and CSR.	General GCSR	External	Survey to a sample of consumers

56	<i>McGuinness et al. (2017)</i>	Journal of Corporate Finance	165	CSR in general terms	General GCSR	Internal	Statistical analyses on a sample of firms
57	<i>Majumder et al. (2017)</i>	International Journal of Accounting and Information Management	23	Agency theory	General GCSR	Internal	Meta-analytical review
58	<i>Chaudhary (2017)</i>	Social Responsibility Journal	40	Social identity and organizational justice theories	General GCSR	Internal	Statistical analyses on a sample of employees
59	<i>Alazzani et al. (2017)</i>	Corporate Governance (Bingley)	46	Upper echelon theory	General GCSR	Internal	Statistical analyses on a sample of firms
60	<i>Al-Shaer & Zaman (2016)</i>	Journal of Contemporary Accounting and Economics	86	Sustainability reporting quality, board diversity	General GCSR	Internal	Statistical analyses on a sample of firms
61	<i>Hur et al. (2016)</i>	Corporate Social Responsibility and Environmental Management	40	CSR perception	General GCSR	External	Statistical analyses on a sample of consumers
62	<i>Rao & Tilt (2016a)</i>	Journal of Business Ethics	234	CSR and CSR reporting	General GCSR	Internal	Literature review
63	<i>Grosser (2016)</i>	Journal of Business Ethics	30	Feminist Perspectives on CSR and NGOs	General GCSR	External	Qualitative study through interviews
64	<i>Galbreath (2016)</i>	Journal of Business Ethics	31	Resource-based and complementary asset theories	General GCSR	Internal	Statistical analyses on a sample of firms
65	<i>Keenan et al. (2016)</i>	Journal of Business Ethics	24	Development theories and gender	General GCSR	External	Qualitative study through interviews
66	<i>Tanwar & Prasad (2016)</i>	Management Decision	21	Employer brand	General GCSR	Internal	Structural equation modeling
67	<i>Shaukat et al. (2016)</i>	Journal of Business Ethics	161	Resource-based view, resource dependence theory	General GCSR	Internal	Structural equation modeling
68	<i>Calabrese et al. (2016)</i>	Journal of Cleaner Production	40	Gender differences in business ethics, CSR and sustainability, eco-feminist theories	General GCSR	External	Statistical analyses on a sample of consumers
69	<i>García-Sánchez et al. (2016)</i>	Long Range Planning	81	Institutional theory	General GCSR	External	Statistical analyses on a sample of firms
70	<i>Rao & Tilt (2016b)</i>	Meditari Accountancy Research	95	Stakeholder and resource dependence theories	General GCSR	Internal	Statistical analyses on a sample of firms

71	<i>Landry et al. (2016)</i>	Corporate Social Responsibility and Environmental Management	44	CSR, critical mass theory	General GCSR	Internal	Statistical analyses on a sample of firms
72	<i>Harjoto et al. (2015)</i>	Journal of Business Ethics	221	Board diversity, stakeholder management theory	General GCSR	Internal	Statistical analyses on a sample of firms
73	<i>Setó-Pamies (2015)</i>	Corporate Social Responsibility and Environmental Management	132	Resource dependence and agency theories	General GCSR	Internal	Statistical analyses on a sample of firms
74	<i>Isidro & Sobral (2015)</i>	Journal of Business Ethics	118	Resource dependence, agency, and human capital theories	General GCSR	Internal	Statistical analyses on a sample of firms
75	<i>Post et al. (2015)</i>	Journal of Business Ethics	98	Upper echelons and resource dependence theories	General GCSR	Internal	Statistical analyses on a sample of firms
76	<i>Deschênes et al. (2015)</i>	Corporate Governance (Bingley)	30	Gender and CSR in general terms	General GCSR	Internal	Statistical analyses on a sample of firms
77	<i>Kim et al. (2015)</i>	International Journal of Contemporary Hospitality Management	21	Consumer perception of sustainability, willingness to pay a premium	General GCSR	External	Statistical analyses on a sample of firms
78	<i>Larrieta-Rubín de Celis et al. (2015)</i>	Business Ethics	53	Stakeholder theory	General GCSR	Internal	Statistical analyses on a sample of firms
79	<i>Rekker et al. (2014)</i>	Journal of Economics and Business	36	Stakeholder theory	General GCSR	Internal	Statistical analyses on a sample of firms
80	<i>Chakrabarty & Bass (2014)</i>	Journal of Business Ethics	32	Institutional theory	General GCSR	External	Statistical analyses on a sample of micro-finance institutions
81	<i>Giannarakis (2014)</i>	Social Responsibility Journal	78	Legitimacy theory, agency, signalling, political process, and resource dependence theories	General GCSR	Internal	Statistical analyses on a sample of firms
82	<i>Fernandez-Feijoo et al. (2014)</i>	Corporate Social Responsibility and Environmental Management	119	Stakeholder theory, CSR disclosure, gender board composition	General GCSR	Internal	Statistical analyses on a sample of firms
83	<i>García-Sánchez et al. (2013)</i>	International Business Review	144	Stakeholder theory, Hofstede national cultural system	General GCSR	External	Statistical analyses on a sample of firms
84	<i>Kabongo et al. (2013)</i>	Journal of Business Ethics	30	Resource dependence theory	General GCSR	Internal	Statistical analyses on a sample of firms
85	<i>Frias-Aceituno et al. (2013)</i>	Corporate Social Responsibility and Environmental Management	268	Stakeholder and agency theories	General GCSR	Internal	Statistical analyses on a sample of firms

86	<i>Huang (2013)</i>	Corporate Social Responsibility and Environmental Management	111	Stakeholder theory	General GCSR	Internal	Statistical analyses on a sample of firms
87	<i>Zhang et al. (2013)</i>	Journal of Business Ethics	185	Legitimacy theory, stakeholder management	General GCSR	Internal	Statistical analyses on a sample of firms
88	<i>Kilgour (2013)</i>	Business and Society	25	Gender inequality and CSR in general terms	General GCSR	External	Qualitative study through interviews
89	<i>Hafsi & Turgut (2013)</i>	Journal of Business Ethics	226	Resource dependence and agency theories	General GCSR	Internal	Statistical analyses on a sample of firms
90	<i>Zhang (2012)</i>	Corporate Governance (Bingley)	75	Resource dependence and agency theories	General GCSR	Internal	Statistical analyses on a sample of firms
91	<i>Renouard & Lado (2012)</i>	Corporate Governance (Bingley)	35	Sustainable development and CSR in general terms	General GCSR	External	Mixed (qualitative methods and quantitative surveys)
92	<i>Mallin & Michelon (2011)</i>	Accounting and Business Research	115	Stakeholder theory	General GCSR	Internal	Statistical analyses on a sample of firms
93	<i>Jia & Zhang (2011)</i>	International Journal of Human Resource Management	29	Agency theory	General GCSR	Internal	Statistical analyses on a sample of firms
94	<i>Bear et al. (2010)</i>	Journal of Business Ethics	675	Resource dependence and agency theories	General GCSR	Internal	Statistical analyses on a sample of firms
95	<i>Kemp et al. (2010)</i>	Journal of Organizational Change Management	21	Organisational change theory, gender, and mining	General GCSR	Internal	Conceptual
96	<i>Rodriguez-Dominguez et al. (2009)</i>	Journal of Business Ethics	77	Stockholder, legitimacy and stakeholder theories	General GCSR	Internal	Statistical analyses on a sample of firms
97	<i>Huse et al. (2009)</i>	Journal of Business Ethics	135	CSR and board diversity	General GCSR	Internal	Survey on a sample of firms' board members
98	<i>Oumlil & Balloun (2009)</i>	Journal of Business Ethics	56	Theory of ethics, morality (idealism versus relativism)	General GCSR	Internal	Survey on a sample of managers
99	<i>Prieto-Carrón (2008)</i>	Journal of Business Ethics	54	Feminist literature on women workers in the industrialization process and in the global supply chain	General GCSR	Internal	Literature review

100	<i>Grosser & Moon (2008)</i>	Accounting Forum	48	Gender mainstreaming, CSR and corporate social disclosure, stakeholders, legitimacy, and political economy theories	General GCSR	Internal	Statistical analyses on a sample of firms
101	<i>Brammer et al. (2007)</i>	International Journal of Human Resource Management	614	Social identity theory	General GCSR	Internal	Survey on a sample of employees
102	<i>Marshall (2007)</i>	Journal of Organizational Change Management	33	Systemic theories of gendering	General GCSR	Internal	Conceptual
103	<i>Vuontisjärvi (2006)</i>	Journal of Business Ethics	128	CSR and HR reporting	General GCSR	Internal	Content analysis on responsible reporting practices
104	<i>Grosser & Moon (2005)</i>	Journal of Business Ethics	92	Gender mainstreaming and CSR	General GCSR	Internal	Conceptual

Appendix B

Analytical matrix: number of papers per each phase and category

ANALYTICAL MATRIX PHASES-CATEGORIES		Birth	Infancy	Adolescence	Youth	Subtotal per category
FOCUS	General GCSR	6	7	20	64	97
	Specific GCSR	0	0	0	7	7
PERSPECTIVE	Internal GCSR	6	7	15	54	82
	External GCSR	0	0	5	17	22
METHODOLOGY	Qualitative*	4	1	1	14	20
	Quantitative**	2	6	19	57	84
	Subtotal per phase	6	7	20	71	Tot. 104
* Including qualitative studies, conceptual papers, and literature reviews.						
**Including mixed methods.						

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**WOMEN'S ENTREPRENEURIAL ORIENTATION IN SMALL
FAMILY FIRMS: THEORISING THE ROLE OF INDIVIDUAL AND
FAMILY HUMAN CAPITAL**

Fabrizia Sarto
University of Naples Federico II
fabrizia.sarto@unina.it

Sara Saggese
University of Naples Federico II
sara.saggese@unina.it

Riccardo Viganò
University of Naples Federico II
riccardo.vigano@unina.it

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Abstract

Focusing on small family firms, this paper aims to provide a deeper understanding of women's entrepreneurial orientation by exploratively assessing how it may be influenced by individual characteristics and human capital. The study draws on multiple qualitative case studies of small Italian family firms conducted between 2017 and Autumn 2021. It is grounded in 16 semi-structured interviews with women entrepreneurs in the position of owner-manager. We found that, in small family firms, conservatism and lateral thinking affect women entrepreneurs' entrepreneurial orientation. These relationships are shaped by educational level, functional background in finance and previous experience in the family firm. The novelty of this paper relies on the conceptualisation of the implications of women's characteristics and human capital for their entrepreneurial orientation within small family firms through ex-post propositions and a new conceptual framework. The article contributes to this special issue and the ongoing debate about women in family firms by examining the effects of human capital at both individual and family levels on women's entrepreneurial orientation. Finally, it calls the attention of practitioners to the factors that could encourage the entry, presence and succession of women owner-managers in small family firms.

1. Introduction

The purpose of the study is to explore the women's entrepreneurial orientation in small family firms and the role played by their individual and family human capital.

Fuelled by strong pressures from scholars and policy makers (Elam et al., 2019), research has increasingly focused on the factors that may affect women's entrepreneurship (Deng et al., 2021). Earlier studies have examined the influence of women's characteristics on entrepreneurial engagement (Minniti and Naudé, 2010), strategic and managerial practices (Kanze et al., 2018; Hechavarria et al., 2012) and firm performance (Robb and Watson, 2012). However, it remains unclear how women's characteristics can affect their entrepreneurial orientation (del Mar Fuentes-Fuentes et al., 2015; Runyan et al., 2006).

Entrepreneurial orientation is defined as a multi-dimensional managerial construct that drives both entrepreneurial success and firm performance (Rauch et al., 2009). It brings together three elements: (i) innovativeness, (ii) risk-taking, and (iii) proactiveness (Lumpkin and Dess, 1996). Innovativeness is entrepreneurs' commitment to creativity, shown by the introduction of new technology, products and services. It therefore describes the entrepreneurial inclination to develop new ideas and innovative procedures (Lumpkin and Dess, 1996; Vecchiarini and Mussolino, 2013). Risk-taking is the entrepreneur's willingness to provide resources for projects with potentially variable results (Rauch et al., 2009) and a reasonable chance of costly failure (Miller and Friesen, 1978). It has been defined as "venturing" into the unknown, "committing" a relatively large portion of assets, and "borrowing" heavily (Baird and Thomas, 1985, p. 230-232). It therefore covers all entrepreneurial activities and efforts to promote uncertain business initiatives (Zahra, 2018). Proactiveness is the ability to look ahead and seek opportunities to anticipate future demand (Lumpkin and Dess, 1996). It therefore covers entrepreneurs' ability to recognise markets' strengths, weaknesses and trends in a timely way, and to develop new products or services ahead of competitors (Kropp et al., 2006).

Entrepreneurial orientation can be heavily dependent on both entrepreneurs' characteristics and their human capital. Human capital is defined as the expertise, experience, knowledge and skills arising from training, job pathway and personal experiences (Becker, 1962; Schultz, 1961). Entrepreneurial orientation can hinge on the educational background and professional expertise that entrepreneurs bring to the firm (Davidsson and Honig, 2003; Unger et al., 2011; Manev et al., 2005). Previous studies have suggested that entrepreneurial human capital supports new business ventures (Klyver and Schenkel, 2013) and firm survival, and also improves firm performance in terms of profit, growth and innovation (Millan et al.,

2014). Family entrepreneurs may also bring family human capital thanks to their previous experience in the family firm (Dawson, 2012; Chrisman et al., 2003).

Scholars have explored the role of both human capital and the characteristics of women entrepreneurs on entrepreneurial orientation (Brush et al., 2017; Runyan et al., 2006). However, the links between human capital, women entrepreneurs and entrepreneurial orientation within family firms is still unclear. This article therefore aims to address the following research question: *How does human capital shape women entrepreneurs' entrepreneurial orientation within family firms?*

The paper exploratively addresses this research question by examining women entrepreneurs in the position of owner-manager. The research uses a multiple case study approach to formulate ex-post propositions and inductively develop a conceptual model that incorporates the key findings (Yin, 2003).

The study focuses on small family firms as a theoretically interesting setting. Studies have shown that women's individual characteristics, skills and background are the main factors influencing their entry (Kickul et al., 2010) and presence (Rowe and Hong, 2000; Lerner and Malach-Pines, 2011) in family firms. They also play a crucial role in favouring women's succession (Schröder et al., 2011; Mathew, 2016; Campopiano et al., 2017). At the same time, entrepreneurial orientation is one of the main success drivers of both family firms and small businesses in general. Moreover, there is a positive and significant relationship between entrepreneurial orientation and both financial and non-financial performance in small family firms (Casillas et al., 2011; Rachmawati and Suroso, 2020).

We find that, in small family firms, women entrepreneurs' characteristics, especially their conservatism and lateral thinking, affect their entrepreneurial orientation. These relationships are influenced by both individual and family human capital. Conservatism limits risk-taking, and lateral thinking ability improves entrepreneurs' levels of innovativeness and proactiveness. These relationships are also affected by women's educational level, a functional background in finance and previous experience in the family firm.

The article is structured as follows. Section 2 reviews the literature. Section 3 describes the research methodology. Section 4 illustrates findings, formulates research propositions and shows the conceptual model, and Section 5 concludes.

2. Literature review

Prior studies have devoted an increasing attention to the role of women in family firms (Jimenez, 2009; Wang, 2010; Glover, 2014; Gherardi and Perrotta, 2016) by mainly focusing on their presence, career dynamics and succession (Campopiano et al., 2017; Hytti et al., 2017; Cesaroni and Sentuti, 2018). However, some questions remain unanswered regarding how the women's involvement in family business affects and shapes the firm's entrepreneurial activity. This is especially true in small businesses, where entrepreneurship supports firm growth processes (Aloulou and Fayolle, 2005; Coleman, 2007).

Looking at the influence of gender on entrepreneurial activity (Jennings and Brush, 2013; Deng et al., 2021), studies have found that women are less likely than men to enter self-employment or to start or running new businesses (Minniti and Naudé, 2010). However, firms led by women often have similar or better performance than similar firms led by men (Robb and Watson, 2012; Matar, 2015).

Interestingly, there can be differences between women and men (Gull et al., 2018) that influence their entrepreneurial orientation (Quaye et al., 2015; Runyan et al., 2006). For example, women entrepreneurs tend to be more risk-averse and more concerned about failure (Minniti and Nardone, 2007; Faccio et al., 2016). They therefore prefer investments with lower risk–return pay-offs and engage in fewer risky business initiatives (Kepler and Shane, 2007; Lim and Envick, 2013). Some studies have found that women entrepreneurs have a stronger commitment to innovation, but others suggest that this propensity may be constrained by a shortage of the human capital needed for innovation (Manolova et al., 2007; Marvel and Lumpkin, 2007; Pablo-Martí et al., 2014). Women entrepreneurs also tend to be less proactive than men when encountering business opportunities, especially if they have previously been exposed to gender stereotypes (Gupta and Bhawe, 2007).

Studies have also considered how women's entrepreneurial intention and orientation (del Mar Fuentes-Fuentes et al., 2015; Wannamakok and Chang, 2020; Zisser et al., 2019) is affected by their individual characteristics (Yukongdi and Lopa, 2017). There has been particular focus on conservatism and lateral thinking. Women entrepreneurs often show conservative behaviour (Sila et al., 2016; Charness and Gneezy, 2012; Mitchelmore and Rowley, 2013), and tend to be averse to ambiguity and uncertainty (Ahmed and Atif, 2021). They also take longer to make decisions and place more weight on threats than opportunities (Charness and Gneezy, 2012; Jianakoplos and Bernasek, 1998). For lateral thinking, also known as web-thinking, women show considerable capacity to collect information from their external environment and develop intricate (non-linear) relationships among pieces of data (Runyan et al., 2006).

The potential contribution of women's characteristics to entrepreneurial orientation can be also affected by human capital. This is especially relevant in family firms, because studies have shown that women's characteristics and human capital are among the main drivers of women's involvement in family firms (Barrett, 2014; O'Connor et al., 2006).

Scholars have stressed the importance of individual founders or entrepreneurs' human capital for the success of their ventures (Coleman, 2007; Javalgi and Todd, 2011; Garcia-Sanchez et al., 2017). Studies have shown that entrepreneurs' background and expertise can improve their cognitive skills (Davidsson and Honig, 2003; Westhead et al., 2005). The level of entrepreneurs' human capital also positively affects entrepreneurial activity, because it supports both the start-up process and business growth by affecting ability to identify new business opportunities (Dimov, 2010; Unger et al., 2011; Bosma et al., 2004). It also results in better venture strategy and planning, and supports funding by partially compensating for the lack of financial capital needed to sustain business opportunities (Unger et al., 2011; Pansiri, 2005). An entrepreneur's background can support the start-up process (Klyver and Schenkel, 2013) and survival of small businesses by enhancing their performance in terms of profits, growth and levels of innovation (Millan et al., 2014; Unger et al., 2011; Coleman, 2007).

Individual human capital can also affect entrepreneurs' level of entrepreneurial orientation. Entrepreneurs with a higher level of education are more likely to be creative and flexible, improving their ability to respond to different situations and adopt innovative behaviour (Miller, 1999; Altinay et al., 2011; Grant and Romanelli, 2001; Liu et al., 2019). Having previous work experience allows entrepreneurs to develop useful information to support decision-making, by strengthening their ability to respond proactively to market opportunities (Reuber and Fisher, 1999; Cooper et al., 1989; Haynes, 2003; Barroso et al., 2011). Education and work experience, including in specific functional areas, may remove some of the fears and uncertainties of doing business. They also provide business owners with a positive attitude to risky decisions (Davidsson and Honig, 2003; Goedhuys and Sleuwaegan, 2000; Wang et al., 2013; Güner et al., 2008).

Interestingly, this circumstance specifically applies to family firms. Growing up in a family business environment helps later generations to understand "how to do business", and therefore plays a key role in developing family-based human capital (Dawson, 2012; Chrisman et al., 2003). Parents or other family members, as representatives of the previous generation involved in the business, can mentor the next generation and hand over both knowledge about running the firm and the secrets of the business (Dyer et al., 2014; Danes et al., 2009). As a result, family affiliation and family human capital both provide family members with a competitive advantage in starting or growing their enterprises (Dyer et al., 2014), and in developing their entrepreneurial orientation (Nandamuri and Gowthami, 2014).

This study therefore explores the determinants of women's entrepreneurial orientation within small family firms in connection with human capital at both individual and family levels.

3. Research design

We used a multiple case study approach because this is appropriate when knowledge is shallow, fragmentary and incomplete. Following Yin (2003), we inductively investigated the phenomenon of women entrepreneurs' entrepreneurial orientation within small family firms to formulate ex-post propositions that may be useful to scholars carrying out subsequent studies on the topic (Eisenhardt, 1991). We opted for in-depth qualitative case studies because they provide a stronger base for explanation of underdeveloped topics (De Massis and Kotlar, 2014). They also foster comparisons and identification of patterns and/or idiosyncratic characteristics in the study cases (Yin, 2003).

Our sample included six small Italian family firms that we examined between 2017 and 2021 (Table 1). We focused on women entrepreneurs in the position of owner-managers. We chose to focus on Italian small family firms for many reasons. First, literature suggests that women entrepreneurs usually work in small businesses (Jennings and Brush, 2013). Family firms are also more likely to formally involve women as top managers (Montemerlo et al., 2013; Campopiano et al., 2017; Danes and Olson, 2003; Chadwick and Dawson, 2018). Italy is an appropriate context for this research because small firms are extremely important to the economy, and the majority are family-owned (Calabrò et al., 2020; Minichilli et al., 2016).

We drew our case studies from two main sources. First, we used our informal network at the University and approached many contacts during thematic workshops and seminars. Second, we drew on publicly available information such as firm websites, press, and media reports (Kallmuenzer et al., 2018). We selected cases for theoretical sampling that we thought would be particular suitable to illuminate the phenomenon of women's entrepreneurial orientation and to extend knowledge about the links among variables (Graebner and Eisenhardt, 2004; De Massis et al., 2015). We followed four main criteria in selecting cases. First, to identify small firms, we focused on those with fewer than 50 employees and a turnover up to € 10 million, following the OECD (2005) definition. Second, to select family firms, we ensured that members of a single family directly or indirectly held more than 50% of the equity (Miller et al., 2014; Calabrò et al., 2020). Third, to focus on women entrepreneurs, we selected firms led by at least one woman from the founding family, who had to hold the position of owner-manager. Fourth, we chose cases that would include different mixes

of attributes in terms of women entrepreneurs' background, family generations involved in the firm and business activity or industry (De Massis and Kotlar, 2014). This sampling logic ensured that our cases were suitable for the research. They complied with the minimum qualifications for size, family status and involvement of women entrepreneurs, and also provided a level of variation that we considered would provide more robust results, as well as replicability and theory extension (Yin, 2009; Eisenhardt and Grabner, 2007; Cesaroni and Sentuti, 2017). The overall characteristics of our cases and respondents are shown in Table 1.

To provide a comprehensive picture of the characteristics and personal stories of all interviewees, we started with semi-structured interviews (N. 6) carried out between 2017–2019, and followed these up (N. 6) in Autumn 2021 to provide a deeper exploration (Figure 1). We used semi-structured interviews because this choice enabled us to use pre-determined open-ended questions and follow up issues that emerged during the dialogue.

Our interview protocol started by closed questions about the interviewee (age, marital status, family position, educational and professional background, experience in the family firm) and the firm (family generation involved in the firm, number of employees, business activity/industry). These were followed by open-ended set questions, and any further questions that emerged during the interview.

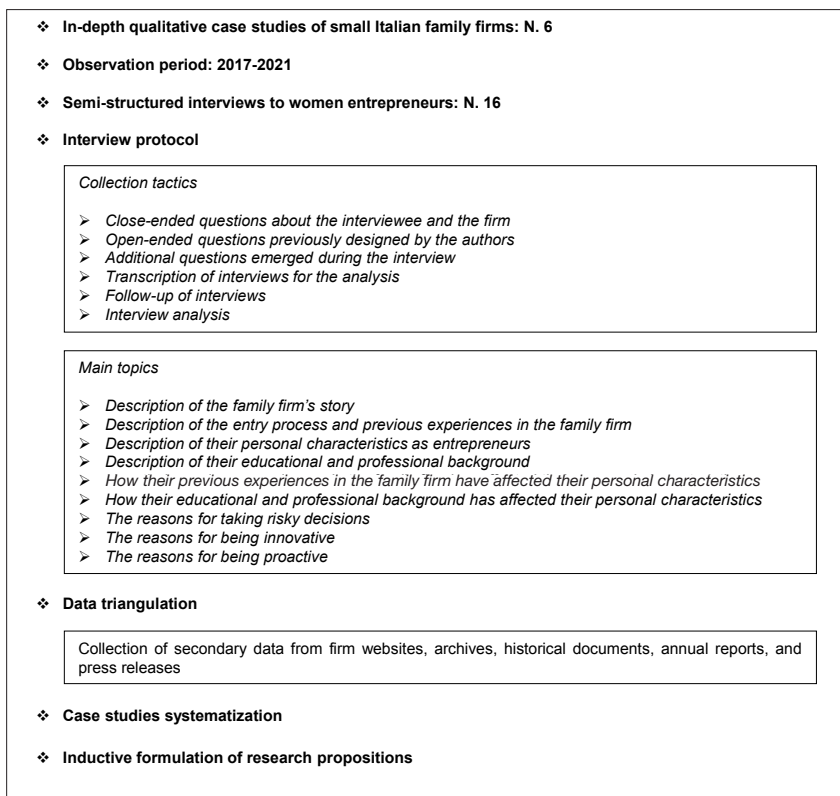
Table 1: Description of case studies

	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6
Respondent profile	Married, aged 55	Single, aged 47	Married, aged 38	Married, aged 33	Widow, aged 62	Divorced, aged 43
Family position of respondent	Successor	Successor	Successor	Successor	Successor	Successor
Respondent's background	Master's degree and PhD in geology	Master's degree in modern languages and MBA	Chartered accountant and auditor, PhD in management	PhD in engineering & technological innovation and master's degree in digital innovation	High-school diploma (classical studies)	MBA
Family generation involved in the firm	5th	4th	2nd	2nd	2nd	3rd
Business activity/ industry	Hospitality	Clothing	Chemistry	High-tech	Clothing	Food and beverages
Number of employees	48	45	49	38	41	37
Turnover (thousand Euros)	7.204	9.919	9.950	8.471	8.316	9.710

To ensure rigor and consistency across all firms, we drew on the literature about the dimensions of entrepreneurial orientation to design open-ended questions and develop an interview guideline. We validated the guideline by holding the first two interviews with women entrepreneurs from the firms in our sample to ensure that all relevant topics were covered (De Massis and Kotlar, 2014).

We asked respondents to describe the story of their family business and how they joined the firm. We moved onto their personal characteristics, the evolution of their educational and professional background, and their experience in the family firm, to understand their attitudes to risk-taking, innovation, and use of proactive behaviours. We asked additional questions (for example, “What do you mean by that?” or “Could you please explain this in more detail?”) to collect more detailed information. All interviews were video recorded and then transcribed. When necessary, we had a second interview session to confirm information or to follow up something that had arisen in the first interview. This procedure resulted in additional 4 interviews leading to N. 16 interviews in total.

Fig. 1: Research design



We used several approaches to improve the clarity of the data collected and limit misunderstandings in interpreting responses. First, we made a brief introductory presentation of our research. We then asked the interviewees' permission to re-phrase their answers in our own words. Once we had completed all the interviews, we analysed the information and created a report. Finally, we carefully read the interview reports of each case to provide an overall picture of the phenomenon.

Besides interviews, we also collected secondary data from external sources (firm websites, archives, historical documents, annual reports, and press releases) to triangulate information. We drew conclusions by coding data, identifying a linear-analytic structure of information based on the topics' sequence in the interviews. Finally, in the last step of our work, we systematised the case studies to develop propositions (Yin, 2003).

4. Results and propositions

This section discusses the study findings, and especially the implications of women's characteristics and human capital for their entrepreneurial orientation within small family firms, covering risk-taking, innovativeness, and proactiveness.

4.1 Women and entrepreneurial orientation in small family firms

The interviews showed that women entrepreneurs' entrepreneurial orientation within small family firms is influenced by both conservatism and lateral thinking.

The women entrepreneurs showed conservative behaviour, witnessed by their tendency to make decisions by examining the strengths and weaknesses of all options (Charness and Gneezy, 2012; Jianakoplos and Bernasek, 1998). For example, Respondent 2 stated:

"I do not like to 'play it by ear'. As the fourth generation successor in my family firm, I firmly believe that it is important to plan all decisions to succeed in business. I therefore try to take into consideration all the factors that could potentially affect my business choices. I examine the possible scenarios associated with all options and consider all the contingencies that could negatively influence the outcomes."

The interviews emphasised that, when women entrepreneurs make decisions, they usually apply asymmetric criteria in the evaluation of drawbacks and benefits of each option. They tend to put more weight on the negative than the positive implications. This means that they avoid making choices that could be seen as too uncertain (Sila et al., 2016; Charness and Gneezy, 2012; Mitchelmore and Rowley, 2013).

Taking the argument a step further, the interviews suggested that this conservatism constrained these women's propensity to take risks, and make risky investments, within their business. Respondent 5 commented:

"When I must invest in a new project, I'm scared about the market threats, and the regulatory and administrative barriers. I feel like I am jumping in with sharks! (...) For example, in 2015, I was thinking about expanding my business (...) I would have needed to make much bigger resource commitments and sustained heavy debt to obtain larger future returns (...) However, in the end, I was just too frightened of it going wrong, and decided not to go ahead after all (...)."

This interviewee was therefore concerned about making long-term risky investments around internationalisation and business growth (Mitchelmore and Rowley, 2013; Faccio et al., 2016). The large resource commitments and heavy debt made her uncertain, and uncommitted. Her willingness to take risks on behalf of the business therefore decreased. Building on this, we propose that:

P1: Conservatism limits the risk-taking of women entrepreneurs in small family firms.

Our interviews also showed that women's entrepreneurial orientation can also depend on lateral thinking, which was common to all our interviewees as part of their decision-making process. Far from the linear and sequential traditional way of thinking, the interviewees described a flexible approach to thinking that enabled them to use all information on a given phenomenon by creating well-developed connections that support their decisions (Runyan et al., 2006). Respondent 1 explained:

"When I have to make decisions for my family business (...), I force myself to identify all possible implications of my choices. I try to pinpoint all connections among facts, activities and implications to select the best option. (...) I'd make decisions in a slower and less linear way so that I can achieve my targets. I think it is really important to share my ideas (...) not only with my relatives, but also with my staff members to develop a bigger picture of the problem we are trying to address."

Similarly, Respondent 6 commented:

"(...) when I have to make decisions, I try to be as flexible as possible because I recognise that the market is always in flux. I take my time to make decisions, and try to listen and understand all voices and positions, and collect all the information available. (...) I need to fully understand the complexities around the problem to make the choice that will best produce the effect I want."

The women entrepreneurs therefore showed strong lateral thinking because they make decisions by considering more elaborate information (Runyan et al., 2006). This may affect their entrepreneurial orientation in terms of innovativeness and proactiveness. Respondent 1's comments supported this:

"I found that the best way to make decisions is to follow a participative and elaborate decision path. For example, two years ago, I oversaw an innovative app

development to manage the customer care and I decided not to start straight away but to (...) collect as much information as possible. I also found brainstorming useful and as a way to hear all the voices inside the business."

These interviews suggested that the women's decisions to collect and process information in a flexible and non-linear way enhance the likelihood that they can innovatively and creatively introduce new products and processes (Runyan et al., 2006). The approach to decision-making fosters the development of new ideas and creative procedures, which in turn may result in new products and processes. Building on this, we propose that:

P2: Lateral thinking improves the innovativeness of women entrepreneurs in small family firms.

The interviews also suggested that lateral thinking can influence proactiveness. For example, Respondent 2 said:

"For my family firm to lead the market and gain a competitive advantage, it is important that we can foresee potential customer needs and trends. I think that this is especially important for smaller firms like mine, because they face the challenge of global markets. My way to achieve this is to collect potentially useful information and integrate it with other inputs to create something new."

The ability of women entrepreneurs to assess and connect multiple and complex information, as well as hold several issues in their minds at the same time, helps women entrepreneurs to manage the business effectively. Some studies have found that women entrepreneurs are more intuitive and able to make better opportunity-driven decisions when they face adverse and challenging circumstances (Matar, 2015; Gupta and Bhawe, 2007). Our case studies suggested that women entrepreneurs can proactively drive changes within their business, by both learning from negative events and showing an advanced long-term planning ability, as well as forward-looking and opportunity-seeking behaviours to build strategic advantages (Lumpkin and Dess, 1996; Kropp et al., 2006). Building on this, we propose that:

P3: Lateral thinking improves the proactiveness of women entrepreneurs in small family firms.

4.2 The influence of human capital at individual and family levels

The interviews with women entrepreneurs also suggested that their human capital, at both individual and family levels, can influence their risk-taking, innovativeness and proactiveness. Respondent 4 commented:

"When I enrolled at university, I chose engineering because I knew that I needed the knowledge and expertise to provide a contribution to my father's firm. After my undergraduate degree, I took a PhD in engineering and technological innovation and completed my education with a Master's in digital innovation. Now I can say that I was not wrong, I made the right choice! This training has certainly improved my knowledge and skills, but I have also become more conservative be-

cause I am now more aware of the implications of every choice and more reluctant to make risky decisions."

This respondent therefore suggested that her education affects the way in which she takes a decision. This was echoed by other interviewees. Overall, we found that the level of conservatism varied as the educational level of women entrepreneurs increased. This is consistent with previous studies suggesting that firm leaders' willingness to take risks depends on their level of education and expertise (Pansiri, 2005). Decision-makers with a higher level of education also have higher levels of conservatism (Wang et al., 2013). Taking this argument a step further, at individual level, the effect of human capital in terms of educational level on conservatism has inevitable consequences for women entrepreneurs' risk-taking. Respondent 3 commented:

"Risky choices always discomfort me. My long education strongly limited my risk tolerance, as I know that every risky choice has high hidden costs that may not be worth the risk because they are often not balanced by earnings. Indeed, thanks to my PhD, I've achieved structured skills that make me more rational and less instinctive. I tend to reject high-risk projects, although they may be highly profitable. (...) Indeed, when I faced the challenge of signing a partnership agreement with another firm (...), I was anxious about being involved in a joint venture. It implied that we would have to share equity and control over the firm with non-family partners, to say nothing of the risk of changes in market conditions!"

This evidence suggested that a longer period of education for women entrepreneurs in small family firms can influence the relationship between conservatism and risk-taking by enhancing the women's aversion to uncertain projects. Our interviews highlighted that women entrepreneurs with a high level of educational human capital avoid making choices that can be seen as too uncertain. This in turn constrains excessive risk-taking in strategic decisions (Wang et al., 2013; Sila et al., 2016). Such circumstance is also in line with previous studies supporting the conclusion that better educated women entrepreneurs tend to be strongly risk-averse and do not support long-term risky projects (Charness and Gneezy, 2012; Faccio et al., 2016). Building on this, we propose that, at individual level of human capital:

P4: The educational level amplifies the relationship between conservatism and risk-taking of women entrepreneurs in small family firms.

Individual-level human capital also influences lateral thinking in making decisions. Respondent 5 commented:

"During my business experience, I noticed that, compared to other women with high levels of education, I'm more likely to compartmentalise information when I make decisions. I make more effort to bring more things together when I am analysing information to make business decisions. I've always needed to involve other people in my decision-making process."

Interviewees with a lower level of education found it harder to use and

integrate information to draw conclusions about general trends from specific occurrences. Conversely, when women entrepreneurs are better educated, they have more advanced and refined knowledge that makes them better able to identify patterns in information and interpret a wider range of possible options to address complex issues (Liu et al., 2019). Education therefore supports women entrepreneurs to process information and recognise the long-term effects of business options. Respondent 1 commented:

“During my university training, I learned the importance of following a target-oriented decision-making approach. I think the biggest mistake that one can make is to compartmentalise without creating links among the different aspects of the topic you are considering. Today, as the head of a small family firm, I still apply this approach and I can develop more intuitive connections where, earlier, I only understood facts. I start the decision-making process by developing my understanding of the big picture, and especially the wider aspects of the issues that I need to examine. I then look for more detailed information about the problem. Finally, I assess the possible solutions. Taken together, this helps me to identify solutions even before issues arise. For example, when the boom in bed and breakfast started some years ago, I understood that the only way to survive was to change our business model and expand our market proposal to offer low-price competitive hospitality solutions.”

The interviews suggested that, at individual level, the human capital in terms of a high level of education among women entrepreneurs in small family firms influences their lateral thinking by enhancing their ability to properly interpret and use complex information for decision-making. This has implications for proactiveness. In line with previous studies, our interviews suggested that better educated women entrepreneurs have well-developed problem-solving skills that help them to identify solutions and therefore address complex and challenging business issues more proactively (Barroso et al., 2011). Building on this, we propose that, at individual level of human capital:

P5: The educational level amplifies the relationship between lateral thinking and proactiveness of women entrepreneurs in small family firms.

Functional background is an additional feature of human capital that affects lateral thinking. Respondent 6 commented:

“During my MBA, I learned that every aspect of business activity is strongly connected to others, and combining them differently gives very different resolutions. (...) Thanks to my financial training, I learned the importance of thinking about connections among facts and business activities to develop a detailed picture of the issues and their current and future implications.”

A background in finance therefore allows women entrepreneurs to understand and weigh the pros and cons of all elements of different options, driving accurate decisions and forward-looking evaluations (Gull et al., 2018; Güner et al., 2008). However, the interviews also suggested that a background in finance increased awareness of the importance of assuring cost-

effectiveness and efficacy. This therefore highlighted financial drawbacks, with possible implications for innovativeness. Respondent 3 noted:

“As an accountant, I know that business options are strongly interconnected, so I always do my best to have a detailed summary of all information that matches the options ‘on the table’. However, I know that no decision is costless. While I sift through options, I try to follow a ‘homo economicus’ approach by considering the financial implications of each one. For example, when I had to decide whether it was profitable to invest in a new market by launching a new chemical product, I took my time to consider the opportunity costs of all remaining options, including not to invest. In the end, I decided that the revenues and benefits were too low compared to the connected costs and drawbacks.”

The women entrepreneurs with financial and accounting expertise therefore described organising a detailed summary of all information that would help in making a decision. However, they also suggested that they were more likely to focus on cost-containment and financial efficacy, forgoing innovative initiatives (Garcia-Sanchez et al., 2017; Wang et al., 2013). This is also consistent with previous studies, and suggests that individual-level human capital in terms of a background in finance supports women entrepreneurs’ lateral thinking (by providing them with financial lens of thinking). However, it also constrains the women’s entrepreneurial intention to innovate. Building on this, we propose that, at individual level of human capital:

P6: The functional background in finance weakens the relationship between lateral thinking and innovativeness of women entrepreneurs in small family firms.

A functional background in finance could therefore be said to influence interviewees’ level of conservatism. Respondent 6 noted:

“(…) My MBA helped me to understand that financial tools are powerful ways to properly measure the risk associated with each project, and that failure is not the opposite of success, but a steppingstone towards your goal. (...) I also learned that the only people who never fall are those who never mount the high wire.”

Opposite results emerged from the interview with the woman entrepreneur with a background in a non-financial field (Respondent 4):

“My PhD in engineering and technological innovation and Master’s in digital innovation have made me ready and confident on digitalisation and high technology matters, which is what my firm deals with. After all, I chose this subject because it was consistent with the industry and suitable for my father’s firm where I always wanted to work. However, the knowledge and skills that I gained through my training have not affected my conservative attitude because I still fear the potential drawbacks of my choices.”

The collected evidence leads us to argue that, compared to women entrepreneurs with a non-financial background, women entrepreneurs who are more expert in finance have a lower degree of conservatism.

A financial background seems to help them to develop a stronger wil-

lingness to take risks. This supports the idea that financial expertise lessens risk aversion in these women (Faccio et al., 2016). In line with previous studies, our interviews showed that competence in managing risk can have implications for women entrepreneurs' intention to take risks (García-Sánchez et al., 2017). For example, Respondent 3 commented:

"I've noticed that my willingness to take risks has improved as my financial expertise has become more and more sophisticated over time. After so long working in finance, I tend to consciously accept the risk related to business activities, because my financial expertise means that I'm prepared for what might happen. Even now, this helps me to overcome my fear of investing and taking my business beyond the boundaries of the Italian market to develop and grow it further."

Having financial expertise therefore helped our interviewees to be more confident, and less concerned about identifying the risks associated with particular business options. This suggests that women entrepreneurs with individual human capital in terms of financial expertise are less conservative when they make business decisions, and therefore tend to be more likely to make long-term risky investments (García-Sánchez et al., 2017). Building on this, we propose that, at individual level of human capital:

P7: The functional background in finance weakens the relationship between conservatism and risk-taking of women entrepreneurs in small family firms.

Shifting the focus to family-level human capital, Respondent 5 commented:

"I learned all I know about running the business from my family. It is not an exaggeration to say that this firm heard my first cry, and from that moment on, I started a process of continuous training during informal conversations over the dinner table with my parents. I also learned about the business by spending all my summer holidays working in the firm (...). I believe that all these experiences have had a powerful influence on me, and now I feel pretty confident of my business choices because I am able to foresee almost all potential drawbacks."

Family capital rooted in the previous experiences of women entrepreneurs can therefore reduce their conservatism. In turn, this can affect the implications for the level of risk-taking. Respondent 6 agreed:

"Working in my family firm since I was a teenager has helped me to understand how to run the business and take risky decisions. (...) While my friends met up to go shopping and spend all their free time with their boyfriends, I lent a hand in my family firm (...). Thanks to my father's mentoring, step by step, I have acquired all the business secrets that have turned out to be essential, especially when I recently took on the challenge of opening a new restaurant. You can imagine how risky that choice could be when you run a small firm and try to expand your business during a crisis like the Covid-19 pandemic."

The interview evidence therefore suggests that previous experience in the family firm suppresses the more conservative behaviour of women entrepreneurs and encourages them to make risky decisions (Nandamuri and Gowthami, 2014). We therefore propose that, at family level of human capital:

P8: The previous experience in the family firm weakens the relationship between conservatism and risk-taking of women entrepreneurs in small family firms.

Family-level human capital also has implications for the proactiveness of women entrepreneurs. Respondent 4 stated:

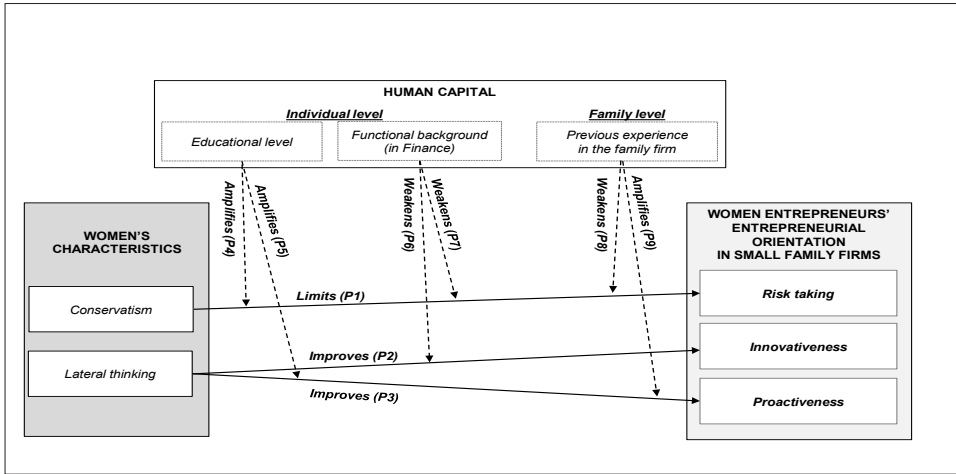
“My long training in the family firm and my relatives’ mentoring have sharpened my receptiveness to market stimuli and all external information potentially useful to help me in making decisions. These unique assets have fostered my ability to make connections among data, facts and activities, and in turn have revealed themselves to be crucial in foreseeing market trends and customers’ needs, bringing potentially critical issues forward.”

Experience within the family firm therefore had positive implications for the interviewees’ decision-making activity. Interviewees reported that this experience trained them to collect and properly connect information, and supported their ability to better interpret market needs and address critical issues. We can therefore argue that, when women entrepreneurs are well-equipped in terms of family capital, they tend to be more open to using all possible inputs for business choices, improving decisions about critical issues, opportunities, and market trends (Nandamuri and Gowthami, 2014). We therefore propose that, at family level of human capital:

P9: The previous experience in the family firm amplifies the relationship between lateral thinking and proactiveness of women entrepreneurs in small family firms.

Figure 2 shows a conceptual model that systematises the relationships among women’s characteristics, the dimensions of their entrepreneurial orientation and the aspects of human capital. The model shows that conservatism and lateral thinking influence the level of risk-taking, innovativeness and proactiveness of women entrepreneurs. These relationships are shaped by human capital at both individual (educational level and functional background in finance) and family (previous experience in the family firm) levels.

Fig. 2: Conceptual model and connections among key constructs



5. Concluding remarks

Drawing on multiple case studies, this article exploratively assesses how, in small family firms, human capital at both individual and family levels influences women's entrepreneurial orientation. The interviews with women entrepreneurs helped us to formulate ex-post propositions and inductively develop a conceptual model. This suggests that women entrepreneurs' characteristics, especially conservatism and lateral thinking, affect their entrepreneurial orientation. These relationships are shaped by aspects of human capital at both individual (educational level and functional background in finance) and family (previous experience in the family firm) levels.

Focusing on the interface of human capital and individual characteristics, the research advances the academic debate on entrepreneurial orientation. Most studies have examined either the implications of human capital or the effects of the characteristics of women entrepreneurs on entrepreneurial orientation (Lim and Envick, 2013; Manev et al., 2005). By contrast, our paper explores both factors and assesses how women entrepreneurs' educational level, functional background in finance and previous experience in the family firm influence risk-taking, innovativeness and proactiveness. The study therefore also extends the human capital literature by disentangling the effects on women's entrepreneurial orientation of human capital at both individual and family levels. It also moves forward the literature on women entrepreneurship by proposing how conservatism and lateral thinking influence women's entrepreneurial behaviour. The article also contributes to this special issue and to the ongoing debate about women

in family firms by providing a deeper understanding of their experiences in small sized family business. Starting from the literature suggesting that women's personal characteristics, expertise and skills are the main drivers of their involvement in family firms (Campopiano et al., 2017), the paper builds on previous studies by assessing the implications of these features for entrepreneurial orientation, which is considered a key factor in the success of small family businesses (Rachmawati and Suroso, 2020; Aloulou and Fayolle, 2005). Finally, the article offers a useful conceptual model that makes a dual contribution. First, it draws out the implications of women's characteristics for entrepreneurial orientation in small family firms by offering an overview of the relationships between both these issues, and human capital at both individual and family levels. Second, by helping to understand how conservatism and lateral thinking can affect women's entrepreneurial orientation, and how these relationships are influenced by human capital, it will enable future scholars to shed light on the connections between these elements within small family firms.

Our paper therefore highlights a number of avenues for future research. First, it does not compare enterprises led by women and men, and future studies could explore and compare them to identify how gender affects entrepreneurial orientation and its relationships with other factors. Scholars could, for example, compare how and to what extent human capital shapes the entrepreneurial orientation of men and women, and examine whether there is a possible gender gap effect. Additionally, the proposed conceptual model is a simplification of a set of complex phenomena, and therefore highlights research opportunities related to the development of a more elaborate framework including additional human capital factors (for example, international experience, industry and firm background). The model also focuses on particular elements of women entrepreneurs' human capital (i.e. educational level, functional background in finance area and previous experience in the family firm). Future studies could examine how similar elements of human capital in others (for example, employees and consultants) in the firm could influence the relationships between factors. Our results also only report the specific effect of human capital and personal characteristics on our interviewees' entrepreneurial orientation. Future studies could explore the presence of substitute or complementary effects among these variables. Our research does not explore the role of women's social capital in entrepreneurial orientation. Another promising research avenue to pursue would therefore be investigating the implications of social capital for women entrepreneurs' risk-taking, innovativeness and proactiveness. Scholars could also explore how additional factors such as other people's human capital (for example, consultants) and available resources could influence the relationship between women's personal characteristics and entrepreneurial orientation.

Finally, by providing insights into the effect of women on the entrepreneurial orientation in family firms, this article highlights factors that could drive the entry, presence and succession of women leaders in family firms. It offers a timely contribution to the current practical debate about supporting women owner-managers to develop and expand small businesses. It provides novel insights for women entrepreneurs about how their conservatism and lateral thinking can foster or limit their entrepreneurial orientation. It also helps them to understand how their human capital at both individual and family levels can amplify these positive effects and weaken the negative ones. These findings could also be useful to policymakers wanting to design programs to encourage women entrepreneurs to invest in human capital to improve their risk-taking, innovativeness and proactiveness, supporting the growth of small family firms.

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**DAUGHTERS' INVOLVEMENT AND FEMALE SUCCESSION IN
FAMILY BUSINESSES: A MULTIPLE-CASE STUDY**

Michela Floris
University of Cagliari
micfloris@unica.it

Angelo Dettori
University of Cagliari
angela.dettori@unica.it

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Abstract

This study intends to contribute to this Special Issue by investigating a relevant topic that inspires numerous studies and deserves to be deepened from several perspectives: daughters' succession. Specifically, building on the family embeddedness perspective, this paper investigates an unexplored field, trying to answer the following question: What happens when a woman becomes a mother after being involved in a family firm? Based on a multiple-case study of four small family-owned firms, this study shows interesting academic and practical implications, revealing four issues that daughters experience when they attain motherhood after being involved in a family firm, namely, family discouragement, family-coach approach, family persuasion and role demotion, resulting in intertwining among family support, family protectiveness and daughter self-efficacy.

1. Introduction

Family businesses, defined in this study as those fully owned and managed by members of the founding family, are pervaded by family beliefs and values and oriented to survive to be handed down through generations (Aronoff & Ward, 2001). They are characterised by intertwined relationships between family and firm that almost completely overlap (Sharma & Manikutty, 2005). This overlap creates several difficulties in considering family and firm as separate entities (Aldrich & Cliff, 2003). Family rules, norms, beliefs, behaviour, history, values, dynamics and events affect a business, thereby imprinting the 'family stamp' in every moment of the family business's life.

Scholars have underlined that the intricate family–business tie generates unique dynamics, affecting management and corporate relationships, which are often caused by anthropological roots (Floris et al., 2019). Thus, women's roles and involvement can vary sensitively from leadership positions (Barrett & Moores, 2010) to mere family delegates (Abdullah, 2014) and from minor and unpaid roles (McKie et al., 2004; Salganicoff, 1990) to an invisible presence (Cole, 1997; Hollander & Bukowitz, 1990). This situation suggests that a family business seems a place where women meet their career expectations, thus exercising visible decision-making powers, holding leadership positions and handling conflicts between socioemotional and financial goals (Cruz et al., 2010). Moreover, a family business is a place that can hinder women's involvement and careers, relegating them to more traditional roles (Nelson & Constantinidis, 2017).

In the past decades, studies on women in family businesses investigated the role of daughters in leadership positions, exploring their experience in the succession process (Gherardi & Perrotta, 2016; Mussolino et al., 2019). These studies also focused on gender inequality and the removal of the so-called 'glass ceiling', factors inhibiting the succession of daughters and benefits that daughters can obtain from working in a family firm (Martinez Jimenez, 2009). However, Sharma (2004), in her literature review, noted that women and their role in family firms remain in the shadows. Similarly, Campopiano et al. (2017), notwithstanding scholars' increasing attention, suggested that the topic deserves further scrutiny, particularly with respect to 'the role of corporate entrepreneurship activities that can act as drivers of women's entrepreneurial entry, as well as outcomes of succession, career dynamics and presence of women in family business' (Campopiano et al., 2017, p. 9). Recently, an interesting literature review (Kubíček & Machek, 2019) found that although succession is one of the most discussed topics in family business studies, studies on female succession are relatively scarce because in the past, women were perceived as family members rather than suitable successors. These investigations established a significant, but not exhaustive, study on the subject.

For this reason, this study intends to contribute to this Special Issue, by investigating the topic of daughter's involvement and female succession, under the lens of how motherhood that occurs after succession influences the role of women within the family business. This topic appears an argument completely unexplored, and it is particularly relevant because several studies found that motherhood generates a professional shock, which determines a salary decrease (ILO, 2015; EIGE 2019), a choice for part-time occupations (ISTAT, 2019) and often job abandonment. Regarding job abandonment, recent research, conducted on a sample of more than 2,000 new mothers, found that fewer than one in five of all new mothers follow a full-time career after maternity leave. Among those who worked full-time before childbirth, a majority have either stopped working or moved to part-time work. Moreover, only 44% returned to and remained in full-time work 3 years after birth, whereas the percentage of those returning to full-time work for men is 90% (Harkness et al., 2019). These data highlight the importance of deepening the topic and analysing in depth the mechanisms that occur after motherhood.

Intending to participate in this inspirational debate and problematising the topic (Alvesson & Sandberg, 2011), this study focuses on daughter successors who have already entered the firm, albeit in different roles, and become mothers after their affirmation in the family firm. The areas of interest in this sense are several and are dictated in particular to understanding whether and to what extent the positions (leadership or minor roles) have remained or changed after motherhood. Another objective is to determine how and through what family governance mechanisms this happens.

How a daughter succession occurs and how motherhood is perceived in terms of women's roles and contributions within family firms should be carefully studied, broadly considering family roles, norms, history and family dynamics. Therefore, this study draws on the family embeddedness perspective, the most suitable theoretical lens that can capture the intricate kin relationships and their effects on businesses (Aldrich & Cliff, 2003). Based on this perspective, this study addresses the following research question: What happens when a woman becomes a mother after being involved in a family firm? We conducted a multiple-case study of four small family-owned firms, based on an in-depth analysis of semi-structured interviews performed with predecessors and daughters. Our findings showed four issues faced by daughters when they experienced motherhood after joining a family firm.

The findings show relevant academic and practical implications. Scholarly contributions are twofold. First, this study contributes to the family embeddedness perspective, delving into an unexplored field—a child's birth event and its effects on daughters' roles within a family firm. Second, the findings contribute to studies on daughters' succession, identify-

ing four issues women face when they become mothers after entering a family business. For practitioners, these findings can help identify effective gender-diversity management tools to support women in their work–life balance.

2. Daughters' involvement and female succession in family firms

In the past three decades, the number of studies on women in family businesses has notably increased (Campopiano et al., 2017; Floris et al., 2019; Gupta & Levenburg, 2013; Sentuti et al., 2019). These studies focused on different themes generally characterised by debates about women's challenges (Martinez Jimenez, 2009), careers and roles (Amore et al., 2014; Cole, 1997; Curimbaba, 2002; Martinez Jimenez, 2009; Salganicoff, 1990), invisibility (Gillis-Donovan & Moynihan-Bradt, 1990), over-nurturing (Hollander & Bukowitz, 1990), work–life balance (Moen, 1992) and traditional socially constructed roles (Dardha, 2016). Specific attention has been paid to ownership succession (Vera & Dean, 2005). They found that the choice of successors and the attribution of leadership rules are often based on gender. Sons are preferred as potential successors to daughters (Bennedsen et al., 2007), particularly if first-born (Jaskiewicz et al., 2013), and daughters are relegated to subordinate roles (Barrett & Moores, 2009; Bjursell & Bäckvall, 2011).

However, notwithstanding the increasing scholarly attention on women's involvement and the recent literature reviews on the topic (Campopiano et al., 2017; Martinez Jimenez, 2009; Wang, 2010), daughters' succession continues to be undervalued in its relevance and has thus not been sufficiently explored (Kubiček & Machek, 2019). The reason is perhaps that in the succession literature, gender is often considered only one variable, rather than a relevant factor that can shape the succession process. This case is linked to daughters' personal path towards leadership, demonstrating their credibility and ability to become a successor (Dalpiaz et al., 2014). In this view, despite being often gender-biased (Aldamiz-Echevarría et al., 2017) with sons generally preferred over daughters (Hytti et al., 2016), succession can be considered a process whereby daughters, and thus women, can acquire visibility and involvement in the family business (Campopiano et al., 2017).

Recent interesting studies deepened daughters' roles in family firms (Curimbaba, 2002; Cesaroni & Sentuti, 2018a, 2018b; Mussolino et al., 2019), identifying typologies with distinctive features.

Specifically, Curimbaba (2002), in her qualitative study, found three types of heiresses: invisible, professional and anchor. Invisible women stem from large families, they have to spend their time and efforts within the family, thereby reducing the possibility of personal career and receiving sufficient income, and they have renounced managerial duties. Professional women

are professionally prepared, try to create a boundary between firm and family and are often involved in the succession process to avoid conflicts. Anchor typology refers to daughters who stem from families with predominantly female offspring. They have great visibility inside the family business and are essential for its continuity.

Cesaroni and Sentuti (2018a, 2018b) identified four daughter profiles with reference to the following: personal goals and ambitions before entering the family firm, reasons for joining the firm, effective role in the firm, motives that brought daughters to play their role in the firm, training and skills, and level of satisfaction with their role. With reference to these features, the authors found five profiles, namely, leader by choice, leader because 'she has to', manager by choice, invisible co-leader and outcast. In our study, we did not find the profile of outcasts because we referred only to daughters who have already taken over the family business. The authors defined leaders by choice as those daughters who have desired to take on a leadership role since childhood and strongly pursued their goals. Then, leader because 'she has to' refers to daughters who become leaders, as no other family member has shown interest in or is likely to lead the family business. Invisible co-leader depicts daughters who aspire to leadership and sometimes have to accept a minor role mainly because of gender bias. Finally, the profile 'manager by choice' identifies daughters satisfied with their minor role in the firm to manage work–life balance.

Mussolino et al. (2019) analysed daughters' self-positioning in male-dominated family firms once succession has occurred. The authors identified four typologies of daughters' succession: the obvious choice (refers to the daughter's perception of being part of a system and thus a means to replicate family norms and family firm rules); the daddy's girl (includes daughters who perceive pressure to replicate their father's decision-making style and feel a sense of non-acceptance, particularly from male employees); the backgrounder (refers to daughters who perceive their skills and abilities and intend to break with their father's leadership style) and the troublemaker (daughters who are aware of their abilities with high education and work experience and who challenge gender norms).

The mentioned studies focused on daughters' involvement or exclusion in the succession process and considered different roles and typologies of daughters and their perception as successors, to our knowledge. However, no studies investigated what happens once daughters are in the firm and they become mothers after that. In detail, how motherhood affects the experience of daughters involved in the firm is unexplored.

Family dynamics and gender assumptions are generally embedded in family rules, norms and expectations and are reflected in business practices (Floris et al, 2019). Therefore, the family embeddedness perspective appears particularly useful for a more in-depth study of daughter succession.

3. Family embeddedness perspective and daughters' succession

In their seminal article, Aldrich and Cliff (2003) highlighted the relevance of incorporating the family in entrepreneurship studies. The authors established that family business scholars often consider family and business as two separate entities. This trend may hinder an adequate understanding of the family business phenomenon. Family dynamics, rules, roles and various events influence the family business's actions, governance, management structures and entrepreneurial intent and propensity. Therefore, a joint, rather than separate, analysis of business and family is considered essential for the topic here analysed for at least two reasons. First, succession is considered an entrepreneurial process (Nordqvist et al., 2013), strongly influenced by personal goals of the owners, family structure, ability and ambitions of potential successors and family resources (De Massis et al., 2008; Le Breton-Miller et al., 2004). Second, motherhood and childbirth force enormous changes within the family and firm (Aldrich & Cliff, 2003). The family embeddedness perspective, in its initial purpose, focuses on the effect of family system characteristics (transitions, norms and values and resources) on new venture creation, and vice versa. Focusing on transitions, Aldrich and Cliff (2003) identified marriage, divorce, death, employment, retirement and childbirth as the main family dynamics that are strictly related to norms and values and resource mobilisation. However, to our knowledge, very few studies focus on childbirth even if motherhood represents an extraordinary event that has the potential to affect the family and firm by destabilising the balance between them and, sometimes cause the reinforcement of gender bias. Mothers are generally less visible than women without children (Gillis-Donovan & Moynihan-Bradt, 1990). From this evidence, daughters perceive potential motherhood in an ambivalent way. On the one hand, they feel the parents' expectations, and on the other hand, they know that work performance tends to decrease after they give birth (Cole, 1997).

Moreover, daughters who are mothers feel tensions associated with work–family balance and resort to making compromises to provide the right attention to the family and business (Baxter & Montgomery, 2000). Moreover, they sometimes experience frustration because of the commitment and hard work necessary to respond to the pressures of business (Day, 2013).

Evidently, the topic deserves additional attention, specifically investigating the unexplored area regarding the fallout from daughters' entering the family firm and the effects of their becoming mothers after succession. The family embeddedness perspective can help investigate the topic considering the family and business together and focusing on how and why the bundle of kin relationships create fertile or sterile soil to support daughters in their dual role as workers and mothers.

The study was conducted considering the behaviours, perceptions and beliefs of predecessors and daughters resulting from shared family values and cultures. Consequently, the concept of motherhood and the daughter's role affected by relationships, attitudes and established norms of the family are exhibited in the firm. Specifically, deepening female succession and motherhood requires delving into family roots to disentangle the family effect from firm management and behaviour. Thus, this perspective appears suitable to address our research question.

4. Methodology

4.1 *Research design and sample*

Given the unexplored topic, a qualitative methodology for this research was chosen and executed by analysing four case studies (Eisenhardt, 1989; Yin, 1994). Family firms represent a fertile ground for qualitative analysis (Litz, 1997; Mc-Collom, 1990) and are particularly appropriate for this study, the reason being that the focus on motherhood and female succession requires an in-depth analysis and has to penetrate the barrier of family resistance. Moreover, the use of case studies allows for an analysis of real, unique phenomena, that of observing a particular scenario and its interactions within the boundaries of the context wherein they develop and act (Patton, 1990; Yin, 2008). The usage of such studies represents a form of qualified investigation aimed at seeking the 'meaning' of reality in the experiential lives of people and organisations (Eisenhardt, 1989; Eisenhardt & Graebner, 2007; Patton, 1990; Yin, 2008). A comparison of case studies is particularly useful in this research study to understand mechanisms through which a family sustains or inhibits women-mothers in their firm's roles. The choice of sampled firms is in line with Patton's (1990) recommendation that the 'logic and power of purposeful sampling lies in selecting information-rich cases for study in depth. Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the research' (Patton, 1990, p. 169). In detail, we selected family firms that possessed the following characteristics: (1) at least at the second generation with succession already completed, (2) predecessor(s) still alive, (3) at least one daughter involved in the firm and (4) the daughter experienced motherhood after she entered the firm and at least three years before the research study. Through personal contacts, we approached the first family firm and then proceeded through snowball sampling, asking our informants to sug-

gest to us other family firms with the defined characteristics. This way, we involved four firms and progressed to obtain their availability, presenting the objective of the study. This dimension of the sample was adequate, in line with Eisenhardt's suggestions (1989, p. 545), that is, 'while there is no ideal number of cases, a number between 4 and 10 cases usually works well'. Considering proximity and the COVID-19 health emergency, firms based in the same regional Italian area were selected to conduct face-to-face interviews, considered the most suitable way of acquiring relevant, sensitive and confidential information. Afterwards, we retrieved information on ownership through company websites and demographic details through phone calls.

Then, we focused our attention on the daughters and their predecessors as the subject of our analysis representing the informants best suited to report data on their firms and allow the investigation of the effect of motherhood on women and their position within the family firm.

Tab. 1 describes the main details of the sampled firm and the daughter's characteristics.

Tab. 1: Firms' details and characteristics of daughters

#	Sector	Foundation / Generation	Date of the last succession	Number of family members involved in the firm and roles	Number of employee	Age of daughter	Role of daughter-mother	Current age of child	Revenue in Euros
1	Artisanship	1945/4	2002	2 (1 brother—CEO and 1 sister)	12	44	Employee	4	250,000
2	Agrifood	1935/5	2003	4 (3 brothers—Production Manager, Plant Manager and Quality Manager—and 1 sister)	15	47	CEO	5	320,000
3	Tourism	1960/4	2012	3 (2 brothers—Receptionist and Marketing Manager—and 1 sister)	10	42	CEO	4	280,000
4	Manufacturing	1980/3	2009	2 (1 brother—CEO—and 1 sister)	8	40	Marketing Manager	4	400,000

Source: Authors' elaboration

4.2 Data collection

Our study mainly relied on primary (interviews) and secondary data sources (archives, personal documents, websites and others). Primary data consisted of eight in-depth interviews: first were four interviews with family owner–managers belonging to old generations not currently involved in the firms. These data are useful to understand the firms' history, dynamics and above all the viewpoint of the predecessors on the role of the daughter during and after succession and possible changes that happened as a result of motherhood. Then, four interviews with the daughters were conducted to investigate their entry process and the changes and conditions they experienced from their motherhood. All interviews helped us understand whether and how family roots were (or not) reasons for specific aspects related to gender involvement within firms and for the consequent attitude adopted towards daughters.

Each daughter was interviewed alone to avoid mutual influence that could have invalidated the sincerity of the accounts.

The in-depth interviews were conducted in person, in the Italian language, and then translated into English. An interview protocol (Legard et al., 2003) designed to obtain information related to the research question was followed. To define the interview protocol, we conducted a pre-study with a sample of 10 individuals to evaluate the efficacy of the questions. Some of them were changed to improve their comprehensibility. The final list of items excluded technical terms from the academic literature as it was intended to stimulate interviewees to freely and naturally discuss their experiences and personal viewpoints.

We began the interviews by asking the informants background questions about their industry, the firm's corporate and business strategy and their role in their family firms. We used open-ended questions (Eisenhardt, 1989a; Glaser & Strauss, 1967), and we prompted the informants to provide additional details when their descriptions were brief or when novel strands of narrative emerged. All interviews (averaging 50 minutes) were recorded and transcribed in 120 double-spaced pages, mostly within 24 hours. We addressed potential informant bias in several ways. First, we interviewed informants belonging to the old generation and the current generation in charge. Second, we used 'courtroom questioning' that focused on factual accounts of what informants did or observed others doing (Huber & Power, 1985; Lipton, 1977). Finally, ethical aspects were considered and respected throughout the study, which included having all participants sign a written form of consent. The interview procedures were clearly expressed to the respondents before the interviews were conducted. Anonymity was guaranteed to the informants and their firms to encourage openness.

Moreover, authorisation was obtained from participants to gather data, transcribe interviews and use the collected information for scientific and academic purposes.

4.3 Data analysis

We analysed data using an inductive approach (Eisenhardt, 1989; Eisenhardt et al., 2016). In the first step, we reviewed the primary and secondary data independently, highlighting the material reflecting daughters' involvement, female succession and motherhood within the family firms. Then, we examined single cases, creating chronologically structured descriptions of each of the four firms with all relevant information. These documents comprised 10–20 pages per firm (a total of 75 pages) and provided a neatly arranged overview of each case.

In this step, considering that the interviewees' responses were the most important source of information, two independent coders first read through the interviews and additional materials and subsequently scanned them for emergent themes that appeared important to answer our research question (Reay & Zhang, 2014).

In the second step, we followed the recommendations of Eisenhardt (1989) and conducted a cross-case analysis to identify common patterns and contradictions across the sample (Eisenhardt & Graebner, 2007). We iterated amongst case pairs to sharpen similarities and differences and form tentative relationships between constructs. Furthermore, we shifted between empirical evidence and theory. As the theoretical framework grew more explicit, we compared it further with the literature to highlight similarities with and differences from prior research, strengthening internal validity and refining constructs and relationships (Eisenhardt & Graebner, 2007). Following this process, we surprisingly noted that the four daughters involved in the research had characteristics identified by four of the five daughter profiles identified by Cesaroni and Sentuti (2018a, 2018b): a. Leader by choice, b. Leader because 'she has to', c. Manager by choice and d. Invisible co-leader. Each of these daughters experienced different approaches when they became mothers, showing a strong tie between their profiles and how motherhood was experienced within the firm. In our study, we did not find the profile of outcasts because we referred only to daughters who have already taken over the family business.

In the third step, we interpreted the data achieving a strong match between the cases and emergent theory (Denzin & Lincoln, 2000; Eisenhardt, 1989; Silverman, 2001). When the process was complete, we developed our emergent theoretical framework (Eisenhardt & Graebner, 2007).

5. Findings

Analysing interviews and iterating with theory, as already mentioned, we noted that the daughters we interviewed showed the same peculiarities of four of the five daughter profiles found by Cesaroni and Sentuti (2018a, 2018b). Specifically, the daughter in Firm 1 appeared similar to an 'Invisible co-leader' [*I have always remained in the shadows. (...) I have never had essential roles, nor of representation*']. The daughter in Firm 2 possessed characteristics that reminded one of a 'Leader by choice' [*Since childhood, I have decided to manage the family business (...). Nobody could have made me change my mind. This is my life, my home, and I don't imagine I can realize myself far from here.*']. Concerning Firm 3, the daughter's showed similar characteristics to a 'Leader because she has to' [*I had to continue the family business. I couldn't disappoint my father's expectations. (...) no one intended to sacrifice their aspirations to take the firm's reins, so I did it (...)*']. Finally, the daughter in Firm 4 embodied the attributes of a 'Manager by choice' [*I could have aspired to a more relevant and apical role (...), but I would have had to dedicate all of myself to work. (...) in this way, I can also enjoy my freedom and have a life of my own that does not revolve solely and exclusively around the family business.*'].

They received a different family approach because of their motherhood, with relevant repercussions on their roles in the firm.

On the other hand, an in-depth analysis of predecessors' interviews showed how and why families adopted specific behaviours when daughters experienced motherhood. During these interviews, the relevance of family roots strongly emerged, thus highlighting how family embeddedness can help in understanding the family effect on firm management [*In our family, women have always been fundamental for family unity (...). In silence, they always worked hard, always taking a step back from their husbands, brothers, and obviously from their fathers. So, it is also for my daughter.*' (Firm 1); *'My mother was a revolutionary, a free spirit. My father admired this nature of hers and never clipped her wings. My sister also chose what to do with her life. And so, do I with my daughter: she decided to stay here, no one forced her to.'* (Firm 2); *'My daughter entered the business because we pushed her to do it. I don't regret it because I believe that everyone in life has to make sacrifices. She has experienced how even my mother and her mother have made many sacrifices for the family (...) you cannot always choose, especially if the choice falls on the whole family.'* (Firm 3); *'Our daughter has chosen an important role, but not a top one, to carve out spaces of her own. (...) I believe that in this, she was inspired by her mother.'* (Firm 4)]

From the daughters' and parents' interviews, three main common constructs have emerged: family support, family protectiveness and daughter self-efficacy.

Family support refers to psychological and intangible care, encouragement and assistance offered to the daughter during difficult moments [*My*

parents and husband still encourage me now, but their presence was even more essential to me some time ago' (daughter, Firm 2); 'My family did not support me even from an emotional point of view, let alone from an operational perspective' (daughter, Firm 1)]. The main aspects that constitute this construct are psychological support, inspiration and intangible stimulus.

Family protectiveness relates to a defensive response to shield the family, whereby the family member experiencing difficulties is the recipient of a preferential approach that causes them to be relieved of specific responsibilities to protect their well-being and allows them to perform their household activities [*'My family and my husband support me by giving me the opportunity to dedicate myself to the child'* (daughter, Firm 3); *'They support me emotionally, but I have no real help to engage in work as I did before I became a mother'* (daughter, Firm 4)]. The main elements that characterised this construct are tangible support, task substitutability and task reduction.

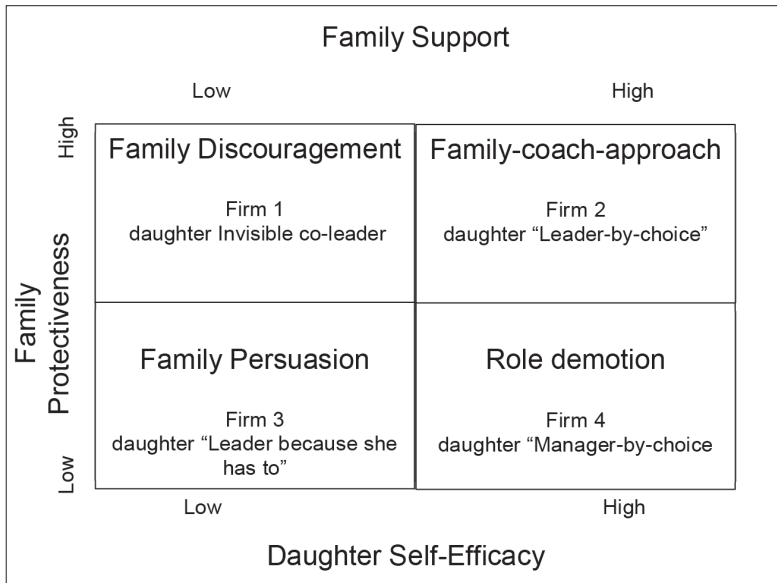
Daughter self-efficacy is the last construct that emerged from the interviews. Bandura (1986) highlighted that daughter self-efficacy refers to a soft skill related to subjective perceptions about qualities possessed concerning the task, considering its complexity, the conditions for carrying it out and expectations of getting a positive outcome [*'I am sure I will succeed in my intent. I have all the support of my family, and I am very determined'* (daughter, Firm 2); *'I don't think I can do it. It's all too complex for me'* (daughter, Firm 1)]. The most relevant elements that define this construct are determination, passion and self-esteem.

Surprisingly, no perceptual discrepancies were noted between predecessors and daughters; this is particularly interesting because the interviewees were interviewed separately to avoid mutual influences. Specifically, for instance, when family support was considered marginal or even absent on the part of the daughter, this aspect also emerged on the side of the predecessor, with the justification relating to decisions taken and behaviour displayed.

By cross-referencing the three constructs and their different manifestation in cases (high vs low), four different family approaches can be defined: family-coach approach, family discouragement, family persuasion and role demotion.

Fig. 1 summarises the approaches that daughters were recipients of during and after their motherhood and reports the constructs in three axes, underlining to what extent each of them concurs to generate the diverse approaches.

Figure 1: Approaches towards daughters



In the following section, we explain the different family approaches.

5.1 Family discouragement

This approach is observed in Firm 1, where the daughter shows similarities with the invisible co-leader profile (*'I work backstage (...) my brother is the leader, and I help him'*). Family discouragement here is represented by the absence of emotional support to the daughter, with the implicit intent of persuading her to leave her role within the firm to devote herself to the family. Specifically, as the daughter plays a minor role, parents consider her contribution within the firm as non-essential; thus, they encourage her to invest her time as mother rather than as a firm member. Following parents' view, family goals prevail on firm goals.

On the family's part, support is low, whereas family protectiveness is high. On the part of the daughter, self-efficacy appears to be low.

Family support is negligible and justified by the 'shadow' role played by the daughter. Moreover, this minimal or absent support seems almost oriented to demotivate the daughter from work, pushing her towards her mother's role and postponing her re-entry into the firm to the future, emerging from the following quotes:

'I have not received much emotional support from my family. On the contrary, in some cases, I have felt almost guilty for being a woman and an entrepreneur at the same time. I have been discouraged to continue' (daughter).

'We do not encourage her to continue working within the company. By contrast, she has never had a top role in the company. She has always supported her brother. Therefore, she could have dedicated her time to her family and waited for better times to return to the firm' (father).

Family protectiveness is high and probably excessive, and evidence of this is the fact that the family tries to replace the daughter in every task and every decision. That is to say, they stated that this behaviour derives from the desire to help the daughter, who has always played minor roles, supporting others *'without putting herself out there'* (father). The following quotes can help understand the concept:

'Since she became a mother, she needs us even more. She is not strong enough to be able to do everything. This is why we are helping her, and we think it is more appropriate that she devotes herself to the child. My son-in-law agrees too' (father).

'Now I have no duties (...) I dedicate myself only to my son. They are convincing me to leave my job because they believe that I cannot look after business and family. (...) I feel discouraged' (daughter).

Self-efficacy is low and derived from the lack of certainty in personal abilities. Specifically, the daughter experiences frustration because of her fear of *'not being up to the task'*, and consequently, she feels a sense of discouragement.

On the family's part, a low opinion of the daughter's abilities emerges, where the daughter is considered *'the weak member of the family'*. The following quotes explain the concept:

'I'm not sure I can do both. Being a mother is very demanding. In the firm, I could become more of a burden than a resource. (...) my parents are probably right' (daughter).

'She needs a lot of help. She is the weakest of the family, and we are afraid she will collapse due to excess stress and responsibility' (father).

5.2 Family-coach approach

This approach is identified by analysing Firm 2, wherein the daughter recalls features of the 'Leader by choice' profile (*'I have always wanted to take over our family business'*). Specifically, as the daughter is determined and passionate, parents motivate and encourage her in the dual role of a mother and a firm member. From this perspective, family and firm are considered two entities that equally require the daughter's commitment.

The family-coach approach is characterised, on the family's part, by high levels of family support and family protectiveness and on the part of the daughter by a high level of self-efficacy. Undoubtedly, this approach guarantees a woman-mother the right work-life balance. Specifically, the

daughter encounters strong *'encouragement and support that guarantee the possibility of achieving the dream of being a woman and a mother without having to give up career or family'*.

Regarding family support, interviewees highlight a high degree of psychological and emotional support the daughter has experienced since her entry into the firm and since the time she became a mother, as also underlined by the father, as follows:

'I have received their support in the past, and I have received it after becoming a mother. They stimulate me to do my best now as well' (daughter).

'We would never allow her to get discouraged (referring to his daughter). We and her husband have always supported and encouraged her to move forward and not to live motherhood and her leadership role as if one excluded the other' (father).

Concerning family protectiveness, the family demonstrates willingness to support the daughter during and after motherhood, trying to support her daily with childcare, housework and any tasks that could hinder her leadership role.

The following quotes can help in clarifying the mentioned concept:

'When I got pregnant, I saw the joy, but also the concerns, in my family's eyes. Then, when my son was born, they did everything to relieve me of many responsibilities, offering to replace me in many tasks to make my life easier' (daughter).

'We can finally enjoy our grandchild and let our daughter feel gratified. Running a business is not easy, but it is feasible for a woman who has a family with the right support from everyone' (father).

In this case, the daughter shows a high level of self-efficacy, and this quality was also recognised by the father. The proposed extracts clarify the concept:

'I work hard to achieve my goals, and my son is a further incentive to do my best. I always tell myself that I can do it!' (daughter)

'We know our daughter's determination and passion very well. She doesn't give up easily, and her motherhood has made her even stronger' (father).

5.3 Family persuasion

This approach is identified in Firm 3, where the daughter shows similarities with the *'Leader because she has to'* profile (*'I found myself practically forced because no one wanted to continue the family business'*). Family persuasion consists of low family support, low family protectiveness and low self-efficacy. The family manipulates the daughter's decisions, pressing her to stay in the firm because her presence cannot be replaced by anybody else in the family because other family members do not show interest. As it occurred when she entered the firm before attaining motherhood, even under such circumstances, the daughter is pushed to continue the business, hinging on her sense of responsibility and guilt. Firm goals prevail upon family interests in addition to the daughter's intentions and ambitions.

Family support is low and characterised by sustained pressure to maintain the role within the firm despite difficulties caused by the desire to achieve work–life balance. The daughter perceives the firm’s responsibility only on her shoulders because of the lack of family support. From the following sentences, the concept can be clearer:

‘They almost forced me to take over the helm of the firm because nobody was interested. Since I was a mother, everything is much more complex. I was hoping for their encouragement, even if only psychological (...), but it didn’t arrive’ (daughter).

‘We are pragmatic. (...) after all, even my wife has always done everything by herself’ (father).

Family protectiveness is absent, and the daughter has to rely exclusively on her efforts and determination, without receiving active support from the family. The duties of the leader and mother are both exclusively borne by the daughter, who feels the weight of responsibility and experiences a sense of *‘loneliness and abandonment’*.

‘I have to divide myself between home and business. No one helps me. (...) I feel alone, and I do not deny that I would like to escape from this situation (...); however, my sense of duty does not allow me’ (daughter).

‘She has to do it alone. She will succeed even now. It’s all a matter of organisation’ (father).

Self-efficacy is low. The daughter perceives extreme difficulty in balancing the business and the family because of the absence of emotional and active support. She tends to be discouraged and has no confidence in achieving positive results. The family shows *‘low determination’* but also believes that *‘with the improved commitment, she can do better’*. The following statements are particularly significant:

‘There are moments in which despair assails me, and I am afraid of destroying what my father has built with so much effort. (...) I think I have underestimated what it means to be an entrepreneur and a mother at the same time. But I have to do it, and I owe it to my family (...) I would risk disappointing them’ (daughter).

‘She had to take over because no one else wanted to. We put our trust in her commitment, but she lets herself go too often to discouragement. She should try harder’ (father).

5.4 Role demotion

This approach emerges in Firm 4, where the daughter shows similarities with the *‘manager by choice’* profile (*‘I chose to enter in our family firm in a role that allowed me to balance work with my personal interests’*). Role demotion consists of high family support, low family protectiveness and high self-efficacy. The family shows emotional support but lacks practical efforts to assist the daughter in her duties as a mother and manager. They suggested

instead to *'change the role for another with minor responsibilities'* (daughter). However, the high self-efficacy ensures that the daughter can pursue her personal goals, with determination and hard work. Parents suggest that the daughter join the firm in a relevant, yet not apical, role and undertake a lesser role so that she can work within the firm without compromising on her role as a mother and in the family. In this case, family interests would appear to prevail over those of the daughters and the firm.

Family support is high, and the family shows the ability to provide emotional and psychological support to the daughter. The parents encourage their daughter not to give up and to continue within the family business, while, however, preferring a minor role for her to better reconcile working life with family life. The daughter perceives this suggestion as a form of attention and care towards her and agrees to play a less relevant role. The following exemplary quotes are particularly meaningful:

'Our daughter doesn't hold a leadership role within the firm; however, she is the marketing manager. We encourage her to continue within the firm, but in a different role, to meet family and work expectations as best as possible' (father).

'I'm the marketing manager, and I like my role. (...); however, it's very hard to combine it with my role as mother. My parents try to encourage me, suggesting a minor role that could allow me more time for my son' (daughter).

Family protectiveness is low, and the daughter does not receive active help from the family. Family members do not actively help the daughter in her role in the firm or the care of the child. She is forced into a lesser role with reduced responsibilities and visibility, as illustrated by the following extract:

'My wife and I are finally retired (...) we no longer want to replace our children (...); it is a problem of responsibility. This is why we advised her to choose a less demanding role' (father).

'My parents and my husband encourage me a lot, but I don't get effective help from them. I accepted their suggestion to leave my position and take on a less important one. I hope it is only a temporary choice' (daughter).

Self-efficacy is high, demonstrating the daughter's willingness to continue her business within the company with passion and determination. The family underlines this characteristic that, amongst other things, is considered a positive element, particularly after a demotion. The following extracts are particularly significant:

'Our daughter is hardheaded. She is stubborn and determined. She will also find satisfaction in her new role for herself' (father).

'I am very determined, and I am sure that it is possible to reconcile being a mother and being a manager. The change of role is transitory, but what matters most is that I do well what I am doing now' (daughter).

6. Discussion and conclusions

Our study, based on the family embeddedness perspective, has contributed to this Special Issue, analysing daughters' involvement in a dynamic perspective, that is, investigating how motherhood, which occurred after succession, influenced daughters' roles within the family business. Our research question was about what happens when a woman becomes a mother after being involved in the family firm.

We conducted a multiple-case study of four small family-owned firms on the basis of in-depth analysis of semi-structured interviews conducted with predecessors and daughters. Our findings show four different approaches that daughters experience when they became mothers after being involved in the family firm.

These approaches, family-coach approach, family discouragement, family persuasion, and role demotion, are characterised by what extent family support, family protectiveness and daughter self-efficacy are intertwined.

In summary, the approach that undoubtedly offers additional opportunities to the daughter-mother is the family-coach approach. This approach is characterised by moral, psychological and operational support from the family and the awareness of the daughter of her abilities that allow her to overcome difficulties and perform at her best in her dual role as mother and entrepreneur. Family persuasion is not very stimulating for the daughter who tends to be almost manipulated by the family into making her decisions. Family persuasion is also not very stimulating to a daughter for whom the complete assumption of her responsibilities is almost imposed without any operational support and by leveraging on the feelings of guilt that could emerge from the choice to leave the company. This sense of guilt is perceived particularly by the daughter from Firm 3, who underlined that she maintained her leadership role for her family but without willingness. This case could underline that the fear of disappointing the family's expectations causes the daughter to continue managing the firm but without real aspiration and without obtaining personal satisfaction. The persuasion of the family and the fact of that is the assumption that the company must be perpetuated by the daughter regardless of her personal ambitions lead to conflicting feelings and constant tension between the sense of responsibility and the desire to leave the company. The combination of these two aspects would seem to generate a sense of guilt in the daughter. The other two behaviours that daughters are subjected to are characterised by a form of family 'abandonment'. That is to say, despite being aimed at supporting the daughter, in reality, family abandonment discourages and demotivates her with respect to her career prospects within the family business.

From the emerged empirical evidence, four propositions can be proposed to synthesise the main findings:

P1. When daughters become mothers and family support is low, family protectiveness is high and self-efficacy is low, they are recipients of the family discouragement approach.

P2. When daughters become mothers and family support, family protectiveness and self-efficacy are high, they are recipients of the family-coach approach.

P3. When daughters become mothers and family support, family protectiveness and self-efficacy are low, they are recipients of the family persuasion approach.

P4. When daughters become mothers and family support is high, family protectiveness is low and self-efficacy is high, they are recipients of the demotion approach.

6.1 Scholarly and managerial implications

The findings show relevant academic and practical implications.

Scholarly contributions are at least threefold.

First, this study contributes to the family business literature, answering the recent call for further studies on women in family businesses (Campopiano et al., 2017; Sentuti et al., 2019) by focusing on the unexplored topic of motherhood and its effects within family firms.

Second, this study contributes to the family embeddedness perspective, opening a new niche of study that investigates an unexplored field—that of the child's birth event and its effects on female roles within the family firm. During childbirth, the family embeddedness perspective is identified as relevant. However, to our knowledge, this topic is not sufficiently explored in previous studies. This topic is necessary for a wholesome understanding of the effects that this event produces within the family firm for women in terms of their career and involvement. In addition, we found that family roots define how motherhood and daughters' careers are perceived. Family routines, roles and rules affect daughters' involvement and consequently how motherhood appears adaptable with their commitment within the firm.

Third, the findings contribute to the female succession literature, identifying four different approaches that women are exposed to when they become a mother after entering the family business. Specifically, we extend the study of Cesaroni and Sentuti (2018b) by uncovering that the profiles they identified beget different family approaches because of their motherhood. The results underline the close relationship between the profiles of women and the behaviour of families towards them. In other words, the more determined the woman to succeed in the family business the stronger the support from her parents and her partner during the experience of motherhood. On the contrary, the more the woman has been pushed to

take control of the firm the more she will be pushed to continue in her role as a leader. Furthermore, the more she holds an important but not necessarily senior role the more she will be discouraged from continuing within the firm and be persuaded to dedicate additional time to her family. Finally, the more invisible a woman is, the more she will be relegated to even more marginal and less important roles within the firm.

This study can be particularly interesting to practitioners for them to understand the roots of gender differences and how these are experienced within family businesses, focusing on the occurrence of motherhood. For example, entrepreneurs and consultants could draw stimulating reflections from this work regarding 'prevention' of certain aspects of gender dynamics and 'prospective analysis' of gender dynamics itself. This study presents an evolutionary analysis of women's roles because of childbirth. The findings can help identify effective gender-diversity management tools to sustain women in their work-life balance.

6.2 Limitations and future research

Despite the contributions and managerial and practical implications highlighted, this study is not without limitations. The first and most relevant is the sample size, which is too small to allow generalisation of the findings. Subsequent studies could expand the sample under analysis, enlarging it numerically.

Future studies are encouraged to conduct longitudinal and cross-cultural analyses to observe the influence of time and different cultures.

Moreover, further studies are invited to build their analysis on time-based role-conflict theory to understand whether and to what extent a firm's generation represents a variable that influences the involvement of women. Above all, further studies could answer other research questions based on the dynamic analysis of women in family firms.

Finally, noticing that all daughters in the sample have only one child, further studies could deepen this aspect by investigating how a daughter's involvement in the firm affects motherhood. They could try to understand whether having only one child is a deliberate choice, scrutinising whether this situation could be a sort of vicious cycle created between motherhood and family businesses.

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OTHER RESEARCH ARTICLES



**STUDENT ENTREPRENEURSHIP:
A BIBLIOMETRIC ANALYSIS**

Valentina Cucino

*Institute of Management and Department EMbeDS
valentina.cucino@santannapisa.it*

Mariacarmela Passarelli

*University of Calabria
mariacarmela.passarelli@unical.it*

Giuseppe Bongiorno

*University of Calabria
giuseppe.bongiorno@unical.it*

Andrea Piccaluga

*Institute of Management and
Department EMbeDS
andrea.piccaluga@santannapisa.it*

Alfio Cariola

*University of Calabria
alfio.cariola@unical.it*

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Abstract

The present paper aims to investigate the literature on student entrepreneurship in order to identify the most recent research field. The study relied on the co-citation analysis and bibliographic coupling techniques to investigate a complete data set of student entrepreneurship publications. Results of the co-citation and bibliographic coupling analysis have identified two main approaches (exogenous and endogenous) and five research topics (university ecosystems, innovation intermediates, personality, personal background and behaviour theory) on student entrepreneurship. The present study represents the contributions offered by studies about entrepreneurship strategies. Building on findings emerging from a qualitative content analysis on clustered publications, the authors discuss a future research agenda that is expected to inspire future studies on the student entrepreneurship field.

1. Introduction

Student entrepreneurship has received growing attention at international level (Parente & Feola, 2021; Wright et al., 2017). However, there is not just a single definition of student entrepreneurship, but several interpretations Gupta et al., (2017). More specifically, a first group of researchers referred to *student entrepreneurs* as students enrolled in an entrepreneurship course or program (Fiet, 2001; Robinson et al., 1991). A second group of researchers argue entrepreneur students as students engaged in preparing a business plan for a new or existing growth-oriented business (Katz et al., 2003). Finally, a third group considers entrepreneur students as individuals who are actively pursuing academic courses while simultaneously managing a business (Ridder & Sijde, 2006).

Furthermore, the literature on the topic is extensive and scholars have highlighted different aspects. Some have investigated the role of external factors such as the family, environment, and ecosystem of innovation; while others have investigated micro factors such as personality traits, locus of control, and personal values (Gupta et al., 2009; McGee et al., 2009; Ahmed et al., 2010). Some scholars investigated the entrepreneurial intention of students in developing countries (Tkachev & Kolvereid, 1999; Gird & Bagraim, 2008; Jones et al., 2008) and others conducted some transnational research (Liñán & Chen, 2009; Moriano et al., 2011; Engle et al., 2010). Although there are some reviews of the literature, they do not identify the main research areas including new studies on the topic broad topic of student entrepreneurship. For example, Galvão et al., (2018) provided insights of a systematic literature review of entrepreneurship education and training as facilitators of regional development. Da Silva et al., (2015) analyzed in detail only the literature on engineering education, develop and drive models of entrepreneurship education in engineering. Moreover, Pittaway & Cope (2007) explored different themes within entrepreneurship education.

However, although systematic literature reviews are recognized methods for conducting evidence-based policy (Tranfield et al., 2003), further approaches should be used to perform an accurate and systematized analysis of the literature (Rialti et al., 2019).

Thus, the paper aims to explore the key themes of student entrepreneurship and provide guidance over future research efforts. Based on these arguments, this study addresses the following research question: *what main research areas are covered by the literature focusing on student entrepreneurship, within the management field?*

More concretely, the main purpose of this research paper is to present a literature review of student entrepreneurship through bibliometric tools. More concretely, the approach used in this study is a two-step bibliomet-

ric approach: Co-citation and Bibliographic Coupling analysis. Co-citation and Bibliographic Coupling analysis are semantic similarity measures for documents that make use of citation relationships. However, while co-citation use frequency with which two documents are cited together by other documents (Hsiao & Yang, 2011), bibliographic coupling shows probability exists that the two works treat a related subject matter (Kessler, 1963). Co-citations and Bibliographic Coupling analysis are complementary. More concretely, the simultaneous use of bibliographic analysis and co-citation analysis allows a more accurate analysis of the literature. Indeed, in a database where link is restricted, Bibliographic Coupling analysis the latest documents and only a limited number of very old papers, while co-citation analysis clusters the eldest documents without clustering newer documents that have not yet been cited.

The paper is structured as follows: in the first section, we illustrated the background of student entrepreneurship; in the second section, we described the methodology used to identify the main studies that have addressed the topic of the student and research fields and future emerging research trends; in the third, section, we display the main results of the Co-Citation and Bibliographic Coupling analysis and in the fourth section, we discuss research approaches and topics emerging from the analysis. Subsequently, in section five and six, we conclude our research and present proposal for future research.

2. Methodology

Bibliometric or “analysis” methods are established as a scientific method and are an integral part of research evaluation methodology, especially in scientific and applied fields (Cucino et al., 2021b; Ellegaard, & Wallin, 2015). For example, these methods are used more theoretically and practically when studying various aspects of science to classify institutions and universities around the world (Ellegaard & Wallin, 2015). In particular, through a keyword analysis and the application of statistical methods, bibliometric analysis allows to identify the most popular topics covered in the field of student entrepreneurship. More specifically, bibliometric analysis allows two main aims: (1) to identify changes both in terms of number and content, within the research on student entrepreneurship (De Bakker et al., 2005) (2) to provide the state of the art of student research entrepreneurship by providing useful information for experts seeking to evaluate scientific activity (Oliva et al., 2006). To achieve our goal, two types of bibliometric analysis have been proposed: *Co-Citation analysis* and *Bibliographic Coupling analysis*.

Co-Citation analysis is used to locate similar documents. In fact, it

is defined as an indicator of document similarity, and it is based on a frequency count (Small, 1973; Hsiao & Yang, 2011; Culnan 1986). As suggested by several authors, we have chosen a threshold of 20 citations for Co-citations analysis (Crupi et al., 2020; Hsiago & Yang, 2011).

Bibliographic Coupling occurs when a reference is used by two articles as a coupling unit between these two articles (Kessler, 1963). The intensity of the strength of the Bibliographic Coupling analysis depends on the number of references that the two articles have in common (Egghe & Rousseau, 1990).

More concretely, our research followed four steps. The first step was to identify the keywords to conduct the analysis. In order to identify the most suitable publications, bibliometric analysis has been conducted by using the following search strategy for searching titles, abstracts and/or keywords: "student" and "entrepreneurship."

The second step was the identification of the database. More specifically, we used the Scopus database as it is very wide. In fact, it completely covers 20,000 main journals which add up to around 70 million searchable records. It is also widely used in the field of entrepreneurship (Scornavacca et al., 2020). This peculiarity allows us to examine a wider collection of articles that is focused on student entrepreneurship.

The third step was the selection of documents. Thus, for this analysis, we considered: 1) only the articles published in English, in order to ensure international relevance; 2) the publications of the last ten years, in order to have an indication of the phenomenon in recent years (2010-2020); 3) only the articles with reference to the business area, in order to focus the analysis object only on the managerial area.

The fourth step involves the tool for data analysis. For this analysis, we have selected the VosViewer software. VosViewer (www.vosviewer.com) is a free program developed to create, visualize and explore two-dimensional scientific bibliometric maps (Van Eck et al., 2010). VosViewer considers the distance between two words which can be interpreted as an indication of the correlation of these words based on the number of occurrences in the document (Cardona & Sanz, 2015). In addition, VosViewer is one of the most used software by entrepreneurship researchers for bibliometric analysis (Cucino et al., 2021b; Donthu et al., 2020; Castillo-Vergara et al., 2018).

3. Findings from the bibliometric analysis

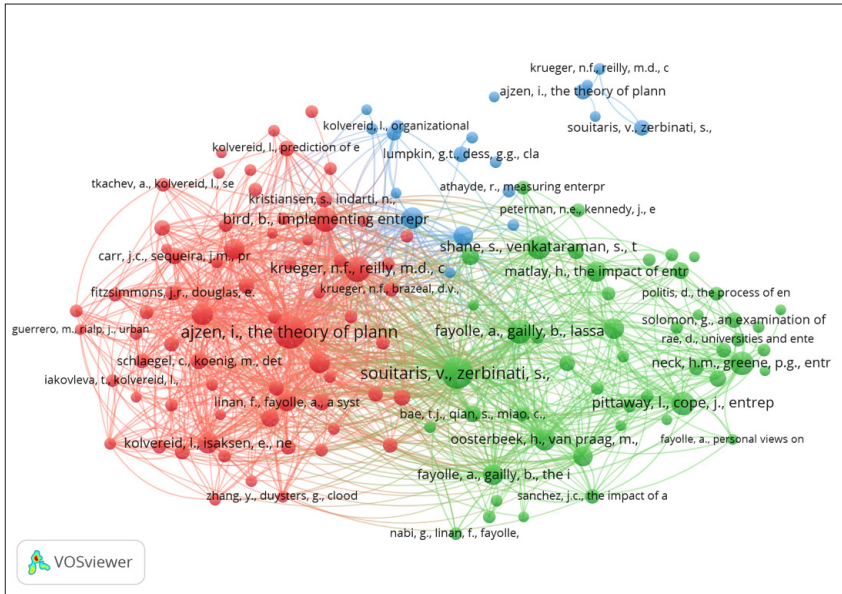
This section shows the main results of the bibliometric analysis (Co-Citation and Bibliographic Coupling analysis) to which documents associated with research on student entrepreneurship from 2010 to 2020 have been applied. Through the four steps previously identified, 1812 results had been selected. In the following session, the analysis of these 1812 documents will be illustrated in relation to the Co-Citation and Bibliographic Coupling analysis.

3.1 Co-Citation analysis

The first results presented below are related to the Co-Citation analysis. From 1812 documents, we identified a minimum number of citations of 20 cited references. This minimum number of cited reference citations is in line with previous studies on citation analysis (Crupi et al., 2020; Lv & Ma, 2019). Thus, from 1812, 72504 references cited are identified. Of these references, only 136 meet the minimum number of citations of 20 cited references threshold.

Subsequently, the 136 documents are analyzed by the first two authors. In particular, the two authors independently analyze the three clusters identified by the software in four steps. First, each author independently organized the files for individual elaborations on the basis of name, year, cluster identified, abstract, and number of citations. Second, each author independently studied and classified the paper abstracts mostly by identifying keywords for each paper. Third, all the authors studied the main documents and, on the basis of the contents of each cluster elaborated title proposals, for themselves. Finally, the authors discussed and defined the contents and consequent titles of the clusters. Thus, the following section shows the three main clusters that emerged from the analysis (Figure 1).

Figure 1 – Co-citation analysis results



Source: authors' elaboration

3.1.1 Cluster 1 – Meso approach: behavioral theory

The first cluster, indicated with the red color in Figure 1, identifies the studies in the field of *planned behavior theory*.

In previous studies on student entrepreneurship, social psychologists and scholars of behavioral disciplines focused on the individual characteristics (Ajzen et al., 1991). In particular, they studied how the processing of information, available to an individual, mediates the effects of biological and environmental factors on individuals' behavior.

Other authors have focused on elements that influence human behavior, such as social attitude, personality trait (Ajzen, 1988; Campbell, 1963; Sherman & Fazio, 1983), risk aversion, utility expected from independence (Douglas & Shepherd, 2002), moods, but also on contextual factors of entrepreneurship such as social, political, and economic variables (Bird, 1988).

Several theories have been proposed in this cluster to address the psychological processes involved in the self-efficacy of the individual, defined as the belief of a person in his ability to perform a task. In particular, Bandura (1977) presents a theoretical framework to explain psychological changes by showing how psychological procedures alter the level and strength of self-efficacy. In his study, he shows how persistence in a given activity pro-

duces mastery experiences and an improvement in self-efficacy with a reduction in defensive behavior. In practice, as the effort and time sustained in the face of obstacles and adverse experiences increases, the better self-efficacy will be. Boyd & Vozikis (1994) further develops the entrepreneurial intentionality model by suggesting that individual self-efficacy influences the development of entrepreneurial intentions and behaviors.

Entrepreneurial intentions understood as thought processes underlying the creation of business plans and analysis of opportunities are at the heart of this cluster (Bird, 1988; Boyd & Vozikis, 1994). Entrepreneurial intentions are influenced by holistic thinking (Bird, 1988) and it also influences some organizational results such as survival, development, growth, and change. For this reason, the study of entrepreneurial intentions has provided and continues to provide a way to advance entrepreneurial research (Bird et al., 1988) and has been the basis for student entrepreneurship studies.

The application of planned behavior theory to analyze the factors influencing entrepreneurial intent among university students is applied by Autio et al (2001). The study provides important evidence by identifying behavioral control perceived as a determinant of entrepreneurial intention in various countries such as Finland, Sweden, the United States, and the United Kingdom.

3.1.2 Cluster 2: Entrepreneurship education

The second cluster, indicated with the green color in Figure 1, focuses mainly on *entrepreneurship education*. Young people are increasingly the target of entrepreneurial policy initiatives and the teaching of entrepreneurship in schools has also increased in recent years. For this reason, some authors measure the impact of these programs. In particular, Athayde (2009) investigated the impact of entrepreneurship education programs in six secondary schools in London and the United Kingdom. The study showed that participation in a corporate program can have a positive influence on entrepreneurial orientation. Bae et al., (2014) investigated the relationship between entrepreneurship education and entrepreneurial intentions on a sample of 37,285 individuals, finding a small significant correlation between entrepreneurship education and entrepreneurial intentions. Fayolle & Gailly (2015) argued it is necessary to consider entrepreneurship education from a holistic point of view, considering it in its wide diversity, both from an ontological and educational point of view. In other words, it is necessary to develop a common framework for evaluating the design of entrepreneurship education programs (Fayolle et al., 2006). Fiet (2001) investigated the debate about whether entrepreneurship can be taught to students by dealing with the theoretical side of teaching entrepreneurship. This article joins Kuhn (1970) who claimed that “theory is the most practi-

cal thing we can teach students". In particular, he commented on 18 programs, revealing a great divergence of topics and the possible causes of this divergence. One way to add more content would be to encode the language by emphasizing more deductive than inductive approaches.

Finally, other authors have focused on the learning stages. In particular, Cope (2005) proposes three distinctive and related elements of entrepreneurial learning; dynamic time phases, related processes, and general characteristics.

3.1.3 Cluster 3: *micro approach, personal background*

While the third cluster indicated with the blue color in Figure 1 focuses mainly on entrepreneurship programs, the latter cluster focuses on *demographic factors* and *educational background*. In particular, Kolvereid & Moen (1997) identify greater entrepreneurial intentions in corporate graduates than other graduates also investigating the reasons for choosing a career (Kolvereid, 1996). Souitaris et al (2007) focuses on two types of students; science and engineering students showing how an entrepreneurial path within their course of study positively influences entrepreneurial intentions.

Hamidi et al., 2008 instead analyze the importance of creativity. In particular, the authors investigate whether the students' creative potential is linked to their intention to engage in entrepreneurship by identifying a positive relationship. Their results indicate that creativity exercises can be used to increase students' entrepreneurial intentions.

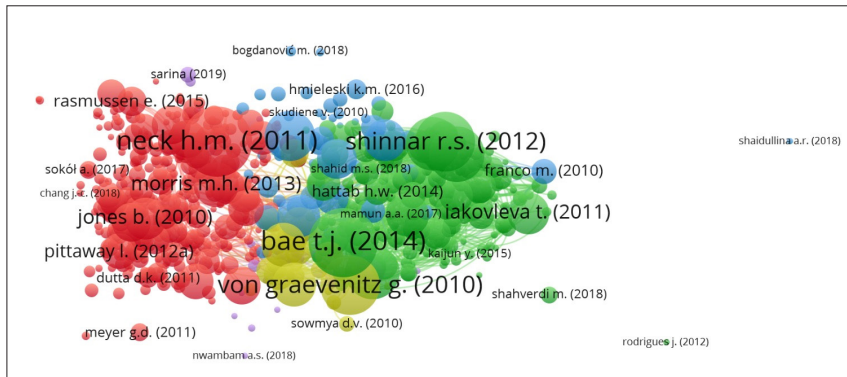
Other studies investigate the relationships between gender and business intentions among students (Wilson et al., 2007; Zhao et al, 2005).

3.2 *Bibliographic coupling analysis*

Co-citation analysis data were used to identify scientific publication and research trends (Ferreira et al., 2017) interrelated with student entrepreneurship. However, to provide future research directions, we strengthen our first co-citation analysis result through the bibliographic coupling analysis. Thus, from the documents of 1812, a minimum number of 4 citations of a document are identified. Thus, starting from 1812 documents, 773 documents meet a minimum number of 4 citations of a document. Subsequently, the 773 documents are analyzed by the first two authors. In particular, the two authors independently analyzed the three clusters identified by the software in four steps. First of all, each author independently organized the files for the single elaborations on the basis of name, year, identified cluster, abstract, and number of citations. Second, each author independently researched and classified the article abstracts primarily by identifying the keywords for each article. Thirdly, each author

studied the main documents and based on the contents, for each cluster, elaborated the title proposals or themselves. Finally, the authors discussed and defined the contents and consequent titles of the clusters. Therefore, the following section shows the five main clusters that emerged from the analysis. More concretely, Figure 2 shows the results of the Bibliographic Coupling analysis.

Figure 2 – Bibliographic Coupling analysis results



Source: authors' elaboration

3.2.1 Cluster 1: The role of entrepreneurial intentions

Although entrepreneurship education is recognized as important (eg, Crant 1996; Donckels 1991; Robinson & Sexton 1994; Zhao et al., 2005), the first cluster (red) focuses on studying students' *entrepreneurial intentions* (Krueger & Brazeal 1994; Peterman & Kennedy 2003).

Entrepreneurial intentions are the basis of the entrepreneurial process and it appears to be a new subfield of analysis. However, the available evidence suggests that not all business intentions ultimately turn into actual behavior when starting and running a new business. Shirokova et al. (2016) analyzed the entrepreneurial spirit by examining the intention-action gap among entrepreneur students. In particular, the authors argue that individual characteristics (family business background, age, sex) and environmental characteristics (university environment, avoidance of uncertainty) influences the translation of entrepreneurial intentions into entrepreneurial actions (Shirokova et al., 2016).

Other studies have explored gender differences in the perception of entrepreneurship education needs - in terms of programs, activities, or projects - to be successful in a career from the point of view of the undergraduate. Using data collected from 3,420 university students in more than ten countries, Dabic et al. (2012) examined the differences between the sexes and the different intentions.

3.2.2 Cluster 2: *the role of the university*

This cluster (yellow) focuses on the role of *universities* in student entrepreneurial choices. Entrepreneurship education should be based on entrepreneurship theory and implemented in student-centered learning activities. Hence, for this reason, the role of universities is important in stimulating student entrepreneurship (Forsström-Tuominen et al., 2015).

Several scholars have focused on the university's role in supporting student entrepreneurship. For example, Pizarro Milian & Gurrisi (2017) have empirically examined how entrepreneurship education is marketed to students in the Canadian university sector. In addition, Abou-Warda (2016) developed a framework for technology entrepreneurship education within universities from three aspects. Technology entrepreneurship professors, educators, technology entrepreneurship programs or courses, entrepreneurship education, and universities can equip students with entrepreneurial skills and prepare them to engage in entrepreneurial activities. Also, universities offer entrepreneurship education courses. However, the growing number of studies on the impact of entrepreneurship education courses offer conflicting and apparently contradictory results. For this reason, Han et al., (2020) underline the need for further studies on the topic.

3.2.5 Cluster 5: *The role of entrepreneurial programs*

The fourth cluster (violet between yellow and red) is the smallest; it includes papers that empirically analyze the *impact* of entrepreneurial programs on student entrepreneurship.

In particular, Kassean et al., (2015) explore the impact of common undergraduate entrepreneurship classroom activities on students' motivational processes related to entrepreneurial careers in the US. Karimi et al., (2016) explore the impacts of elective and compulsory entrepreneurship education programs on students' entrepreneurial intention and identification of opportunities in Iran.

Vanevenhoven & Liguori (2013) analyzed data-driven insights into the impact of entrepreneurial education on (1) both the motivational processes underlying students' road to entrepreneurship and through the entrepreneurial process and (2) the process of identity transformation from student to entrepreneur.

3.2.3 Cluster 3: *The role of personality*

Several authors have investigated the factors that influence entrepreneurial intention (Scott & Twomey, 1988; Kolvereid, 1996) and in particular, entrepreneurial attitudes by identifying different approaches

(Majumdar & Varadarajan, 2013). In the functional approach (Baumol, 1993), the entrepreneur is described as an innovator, and in the psychological approach, (McClelland, 1961) the entrepreneur is defined by his or her personality, motivations, and behavior. Accordingly, the interaction of personal characteristics (risky, creativity, and need for achievement) with perceptions of competencies and familiarity (entrepreneurial experience, knowledge, awareness, and interest) become critical to assess the students' entrepreneurial potential.

Studies in this cluster (blue) seek to establish causal relationships between psychological (the propensity for students to undertake an entrepreneurial study with the purpose of starting a new venture), demographic (with particular emphasis on age, gender, work experience, awareness, and their entrepreneurial experience), and behavioral factors (the *personality* traits of the individuals with the intention of measuring their creativity, risk-taking attitude, passion or need for achievement).

In particular, (Westhead & Solesvik, 2016) have shown that the ability to perceive risk is lower in female students and higher in male students.

3.2.4 Cluster 4: the role of perceptions

The papers in this cluster (green) identify the challenges and opportunities for improving higher entrepreneurship education by considering students' perceptions of both their demand for entrepreneurship education and their entrepreneurial intention.

Barba-Sánchez & Atienza-Sahuquillo (2018) indicated that the need for independence is the key factor in the entrepreneurial intent of future engineers and confirmed the positive contribution that entrepreneurship education has on their entrepreneurial intentions.

Egerová et al. (2017) adopted a mixed-methods study by investigating the perceptions of business students in the Czech Republic towards entrepreneurship education, and examining the factors influencing their level of intention to be entrepreneurs. The results indicate that family background significantly influences the student's entrepreneurial intention and that participation in entrepreneurship-oriented courses positively influences the student's level of self-efficacy. The study showed further that business education had some effect on the student's ability to gain the necessary knowledge for entrepreneurship. Another key finding was that entrepreneurship education specifically for business students has to equip students with entrepreneurial skills, attributes, and behaviors. The results also suggest that entrepreneurship education is a contextually determined concept that requires modification of content and methods to meet the specific needs of a particular target group.

4. Discussion

When examining the literature on student entrepreneurship, two distinct strands of research emerge.

The first focuses on an *exogenous approach*, emphasizing the role of institutions and the paths that encourage the start of an entrepreneurial path. In particular, the student entrepreneurship analyzes (1) the role of *entrepreneurship education* across the multitude of institutions that offer entrepreneurship education (e.g. Peterman & Kennedy 2003). Although current research shows both positive results (Fayolle et al., 2006; McMullan et al., 2002; Peterman & Kennedy 2003; Souitaris et al., 2007) and negatives (Von Graevenitz et al., 2010), universities around the world employ a combination of initiatives to create entrepreneurial appeal climate. More concretely, university offers of training and support for entrepreneurship are of different types (Feola et al., 2020; Matt & Schaeffer, 2018; Parente et al., 2015). The university can stimulate and facilitate innovative entrepreneurship through practical entrepreneurship activity (Feola et al., 2020; Kassean et al., 2015), specific educational programs, or technology transfer offices. In particular, *technology transfer offices* are particularly able at assisting researchers and students who wish to transfer the results of their research to business (Passarelli & Costabile, 2014; Boh et al., 2016 Hockaday & Piccaluga, 2021).

Within the exogenous approach, a second (2) part of the literature focuses on innovation intermediate. More tangible support can also come from public infrastructure to support entrepreneurship, such as incubators or proof of concept centers (Passarelli et al., 2020), and successful entrepreneurs serving as mentors. What Kenney and Patton (2005) called “entrepreneurial support networks” (e.g. actors as venture capitalists, lawyers, and accountants) are also formal institutions assisting the formation and growth of entrepreneurial firms. Informal institutions include the wider culture (Stephan & Uhlander, 2010) and social norms (Webb et al., 2009).

Table 1 - research approach and research topic on student entrepreneurship

Research approach	Research topic	Research stream
Exogenous	University ecosystems	<ul style="list-style-type: none"> • entrepreneurship education program (Battaglia et al., 2022; Kassean et al., 2015; Karimi et al., 2016) • Entrepreneurship activity (es. competitions) (Kassean et al., 2015); • Technology Transfer Office (Boh et al., 2016)
	Innovation intermediaries	<ul style="list-style-type: none"> • Incubators (Jansen et al., 2015); • Venture capital (Kenney & Patton 2005) • Informal institutions (Stephan & Uhlander, 2010) • Proof of concept centers (Passarelli et al, 2020))
Endogenous	Personality	<ul style="list-style-type: none"> • Personal traits (Göksel, 2011; Cunningham & Lischeron, 1991) • Entrepreneurial spirit (Farrukh et al., 2018); • Creativity (Gustiawan, 2014); • Gender (Westhead & Solesvik, 2015; Zhang et al., 2014; Petridou et al., 2009) • Self-efficacy (Nowiński et al., 2019)
	Personal Background	<ul style="list-style-type: none"> • Ability (Huber et al., 2014); • Demographics (Laspita et al., 2012; Zellweger et al., 2011) • Social capital (Guerrero et al., 2008)
	Behavioral Theory	<ul style="list-style-type: none"> • Entrepreneurial Intention (Covin & Slevin 1989; Kraus et al., 2012; Rigtering et al., 2014; Krueger et al., 2000; Werner et al., 2014) • Entrepreneurial attitudes (Lüthje & Franke 2003; Majumdar & Varadarajan, 2013)

The second strand of research on an *endogenous approach*. Behaviors consist of actions performed with the influence of personal and external conditions (Le Thuy et al., 2020)s. In line with psychological theories of behavior formation, such as the theory of planned behavior, one can evaluate the social subgroup of students with their intentions towards entrepreneurship. Hence, their entrepreneurial behavior is derived from their attitude towards entrepreneurship. Thus, there is not spontaneity but intentionality in the actions to start a new venture (Ajzen, 1991; Kautonen et al., 2013).

The future entrepreneur will be a student with a genuine desire for a particular project; one who will put in place everything possible to their intentions and thoughts into action. Related to this is a particular behavior regarding discovery, evaluation and exploitation of an opportunity that can turn into a solid reality (Shane & Venkataraman, 2000; Krueger et al., 2000).

However, to study the process of business creation by students, there is a need to focus on the entrepreneurial spirit that characterizes the personality and attitudes of the student. In fact, skills and personal characteristics are at the basis of the entrepreneurial intention, accompanied by the desire to improve more and more, so that they can create business through

constant learning (Farrukh et al., 2018). However, it was also analyzed the entrepreneurial orientation was characterized by subjects who have a particular propensity to be competitive, innovative, proactive, risk-taking, and autonomous (Covin & Wales, 2012; Lee & Peterson, 2000). The latter may also characterize students who precisely are interested in the category and intend to be part of it. Taking the Personal Preference Schedule (Edwards, 1954; 1959), one of the first tests of entrepreneurial nature was asking the respondent to rank their needs. It showed that entrepreneurs have “a high need for success, autonomy, change and a low need for affiliation.” However, even in reference to other more recent tests, very few mentioned student entrepreneurs and many concluded that entrepreneurship is influenced by many different factors (Tong et al., 2011; Van der Zwan et al., 2016). With reference to more general studies, there are studies that also point to the fact that a large proportion of the population would like to pursue an entrepreneurial career at a young age. It turns out that student entrepreneurship is very important for research on entrepreneurship, as it refers precisely to that stage of life. On the other hand, regarding gender, despite the growth in recent years, there are still many more male entrepreneurs than females, and there is a need to assess gender differences in the analysis of entrepreneurial intention and subsequent transformation into behavior (Zhang et al., 2014; Petridou et al., 2009).

Nielsen & Lassen (2012) stated that students are the perfect group to investigate identity construction in the entrepreneurial process. However, most of them believe that in order to be successful entrepreneurs, it is necessary to engage with an innovative or creative business plan. Lack of good planning can be problematic when starting a business, while a well-organized business plan can ensure the outcome of the project over time (Ferreira et al., 2017).

Seeking creativity could lead, in the long run, to a major transformation of society and help overcome some social challenges. In addition, innovation, motivation, and personal attitudes can be critical success factors and make you attractive to those considering this career option. While misperceptions about entrepreneurship, lack of skills, experience, or elementary knowledge about business can turn students away from engaging in entrepreneurial ventures (Jansen et al., 2015). Young students need to have the understanding that they do not have to master every possible skill to start or run a business. Personality traits play an important role, which is defined as “the ability to renew, increase and adapt skills over time” (Cunningham & Lischeron, 1991). That being said, students would come across as more flexible, able to acquire dynamic skills, and are not as emotionally attached to their business as most experienced entrepreneurs with great adaptive skills to their business model (Göksel, 2011).

Entrepreneurship is based on economic theory and the exchange of goods and services, and economic factors are crucial to the effective exercise of entrepreneurial activity. To it, it is also important to link the sources of funding for the business idea. In fact, the lack of funding for start-ups is one of the most important factors for young students trying to create a new business. Entrepreneurs need funding to achieve their goals and, especially, to grow their idea more and more (Alsos et al., 2016; Finkle et al., 2013; Wright et al., 2017)

Linked to purely economic factors, certain components influence people's lifestyles. In fact, sociological factors refer to the latter and characterize how individuals live their lives, their work, and their consumption habits. All within a cultural context, it is defined as a set of common values, beliefs, and expected behaviors. These can influence the intentions and behaviors of young students particularly towards organizational culture (Mars, 2009; Hahn, 2020).

Another important factor is related to the the role of students' parents. There are several evidence in the student's entrepreneurship literature that students with a family business background enhance their propensity to turn these intentions into actual behaviors (Hussain et al., 2021; Laspita et al., 2012, Zellweger et al., 2011). The family experience of parents has a significant impact on the entrepreneurial intentions and behavior of children (Shirokova et al., 2016). In addition, students with good family backgrounds in entrepreneurship are likely to take advantage of their knowledge and parental network when trying to start a new business and demonstrating some starting inequality for those without entrepreneurial family backgrounds (Hussain et al., 2021; Van Auken et al., 2006). Although with equal levels of intention and desire towards entrepreneurship, they do not benefit from this variety of resources, thereby making the transition from intention to actual behavior more cumbersome in some cases. As for the field of education, perhaps the closest to students, there are several methods that are grouped under entrepreneurship education defined as all activities that promote entrepreneurial attitudes, mentality and skills, and accompany the student from idea generation to start-up, growth, and real enterprise (Smith et al., 2006). The goal of entrepreneurship education is to try to get into the minds of students by using skills in a way that supports them in innovative activities or in taking risks resulting from the activity (Jones et al., 2017). In evaluating the effect of entrepreneurship education, it is useful to focus on learning in terms of intentional, cognitive, and skill-based outcomes (Huber et al., 2014). Indeed, if there are changes in attitudes in terms of wanting to start a new business or being involved in innovation within an existing business, there is some positive effect in terms of entrepreneurship education (Kyro, 2008). However, there is also a need to evaluate the understanding of the information obtained about the

reasons to start a business and the acquisition of the tools needed to be an entrepreneur. In particular, university initiatives, which aim to discover and strengthen the entrepreneurial spirit, facilitate the formation of positive beliefs about entrepreneurial careers among students. In other words, promoting entrepreneurship also creates a supportive atmosphere in terms of entrepreneurial intentions within universities, which can create a favorable environment for intention-action transformation (Battaglia et al., 2022; urker & Selcuk, 2009; Liñán et al., 2011; Sesen, 2013).

In recent years, the role of the professor has changed with the advent of technologies and devices that allow unprecedented access to data anywhere, and that has changed the way people teach and learn. Students are allowed to access knowledge and learn from any geographic location, which has created a digital learning ecosystem on entrepreneurship education including through free online courses (Liguori & Winkler, 2020).

5. Conclusion

Our study is one of the first to apply bibliometric analysis with statistical software to the topic of student entrepreneurship. More concretely, in this study, we superimpose the analysis of co-citations and bibliographic coupling analysis to discover what the most relevant research topics on student entrepreneurship are.

Our study contributes to the literature on student entrepreneurship in three ways. First, the analysis of Co-Citation identifies consolidated trends in the literature and their effect on the creation of new businesses. Specifically, from the analysis, three main clusters are derived; the behavioral planned theory, the educational paths, and some demographic aspects. This implies that most of the theoretical and managerial research are mainly focused on behavioral aspects that aim to investigate the behaviors of entrepreneur students on educational paths and in particular, on studies that aim to investigate the contributions of educational paths and their role in the development of the student entrepreneur and finally on the demographic aspects, and in particular on the demographic aspects that influence the choice of students to start an entrepreneurial activity.

Second, through the Bibliographic Coupling analysis, it is possible to identify emerging trends and future research trends (Egghe & Rousseau, 1990; Kessler, 1963). In particular, through the analysis of the bibliographic correspondence, the main research trends have been identified. More concretely, some trends focus on *entrepreneurial intent* and in particular on the elements that push the students' intentions to start an entrepreneurial path by privileging empirical analyzes to theoretic-

cal ones (Battaglia et al., 2022; Parente & Feola, 2021). Another trend focuses on the effect of *micro factors* that influence entrepreneurial intentions and in particular on the psychological factors that push students to start an entrepreneurial path (Gupta et al., 2009; McGee et al., 2009; Ahmed et al., 2010). Finally, another big trend concerns the *macro factors* that influence students' entrepreneurial choices (Da Silva et al., 2015; Galvão et al., 2018; Pittaway & Cope, 2007). The result of the analysis of the two methods is in Table 1.

Our study, in fact, offers some policy implications. Specifically, policymakers should enact specific policies to support academic entrepreneurship initiatives. Also, government can conduct both active and passive policies to encourage entrepreneurship. Since the characteristics of the ecosystem inevitably influence entrepreneurial choices, public policies should be supporting the creation of incubators that can be a support for the potential entrepreneur. In fact, they can acquire managerial insights to supplement their technical expertise to help gain familiarity with customers and suppliers while on someone else's payroll. The networks the entrepreneur develops are bound to the environment of the incubator organization so that when he/she starts up a venture, it tends to be in the same area. Moreover, public policies should be oriented to expand the funding system for students, enact laws to help students easily access capital, promote and encourage investment activities of large companies in startups. The costs of starting a business is another factor that policymakers should consider. Such costs are certainly a factor one considers before embarking on any entrepreneurial activity. Start-up costs include the number of procedures and days it takes to form a business entity, the fees required to establish a business, and a minimum level of required capital. Also, legal protection and property rights represent important factors to regulate. All these factors are important for generating an entrepreneurial-friendly environment for students.

These considerations provide new insights into the influence of universities on promoting the development of the student entrepreneurship. More concretely, the identification of micro and macro factors encourages universities to initiate increasingly specific and focused educational paths also for the development of personal skills and abilities (e.g. soft skills).

In addition, universities could further define their strategies to encourage and help start and develop new businesses during their studies. In particular, universities should actively involve their technology transfer offices during the studies of aspiring entrepreneurs (Passarelli et al., 2020).

Finally, an important perspective to note concerns the motivation behind students' career choices. In particular, young graduates may interpret entrepreneurship as one of the only choices for employment. In other words, this aspiration is not based on their actual characteristics or intentions but is a direct consequence of the unstable macroeconomic conditions in which they live, which is characterized by high youth unemployment. In this context, universities, industries, and policymakers, in general, should work together so that there is an appropriate alternative job offer to entrepreneurship. In fact, only in this way would entrepreneurship become a chosen and undue path.

However, it is not without limitations. First, the main limitation deals with the fact that labels of clusters emerging from co-citation analysis and bibliographic Coupling analysis are the result of the authors' elaboration. As consequence, similarities/differences with previous works could be formal and/or consistent. Second, our study only considers the last 10 years of research. However, this was a choice of the authors to limit the field of investigation. Third, only articles in English were considered for the authors' skills.

6. Implications and Future research

Our study offers insights for future research in the field of student entrepreneurship. First, our study analyzed the different research fields emphasizing the role of entrepreneurial education. Indeed, although some studies have focused on the empowerment and engagement of technology transfer professionals (Cucino et al., 2021a), future research could investigate the drivers of empowerment and engagement in entrepreneurship education. In other words, a possible research trajectory can look at the factors that stimulate the creation of a business with or without academic involvement. This could help examine the actions taken by universities and the factors that contribute specifically to the creation of academic spin-offs. Through the study and its implications, universities could define in more detail their strategies for the entrepreneurial university to encourage and help start and develop new businesses during their studies.

Second, our study highlighted the role of the university in delivering entrepreneurial pathways. In fact, several studies have focused on the role of the entrepreneurial university (Feola et al., 2020; Grimaldi et al., 2021; Parente & Feola, 2021; Sedita & Balsi, 2021), focusing either on technology transfer activities (Abreu & Grinevich, 2013; Miller et al., 2018), education activities (Han et al., 2021), or university start-up competitions (Parente et al., 2015). Further investigation could also look at the actual output of entrepreneurship education in terms of the creation of new businesses by students participating in the courses.

Third, our study highlighted the main endogenous factors underlying student entrepreneurship. In particular, several scholars have focused on the role of the entrepreneurial spirit (Farrukh et al., 2018), creativity (Gustiawan, 2014), and self-efficacy (Hussian et al., 2021; Nowiński et al., 2019). However, future studies could investigate whether there is a behavioral transformation in students who have started businesses in terms of their approach to work and of personal and behavioral characteristics.

Finally, our study focuses on students' individual intentions. According to our analysis, several studies have analyzed the impact of family background and personality traits on entrepreneurial intentions (Cunningham & Lischeron, 1991; Göksel, 2011; Hussian et al., 2021). Future research should analyze group intentions since students usually belong to groups in both university and out-of-school settings. Thus, in the assessment of personal conditions and consequences, although the underlying cognitive mechanisms are individual, the different processes from initiation to daily activities occur in teams, which justifies the need to investigate group processes. Further research will focus also on biological factors (Passarelli et al, 2020), by combining biology and entrepreneurial behavior among students. A recent field of literature, in fact, focused on the relationship between hormones, physical characteristics, health conditions and entrepreneurial dimensions. The stimulation of such hormones among students could help them to increase their alertness, their motivations, and their entrepreneurial orientation.

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**CAUSES OF CORPORATE CRISIS: AN INVESTIGATION ON SMES
TO SUPPORT THE LEARNING PROCESS**

Francesca Sgrò
University of Urbino
francesca.sgro@uniurb.it

Federica Palazzi
University of Urbino
federica.palazzi@uniurb.it

Massimo Ciambotti
University of Urbino
massimo.ciambotti@uniurb.it

Linda Gabbianelli
University of Urbino
linda.gabbianelli@uniurb.it

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Abstract

The study is an invitation to reflect on the leading (internal and external) causes of the crisis for SMEs while taking their corporate age into account, and act as a useful tool when identifying the critical areas that require intervention to prevent or mitigate the crisis. A questionnaire was administered to the legally appointed bankruptcy trustees that managed 228 bankruptcy procedures. Descriptive statistical analysis and exploratory factor analysis have been employed. Data shows that planning activities, governance, and ownership issues (as internal factors), in addition to economic and industrial crisis (as external determinants) are recognized as a prerogative for a firm bankruptcy procedure activation. The main limit concerns the reduced sample size due to challenges in the data gathering process while also considering the "bankruptcy status" and the reference context; these are characterized by small-sized enterprises, hilly and mountainous landscapes, and fairly secluded locations with poorly developed infrastructures.

1. Introduction

The current economic, social, and political system is facing numerous challenges due to the COVID-19 pandemic. Society is experiencing social distancing and isolation, public health systems are showing their strengths and weaknesses, and governments are providing recovery programs. In the meantime, small and medium-sized enterprises (SMEs) have been extremely affected by a supply and demand shock, causing, in turn, liquidity shortages. Forecasts show dire projections. There is a possible risk that over 50% of SMEs will not survive in the short term, especially due to liquidity shortage, and it has been estimated that SME unemployment will reach about 60-70%. That being said, in all OECD countries, SMEs represent the vast majority of companies where a widespread downfall of these enterprises will lead to a global reduction of economic and social growth prospects (OECD, 2020).

In Italy, SMEs provide 66.9% of overall value-added, surpassing the EU average of 56.4%, with an employment rate of 78.1%, compared to the EU average of 66.6%. The share of employment generated by SMEs is even higher in micro firms, which provide 44.9% of employment compared to the EU average of 29.7%. Moreover, these enterprises have been affected the most in terms of the drop in demand, problems along the supply chain, and/or transport/logistics (European Commission, 2019). Compared to larger companies, SMEs show less resilience and flexibility when dealing with the costs these shocks entail, and these companies can rely on fewer tangible and intangible resources, facing the worst conditions in accessing capital (Quintiliani, 2017). Therefore, the SME survival rate is lower compared to larger companies (European Commission, 2019). The recent reform of the Italian bankruptcy law has approved the “Crisis and Insolvency Code” with Law 155/2017, aiming to provide significant changes to the discipline of corporate crisis and insolvency. This legislation was expected to come into force in September 2021, but has been postponed one year because of the COVID-19 pandemic.

Several studies have investigated the causes that lead to the failure of a firm, in particular: management/entrepreneur features, company characteristics, reference environment, corporate governance, relationships with stakeholders and corporate policies (Altman, 1968, 1984; Thornhill and Amit, 2003; Ciambotti, 2005; Ciampi and Gordini, 2013; Ciampi 2015, 2017, 2018; Gabbianelli, 2018; McNamara et al., 2017).

Notwithstanding the growing interest in enhancing the theoretical foundation and the practical approach to a firm’s crisis, studies providing a comprehensive investigation into crisis origins in SMEs are still scarce. This study tries to fill the existing gap in the literature which examines the external and internal causes of bankruptcy in Italian small and medium-sized enterprises, while also factoring in corporate age.

Therefore, this study wants to bridge the divide between theory and practice. This research investigates the determinants of the bankruptcy of SMEs within the January 1994 - November 2017 time frame that filed for bankruptcy at Urbino's Bankruptcy Court.

A survey was administered to the 228 bankruptcy trustees. It was designed to gather background information on the firms, along with data pertaining to the external and internal causes of bankruptcy. Hence, descriptive statistical analysis and factor analysis were employed to identify the main financial distress factors for Italian SMEs.

Therefore, the research formulates the following question: (RQ1) What external factors determine the crisis of SMEs? (RQ2) What internal factors cause the crisis of SMEs? (RQ3) Is there a correlation between the firms' age and specific causes of the crisis?

This paper can be considered original for several reasons: it tries to map the causes of the crisis for all SMEs that were declared bankrupt by a specific court; moreover, it tries to investigate the association between the firms' age and the causes of the crisis, given that previous studies consider firm age only as a variable to predict SMEs' default (Zanda and Lacchini, 1995; Abdullah et al., 2016; Lugovskaaya 2010); finally, the results are interpreted considering the actual COVID-19 crisis and the chances of survival for most SMEs, trying to suggest public interventions to support SMEs.

This paper is structured as follows. Section 2 reviews the literature on factors influencing the firm's failure. Section 3 describes the research methodology, then section 4 presents the findings, followed by a final discussion and conclusion.

2. Literature background

The Italian "Crisis and Insolvency Code", ultimately approved in February 2019, was created to promote better conditions for creditor satisfaction, as well as safeguarding entrepreneurs' rights by helping overcome the crisis (Riva and Comoli, 2019). Among the interventions envisaged, the Code provides a legal definition of the "crisis" concept and introduces a compulsory early warning system to detect symptoms before the onset of the crisis.

The term "crisis" refers to a situation in which a company faces numerous challenges in terms of economic and financial difficulties that increase the probability of insolvency brought on by a cash flow shortage, which, subsequently, leads to a future inadequacy to comply with the previous obligations (Carter and Van Auken, 2006; Poli, 2020). Furthermore, the corporate crisis is characterized not only by economic distress but by inadequate strategic and managerial approaches on behalf of the gover-

ning bodies that undermine the firm's survival (Ciambotti, 2005; Cesaroni and Sentuti, 2016). Strategic monitoring must be periodically carried out to verify the company's health, through the control that should be adapted according to the degree of turbulence and environmental uncertainty for the effective management of strategic emergencies (Ciambotti, 2005). Generally, SMEs are unprepared when it comes to managing the negative consequences produced by an unforeseen strategic setback. The latter, to which SMEs are more vulnerable, are unpredictable by nature.

Consequently, once the crisis has been identified, it will be necessary to evaluate the opportunity of recovering (or not) the economic and financial viability. In other words, there will be the need to evaluate whether the crisis is irreversible; as a consequence, it will lead to the enterprise exiting from the market or setting off a liquidation process, or even whether there is the chance to undertake recovery processes (Brugger, 1984, 1986; Coda, 1986; Camacho-Miñano et al., 2015).

The dynamic of a crisis is characterized by several interconnected phases: a reduction of revenues and/or increase of costs, worsening of margins, a need for liquidity, the extension of payment time of suppliers/creditors, an increase in financial costs, the inability to generate cash flow for debts, additional financial needs, delayed or missed payment of tax-related debts, deterioration of bank rating, reduction of the credit line, inability to face bank or supplier debts, and insolvency.

Therefore, the crisis can be seen as a severe deterioration process of a firm's vitality structure that can take place either progressively, with a continuous and ever-increasing decline, or caused by sudden external factors (i.e. global economic crisis, industry-specific crisis, natural or health catastrophe, etc.), internal factors (i.e. the disengagement or the sudden passing of the entrepreneur-founder, changes of ownership and governance structures, accidents not adequately covered by insurance, etc.) or changes in the strategy structure (Altman, 1984; Thornhill and Amit, 2003; Ciampi and Gordini, 2013; McNamara et al., 2017). The strategic problem stems from the incoherence of the company within the reference context. The adequate and complex management of the dynamic relationship between enterprise, strategy, and the environment is the key factor for a firm's success or failure (Ciambotti, 2005).

In management and accounting literature, there are two main branches of research regarding the factors influencing a firm's failure: subjective-behaviourist and objective (Guatri, 1995).

The subjective-behaviourist approach sustains that the crisis is brought on by subjective (internal) variables related to managerial and entrepreneurial characteristics (Novak and Sajter, 2007). These factors regard the company's characteristics, such as the resistance to change, succession processes, inability to adapt to environmental changes due to insufficient strategic and operational flexibility, as well as structural rigidity.

According to some authors (D'Aveni and MacMillan, 1990; Greening and Johnson, 1996), factors related to the management sphere are considered the most influential determinants for bankruptcy. Lack of management skills and competences, as well as patterns of reluctance and inertia, reduce the probability of long-term survival, leading to missed opportunities through strategy changes (D'Aveni and MacMillan, 1990; Ceccacci and Devetag, 2014; Ooghe and De Prijcker, 2008; Gilbert, 2005). Companies' distress can also be caused by excessive optimism and risk behaviours, where risks are neither considered, nor managed. These risk behaviours threaten the firm's wealth and stakeholders' interests.

In addition, managers and entrepreneurs making wrong choices concerning strategy, investments, commercial areas, financial policy, or operational aspects can lead to a corporate crisis (Ooghe and De Prijcker, 2008; Pace, 2013; Pierri et al., 2013). Finally, the age and size of companies should also be taken into account. Younger firms can be lacking in: managerial skills, financial management abilities (Thornhill and Amit, 2003), tangible and intangible resources, legitimacy, and stable relationships with stakeholders. These are all forerunners of the crisis.

The older the firm, the lower the probability of bankruptcy (Carter and Van Auken, 2006). However, changes and evolution of the competitive environment are recognized as the factors which bring older organizations to their demise. Thus, older firms would seem incapable of adapting to environmental changes (Thornhill and Amit, 2003).

According to the objective approach, several external causes can produce a crisis: environmental turbulence and complexity, industry-specific crises, supply and demand shock, deterioration of relations with stakeholders, and changes in the competitive, legislative, social, and technological reference context (Haldma and Laats, 2002, Szychta, 2002).

Numerous studies (Colombelli et al., 2013; Martinez et al., 2019) suggest that the probability of business failure is very high during a global economic crisis, seeing as firms face a turbulent and uncertain environment. These unstable situations are characterized by high inflation, unfavourable exchange rate changes, and supply and demand shock leading to the firm's bankruptcy (Bhattacharjee et al., 2009). These factors lead to declining revenues, profits, and liquidity that highly influence the firms' survival (Cerrato et al., 2016). However, Martinez et al. (2019) highlight the critical importance of human capital in mitigating the effects of the financial crisis on a firm's failure, especially for service companies.

4. Methodology

This study was developed in collaboration with Urbino's Bankruptcy Court, and it aims at investigating the factors leading to a firm's failure. The total population is composed of 228 companies that, during the January 1994 - November 2017 time frame, were declared bankrupt by the court. The primary data concerning the failed companies and their bankruptcy were collected from the Registry of the Urbino Bankruptcy Court. Also, a survey was developed and forwarded by email to the legally appointed bankruptcy trustee to manage the procedure.

The survey asked a variety of questions in three sections as follows (table 1): the first section refers to the firms' characteristics in terms of sector of activity, legal form, size, and age at the date of bankruptcy; the second section gathered information regarding the entrepreneur's profile (age, educational level, and previous work experiences); finally, the third section investigates the external, and internal causes determining the firms' crisis. The judgement of the bankruptcy trustee was requested and measured through a Likert scale that ranges from 1 (uninfluential) to 7 (profoundly affecting the bankruptcy).

An exploratory factor analysis (EFA), with Promax rotation, has been applied to aggregate the several external, and internal causes to identify the main components associated with the corporate crisis and consequent bankruptcy procedures.

Table 1 – The questionnaire design

Questionnaire sections	Area of investigations
Firm general information	<ul style="list-style-type: none"> • Sector of activities • Legal form • Size • Age at the bankruptcy's date
Entrepreneur's profile	<ul style="list-style-type: none"> • Age • Educational level • Previous work experience
External and internal causes	<p>External environmental causes</p> <ul style="list-style-type: none"> • Industry-specific crisis • Global economic crisis • Market-specific crisis • Stakeholder relationship quality • High procurement cost of raw materials <p>Internal firm-specific causes</p> <ul style="list-style-type: none"> • Inadequate management of financial needs • Debt increase • Under-capitalization • Wrong strategic choices • Inappropriateness of credit management • High fixed costs • Lack of data analysis • Excessive optimism in strategic plans • Liquidity shortages • Lack of cost control • Oversized fixed assets • High warehouse stock • Insufficient mandate processes • Ownership conflicts • Governance conflicts • Business succession conflicts

4. Findings

4.1 The descriptive statistics

The sample is composed of 105 firms (46% of the total population) that filed for bankruptcy between 1994 and 2017. These enterprises mainly operate in the manufacturing sector (55%) and, to a lesser extent, in the sectors of services (16%), wholesale trade (15%), and construction (14%). Based on the legal form, 76% of the firms are limited liability companies, 19% are partnerships, and 5% are one-person businesses. Table 2 shows the profile of enterprises in terms of the number of employees and members. The number of members is, on average, equal to 2.14 with a minimum value of 1, for one-person businesses, and a maximum of 8 for limited liability companies or partnerships.

The number of employees is, on average, equal to 7.68, with a standard deviation of 12.98 and a median value of 3; the minimum and maximum values are respectively of zero and 70 workers.

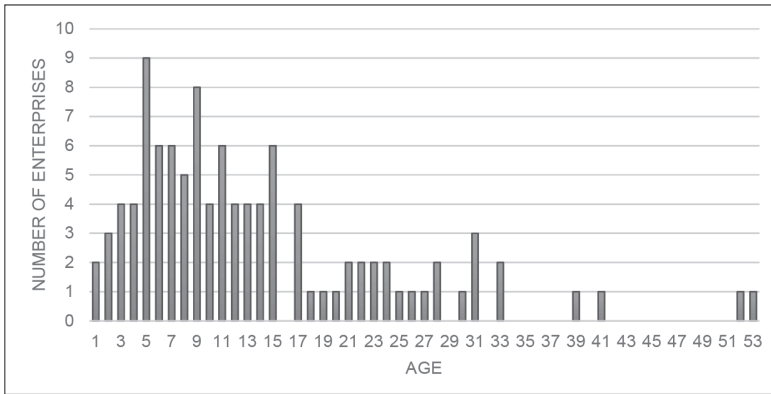
Table 2: The firms' profile

Variables	Total	Mean	Median	Dev. St	Min	Max
Members	225	2.14	2	1.22	1	8
Employees	776	7.68	3	12.98	0	70

Figure 1 shows the company's age at the starting date of the bankruptcy procedure. Specifically, 13 enterprises filed for bankruptcy before 2008 and 92 during the 2008-2017 time-frame. On average, companies filed for bankruptcy after 13.68 years. This means that a firm's age could be a variable that potentially affects a firm's ability to overcome a crisis by avoiding the bankruptcy procedure.

Thus, bankruptcy could mainly concern younger firms, while older firms seem to be more likely to successfully cope with the crisis.

Figure 1: The age of failed enterprises



On average, the entrepreneurs involved in the bankruptcy procedures were around 50 years old (data refers to 144 entrepreneurs out of a total of 225).

As far as the entrepreneurs' education is concerned, 2 attended elementary school, 61 reached middle school, 60 attained their high school diploma, and 8 held a Bachelor or Master's degree (data are related to 131 entrepreneurs out of a total of 225). Interestingly, a significant portion of the entrepreneurs (70 out of 122 respondents) declared that they had previous professional experience in the same sector in which they were running their current business. In contrast, 52 entrepreneurs declared not having any previous work experience in the industry.

Table 3 highlights the external causes that contributed to the crisis and determined a firm's insolvency and bankruptcy. The external causes that obtained the highest scores are: industry-specific crisis (4.65), global economic crisis (4.04) and market-specific crisis (3.49). Other causes, such as the quality of the relationships with stakeholders (2.73), the high procurement cost of raw materials (2.17) seem, on average, to have had less importance when dealing with corporate crisis.

Table 3 - The external causes of bankruptcy

External causes	Obs.	Mean	Dev. St	Min	Max
Industry-specific crisis	104	4.65	2.03	1	7
Global economic crisis	104	4.04	1.99	1	7
Market-specific crisis	100	3.49	1.96	1	7
Stakeholder relationship quality	101	2.73	1.69	1	7
High procurement cost of raw materials	101	2.17	1.40	1	7

The internal causes contributing to the corporate crisis and to the consequent bankruptcy are shown in table 4: inadequate management of financial needs (3.84), debt increase (3.62), under-capitalization (3.56), wrong strategic choices (3.54), the inappropriateness of credit management (3.46), high fixed costs (3.41) and lack of data analysis (3.1). These obtained the highest scores. The internal causes deemed less important are the following: excessive optimism in strategic plans (2.78), liquidity shortages (2.73), lack of cost control (2.24), oversized fixed assets (2.2), high warehouse stock (2.2) and insufficient mandate processes (2.04). Conflicts related to ownership, governance, and business succession do not appear to be relevant internal causes.

Table 4 - The internal causes of bankruptcy

Internal causes	Obs.	Mean	Dev. St	Min	Max
Inadequate management of financial needs	103	3.84	1.73	1	7
Debt increase	100	3.62	1.75	1	7
Under-capitalization	101	3.56	1.90	1	7
Wrong strategic choices	102	3.54	2.01	1	7
Inappropriateness of credit management	103	3.46	1.79	1	7
High fixed costs	102	3.41	1.97	1	7
Lack of data analysis	103	3.1	1.72	1	7
Excessive optimism in strategic plans	101	2.78	1.97	1	7
Liquidity shortages	100	2.73	1.59	1	6
Lack of cost control	100	2.24	1.49	1	7
Oversized of fixed assets	101	2.2	1.57	1	6
High warehouse stock	100	2.2	1.57	1	7
Insufficient mandate processes	100	2.04	1.55	1	7
Ownership conflicts	101	1.78	1.33	1	7
Governance conflicts	101	1.75	1.29	1	7
Business succession conflicts	101	1.36	0.86	1	7

4.2 The correlation between company age and causes of the crisis

In order to answer the following research question - "Is corporate age associated with specific causes of the crisis?" – Pearson's and Spearman's correlations were employed to investigate the positive or negative association between age and external and internal causes of the crisis.

Table 5 shows only the significant Pearson's correlation values between company age and the causes of the crisis. Corporate age is positively associated with the global economic crisis (0.263**), industry-specific crisis (0.308**), and market-specific crisis (0.388**). But corporate age is negatively correlated with governance conflicts (-0.253*), ownership conflicts (-0.239*), insufficient mandate processes (-0.242*), and lack of data analysis (-0.256**).

Table 5. – The Pearson's correlation matrix between company age and causes of the crisis

Variables	Global economic crisis	Industry crisis	Market crisis	Governance conflicts	Ownership conflicts	Insufficient mandate processes	Lack of data analysis
Firm age	0.263**	0.308**	0.388**	-0.253*	-0.239*	-0.242*	-0.256**

*, ** significant at 0.05 and 0.01 levels (two-tailed test), respectively

Table 6 shows only the significant Spearman's correlation values between company age and the causes of the crisis. In particular, corporate age is positively associated with external-environmental corporate causes such as the global economic crisis (0.269**), industry-specific crisis (0.319**) and market-specific crisis (0.289**). Instead, by focusing on internal firm-specific causes, corporate age is negatively correlated with insufficient mandate processes (-0.268**), ownership conflicts (-0.270**), and governance conflicts (-0.306**).

Table 6. – The Spearman's correlation matrix between company age and causes of the crisis

Variables	Global economic crisis	Industry crisis	Market crisis	Insufficient mandate processes	Ownership conflicts	Governance conflicts
Firm age	0.269**	0.319**	0.289**	-0.268**	-0.270**	-0.306**

*, ** significant at 0.05 and 0.01 levels (two-tailed test), respectively

Both correlations suggest interesting associations between corporate age and the external and internal causes of the crisis. Thus, the positive association between age and external causes would seem to indicate that older firms are more vulnerable to external shocks. In contrast, the negative associations between age and some internal causes (lack of data analysis, insufficient mandate processes, ownership and governance conflicts) would highlight that, for older firms, internal conflicts concerning governance, ownership and the lack of data analysis are not so relevant when identifying the firm's crisis and its consequent bankruptcy.

4.3. The main factors of external and internal causes

In order to answer the following research questions - "What are the key external causes of bankruptcy?" - and - "What are the main factors of internal causes?" - an EFA (exploratory factor analysis) was performed to aggregate the several external and internal causes contributing to the corporate crisis, as shown in table 7.

The EFA has identified three main components for external and internal causes, such as: planning activities, governance and ownership issues and economic and industrial crisis. First, to ensure sampling adequacy, a Kaiser-Meyer-Olkin (KMO) test confirmed a favourable result (External environmental and Internal firms-specific causes: $KMO = 0.815$): second, to ensure internal constancy, a Cronbach's alpha test was conducted with favourable results (External environmental and Internal firms-specific causes: $\alpha = 0.893$).

By focusing on the causes, the first factor, recognized as planning and programming activities, refers to issues pertaining to planning and programming activities, both operative and strategic, that cause a rigid structure, high costs, and raised financial requirements; the second factor, recognized as governance and ownership issues, concerns governance conflicts, ownership conflicts, and business succession conflicts; finally, the economic factor and industrial crisis concerns industry-specific, global economic, and market crises issues.

Table 7 - The EFA of the external and internal causes

Pattern Matrix			
Items	Planning activities	Governance and ownership issues	Economic and industrial causes
Lack of cost control	0.881		
Oversized fixed assets	0.844		
High fixed costs	0.794		
Insufficient mandate processes	0.730		
Excessive optimism of strategic plans	0.724		
Liquidity shortages	0.692		
Wrong strategic choices	0.691		
High warehouse stock	0.65		
Under-capitalization	0.629		
Inadequacy of credit management	0.586		
Lack of data analysis	0.586		
Inadequate management of financial needs	0.554		
High procurement cost of raw materials	0.515		
Debt increase	0.464		
Governance conflicts		0.995	
Ownership conflicts		0.948	
Business succession conflicts		0.547	
Stakeholder relationship quality		0.329	
Industry-specific crisis			0.927
Global economic crisis			0.840
Market-specific crisis			0.523
Cumulative variance %	13.6	41.6	48.6

KMO= 0.815

Extraction method: Exploratory Factor Analysis. Rotation method: Promax with Kaiser Normalization

4.4 Validity checks

Confirmatory factor analysis has been conducted to obtain evidence of the convergent and discriminant validity of the measurement scales. Results showed an acceptable model fit, $\chi^2(186) = 371.126$, $p < .000$; comparative fit index (CFI) = .92, goodness-of-fit index (GFI) = .74, root mean square error of approximation (RMSEA) = .09.

We tested for convergent validity by checking that all significant (all t-values > 3.90) and substantial (all standardized parameters > .56) items loaded into the latent construct, as expected. Moreover, all constructs showed satisfactory levels of average variance extracted (AVE; all AVE values > .46) and composite reliability (all composite reliability values > .82).

Finally, as suggested by Fornell and Larcker (1981), the condition for discriminant validity among constructs has been verified. All AVEs were larger than any squared correlation among constructs (largest squared correlation = .29), suggesting that discriminant validity was achieved.

Therefore, table 8 shows confirmatory factor analysis results and table 8 reports correlations among latent constructs.

Table 8 - Confirmatory Factor Analysis Results

Items	Standardized loading	Construct	Average Variance Extracted	Composite Reliability
Lack of cost control	0.808	Planning activities	0.468	0.924
Oversized fixed assets	0.843			
High fixed costs	0.731			
Insufficient mandate processes	0.743			
Excessive optimism of strategic plans	0.693			
Liquidity shortage	0.670			
Wrong strategic choices	0.640			
High warehouse stock	0.655			
Under-capitalization	0.666			
Inadequacy of credits management	0.662			
Lack of data analysis	0.593			
Inadequate management of financial needs	0.645			
High procurement cost of raw materials	0.561			
Debt increase	0.605	Governance and ownership issues	0.583	0.831
Governance conflicts	0.985			
Ownership conflicts	0.967			
Business succession conflicts	0.542			
Stakeholder relationship quality	0.371	Economic and industrial causes	0.629	0.829
Industry-specific crisis	0.981			
Global economic crisis	0.760			
Market-specific crisis	0.569			

Table 9 - Correlations Among Latent Constructs

	Planning activities	Governance and ownership issues	Economic and industrial causes
Planning activities	1		
Governance and ownership issues	0.297	1	
Economic and industrial causes	0.129	-0.342	1

5. Discussion and conclusion

In light of the COVID-19 pandemic and the new Italian Crisis and Insolvency Code, this research sets out to investigate the causes, both external and internal, that lead to corporate crisis and consequent bankruptcy, and to acquire knowledge and act pre-emptively before the crisis becomes an irreversible insolvency. The main external factor causing the crisis is represented by the economic and industrial crisis. Rapid changes in technology, markets, politics, and social factors characterize the context in which the firms operate, increasing the complexity of firm management and underscoring the need to adapt to the environmental changes. Globalization has created a unique system where both financial and economic crises, along with health emergencies, spread throughout the world very quickly.

Instead, planning and programming activities, along with governance and ownership conflicts, are recognized as the main internal factors affecting a firm's crisis. Inappropriate planning activities may lead to expensive under/over-estimation as well as ineffective investments. In turn, wrong strategic choices may cause the over-optimistic plans, oversized assets as well as high warehouse stock, that increase financial needs. SMEs are often under-capitalized, and they must meet their ever-increasing financial needs through mostly bank debts. SMEs require developed management accounting systems, adequate administrative and organizational arrangements that guarantee timely information flows to support the decision-making processes (Palazzi et al., 2019; Bogarelli, 2020). The new Code of the crisis has properly identified the critical areas that make SMEs vulnerable. But the hurdles facing the spread of management accounting systems and adequate administrative and organizational arrangements are numerous (Sgrò et al., 2020) and are not to be underestimated.

It is clear that SMEs are exposed to a wide range of external and internal factors of varying complexity, which can lead to a crisis situation if their early signs are ignored or go unmanaged, such as issues related to the economic and industrial crisis, or market changes that are strongly characterized by unpredictability. Therefore, every company should implement an effective risk management system to ensure their survival and increase their ability to overcome uncertainties in order to reach their goals (de Araújo Lima et al., 2020).

Moreover, as shown by Pearson's and Spearman's correlations, the firm's age does not seem to favour bankruptcy; that is, the older companies would have a lower probability of being subjected to bankruptcy procedures (Carter and Van Auken, 2006; Palazzi et al., 2018), because of tangible, intangible, and financial resources' availability, and previous experiences that fed the learning process (Cucculelli, 2017; Quintiliani, 2017).

Conversely, the positive association between age and external causes would seem to suggest that older firms are more vulnerable to external shocks (Thornhill and Amit, 2003). In contrast, the negative association between age and some internal causes (the lack of data analysis, insufficient mandate processes, ownership and governance conflicts) would highlight that, for older firms, internal conflicts concerning governance and ownership and the lack of data analysis are not so relevant with respect to the crisis and the consequent bankruptcy. These findings show that external shocks could cause distress to older firms. It is a daunting problem in the ongoing health emergency situation, because the risk of bankruptcy concerns not only the youngest enterprises but also the oldest ones. Thus, public authorities should take into account these findings and provide support measures in favour of younger and older firms that have different necessities.

The managerial implications of the study are essential. Unfortunately, SMEs are characterized by insufficient managerial resources that deprive them of effective management systems, in addition to organizational and administrative arrangements. The new Italian Crisis Code and the emergency caused by COVID-19 will force SMEs to undergo a significant cultural change that will have to make enterprise management more professional, with more proactive decisions, and a more dynamic corporate system. The quality of management can make a difference, especially for SMEs.

Regarding the political implications, we can assert that public authorities should identify adequate support measures for both younger and older SMEs because the internal causes of the crisis seem to concern mostly younger ones, but external shocks cause distress mainly to older firms.

This study provides new recommendations for government and financial institutions which need to redirect their efforts towards helping and supporting young and old firms in overcoming financial distress and preventing a process of decline. These institutions could directly intervene during the crisis to avoid firms having to face liquidity shortages, especially with regard to young companies (Serrasqueiro et al., 2018). Firstly, on one hand, the bank system could ease their lending policy towards young firms rather than continue to financially support only companies that have considerable liquid assets. On the other hand, the government could institute a fund with the aim of helping to stimulate and support young firms' innovation and R&D to establish the path for potential economic growth. Secondly, government institutions could help firms promote and nourish commercial relationships with foreign partners to enrich firms' ability of recognizing and exploiting new opportunities. In this way, companies could gain access to new markets, business opportunities, avoid potential and temporal difficulties related to the local markets or industries, with the addition of increasing their survival chances during a crisis (Eggers, 2020).

Finally, governmental policies could be devoted to spreading knowledge about management accounting tools and practices capable of detecting firms' early signals of recession (López and Hiebl, 2015).

The lessons learnt are several:

- the concurrent causes of bankruptcy are numerous but the internal ones are referable to inadequate abilities and management systems; the new Italian Crisis and Insolvency Code tries to solve these deficiencies by fostering an organizational change and cultural development in SMEs;
- the external causes are very relevant and shocking because they could wipe out both younger and older firms; thus, the consequences are very risky for our economic system, especially during the current health emergency situation that represents an unpredictable external shock;
- the public authorities should take into account the differences between younger and older firms and promote *ad hoc* support measures;
- entrepreneurs should take advantage of this crisis and concentrate their efforts to favour change towards creating a company capable of successfully competing in the new context through sustainable development.

The main limit concerns the restricted sample size due to challenges in the data gathering process when considering the “bankruptcy status” of the sampled companies. Therefore, the results could be potentially influenced by the smaller sample and context, characterized by small-sized enterprises located in Urbino (characterized by a hilly and mountainous landscape and fairly secluded locations with poorly developed infrastructures). It would be interesting to extend the survey to other territories with different features. Additionally, the sample is drawn from a population of bankrupt enterprises. The inclusion of surviving firms would allow us to better understand the mortality dynamics.

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TOP LEADERS' BEHAVIORAL FLEXIBILITY, ORGANIZATIONAL
ADAPTABILITY AND FIRM PERFORMANCE:
AN ANALYSIS OF ITALIAN FAMILY COMPANIES

Alessandra Tognazzo
University of Padova
alessandra.tognazzo@unipd.it

Sara Sassetti
University of Pisa
sara.sassetti@unipi.it

Paolo Gubitta
University of Padova
paolo.gubitta@unipd.it

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Abstract

Given the increasing uncertainty and complexity that organizations have to face nowadays, top executives of family companies must be prepared to adapt not only their leadership behavior, but also the organizational structures to meet the challenges of an increasing uncertainty. Grounding on Yukl's Flexible Leadership Theory, this study aims to explore the relationship among leaders' behavioral flexibility, organizational adaptability and organizational performance. This research, based on behavioral event interviews (BEI), involved 87 top leaders of family Italian companies. Findings suggest that top leaders' behavioral competencies and organizational adaptability are related to firm results only when these two elements are considered together. Thanks to this research, we contribute to extend previous work on the relationship between top leaders' flexibility and firm performance considering family firms' leadership as a complex process that takes into account the organizational conditions under which top leaders' behavioral flexibility is effective.

1. Introduction

To survive in a dynamic competitive environment, organizations must adapt and change. Also, family firms, which typically leverage their success on their heritage and tradition, need to take this challenge. All organizations may be adaptable and respond promptly to changes in the consumer and competitive markets, changes in technology, and changes in the economy (Lee & Grewal, 2004). Organizational adaptability is “the capability of the firm to enact and respond quickly to changing competitive conditions and thereby develop and/or maintain competitive advantage” (Hitt *et al.*, 1998, p. 27). In this context, effective leaders, such as entrepreneurial leaders, not only drive the organization to adapt to change, but in the face of uncertainty envision possible outcomes and then forge actions that enact new profit models (Gupta *et al.*, 2004). Specifically, top leaders’ flexible behaviors are often invoked as the engine that pushes organizations toward success and change (Yukl, 2008) and are embedded in many contemporary theories of leadership, including works about leadership effectiveness (Boal & Hooijberg, 2000); transformational (Colbert *et al.*, 2008), charismatic (Davis and Gardner, 2012), and entrepreneurial leadership (Cogliser & Brigham, 2004). This large body of literature focuses on flexible behaviors as indicators of how much leaders can easily adapt to changes and inspire change, while scant attention has been given to the fact that a flexible leader is able to respond effectively to diverse situations thanks to a wide behavioral repertoire of different skills which influence the organizational processes and determine a firm’s performance and long-term survival (Yukl, 2008; Boal & Hooijberg, 2000).

Starting from these premises, the present study builds upon the Flexible Leadership Theory (FLT) (Yukl, 2008) and aims to explore the relationship among leaders’ behavioral flexibility - in terms of behavioral competencies - organizational adaptability and performance in family firms. Indeed, the FLT postulates that in order to survive and prosper, organizations need leaders who are flexible and adaptive. Mostly, top executives must be prepared to modify and adapt not only their leadership behavior, but also the organizational structures to meet the challenges of an increasingly turbulent and uncertain environment and reach better performance (Yukl, 2008). This is true also for family companies, which may have less flexible and more conservative organizational structures (Calabrò *et al.*, 2019). Thanks to this research we contribute to extend previous work on the relationship between top leaders’ flexibility and firm performance by answering a call to consider leadership a complex process that takes into account the organizational conditions under which leaders’ behavioral flexibility is effective (Yukl, 2008; 2012). Moreover, this study would answer to the call for a broader systems approach to assess and test the FLT identifying the

mediating processes and complex interactions (Yukl, 2008). To the best of our knowledge, no previous empirical work has attempted to explore the direct, interaction (i.e., moderation), indirect (i.e., mediation) and joint (i.e., suppression) effects of individual and organizational variables on firm results using a multi-level, multi-source and multi-method study. Moreover, this study contributes to the debate that sees on one side, innovation research which points out that SMEs are characterized by quick decision-making, willingness to take risks and flexibility in responding to new market opportunities and on the other side family firms' literature which considers their conservative posture, organizational rigidity, risk aversion, willingness to keep control of the firm and limited propensity to use investment capital to fund innovation projects (Calabrò *et al.*, 2019). Our study supports the notion that the family leaders' characteristics may determine how these firms respond to the emergence of change, by answering to a call for more research into how family firms may successfully deal with organizational change taking into account the role of key contingencies (De Massis, Wang & Chua, 2019).

Based on behavioral interviews (Boyatzis *et al.*, 2000; McClelland, 1998), this study involved 87 top leaders of family Italian companies and suggests that top leaders' behavioral flexibility and organizational adaptability play a role in directly shaping firm results only when these two elements are considered together. Their combination effect, rather than their mediating effect, is what affects firms' performance.

The remainder of this paper is structured as follows. The following section presents the theoretical background inspiring this research. Thereafter the hypotheses are developed, and another section illustrates the research method, variables' operationalization, and the research analyses conducted. The final part presents the results and their implications.

2. Theoretical framework and hypotheses development

2.1 Top leaders' behavioral flexibility and organizational adaptability: The Flexible Leadership Theory

In order to support the theoretical framework of our study, we adopt the *flexible leadership theory* (FLT) (Yukl, 2008). This theory concerns strategic leadership and emphasizes the need to influence key determinants of financial performance for a company: organizational efficiency, adaptability, and human capital. Due to the aim of our study, our focus here will be on adaptability. One form of influence is the use of task, relations, and change-oriented leadership behaviors. Another type of influence concerns strategy, programs, systems, and organizational structure (Yukl, 2008; Yukl & Lep-

singer, 2004). In accord with this theory we will consider top leaders' task, relationship and change-oriented behaviors. The FLT encourages to adopt synergistic ways to understand the influence of leaders' behavior and context on the firm's performance. Indeed, the FLT explains that the effect of leaders' behaviors on firm performance may differ based on whether the organization's level of adaptability is high or low, this theory suggests that top leaders' flexible behaviors and organizational adaptability are likely to interact in predicting firm performance (Yukl, 2008).

Previous research suggests that family involvement in business may give rise to a difficult trade-off between the tradition arising from shared family firm history and values, and the need for organizational and strategic change arising with increasingly dynamic competitive environments (De Massis *et al.*, 2019). To perform well, all organizations, including family companies, must adapt to external threats and opportunities in a timely manner, so we might seek to determine whether organizational adaptability amplifies the relationship between leaders' behavioral flexibility and firms' performance because "more research is needed to learn how leaders adapt their behavior to changing situations" (Yukl, 2012, p. 77). Existing research in family firms does not yet provide a definite explanation of how family businesses deal with organizational change, even if from the literature it can be inferred that flexibility and adaptability can be even more challenging for family firms as their competitive advantage relies on continuity rather than change (Kotlar & Chrisman, 2019).

2.2 Top leaders' behavioral flexibility: the relationship with organizational adaptability and performance

Based on FLT, research on strategic leadership focuses on executives who have overall responsibility for an organization and who are ultimately responsible for what happens in the organization (Hambrick & Mason, 1984), so organizational performance is highly dependent on top managers' behavior. As Hambrick (2007, p. 335) states, "the use of demographic indicators leaves us at a loss as to the real psychological and social processes that are driving executive behavior, which is the well-known 'black box problem'." To respond to this "loss," scholars have begun to focus on the influence of leaders' behavior on firm performance (Colbert *et al.*, 2008). Wang and coauthors (2011) show that leaders' behaviors impact firm performance and middle-managers' attitudinal responses, while Waldman *et al.* (2004) find evidence of a relationship between top leaders' charisma and strategic change. This stream of research also advanced the notation that, in less complex organizational contexts (i.e., small firms), senior executives have greater latitude in making strategic choices, so they are more likely to wield greater influence on firm performance than are CEOs of larger firms

(Ling *et al.*, 2008). Similarly, family firms' top leaders are recognized for being fundamental for organizational change and firm performance (Kammerlander & Ganter, 2014).

Contingency approaches, particularly the FLT, clarify the role of the determinants of an organization's effectiveness (Yukl, 2008). Adding to the behavioral approach, the FLT establishes three types of leadership flexible behaviors that have implications for overall organizational effectiveness: task-oriented behaviors, change-oriented behaviors, and relationship-oriented behaviors (Yukl, 2008; Yukl *et al.*, 2002). Task-oriented behaviors prevalently influence organizational efficiency, relationship-oriented behaviors are related primarily to the business's human capital, and change-oriented behaviors are key drivers of the firm's adaptability to the external environment. These behaviors impact overall performance by influencing organization-level variables (i.e., the performance determinants) (Yukl, 2008). Moreover, the leaders' flexible behaviors have an impact on the organizational adaptability due to these behaviors include the leaders' ability to understand how the various parts of the organization relate to each other, how changes in one part of the system will eventually affect the other parts, and how changes in the external environment will affect the organization. A leader with a high level of these skills is able to develop a better mental model for understanding complex, causal relationships within the organization and adapt to them (Yukl & Mahsud, 2010; Mumford *et al.*, 2007). According to the main arguments discussed, we may postulate the following hypotheses:

Hypothesis 1. In family firms, top leaders' flexible behaviors are positively related to firm performance.

Hypothesis 2. In family firms, top leaders' flexible behaviors are positively related to organizational adaptability.

2.3 Leaders' flexible behaviors and firm performance: the moderation and mediation effect of organizational adaptability

Research in leadership and strategic management suggest that the interaction of leaders' flexible behaviors and organizational adaptability could be related to firm performance such that, when organizational adaptability is low, top leaders' flexible behaviors may be needed in order to facilitate firm performance, while they are not as necessary when organizational adaptability is high (Yukl, 2008). Traditional research in the substitutes for leadership has posited that particular individual, task, and organizational variables could substitute for or neutralize leadership effects, so substitutes "not only tend to affect which leader behaviors (if any) are influential, but will also tend to impact upon the criterion variable" (Kerr & Jermier, 1978,

p. 395). Moreover, strategic management theories also recognize that top executives face considerable constraints to their actions, so results might be due to contextual conditions, rather than to leader actions (Hambrick *et al.*, 2015; Hambrick & Quigley, 2014). In line with this idea, in family business research the relationship between family firm leadership and performance is context-dependent (De Massis *et al.*, 2019).

Consequently, organizational adaptability may amplify the effect of family leaders' behaviors on firm-level outcomes: flexible behaviors and firm performance are more closely associated when the level of one organization's adaptability is high. In this regard, Pawar and Eastman (1997) surmise that, when the organization adapts to the external environment, the leaders' job is to be more flexible. In adaptable organizations, which seek to shape the environment rather than just reacting to changes, leaders must build new frames of reference for members of the organization, create a challenging vision for the organization and inspire for adaptability and flexibility. Based on these theoretical arguments, we present the moderation hypothesis:

Hypothesis 3. In family firms, top leaders' flexible behaviors and firm performance are more closely associated when the level of organization's adaptability is high.

As discussed, an organization effectiveness, specifically its performance, is determined by how well it adapts to changes in the external environment (Yukl, 2008). Leader's flexible behaviors have often been considered in leadership and management studies, and scholars have often linked them to positive outcomes like innovation and learning (Jung *et al.*, 2008; Vera & Crossan, 2004).

Despite the abundance of positive findings related to the effectiveness of leaders' flexible behaviors, there are reasons to question whether overall firm performance is enhanced by a firm's attitude toward change. For instance, Yukl (2002) suggests that leaders' flexible behaviors imply a need for changes in the strategy and culture of an organization that may not be appropriate, this means that leadership, considered as a multilevel phenomenon, plays a role at multiple levels (DeChurch *et al.*, 2010). Moreover, it is important to remember that individual-level variables and firm performance are more distal than organizational-level attributes and firm outcomes while organizational-level postures and orientations are more likely to be related to firm outcomes (Friedrich *et al.*, 2009).

Based on these theoretical premises, then, we can suppose that organizational adaptability mediates the relationship between leaders' flexible behaviors and firm performance.

Hypothesis 4. In family firms, the relationship between top leaders' flexible behaviors and firm performance is mediated by a high level of organization's adaptability.

2.4 The mutual suppressor effect of leaders' flexible behaviors and organizational adaptability

The long-standing conceptualization of leadership among both researchers and the general public is that it is a leader-centric, or individual-level, phenomenon. When asked to define leadership, one usually thinks of a single individual providing direction and inspiration to a group of followers. Among the three main ways of defining leadership, as a person, a role, or a process (Yukl, 2008), leadership is most often studied in terms of the person (Bolden *et al.*, 2011). In reality, however, leadership rarely plays out at only the individual level but is a complex, dynamic process strictly linked to the organization (Kollenscher *et al.*, 2017).

In line with this argument, the FLT sustains that leaders' flexible behaviors affect organizational performance more if they influence the organization's ability to adapt (Yukl, 2008). In other words, to be meaningful for overall organizational effectiveness, flexible behaviors require that organizational processes be adaptive and vice versa.

Although leadership in organizations is an inherently multi-level phenomenon (DeChurch *et al.*, 2010), organizational effectiveness hinges on leadership being enacted by leaders and on the organization as a complex system. If we consider an organization as a complex network of agents, then individual behaviors and organizational-level phenomena happen jointly. In fact, some scholars contend that both top-down and bottom-up dynamics are at play (Uhl-Bien *et al.*, 2007).

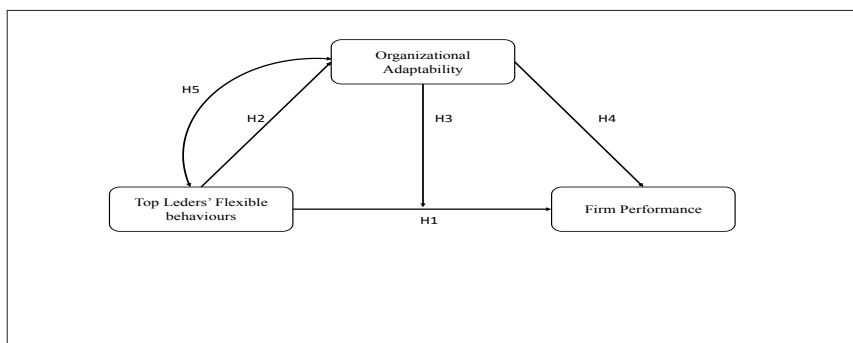
This approach seeks to go beyond the individual position-holder's direct interpersonal influence attempts to the indirect influence of a system's top position-holders individually and collectively, emphasizing the dynamics of their collective influence, which is largely overlooked in family firms' research. In this view, leadership is embedded in context, and its effectiveness is not universal but depends on a wide variety of environmental and organizational conditions (Osborn & Hunt, 2007; Osborn *et al.*, 2002; Osborn & Marion, 2009): leadership is socially constructed and organizational change patterns can emerge from the dynamic interplay among individual and organizational capabilities (Hunt & Ropo, 1995; Osborn *et al.*, 2002). The context alters leadership, just as leadership alters the context, to the point that, over time, it is not just a leader standing above subordinates but leaders involved in collective influence that shapes the context—and vice versa.

In short, we predict that leaders' flexible behaviors do not affect performance directly but only through organizational adaptability. In statistical terms, organizational adaptability acts as a suppressor variable. As defined by Pandey and Elliott (2010, p. 28) "a variable may act as a *suppressor* or *enhancer*—even when the suppressor has a significant zero-order correlation with an outcome variable—by improving the relationship of other independent variables with an outcome variable." This kind of effect might be overlooked in leadership research since researchers may tend to exclude independent variables that are not significantly correlated with the dependent variable. Here we propose that leaders' flexible behaviors and organizational adaptability are correlated and that organizational adaptability, as a suppressor variable, accounts for and discards variances that are irrelevant to the dependent variable, giving leaders' flexible behaviors a stronger relationship with firm performance (i.e., they improve the overall predictive power of the model). As an alternative explanation to the mediation effect, we predict that:

Hypothesis 5. In family firms, organizational adaptability suppresses (i.e., enhances) the relationship between top leaders' flexible behaviors and performance. The relationship between top leaders' flexible behaviors and firm performance is enhanced by a high level of organization's adaptability.

The entire research framework and the related hypotheses are shown in Figure 1.

Fig. 1 Theoretical framework



Source: Authors' elaboration

3. Method and Procedures

Our research framework considers all of the main elements of FLT (Yukl, 1999, 2008, 2012; Yukl *et al.*, 2002; Yukl & Lepsinger, 2004): firm performance, organizational adaptability, and top leaders' flexible behaviors, where the organization is considered as a *unique whole* of people and structure between the leader and firm outcomes (Kollenscher *et al.*, 2017). Based on previous studies (Gerli, Bonesso & Pizzi, 2015; Bonesso *et al.*, 2020; Tognazzo *et al.*, 2017), in order to collect data, this research applies the Behavioral Event Interview (BEI) that allowed us also to include complex information that is difficult to assess objectively. In the following paragraphs, the sample and the measurements adopted are discussed in depth.

3.1 Participants

Eighty-seven Italian leaders in an executive MBA program (editions from 2006 to 2010) at an Italian Business School took part in the study. The average age of participants was 36 years, with ages ranging from 26 to 53 years (s.d. = 7.55). Seventy-six percent of the sample was male. More than third (35%) of the respondents held a university degree. On average, the participants had been working for approximately fourteen years (s.d. = 8.21; range: 2–34 years).

Executives were all at the top level of their organizations (e.g., CEO, CFO, COO, CIO, or president), so they were C-level leaders and also majority owners of the companies. All the participants involved in the analysis, aside of their job title, are the main decision-maker of the firms. Moreover, it is important to specify that the context we are considering is made of family firms that mainly operate in mature sectors in the period of the financial crisis. We believe that no previous research has tried to test these kinds of effects on a group of top leaders of family Italian companies. Most research about competencies includes managers of managerial companies while less research works of this kind is based on European family companies. That's why we decided to put so more emphasis on the context we are analyzing.

In addition, firms had an average size of 79 employees (range: 0–812; all firms are small and medium, only one is an outlier, which corresponds to 812 was a small firm that experienced a huge growth in a very few years). All of the participants' firms were located in northeast Italy, which allowed us to control for possible situational-cultural effects, although they operated in a variety of sectors (65% in the manufacturing industry, 11% in service activities, 12% in retailing activities, and 10% in construction and building activities), which provided us with sufficient variability in the sample.

3.2 Measurements

3.2.1 Independent variable: Assessment of leaders' flexible behaviors

To collect the behavioral data, we modified the critical incident interview (Flanagan, 1954), which has often been used in leadership research (Wolff *et al.*, 2002), using the inquiry sequence from the Thematic Apperception Test and the focus on specific events in one's life from the bio-data method (Dailey, 1971). The method, called the Behavioral Event Interview (BEI), reducing the chance of retrospective biases and ensures more reliability than self-reported data, which would be more likely to measure espoused theories about how one tends to or likes to behave than to measure actual behavior (Boyatzis *et al.*, 2000; McClelland, 1998).

Following previous research (Bonesso *et al.*, 2020; Cortellazzo *et al.*, 2020; Gerli, Bonesso & Pizzi, 2015), the BEI interviews were one-hour audiotaped semi-structured individual interviews in which participants were asked to recall recent, specific events in which they felt effective. Once they recalled an event, they were guided through telling the story of the event with a set of five questions: (1) What led up to the situation? (2) Who said or did what to whom? (3) What did you say or do next? (4) What were you thinking and feeling? (5) What was the outcome or result of the event? This technique, developed by McClelland and colleagues (1998), Boyatzis and co-authors (2000), and Spencer and Spencer (2008), is especially useful when one is examining defined situations and situationally relevant aspects of managerial behaviors, a fundamental element of Yukl's (2008) theory.

After each interview, the responses were transcribed and interpreted using a thematic analysis process (Boyatzis, 1998), a process for coding raw, qualitative information. Through the use of a "codebook" that articulates specific themes and how to identify them, the researcher converted open-ended responses or unstructured responses into a set of quantified variables for analysis. We used Boyatzis' codebook as an initial primary reference for the coding (Boyatzis, 1995), as it has been used in numerous studies and has shown predictive validity of the measures obtained (Tognazzo *et al.*, 2017; Boyatzis, 2009; Camuffo *et al.*, 2012). We then classified the Boyatzis' competencies following the Yukl's leaders' flexible behaviors (task, change and relationship oriented behaviors) clusters (In the Appendix, Table A presents a detailed description of each behavior and Table B presents the distributions of the behaviors). The coders typically asked for five or six events in which leaders believed they had been effective. Frequency measures how often someone shows a certain behavior. (It is the number of times a behavior is detected out of the maximum possible number of times it can be detected. For example, a 50 percent frequency means that a behavior appears in three behavioral events out of six.) Two coders

independently coded all the interviews. Inter-rater reliability was always greater than 90 percent. To avoid the influence of MBA education on our data, we interviewed the leaders as soon as they enrolled in the MBA program (before starting the classes).

We performed a factor analysis to reduce the number of variables used in our further analyses. First, to avoid altering the regression's betas in the factor analysis as a consequence of our data's non-normality, we computed the IHS transformation of each variable (i.e., behavior), as it is an alternative to the logarithmic transformation when the distribution of the variables is skewed and some of the variables take on zero or negative values (Burdidge *et al.*, 1988)

Since our three sets of behaviors derived from the FLT (i.e., task-oriented, relationship-oriented, and change-oriented behaviors) were theoretically distinct, we performed three separate exploratory factor analyses (EFA), one for each set of behaviors, to ensure that all component loadings were acceptable (>.5) and explained enough variance in the latent factor. Then, we conducted a confirmatory factor analysis (CFA) to verify the fit of the hypothesized three-factor model. Results showed that the hypothesized three-factor model fit the data, supporting the association of Yukl's flexible behaviors taxonomy to the competencies proposed by Boyatzis' codebook. Factor analysis was used here to reduce the number of variables. Indicators of internal consistencies (like Cronbach's alpha) are not applicable to our three factors, as the factors aim to include a number of behaviors that represent, in a theoretical sense, three unique constructs. However, that may empirically include behaviors that are distinct and not necessarily correlated. One could think of our three factors as "indexes" of certain kind of behaviors rather than as "sub-scales" made of items of one theoretically correlated dimension. Then we conducted a confirmatory factor analysis (CFA) to verify the fit of the hypothesized three-factor model. Results showed that the hypothesized three-factor model fit the data reasonably well ($\chi^2 = 56.43$ (df = 51; $p = 0.2793$), RMSEA= .03, CFI= .92, TLI= .90, and SRMR=.07). These results indicated a reasonable model fit considering the limited sample size and the structure of our data.

3.2.2 The moderator, mediator and suppressor variable: organizational adaptability to the external environment

To assess the organization's ability to adapt to its external environment, we used subject matter experts' evaluations, which also consider firm-specific situational variables. Subject-matter experts are those who, by virtue of position, education, or experience, have significant expertise or insight in a particular discipline. The subject matter experts' role is to observe, judge, and evaluate, so they are typically used when data are limited, lacking,

or too complex, as in our case. The use of these experts' evaluations in business literature is common in job analysis research and practice (Lievens *et al.*, 2004), in competency modeling processes (Shippmann *et al.*, 2000), and as a way to validate items' scales (Sireci & Geisinger, 1995).

Using a procedure similar to that Vessey, Barrett and Mumford (2011) used, each participant was asked to describe in written form his or her firm's strategy in relation to its external environment. In particular, each participant reported (with reference to the last five years) 1) his or her firm's industry description and a sector analysis using Porter's 5-forces model; 2) his or her firm's key strategic resources, core competencies, and strategy, along with a SWOT analysis based on environmental resource availability and the pace of technological change; and 3) a detailed description of the main competitors with a benchmarking analysis. We asked two experts (two professors in management disciplines) whom we selected for this task based on their knowledge of the firms (and leaders) that took part in the study, to rate separately all of the businesses' levels of adaptability, considering the combination of three abilities: market positioning, learning, and innovation. The two experts were informed about the use of collected data for the purpose of this research and about the definition of "organizational adaptability" before they rated the firms. (Table C in the Appendix shows the comparative evaluation method the two subject matter experts). Each of the experts rated all of the organizations comparatively, ranking higher those organizations that better adjusted to the external environment, based on the three behaviors that we identified on the basis of FLT (Yukl, 2008, 2012; Yukl & Lepsinger, 2004). We could not rely on an evaluation based on a non-comparative scale (e.g., a Likert-type scale) because of our measure's complexity. In fact, in an assessment that uses a Likert-type scale, all items are deemed to be of equal value. Here, we are analyzing organizations that are comparable with respect to size and cultural-institutional environment but that operate in different sectors. Therefore, for example, for some firms' market positioning ability might have a meaning that differs from that of other firms, and might be more meaningful for organizational adaptability than innovation is because of an infinite set of conditions, and such differences are difficult, if not impossible, to capture in a questionnaire.

We ensured the inter-rater reliability ($> .84$) of the two experts. In addition, the correlation between the ranking obtained and average income in the corresponding five years was 0.43 ($p < 0.01$), which validates our measure. This variable consists of an ordinal ranking from 1 to 19.

3.2.3 *Dependent and Control Variables*

We asked the participants to answer questions related to their demographics, such as *age*. We used dummy variables for *gender* and *education level* (1 = tertiary education; 0 = less than tertiary education). We integrated information from the AIDA database (the Italian branch of the *Bureau van Dijk* European Databases), measuring our dependent variable *firm performance* as firm return on asset (ROA) in 2009. Previous studies on top leaders have also used ROA as performance indicator (e.g., Wiengarten *et al.*, 2017; Furtado and Karan 1994; Firth *et al.*, 2006). ROA indicates the long-term annual changes in financial performance, and it differs from other traditional measure of long-term performance, such as return on equity, that does not provide information on the level of risk to which a company is exposed to or the overall efficiency with which a firm's total assets are employed (Wiengarten *et al.*, 2017; Hsu and Boggs 2003). Subsequently, we use ROA as the financial performance indicator to obtain a more comprehensive understanding about performance in a critical financial time like the 2009 was. Indeed, the Great Recession lasted from December of 2008 until June of 2009 and was often referred to as the worst economic crisis since the Great Depression (Walker *et al.*, 2013; National Bureau of Economic Research, 2012). In Italy, the huge effects of Lehman Brothers bankruptcy arrived in 2009. In this context, leaders' responses to organizational crisis differed, yielding both effective and ineffective actions, having important consequences on firm performance. We decided to focus our analysis on this year, in order to better understand how the leader's flexible behavior was crucial to deal with such a critical economic uncertainty.

Firm size was measured as the number of employees reported in AIDA. We used the number of employees rather than turnover, as number of employees is less subject to economic change, especially in the Italian context, where the job market has few exit strategies. Moreover, we applied the firm size criteria as number of employees following previous studies which considered the relationship between leader's behavior and different aspects of firm performance (Wu *et al.*, 2015; Wang *et al.*, 2011; Czarnitzki and Krafczyk, 2004). We used the first two digits of the ATECO code to codify the sector of activity and controlled for the dummy variable *firm sector* (1 = manufacturing; 0 = other sectors).

Table 1 summarizes the variables included in the model, the technique applied to collect data and the reliability tests used.

Table 1 Variables' name, data collection technique reliability tests used.

Variable name	Data collection technique	Measure reliability test
Leaders' flexible behaviors (Independent variable)	1) BEI; 2) Thematic Analysis process; 3) Classification of Boyatzis' competences following Yukul's Scheme	Inter-rater reliability of two independent coders EFA and CFA
Organizational adaptability (moderator, mediator and suppressor variable)	1) Two experts' evaluations about participants' strategy to deal with external environment; 2) Rate the participants' level of adaptability based on the behaviors indicated by FLT scheme; 3) Participants' ranking.	Inter-rate reliability of the two experts.
Firm performance (Dependent variable)	Firm ROA from the AIDA database	

4. Results

A post-hoc estimated power for the present investigation, calculated using G*Power3 software (Faul *et al.*, 2007), is 0.93, considering an alpha error probability of 0.05, an R^2 of 0.22 a sample size of 87 and 9 predictors, which is a higher than the commonly used threshold of 0.80 (it corresponds to the probability of detecting the effect). The corresponding effect size is 0.28; according to Cohen f-squared values of 0.02, 0.15 and 0.35 can be considered "small", "medium and "large" effects, respectively, so 0.28 can be considered a medium-large effect. It is also worth noticing that even if our sample size is limited some other studies that use the critical incident methodology report similar sample sizes (Camuffo *et al.*, 2012; Ryan *et al.*, 2009).

As Table 2 and 3 show, we tested our hypotheses using different regression models. Specifically, we performed an OLS regression to test Hypothesis 1, an ordered logit analysis to test Hypothesis 2 and a moderation analysis to test Hypothesis 3. Finally, we then tested our fourth and fifth hypotheses using the usual steps in mediation analysis (Baron & Kenny, 1986).

Tab. 2 Regression analyses: testing direct and moderation effects

Models	OLS with robust SE (1)	OLS with robust SE (2)	OLS with robust SE (3)	OLS with robust SE (4a)	OLS with bootstrapped SE (4b)
Variables	Firm Perfor.	Firm Perfor.	Firm Perfor.	Firm Perfor.	Firm Perfor.
Gender	3.37**	2.68	2.28	2.33	2.33
Age	0.30**	0.32**	0.24*	0.25*	0.25*
Education	-0.24	-1.23	-3.52	-4.09*	-4.09
Firm sector	-1.80	-1.42	-0.91	-0.89	-0.89
Firm size	0.00	0.00	-0.00	-0.00	-0.00
Task-oriented behav.		0.60	0.62	0.50	0.50
Relationship-oriented behav.		1.10	0.82	0.73	0.73
Change-oriented behav.		-1.42	-1.94*	-1.97**	-1.97*
Org. adaptability			0.49**	0.50**	0.50**
Organizational Adaptability * Change-oriented behav.				-0.22*	-0.22
Constant	4.81***	4.81***	4.81***	5.06***	5.06***
F or Wald χ^2	2.52*	1.81*	2.01*	1.89*	24.70***
R ² /Pseudo R ²	0.118	0.156	0.217	0.232	0.232

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Tab. 3 Regression analyses: testing mediation and suppression effects

Models	Ordered-logit with robust SE (5a)	OLS with robust SE (5b)	OLS with robust SE (6)	OLS with robust SE (7)	OLS with robust SE (8)
Variables	Org. Adaptability	Change Behav	Firm Perfor	Firm Perfor	Firm Perfor
Gender	0.63	-0.04	2.68	2.91*	2.28
Age	0.07**	0.02	0.32**	0.22*	0.24*
Education	1.98***	-0.74***	-1.23	-2.02	-3.52
Firm Sector	-0.79	-0.01	-1.42	-1.31	-0.91
Firm Size	0.01***	0.00	0.00	-0.01	-0.00
Task-oriented behav.	-0.05	-0.10	0.60		0.62
Relationship-oriented behav.	0.16	0.18*	1.10		0.82
Change-oriented behav.	0.41*		-1.42		-1.94*
Organizational adaptability		0.04*		0.43**	0.49**
Constant	7.09***	-0.90*	-7.73	-7.79	-8.64*
F or Wald χ^2	41.95***		1.81*	2.44**	2.01**
R ² /Pseudo R ²	0.08	0.24	0.16	0.17	0.22

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

In the following paragraphs, we show the results for each hypothesis postulated.

a. Direct effects

We tested our first and second hypotheses by regressing firm performance (Models 2 and 6) and organizational adaptability (Model 5a) on top leaders' flexible behaviors. Model 1 reports the regressions with control variables, we can see that age and gender are significant. We used all OLS models except one ordered-logit (Model 5a), which was required for the ordinal categorical dependent variable. We reported heteroskedasticity-adjusted (i.e., robust) standard errors because the distribution of the final model's residuals was not normal (Shapiro-Wilk $W = .85$; $p < .0001$) and because there is some evidence of homoskedasticity in the distribution of residuals (Breusch-Pagan test: $\chi^2(1) = 22.41$; $p < .0001$). We obtained similar results in the other models. We also calculated variance inflation factors (VIFs) for our final regression model. The VIF was less than 2 ($VIF = 1.28$), which is lower than the critical value of 10, indicating no serious omitted variables bias.

The first hypothesis was not supported because the coefficients were not statistically significant. None of the leaders' flexible behaviors, in terms of task, relationship and change oriented behaviors are statistically significant, they do are not directly related to firm performance ($\beta = -1.42$; $p > 0.1$) (Model 2). We have the same results considering the relationship between leaders' flexible behaviors and organizational adaptability with the exception that change-oriented behaviors have a positive significant effect on organizational adaptability (Model 5a) ($\beta = 0.41$; $p < 0.1$). For this reason, Hypothesis 2 is partially supported.

b. Moderation effect

Hypothesis 3 predicted that the relationship between leaders' flexible behaviors and firm performance is stronger when organizational adaptability is high. We mean-centered the independent variables (Aiken *et al.*, 1991) and, as shown in Table 2 (Models 4a and 4b), we found a weakly significant relation between flexible behaviors and organizational adaptability in predicting firm performance using robust standard errors, but no significant effect using bootstrapped standard errors ($\beta = -0.22$; $p = 0.091$ with robust SE and $p > 0.1$ with bootstrapped SE), thus Hypothesis 3 is not supported.

c. Mediation and suppression effects

Applying the mediation analysis (Baron & Kenny, 1986), we first regressed organizational adaptability on flexible leaders' behaviors (Eq. 0, Model 5a). Among the three flexible leaders' behaviors, we report here the results only for the significant one, i.e. change-oriented behaviors. We regressed firm performance on change-oriented behaviors (Eq. 1, Model 6) and then on change-oriented behaviors and organizational adaptability jointly (Eq. 2, Model 8). Table 3 shows the suppressor pattern clearly. The coefficient of change behaviors becomes more significant when Model 6 ($\beta = -1.42$; $p > 0.1$) is compared to Model 8 ($\beta = -1.94$; $p = 0.052$). Moreover, the R^2 increases (from 0.16 and 0.17 in Models 6 and 7 to 0.22 in Model 8). This did not hold for the other flexible leaders' behaviors, i.e. task and relationship behaviors. In short, Hypothesis 4 is not supported, while Hypothesis 5 is partially supported.

There can be different kinds of suppression effects, one of them is the case in which two predictors are *mutual* suppressors, thereby muddying the distinction between X and S (Pandey and Elliott, 2010). To assess this possibility, we followed these steps:

$$X = a + \beta_0 S + e \quad (\text{Eq. 0b - Model 5b})$$

$$Y = a + \beta_1 S + e \quad (\text{Eq. 1 - Model 7})$$

$$Y = a + \beta_2 X + \beta_3 S + e \quad (\text{Eq. 2 - Model 8}),$$

where S is organizational adaptability, X is change behaviors, and Y is firm performance. If β_3 is absolutely larger (i.e., farther from zero) than β_1 , we have a mutual suppressor effect. To establish a mutual suppression effect, must determine whether change-oriented behavioral competencies are suppressors in the relationship between organizational adaptability and firm performance. The coefficient associated with organizational adaptability increases from 0.43 in Model 7 to 0.49 in Model 8 ($p < 0.05$ in both cases).

Suppression can also be found when the direct and indirect effects are opposite in sign. In our case, when we consider organizational adaptability as a suppressor, the direct effect = -1.94 and the indirect effect = $(0.40 * 0.43) = 0.17$. When we considered change behaviors as a suppressor, the direct effect = 0.49 and the indirect effect = $(0.04 * -1.42) = -0.05$.

We also ran regressions with the non-transformed values of behaviors and the standardized measures of organizational adaptability, and results do not change significantly.

Moreover, we used the Sobel test to evaluate the significance of these suppressor effects, as MacKinnon, Fairchild, and Fritz (2007) suggest. We used a procedure based on bootstrap methods that is suggested for small to moderate-sized samples (Shrout & Bolger, 2002). We computed each of the proposed indirect effects by relying on bootstrap samples and constructing a bias-corrected confidence interval. We created bootstrap samples by drawing two 1000-firm random samples, replacing the firms into the full sample each time; the results show significant indirect effects in both cases (organizational adaptability as a suppressor variable: observed coefficient $t = 0.5$; 95% confidence interval lower bound = .06, upper bound = 1.58; change behaviors as a suppressor variable: observed coefficient = -.07; 95% confidence interval: lower bound = -.29, upper bound = -.00.)

In short, our results show that top leader change behaviors and organizational adaptability have a mutual reciprocal or cooperative suppression effect (Conger, 1974) in predicting firm performance. The coefficients of the two predictors have opposite signs, but since they are positively correlated, including them together in the regression equation controls for the overlap, and their mutual suppression is revealed by increases in both regression weights.

5. Discussion

Top executives must be prepared to modify and adapt not only their leadership behavior but also the organizational structures to meet the challenges of an increasingly turbulent and uncertain environment and reach better performance (Yukl, 2008) and this may become very challenging for family companies whose competitive advantage typically relies on traditions and long-lasting values (Kotlar & Chrisman, 2019). The present study builds upon the FLT (Yukl, 2008) and aims to explore the relationship among leaders' behavioral flexibility - in terms of behavioral competencies - organizational adaptability and organizational performance in a sample of family Italian companies.

Thanks to this research we contribute to extend previous work on the relationship between top leaders' flexibility and firm performance by answering a call to consider leadership a complex process that takes into account the organizational conditions under which leaders' behavioral flexibility is effective (Yukl, 2008; 2012). Moreover, we answer to the call for a broader systems approach to assess and test the FLT identifying the mediating processes and complex interactions (Yukl, 2008). To the best of our knowledge, no previous empirical work has attempted to explore the direct, interaction (i.e., moderation), indirect (i.e., mediation) and joint (i.e., suppression) effects of individual and organizational variables on firm results using a multi-level, multi-source and multi-method study.

Our results, analyzing 87 Italian companies' top leaders, suggest that first, because top leader change-oriented behaviors and organizational adaptability are correlated, the negative relationship of the former with firm performance is counterbalanced by the positive link of the latter (i.e., suppression effect). Thus, even when leaders' behaviors impact firm results negatively, the organization might counterbalance their impact. In other words, the relationship between leaders' flexible behaviors and firm performance could be better understood if individual and organizational aspects are jointly taken into consideration (Yukl, 2008).

Moreover, our study has considered all the three categories of leaders' flexible behaviors – task, relationship and change oriented behaviors – and the results showed that just change behaviors, jointly with organizational adaptability, are linked to positive and better firm's performance. Therefore, to survive in a dynamic competitive environment, organizations should adapt and change, but they need leaders who have developed change-behaviors, which allow not only to drive the organization into new processes, but in the face of uncertainty, envision possible outcomes and then forge actions that enact new profit models. This evidence confirms the necessi-

ty to investigate specific leaders' flexible behaviors and analyze which of them interact with organization-level variables. This also suggests that in family companies, top leaders should pay attention to being persuasive and negotiating, visioning and sharing best practices.

Furthermore, this study contributes to the debate that sees on one side, innovation research which points out that SMEs are characterized by quick decision-making, willingness to take risks and flexibility in responding to new market opportunities and, on the other side, family firms' literature which considers their conservative posture, organizational rigidity, risk aversion, willingness to keep control of the firm and limited propensity to use investment capital to fund innovation projects. Our study supports the notion that the family leaders' characteristics may determine how these firms respond to the emergence of change.

Together with its theoretical relevance, our study offers interesting practical implications. Usually, top leaders are described as people with a great *ego* who tend to ascribe organizational results to their own results, especially in family companies where family members' sense of identity largely overlaps with the company's one. Based on our results, top leaders should be aware that the behaviors oriented toward change they possess, and use are related not only to a single person or multiple people inside the organization, but also to an organization-level orientation itself. Our results suggest that it is not only the individual leader that matters for firm results, but the organization itself matters for firm performance. Consequently, if both flexible leadership and organizational adaptability work together, they can create strong business capabilities such as adaptability which determines how well the firm will respond to the competition, customer demand and all other market pressures and in general reach higher firm performance, creating competitive advantage.

This implies also that management consulting and intervention aimed at improving family firm performance should not only focus on leader's professional competencies, but take a more holistic approach by also considering the organizational context itself. For example, top leaders that invest in coaching should also consider investing in their collaborators' education, in the structure and processes of the organization. For example, top leaders' and their organizations could create leadership development programs, aimed at building out a mindset oriented to flexibility and adaptability. They could introduce human resources initiatives to gather new information from various sources, create meaning acceptable to all, coordinate with others to implement required changes and build an adaptable workforce. Moreover, while hiring new employees, top leaders can assess candidates' willingness to adapt and act in a flexible way. Specifically, during the selection procedures they could assess whether candidates for le-

adership roles have the attributes such as openness to adaptability, flexible behaviors in managing people and unexpected situations.

In addition, flexible leadership and adaptive organizations are important during times of crisis, that is when unusual events disrupt the work or create an immediate problem that requires the leader's attention and an organizational change. How well a leader handles immediate crises, like the one of 2009 in Italy, is an indicator of flexible and adaptive leadership (Yukul & Mahsud, 2010). Our results showed that the leaders' flexible behaviors alone are not enough in time of crises, but a more overarching approach in terms of organizational adaptability is required. Indeed, considering the major changes in the external environment because of immediate problems to solve, create emerging threats or opportunities for the organization. Therefore, changes in strategies or tactics are often needed to ensure effective performance and continued survival for the organization.

In short, this research shows that in order to reach better family firms' performance, investing on the development of top leaders' flexibility is not enough, instead it appears to be crucial to create an organizational orientation focused on adaptability.

6. Limitations and directions for future research

Despite the strengths of this study, some limitations need to be addressed. First, a longitudinal or time-lagged design would provide stronger results. Indeed, longitudinal research is also useful to deal with overlapping constructs that may involve reciprocal causality over time. Moreover, as it is widely adopted in the literature, we adopted ROA as a measure of firm performance, nevertheless future researches would also use other performance indicators such as multi-years sales and profit margins. In addition, because the level of organizational adaptability might be similar in firms of comparable size that operate in the same industry, research should consider industry differences, in which case a Likert-scale can be used to assess organizational adaptability. Similarly, future studies may be enriched by considering a wider array of contextual conditions beyond organizational adaptability which may affect leadership effectiveness. For example, extending the time frame of performance and behavioral data may provide different results. Moreover, we assessed organizational adaptability asking to the participants many information about their competitive environment, for future research would be useful to assess and investigate also what kind of leaders' decisions and actions they usually apply to adapt to the environmental change in terms of, for example, innovative marketing strategies, innovative products, and learning about new market opportunities. Additionally, due to the aim of this study, we focused just on organizatio-

nal adaptability as performance determinant not considering the other two elements mentioned by the FLT: efficiency and human capital. Future researches should understand the role of these two important organizational variables and test how them interface with the leaders' flexible behaviors.

Second, our research focuses on top leaders, which is valuable also for strategic management theory, although in larger firms the same approach could be applied to other levels (e.g., business unit) to identify which contextual conditions are necessary or sufficient to sustain our theory. Moreover, the present research gives scant attention to the role of followers, although followers' behaviors and attitudes may affect multi-level processes. It would be interesting to replicate the research on a sample of non-family companies.

Third, the extent to which these findings generalize to more random samples is unclear and more generalizable methods could be used (e.g. survey). Moreover, even if all participant attended an MBA, we cannot rule out the possibility of a potential bias when describing their firms.

Finally, our study was conducted in an Italian sample. Extending our results to other parts of the world could increase our findings' validity. Replicating this study in other national contexts (e.g., with firms that operate in rapidly changing environments) could yield different results. For instance, we would expect change behaviors to be more frequent than result- and task-oriented behaviors in dynamic environments, so we suspect top leaders' behaviors and firm proactiveness would play a different role.

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APPENDIX

Table A Definitions of behaviors according to FLT theory and our measurement

FLT definitions (Yukl et al., 2002; Yukl, 2008, 2012)	Assessed EI behavioral competencies (Boyatzis, 1982, 1995)	
<p>Task-oriented behaviors</p> <p>Task-oriented behaviors include short-term planning and scheduling of work activities, determining resource and staffing requirements, assigning tasks, clarifying objectives and priorities, emphasizing the importance of efficiency and reliability, directing and coordinating activities, monitoring operations, and dealing with day-to-day operational problems.</p>	<p><i>Result orientation*</i></p>	<p><i>Setting goals, improving and achieving the objectives and measuring performance.</i></p> <p>People show this behavior when they persist in efforts to reach objectives without being discouraged in the face of obstacles, aim to improve organizational performance in their everyday jobs, try to do something newer than others do, and try to reach challenging objectives.</p>
<p>They are used to improve productivity and reduce costs by eliminating unnecessary activities, duplication of effort, wasted resources, errors, and accidents.</p>	<p><i>Customer orientation</i></p>	<p><i>Understanding and satisfying the needs of internal and external customers.</i></p> <p>People show this behavior when they care about customers' satisfaction; offer their clients excellent service, care about their future needs, and keep them informed; and try to solve customers' everyday problems with long-term vision.</p>
	<p><i>Leadership*</i></p>	<p><i>Creating shared goals, managing human resources in the best interest of the organization, and leading people in the desired direction.</i></p> <p>People show this behavior when they put effort into scheduling and planning meetings and assigning jobs, tasks, and responsibilities; use their formal power to lead the group toward achieving the set objectives; and create shared objectives for the group.</p>
	<p><i>Pattern recognition</i></p>	<p><i>Identifying logical patterns from a disorganized set of information or data that seems random.</i></p> <p>People show this behavior when they identify patterns of events/information that other people don't see and use these patterns to interpret events/information, use new conceptualizations to organize complex information, see similarities between past and present events, and use original concepts, metaphors, and analogies to explain the meaning of the data and information.</p>

Relationship-oriented behaviors	<i>Empathy</i>	<i>Understanding others.</i>
<p>Relationship-oriented behaviors include showing support and positive regard, providing recognition for achievements and contributions, providing coaching and mentoring, consulting with people about decisions that will affect them, delegating and empowering subordinates, encouraging cooperation and teamwork, and building a network of information sources inside and outside the organization.</p>		<p>People show this behavior when they understand other people's weaknesses and strengths; understand the reasons for their behaviors (e.g., they know what motivates or demotivates collaborators); read and interpret others' feelings, sensations, and non-verbal behaviors precisely; and listen to others, ask questions, and wait for answers, giving the other person the time to express his or her point of view at the pace and in the manner he or she prefers.</p>
	<i>Networking</i>	<p><i>Building relationships at an individual level and at a group level (coalitions and alliances).</i></p> <p>People show this behavior when they act in a way that builds relationships that can be helpful in their jobs now or in the future, uphold personal relationships that are or might become useful in the work realm, and use informal networks.</p>
	<i>Teamwork*</i>	<p><i>Stimulating the members of a group to work together effectively.</i></p> <p>People show this behavior when they generate symbols of the group identity, have pride in belonging to the group, share effort, generate trust or shared goals in a group using friendly and personal contact, involve all the relevant people in finding solutions to conflicts in the group, let the group take the responsibility to reach specific objectives without taking the outcome personally, and communicate to other people the need for collaboration or team work.</p>
	<i>Social objectivity</i>	<p><i>Perceiving other people's beliefs, emotions, and points of view, even when they differ from one's own.</i></p> <p>People show this behavior when they perceive multiple perspectives or differing points of view of the same situation or problem; see the value in multiple perspectives, especially when they differ from their own; and describe other people's thoughts, feelings, or values as specific characteristics of one individual, even in a context that tends to stereotype people because of their membership in a group or category.</p>

<p><i>Change-oriented behaviors</i></p> <p>Change-oriented behaviors include monitoring the environment to identify threats and opportunities, interpreting events and explaining why major change is needed, articulating an inspiring vision, taking risks to promote change, building a coalition of supporters for a major change, and determining how to implement a new initiative or major change.</p>	<p><i>Persuasiveness</i></p> <p><i>Inducing a course of action or a point of view by means of argument or entreaty (making other people think or do what they want them to think or do).</i></p> <p>People show this behavior when they give orders or directions based on rules, procedures, regulations or organizational authoritarian roles without soliciting others' contributions; express the desire or need to persuade others; try to convince others by leveraging their interests (e.g., emphasizing what each person can personally gain); try to convince others by anticipating their reaction to an argument, a request, or a specific situation and communicating considering the listeners' level of comprehension and emotional state; ask questions or consciously use techniques that aim to gain emotional and rational consensus from listeners about specific ideas, projects, or activities; and express preference for their own images or reputations over those of the organization and its products or services.</p>
	<p><i>Negotiating</i></p> <p><i>Reaching favorable agreements when closing negotiations, mediating among various positions, or finding compromises among the various positions, even when one is not directly involved in the agreement.</i></p> <p>People show this behavior when they make their positions known in a negotiation; identify the common areas of interests or objectives; and present appealing arguments to obtain profitable conditions.</p>
	<p><i>Visioning*</i></p> <p><i>Conceiving a new vision for a group and reinterpreting the organization's mission by creating a new understanding of it.</i></p> <p>People show this behavior when they think about new strategic objectives for their organizations and can reinterpret the organization's mission.</p>
	<p><i>Benchmarking*</i></p> <p><i>Knowing and referring to the best practices in the activity.</i></p> <p>People show this behavior when they compare their activity with objective standards to identify areas of possible improvement (e.g., comparing their firm's performance with that of their competitors).</p>

* These behaviors were added using thematic analysis, since they were not present in Boyazis' codebook (1982, 1995).

Table B Descriptive statistics of behavioral variables before its transformation

	Mean	S.D.	Skewness	Kurtosis	Number of observations with frequency equal to zero (N=87)	Min	Max
Task-oriented behaviors							
Result orientation	59.56	18.05	-0.70	4.49	2	0	100
Customer orientation	21.05	24.26	1.08	3.57	38	0	100
Leadership	12.85	15.84	0.72	2.02	48	0	50
Pattern recognition	23.01	22.98	0.85	2.84	30	0	80
Relationship-oriented behaviors							
Empathy	34.67	25.61	0.10	2.00	21	0	80
Networking	29.34	23.29	0.32	2.20	22	0	83.33
Teamwork	27.01	25.93	.43	1.87	32	0	80
Social objectivity	3.40	10.15	3.46	15.95	76	0	60
Change-oriented behaviors							
Persuasiveness	35.56	23.84	-0.18	1.92	18	0	80
Negotiating	13.33	17.71	0.98	2.67	50	0	60
Visioning	6.36	13.19	1.95	5.58	68	0	50
Benchmarking	5.40	12.12	2.62	10.63	69	0	66.67

Table C Comparative evaluation method used by subject matter experts to rate the organization's ability to adapt to its external environment

Organizational adaptability

Each report includes:

- 1) a firm's industry description and a sector analysis using Porter's 5-forces model;
- 2) a description of the firm's key strategic resources, core competencies, and strategy, along with a SWOT analysis based on the availability of environmental resources and the pace of technological change;
- 3) a detailed description of the firm's main competitors and a benchmarking analysis.

Please rank each report based on the following question:

Compared to the other firms, how well has the organization adapted to changes in the external environment in the last 5 years?

Assign to each firm

- a higher score if your answer is "better,"
- the same score if your answer is "equally,"
- a lower score if your answer is "worse."

For instance,

if you think that Report 1 adapts more proactively (better) to the environment than Report 2, assign:

2 to Report 1

1 to Report 2.

In your evaluation, please consider the following firm characteristics.

Market positioning ability

- level of pressure to improve company reputation, customer loyalty, and sales volumes
- competitive and industry positioning
- objective evaluation of market risks and opportunities

Learning ability

- gathering information about the environmental conditions to respond in a timely way to external threats and opportunities; using slack resources accumulated
- experience in dealing with threats and opportunities
- ability to identify effective ways to leverage core competencies

Innovation ability

- organizational flexibility (with regard to operational processes and the types of products and services provided)
 - cultural flexibility (cultural values of creativity, flexibility, tolerance of mistakes, product quality, and customer service)
 - focus on enhancing product quality and introducing innovative changes
-

BOOK REVIEW



**BOOK REVIEW CUCINO V., DI MININ A., FERRUCCI L.,
PICCALUGA A., LA BUONA IMPRESA. STORIE DI START UP PER
UN MONDO MIGLIORE, IL SOLE 24 ORE, 2021,**

Tonino Pencarelli
University of Urbino
tonino.pencarelli@uniurb.it

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Abstract

The book tries to answer the following research question: can you contribute to the common good by doing business? The need to change our economy is expressed in many quarters due to the enormous environmental and social problems. One of the most accredited theses is that this change can only occur through collective action. In fact, more and more companies operate with the aim of "improving the world": in particular, in many startups - even in the awareness of having to achieve an economic-financial balance - there is a strong desire to generate social impact. The authors of the book devote attention to these types of businesses, describing and telling their stories, with the hope that the examples described can serve as a model and as an inspiration for many young potential entrepreneurs and for managers eager to rethink the traditional way of conceiving business.

Review

Among the many things that the health emergency of COVID 19 has taught us, in addition to the importance of cooperation and solidarity between people, communities, public institutions, States and social actors in general, the strategic role of the firm also stands out. Firms as institutions capable of addressing and solving the needs of citizens and the population in an organized manner, by preparing health systems to fight the virus and in many other ways. However, it also emerges that the firm operating in the current capitalist system according to the traditional paradigms of the creation of value for the shareholders begins to be questioned. An example is the request for greater attention to society, such as the use of knowledge for the manufacture of vaccines worldwide by renouncing – or reducing - the patent protection of know-how which is often created also thanks to the contribution of public funding (Pencarelli, 2020). But the aims of the company have been questioned for some time and are subject to harsh criticism from the media and public opinion, increasing disapproval and intolerance at the emergence of socially deplorable and at least questionable behaviors by many organizations, qualified for this by Gallino (2005) as “irresponsible companies”. These companies, beyond the elementary obligations of the law, believe that they “do not have to answer to any public and private authority, or to public opinion regarding the consequences in the economic, social and environmental fields of its activities”. Gallino underlines how companies that act irresponsibly generate high social costs, such as those involved in corporate scandals, in large fiscal? escapes, in practicing salary levels and working conditions often at the limit of decency (eg. the gig economy sector), increasing their insecurity and in some cases informality, associated with the lack of legal guarantees, in building and relocating unsafe chemical plants in developing countries, in creating highly polluting productions without any environmental remediation action, in manufacturing products incorporating design defects known to the manufacturer that are dangerous for users, or in carrying out sudden productive relocations abroad with mass layoffs, without any scruple towards the communities that originally hosted the production sites. Attention to socially responsible companies and the need for fairness and transparency regarding the activities carried out by companies therefore grows in parallel with the occurrence of irresponsibility phenomena, but is also linked to other important factors of change in the environmental context that are prompting new position taken by public opinion, by governmental and supranational institutions and by pushing companies to take on problems previously considered to be the exclusive competence of the state and civil society. In this context, new challenges are opening up to companies, which are asked to continue producing goods and services to meet people’s needs

by creating value for shareholders, but also for other stakeholders, respecting environmental and ecosystem constraints. The advent of new business models is called for, attentive to the positive impact on a social and environmental level, as well as to profit. We therefore increasingly need “good company”, though we are not really sure what kind of companies they are. This is the subject of the essay by Cucino et al.(2021), which has the merit of collecting in an agile volume that is pleasant to read, a series of start-up stories born in the name of this new paradigm, aimed at creating a better world, like the Authors underline in the subheading of the book. The cases investigated were selected in the context of an Italian network for the enhancement of research, called Netval. These are cases of companies operating in different territories and in different economic sectors. Start-ups with a social vocation were investigated on the basis of some common interpretations: a) the role of previous experiences of entrepreneurs; b) the importance of managerial skills; c) the possession of interpersonal and networking skills; d) innovation that starts from the fragility of the people to whom the solutions are aimed; e) the role of advanced technologies; f) the contribution of universities to new entrepreneurship with a social vocation; g) the importance of local roots; h) the different future perspectives; i) contagious intrapredence.

In detail, the start-ups analyzed are the following: 1) Bioverse, which develops and markets electro-medical equipment designed for areas in difficult health situations and with scarce economic resources; 2) Catalyst srl, which operates in the sector of innovative construction, proposing a new way of producing bricks using waste materials obtained from demolition or from marble quarries 3) Diamante, acronym for diagnosis of autoimmune diseases using nanotechnologies, born as a spin-off of the University of Verona. The goal is to offer a tailor-made customer service for the eco-sustainable production of customized plant viral nanoparticles for applications in the cosmetic, nutraceutical and phytopharmaceutical fields; 4) eP-rolnn, acronym of Energy and propulsion innovation, born as a spin-off of the University of Salerno with the aim of developing and marketing a kit for the conversion of traditional cars into solar hybrid vehicles, reducing consumption and emissions; 5) Glass to Power, is a spin-off of the University of Milano Bicocca with the aim of proposing sustainable building solutions, within the so-called Zero-Energy Building. The value proposition consists of photovoltaic windows capable of maintaining the transparency of the glass to allow sunlight to pass through the building and generate electricity at the same time; 6) Greenbone Ortho, born from a group of researchers from the Institute of Science and Technology of Ceramic Materials in Faenza that operates in the market of orthopedic biomaterials to provide solutions to bone defects. The challenge is to offer a possible and fast healing to patients with major bone damage through bone regeneration

based on wood materials. 7) IntendiMe, born as part of a Contamination Lab project of the University of Cagliari with the aim of improving the life of deaf and hearing impaired people. The solution offered consists of a system, named KitMoe, that, through special sensors, is able to detect any sound or vibration within the home or in similar places, such as offices, hotel rooms, transmitting a notice in real time to the person through a smartwatch that receives the reports and a specific app for device management; 8) LiMix, born from the idea of an industrial computer science student at the University of Camerino, developing a prototype of a support exoskeleton for people with motor disabilities in collaboration with teachers of the mathematics department of the same University. The innovation consists of a wearable device, called Talking Hands, which through sensors applied on the fingers, on the back of the hands and on the forearm, detects and translates every movement into data that it sends to the smartphone, which translates it into language thanks to a synthesizer vocal; 9) New Gluten World, born from a study by a researcher from the University of Foggia, which led to the creation of a patent entitled "Method for detoxifying gluten proteins from cereal grains". The patent allowed the start of the spin-off of the University of Foggia to create a technology that through a physico-chemical process reshapes the gluten proteins directly in the wheat, creating value for people with celiac disease; 10) Orange Fiber, is a Sicilian company born from the idea (later patented) of a Fashion Design student at the AFOL Moda institute in Milan and from the collaboration with the chemistry department of the Politecnico di Milano. The company produces sustainable fabrics for major fashion brands, such as Ferragamo and H&M, fabrics created using by-products of the citrus processing industry as raw material; 11) Personal Factory, born from the idea of an engineering student from the University of Trento, who creates a platform, called Origami, for the management of construction manufacturing processes in the cloud that today allows you to manage plants all over the world. The innovation allows the plant to dose, mix and bag the premixed product for construction, consisting of sand, cement, lime and gypsum. Value is created by promoting the use of local raw materials, reducing the polluted impact of transport and increasing the competitiveness of local producers; 12) PCUP (Public Cup), born from the idea of a student in philosophy of the University of Milan with the aim of offering an innovative glass, an alternative to disposable plastic cups, taking advantage of the approach of the internet of things. The innovative product is made of food-grade silicone, a light, flexible and versatile material, and includes chips that enable some integrated digital services, accessible via an app. The glass can be placed in your pocket, does not get damaged, withstands very high temperatures and does not generate chemical reactions with the drinks it comes into contact with. The innovation allows event organizers

to give it as a deposit to customers and customers to communicate with friends and carry out other operations via smartphone. All this eliminating the use of plastic with obvious environmental benefits; 13) Quid, is a social cooperative born from the idea of a young girl from Verona to make clothing using surplus and unused fabrics from other companies, usually of large size. The products are made thanks to the contribution of workers belonging to fragile population groups, at high risk of social exclusion; 14) TomaPaint, TomaPaint, born from the idea of a group of people with complementary skills in order to produce a natural bioresin extracted from the waste of the food industry, in particular from tomato peels. This is the cutin, which in nature has a protective action in the leaves and fruits of plants. The goal was to replace artificial resins with natural bioresins in the production of paints, with benefits for the environment and people's health; 15) UBT, Umbria Bioengineering Technology is a company born as a spin-off of the University of Perugia which operates mainly in the field of production and marketing of mammographs based on non-ionizing radiation. The company belongs to the world of benefit corporations and realizes innovations for the diagnosis of breast tumors as well as a saving of about 30% compared to traditional mammograms, also the carrying out of cancer diagnoses without any risk to women's health; 16) Transpar3nt has developed a digital platform based on a proprietary blockchain with the aim of facilitating and securing interactions between people, companies and organizations. Born from an idea of one entrepreneur. Transpar3nt offers a new vision of the world of business and relationships by enabling people and companies to create a global system of transparency through the promotion of ethical, collaborative and sustainable behaviors. The goal is to guarantee a relationship of trust in the interactions and economic transactions between different actors. thanks to the protection of data and information exchanged by actors; 17) The Baglioni brothers, who do not carry out a new enterprise, but propose an original artistic and musical path, creating didactic songs with a very high social impact on entire school groups. The goal is to combat high school drop-out through songs, trying to bring schools and high school students closer to that of music which usually absorb much of the life time of young people. The description of these entrepreneurial stories with a social vocation highlights that also in Italy the approach to business management is beginning to be inspired by new values, trying to reconcile the necessary pursuit of profit and economic balance with the ability to create value for the territory and for people, in full respect of natural capital and the environment. The text has the merit of bringing out positive entrepreneurial stories, often unknown, but representative of a model of "good business" that responds to the new challenges that the idea of creating a better world places before us all. Very important in these start-up events is the role played by many players in the

ecosystem of technological and social innovation, starting with universities, research centers, business networks and the system of venture capital lenders, both private and public.

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