

Dissertation

Promoting Intrapreneurship in Family Firms and SMEs: The Impact of Family Influence, Job Fit, and Individual Entrepreneurial Orientation

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Executive Summary

In the dynamic and complex markets of today, family firms and small-sized enterprises (SMEs) are under constant pressure to innovate their products, services, and internal business processes to preserve their competitive advantage and ensure longevity. Notably, many of such entities meet and even surpass the innovation criteria, despite often facing limited resources compared to non-family and/or larger corporations. This raises an intriguing question: how do these firms manage to be so innovative? A key driving force of their innovation is the entrepreneurial potential of their employees, better known as intrapreneurship. Defined as the entrepreneurial behavior and activities undertaken by employees within their organizations, intrapreneurship is widely recognized to enhance innovation outputs and subsequently improve firms' performance. Therefore, identifying the factors that promote intrapreneurship in family firms and SMEs carries considerable theoretical and practical significance.

However, while numerous studies have investigated various antecedents of intrapreneurship, little attention has been devoted to family firms and SMEs. This lack of focus is surprising, given their significant differences compared to non-family and/or larger corporations, suggesting unique triggers for intrapreneurship in these organizations. For example, the family business literature emphasizes the influence of the enterprising family, known as family influence, on a firm's behavior and decisions. This family influence delineates family firms from non-family ones, thus making it a dominant subject in family business research in recent years. Despite different studies investigating the impact of family influence on aspects such as innovations, strategic and financial decisions, or succession within family firms, empirical studies examining its relationship with intrapreneurship are severely lacking. Additionally, family influence has only been measured from the perspective of the enterprising family, while the perspective of non-family employees, who are building the most dominant stakeholder group within many family firms and therefore, frequently subjected to family influence, has been notably overlooked in measuring family influence. This research contributes to fill this gap, considering that understanding the perception of family influence is critical to better grasp this concept, particularly in the context of family firms. Intrapreneurship studies in SMEs are lacking, too. Despite the understanding that a pleasant and satisfying working environment nurtures intrapreneurship, and SMEs being acknowledged for their aptitude in tailoring their workplaces to accommodate their employees' needs, the specific impacts of these conditions on employee intrapreneurship remain largely unexplored. Thus, it is highly relevant to examine

the impact of the alignment between an actual job and employees' personalities, demands, and needs, in the literature known as job fit, on employees' intrapreneurial activities.

To address these gaps, this dissertation is based on three consecutive studies. The first qualitative study explores how the influence of the enterprising family on the firm affects the intrapreneurial motivation of non-family employees. The findings highlight that significant family influence fosters strong identification of non-family employees with the family and the firm, positively driving their intrapreneurial motivation. In contrast, firms with reduced family influence report decreased identification among non-family employees, prompting such firms to establish mechanisms, such as monetary rewards, to stimulate extrinsic intrapreneurial motivation. The second study develops and validates the Perceived Family Influence Scale (PFIS), a pioneering instrument measuring family influence from the perspective of non-family employees allowing for the gathering of more holistic and comprehensive data. The third study quantitatively examines the relationship between individual entrepreneurial orientation, job fit and employee intrapreneurship. The results indicate that individual entrepreneurial orientation positively influences employee intrapreneurship, while job fit has no significant effect on it. However, the results also show that the person-organization fit, and the demands-abilities fit have a leveraging effect on the positive relationship between individual entrepreneurial orientation and employee intrapreneurship.

The contributions of this dissertation are manifold. First and foremost, it offers valuable insights into intrapreneurship within under-researched contexts such as family firms and SMEs. It highlights two intra-organizational factors, family influence, and job fit, that, either directly, such as family influence, or via moderation effects, such as job fit, promote intrapreneurship. Thus, this manuscript advances the discourse on intrapreneurship and innovation in family firms and SMEs and encourages further research in these areas. Secondly, the thesis introduces the PFIS, the first-ever scale measuring family influence from the perspective of non-family employees. This novel instrument enables researcher to collect more comprehensive and holistic data on family influence. This expands the knowledge on family firms, ultimately advancing the family business research stream. Last but not least, the PhD provides relevant practical contributions for firms, irrespective of their size, financial resources and/or structure, aiming for increased innovation outputs through intrapreneurship. Such firms are recommended to leverage the principles of family influence, such as strong and personal relationships with employees, and job fit revealed in this dissertation.

Acknowledgments

"At times our own light goes out and is rekindled by a spark from another person. Each of us has cause to think with deep gratitude of those who have lighted the flame within us."

- Albert Schweitzer

In the journey of completing this dissertation, I realized the remarkable similarities between this academic pursuit and an intrapreneurial venture. The essence of intrapreneurship lies in innovating within an existing organization, similar to how a PhD candidate functions within the academic institution. As a PhD candidate, I found myself not just as an employee of the university but also as an intrapreneur, aiming at the creation of something novel and valuable. While in the context of business units, these outcomes are oftentimes product or process innovations, in the academic world the equivalent is a dissertation, which represents a unique contribution to the scientific discourse. Given these parallels, coupled with the fact that my dissertation aims to examine the drivers of intrapreneurial ventures, my findings have direct parallels to my personal PhD experience. Particularly, the insights gained in the third study (Chapter 5), which draws upon Ajzen's (1991) Theory of Planned Behavior, underscore that personal intentions often shape individual behavior. Indeed, when I started my PhD in 2017, it was my firm intention to see it through to completion, otherwise I would not have started. So, I thought mastering the PhD cannot be that hard as the equation, according to the TPB, appeared simple: my intention to do a PhD would likely lead me to attain this academic title sooner or later. However, as it is often the case, the simplicity of theory belies the complexity of practice. This holds also truth for the path of a doctoral student, who is fraught with the challenge of balancing the strong intention to complete the dissertation with the myriad daily responsibilities of academic life. Teaching commitments, project work, and other academic duties compete for time and attention, often relegating focused research to the sidelines. This conflict enforces a shift in priorities, which often leads to strong cyclical fluctuations in motivation. This makes writing a doctoral thesis a complex, sometimes very challenging process.

Fortunately, as my third study also shows, the relationship between intention and behavior is not linear but is significantly influenced by contextual factors. This finding aligns seamlessly with the interactionist perspective (Oldham & Cummings, 1996; Woodman et al., 1993), which proposes that behavior is a delicate interplay between individual intentions and the surrounding context. This theory became not just an academic concept for me but a lived reality throughout

my PhD process. Without my professional and personal environment, i.e. my professors, my colleagues and of course my friends and family, I might have still finished my PhD, but it would have been much more difficult and definitely less enjoyable. Therefore, I have to thank some very important people who have been with me and provided immeasurable support on my PhD journey. These people were and still are the spark that ignites my flame and the fuel that keeps it burning.

First of all, I have to thank my doctoral supervisor and mentor Prof. Dr. Petra Moog. You afforded me the opportunity to start my PhD and thus my academic career in the first place by hiring me in October 2017. During our work together, we have shared great experiences, such as our two trips to Baku, the EURAM conference in Dublin, and the RENT conference in Gdansk. In general, you always supported me when needed, but also gave me the freedom and confidence to do my work in my own way without constantly looking over my shoulder. This leadership style, blending support with autonomy, has been invaluable to me. Your friendly and caring manner always made me feel at ease, so I always enjoyed being a member of your team. I would also like to thank you for the many opportunities you have given me to gain experience traveling internationally. Besides the mentioned international experiences we shared, another unforgettable memory was my trip to the Babson Conference in Boston in 2018, which you made possible for me. So, I sincerely thank you for everything you have done for me during my PhD. Your guidance has been a pillar of my growth, and I eagerly anticipate our future collaborations.

Secondly, a big thank you goes to my second supervisor and mentor Prof. Dr. Giuseppe Strina. Since my first day at your chair in 2019, I have greatly enjoyed working for and with you. Our relationship, which was positive from the start, formed the basis for our fruitful and pleasant collaboration. I deeply appreciate your trust in me and my work, and the increasing responsibility you have given me for our chair's interests. Our various conference visits to Volos, Paris, Dublin, Krakow, and Gdansk helped our relationship grow more personal. This makes work so much easier and more enjoyable for you, as I am fully committed to our chair and, I feel, you are fully committed to your staff in return. I would also like to thank you for providing me the opportunity of a one-month research stay in Rome at the Niccolò Cusano University in 2022. This stay was in a way crucial to get the second study of this dissertation underway, as I could fully focus on my research, while also enjoying the charms of the eternal city. Although my thesis is now written and concludes here, the chapters of our joint story

remain unwritten, and I eagerly look forward to filling them with you in the future. Grazie mille per tutto Professore!

I would also like to thank all my colleagues at the University of Siegen with whom I have worked over the last six years. You have all made my work more enjoyable and fulfilling. I really cherish our conversations at lunch and during coffee breaks, which spanned beyond work topics to various aspects of our lives. Also, you have always helped me when I needed support, no matter what I asked for. Guys, thank you all for your collegiality, support, and the wonderful times we shared so far. Special appreciation goes to Dr. Julian Ruf and Dr. Sven Wolff, both co-authors of all or nearly all the papers in this thesis. Your contribution significantly elevated the quality of my research, and without you, I would have faced much more difficulty completing these papers.

Although work is an essential part of my life, other areas are equally important. My friends and family play a central role in these areas. Having them as my bedrock in the good, but more importantly the bad times of my life, provides me security and serenity through all times. Especially to my parents, who have laid the foundation of my life and constantly encouraged and supported me, your role in my achievements is immeasurable. Therefore, I am really grateful and want to thank both of you for everything you have done for me! Last but not least, to my wonderful wife Laura, your enduring support and love have been my guiding light through moments of doubt and triumph. Your role in this journey is as significant as any academic endeavor. As the saying goes, behind every successful man is a strong woman – and you are certainly the strongest woman I know. Laura, thank you so much for being my life partner and for your strength when I needed it most, I love you!

In summary, this dissertation is not merely a product of my effort; it's a testament to the immense support and inspiration I've received from each one of you. Thank you for being part of my PhD and personal journey.

- Philipp Köhn -

Table of Contents

Executive Summary	I
Acknowledgments.....	III
Table of Contents.....	VI
List of Figures	IX
List of Tables	X
List of Abbreviations	XI
1 Introduction.....	1
2 Theoretical Background.....	7
2.1 Intrapreneurship	7
2.1.1 Definition of Intrapreneurship	7
2.1.2 Drivers of Intrapreneurship.....	9
2.1.3 Measuring Intrapreneurship – Employee Intrapreneurship Scale (EIS).....	9
2.2 Family Firms and Family Influence.....	11
2.2.1 Definition of Family Firms	11
2.2.2 Family Influence and its Impact on Intrapreneurship of Non-family Employees ..	13
2.3 Small and Medium-sized Enterprises	16
2.4 Job Fit	19
2.5 Individual Entrepreneurial Orientation.....	21
3 Why are Non-family Employees Intrapreneurially Active in Family firms? A Multiple Case Study	24
3.1 Introduction.....	25
3.2 Theoretical Background.....	26
3.3 Methodology	30
3.3.1 Research Design and Setting	30
3.3.2 Sample.....	31
3.3.3 Data Collection	33
3.3.4 Data Analysis.....	35

3.4 Results.....	36
3.4.1 Family Influence, Identification, and Family-related Intrapreneurial Motivation..	36
3.4.2 Business Mechanisms and Business Related Intrapreneurial Motivation	41
3.4.3 Intrapreneurial Activities	45
3.5 Discussion.....	48
3.5.1 Theoretical Implications	48
3.5.2 Contributions to the Literature.....	53
3.5.3 Limitations and Future Research	54
3.5.4 Practical Implications.....	55
3.6 Conclusion	55
4 Measuring Family Influence from a Non-Family Employee Perspective: The Perceived Family Influence Scale (PFIS).....	57
4.1 Introduction.....	58
4.2 Theoretical Background.....	59
4.3 Development, Validation, and Application of the PFIS	63
4.3.1 Step 1: Initial Item Generation.....	64
4.3.2 Step 2: Scale’s Improvement and Validation.....	68
4.3.3 Step 3: The Effect of Perceived Family Influence on the Job Satisfaction of Non-family Employees	74
4.4 Discussion	79
4.4.1 Theoretical and Practical Implications.....	81
4.4.2 Limitations and Future Research	83
4.5 Conclusion	83
5 From Intention to Behavior: How Individual Entrepreneurial Orientation and Job Fit Influence Employee Intrapreneurship in SMEs.....	85
5.1 Introduction.....	86
5.2 Theoretical Background and Development of Hypotheses	88
5.2.1 The Relationship Between IEO and EI.....	91
5.2.2 The Relationship Between Job Fit and EI.....	93
5.2.3 The Moderation Effect of Job Fit on the Relationship Between IEO and EI.....	95

5.3 Methodology and Data.....	96
5.3.1 Dependent Variable	97
5.3.2 Independent Variables	98
5.3.3 Moderator Variables	99
5.3.4 Control Variables	100
5.4 Results.....	101
5.5 Discussion.....	104
5.5.1 Theoretical Implications	104
5.5.2 Practical Implications.....	107
5.5.3 Limitations and Future Research	107
5.6 Conclusion	108
6 Findings and Implications.....	110
6.1 Summary of Findings.....	110
6.2 Theoretical Implications	115
6.3 Managerial Implications	119
6.4 Limitations and Future Research	121
6.5 Conclusion	122
7 Bibliography	124
8 Appendix.....	CLIII
9 Statutory declaration	CLXII

List of Figures

Figure 1: Research Model of this Dissertation	5
Figure 2: Antecedents and Outcomes of Intrapreneurship	10
Figure 3: The Three-circle Model of the Family Business System	12
Figure 4: The Influence of Job Fit on Employees' Behavior.....	20
Figure 5: Theoretical Relationships Between Family Influence, Job Fit, Individual Entrepreneurial Orientation, and Intrapreneurship	23
Figure 6: Example of the Data Analysis Leading to the Aggregated Dimensions	36
Figure 7: Family-related Intrapreneurial Motivation of Non-family Employees	41
Figure 8: Business-related Intrapreneurial Motivation of Non-family Employees	44
Figure 9: Integrative Model of Intrapreneurial Motivation of Non-family Employees in Family Firms	47
Figure 10: Plot of the Results of the PFIS Confirmatory Factor Analysis	72
Figure 11: Hypothesis	96
Figure 12: Plot of the Moderation Effect.....	104
Figure 13: Relationships Between Family Influence, Job Fit, Individual Entrepreneurial Orientation, and Intrapreneurship	112
Figure 14: The Impact of Family Influence, Job Fit, and IEO on Intrapreneurship in Family Firms and SMEs.....	113
Figure 15: Robustness Test PFIS Confirmatory Factor Analysis Subsample 1	CLIII
Figure 16: Robustness Test PFIS Confirmatory Factor Analysis Subsample 2	CLIV
Figure 17: Confirmatory Factor Analysis EIS	CLV
Figure 18: Initial Confirmatory Factor Analysis IEO.....	CLVI
Figure 19: Updated Confirmatory Factor Analysis IEO.....	CLVII
Figure 20: Initial Confirmatory Factor Analysis FIT	CLVIII
Figure 21: Updated Confirmatory Factor Analysis FIT	CLIX

List of Tables

Table 1: Integrated Studies	3
Table 2: Definition of SMEs by the European Commission	17
Table 3: Definition of SMEs by the IfM Bonn.....	17
Table 4: Intrapreneurship Promoting and Inhibiting Characteristics of SMEs.....	18
Table 5: Sample	32
Table 6: Secondary Data.....	34
Table 7: Family Influence.....	38
Table 8: Identification of Non-family Employees	39
Table 9: Family-related Motivation of Non-family Employees	40
Table 10: Business Mechanisms Supporting Intrapreneurial Motivation.....	43
Table 11: Business-related Motivation of Non-family Employees	44
Table 12: Intrapreneurial Activities and Pride in own Work.....	45
Table 13: Family Influence to Business Mechanisms Ratio.....	50
Table 14: Theory-based Questions and Latent Constructs Used for the Initial Construction of the PFIS.....	67
Table 15: Exploratory Factor Analysis of the PFIS (Initial Solution with 4 Factors).....	70
Table 16: Confirmatory Factor Analysis of the PFIS	71
Table 17: Model Fit Diagnostics CFA PFIS.....	73
Table 18: Cronbach`s Alpha, AVE, Composite Reliability, and Larcker Test for Discriminant Validity	74
Table 19: Variable Description.....	75
Table 20: Means, Standard Deviations, and Correlations.....	77
Table 21: Regression Analysis - Perceived Family Influence on Job Satisfaction.....	78
Table 22: Variable Description.....	100
Table 23: Means, Standard Deviations, and Correlations.....	102
Table 24: Regression Analysis IEO on EIS Moderated by FIT.....	103
Table 25: Main Survey Questions.....	CLX

List of Abbreviations

AVE	Average variance extracted
CEO	Chief executive officer
CFA	Confirmatory factor analysis
CFI	Comparative fit index
CI	Confidence interval
CTE	Care towards employees
DA-Fit	Demands-abilities fit
DC	Direct communication
e.g.	Exempli gratia: for example
EE	Entrepreneurial environment
EFA	Exploratory factor analysis
EI	Employee intrapreneurship
EIS	Employee intrapreneurship scale
EO	Entrepreneurial orientation
F-PEC	Family Powe, Experience, and Culture
FF	Family firm
FI	Family involvement
FIFS	Family influence familiness scale
FV	Family values
H	Hypothesis
IEO	Individual entrepreneurial orientation
IfM	Institut für Mittelstandsforschung
IM	Idea management
M	Mean
Max.	Maximum
Min.	Minimum
MS	Managerial support
N	Natural number: sample size
N/A	Not applicable
NACE	Nomenclature statistique des Activites economiques dans la Communaute Europeenne'-Statistical

NS-Fit	Needs-supplies fit
OLS	Ordinary least square
P	Proposition
p	Probability value
p.	Page
PFIS	Perceived family influence scale
PO-Fit	Person-organization fit
PRF	Personal relationships with family members
RMSEA	Root mean square error of approximation
RS	Reward system
SD	Standard derivation
SEW	Socioemotional wealth
SIM	Structured innovation management
SME	Small and medium-sized enterprise
SRMR	Standardized root mean square residual
TLI	Tucker Lewis index
TPB	Theory of planned behavior
v	Variable

1 Introduction

In the face of rapidly changing and increasingly complex business landscapes, as well as national or global crises, both family firms and SMEs consistently strive to reinvent their product and service portfolio and internal processes in order to maintain their competitiveness and viability (Denicolai et al., 2021; Hock-Doepgen et al., 2021; Kuratko & Audretsch, 2013; Saunila, 2020). Interestingly, many of these firms not only meet but often surpass the benchmarks of innovation, despite having limited resources compared to non-family and/or larger organizations (Classen et al., 2014; Duran et al., 2016; Habbershon & Williams, 1999). This leads to the intriguing question of how these firms achieve such remarkable innovation strength? One key driving force is the entrepreneurial potential present within their workforce, often referred to as intrapreneurship (Pinchot, 1985). Defined as entrepreneurial activities and behaviors manifested by employees within their respective organizations (Antoncic & Hisrich, 2001; Blanka, 2019; Gawke et al., 2019; Pinchot, 1985; Vesper, 1984), intrapreneurship is widely acknowledged to bolster innovation outputs, thereby enhancing the overall performance of the firms (Augusto Felício et al., 2012; Baruah & Ward, 2015; Ireland, 2003; Kearney & Meynhardt, 2016; Morris et al., 2011; Nicholson et al., 2016; Parker, 2011; Rivera, 2017). Therefore, pinpointing the factors that stimulate intrapreneurship in family firms and SMEs carries significant theoretical and practical implications.

Despite numerous studies exploring various influences of intrapreneurship, research focusing on family businesses and SMEs has been sparse (Carrier, 1994; Cerón Ríos et al., 2020). This research gap is striking, considering the distinct characteristics of these entities when compared to non-family and/or larger corporations (Curran & Blackburn, 2001; Josefy et al., 2015; Welsh et al., 1982). This suggests that, within these organizations, unique aspects may trigger intrapreneurship (Sun et al., 2023). The literature on family business, for example, highlights the special role of family influence on the firm's decisions and behaviors (Habbershon & Williams, 1999; Minola et al., 2021; Patel & Chrisman, 2014; Zellweger, Nason, et al., 2012). This distinctive influence separates family firms from their non-family counterparts, making it a key topic of recent family business research (Chrisman et al., 2003, 2012; Chua et al., 2012; Habbershon & Williams, 1999; Lamb & Butler, 2018; Lindow et al., 2010; Pearson et al., 2008). However, even though various studies exploring the impact of family influence on innovation (Bammens et al., 2015; Dibrell & Moeller, 2011; Eddleston et al., 2010), strategic and financial decisions, or succession within family firms (Berrone et al., 2010; Berrone et al.,

2012; Gomez-Mejia et al., 2011, 2018), empirical investigations regarding its relationship with intrapreneurship are notably scarce. Furthermore, family influence has largely been measured from the perspective of the enterprising family itself, overlooking the perspective of non-family employees, who are often the most represented non-family stakeholder group in family firms (Pimentel et al., 2020), and thus frequently subjected to family influence. Drawing on social constructivism theory (Berger & Luckmann, 1967; Kukla, 2000; Morgan & Smircich, 1980), incorporating their perception of family influence is crucial to better comprehend this concept and consequently, the nature of family firms. Similar research gaps are evident in SME studies, with a distinct shortage of studies on intrapreneurship. Although there is a consensus that a generally satisfying working environment promotes intrapreneurship (Auer Antoncic & Antoncic, 2011; Baer, 2012; Bammens et al., 2013, 2015; Zhang & Bartol, 2010), and SMEs are noted for shaping workspaces to suit their employees' needs (Hauser et al., 2008; Pfohl & Arnold, 2006), still research on how these conditions affect intrapreneurship is severely lacking. Therefore, it becomes paramount to investigate how the alignment of a job with an employee's personality, abilities, and needs, commonly referred to as job fit (Cable & Judge, 1996; Kristof, 1996; Resick et al., 2007; Saks & Ashforth, 1997), influences their intrapreneurial activities.

In light of these research gaps, this dissertation is anchored on three sequential studies (Table 1). The first study delves into the intrapreneurial motivation of non-family employees in family firms. Despite the understanding that family involvement often elevates workforce motivation to propose innovative solutions (Bammens et al., 2015; Dibrell & Moeller, 2011; Eddleston et al., 2010), the specific motivations of non-family employees within family firms and the role the entrepreneurial family plays in this context remain under-researched. To address this, a multiple case study (Eisenhardt, 1989, 2021) using a dyadic sample of interviews with owner-managers and non-family employees across nine German family firms has been conducted. The cross-case analysis reveals that strong family influence within firms amplifies non-family employee identification, intrinsically motivating them to engage in intrapreneurial activities. Moreover, firms exhibiting lesser family influence show a decrease in this intrinsic motivation. As a result, these family firms implement certain business mechanisms intended to foster extrinsic motivation among non-family employees.

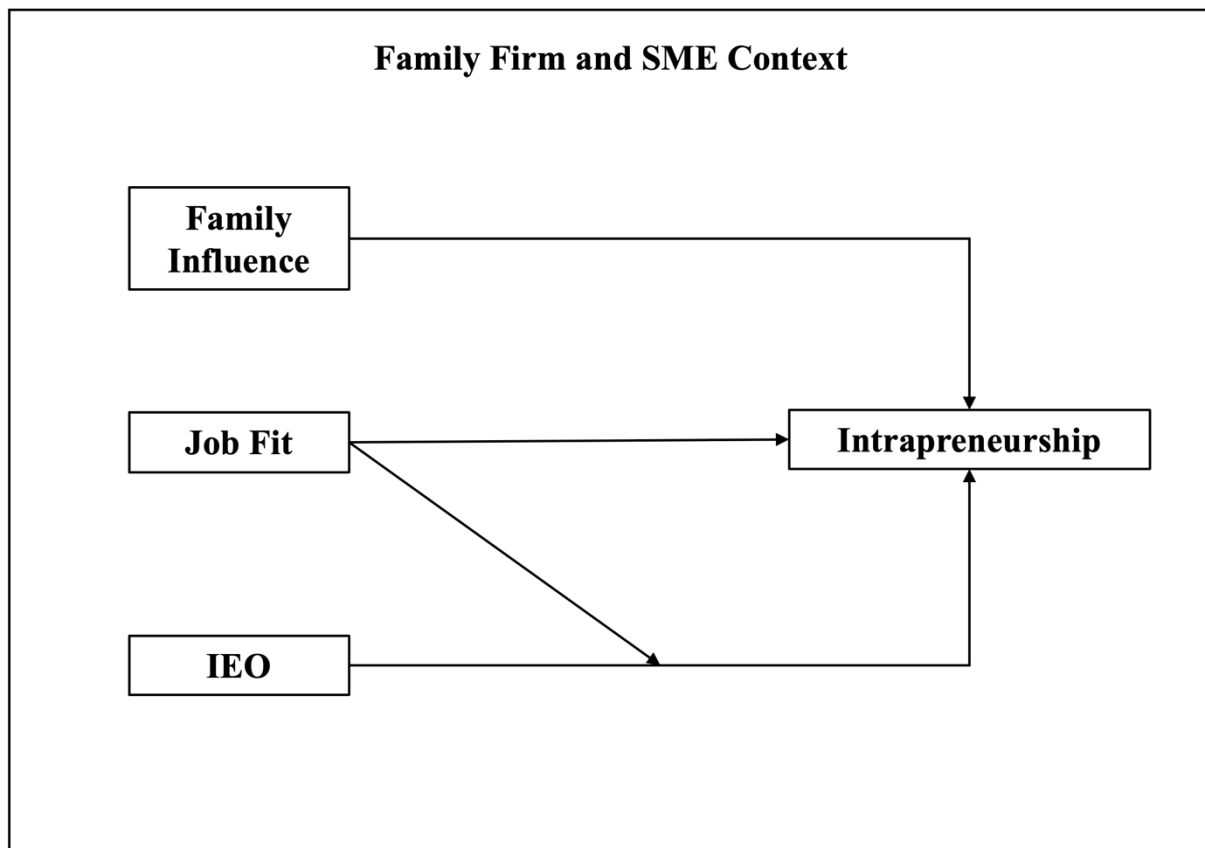
Table 1: Integrated Studies

Authorship	Research Gap	Main Theoretical Concepts	Methodology and Sample	Publication Status / Presentations	Contribution
Study 1: Why are Non-family Employees Intrapreneurially Active in Family Firms? A Multiple Case Study					
Köhn, Philipp Ruf, Philipp J. Moog, Petra	Influence of the enterprising family on intrapreneurial motivation of non-family employees.	Intrapreneurship, non-family employees in family firms, family influence	Qualitative case study: 9 cases, 18 interviews (dyadic sample)	Published: <i>Journal of Family Business Strategy (JFBS)</i> Presented at: • <i>International Family Research Academy Conference (IFERA) 2021, online</i> • <i>Babson College Entrepreneurship Research Conference (BCERC) 2019, Boston</i>	Coordination, reviewing the literature, data collection and qualitative data analysis and writing large parts of the paper.
Study 2: Measuring Family Influence from a Non-Family Employee Perspective: The Perceived Family Influence Scale (PFIS)					
Wolff, Sven Köhn, Philipp Ruf, Philipp J. Moog, Petra Strina, Giuseppe	Lack of sound instruments that measure family influence from a non-family member perspective.	Family influence, non-family employees, scale development, job satisfaction	Psychometric analysis: Confirmatory factor analysis, 600 cases Quantitative empirical: Regression analysis, 499 cases	1 st Revise and resubmit: <i>Journal of Family Business Strategy (JFBS)</i> Presented at: • <i>Academy of Management (AOM) 2023, Boston</i> • <i>European Academy of Management (EURAM) 2023, Dublin, nominated for best paper award in the FABR SIG</i>	Coordination, reviewing the literature, data collection and writing large parts of the paper.
Study 3: From Intention to Behavior: How Individual Entrepreneurial Orientation and Job Fit Influence Employee Intrapreneurship in SMEs					
Köhn, Philipp Wolff, Sven Ruf, Philipp J. Moog, Petra Strina, Giuseppe	Yet, no research investigated the effect of individual entrepreneurial orientation and job fit on employee intrapreneurship.	Employee intrapreneurship, individual entrepreneurial orientation, Job FIT, theory of planned behavior	Quantitative empirical: Regression analysis, 649 cases	Under review: <i>International Small Business Journal (ISBJ)</i> Presented at: • <i>Research in Entrepreneurship and Small Business (RENT) 2023, Gdansk</i>	Coordination, reviewing the literature, data collection and writing large parts of the paper.

The second study introduces and validates the Perceived Family Influence Scale (PFIS), a tool designed to measure the perception of non-family employees about family influence in family firms. The PFIS distinguishes itself from existing scales (Astrachan et al., 2002; Frank et al., 2017; Klein et al., 2005) by capturing family influence from a non-family member's perspective, thus contributing to a more comprehensive understanding of family influence, and paving the way for future research in this research field. The development of the PFIS follows a multistep process (DeVellis, 2017; Hinkin, 1995; Pearson et al., 2014), beginning with theoretical and empirical generation of initial scale items. These items are improved through exploratory factor analysis, and finally validated through confirmatory factor analysis, revealing three subscales (culture, involvement, and image). Lastly, this study tests the PFIS's applicability by examining the effect of non-family employees' perceived family influence on their job satisfaction (Bacharach et al., 1991) using a sample of 499 non-family employees from German family firms. The findings indicate that a perceived family influence has a positive effect on the job satisfaction of non-family employees.

The third study scrutinizes the dynamics between intention and behavior in intrapreneurship at the individual level, a domain that remains significantly under-explored in contrast to firm-level intrapreneurship studies (Blanka, 2019; Gawke et al., 2019; Niemann et al., 2022). To address this, the relationships between individual entrepreneurial orientation (IEO) (Bolton & Lane, 2012; Kollmann et al., 2007; Santos et al., 2020), measuring intention, job fit (representing context) (Cable & Judge, 1996; Kristof, 1996; Resick et al., 2007; Saks & Ashforth, 1997), and employee intrapreneurship (EI) (Gawke et al., 2019), denoting behavior, are examined within SMEs. The moderated regression analyses, based on a sample of 649 employees from German SMEs, revealed that IEO positively impacts EI. Interestingly, while job fit did not have a significant direct effect, it positively moderates the relationship between IEO and EI, especially in relation to the sub-dimensions person-organization fit, and demands-abilities fit. The findings enhance the theoretical understanding of intrapreneurship, particularly the relationship between intention, context, and behavior, while also offering valuable practical insights for contextualizing employment settings within SMEs. Figure 1 provides a schematic representation of the diverse themes addressed in the different studies and outlines their interconnections.

Figure 1: Research Model of this Dissertation



Source: Own illustration.

The contributions of this dissertation are manifold. Foremost, the dissertation delivers crucial perspectives on intrapreneurship within the less explored contexts of family firms and SMEs, emphasizing two intra-organizational elements, family influence and job fit, that either directly foster intrapreneurship (family influence) or has a moderating effect on the intrapreneurial activities of employees, who already show a propensity towards entrepreneurship (job fit). Consequently, and due to the relationship of intrapreneurship and innovation, this work enhances somehow as well the scientific discussion on innovation within family firms and SMEs and sparks further scholarly pursuits in these domains. Secondly, the dissertation introduces the Perceived Family Influence Scale, the first scale that measures family influence from the perspective of non-family employees. This innovative instrument facilitates more inclusive and holistic data collection on family influence, thereby enriching our understanding of this concept and progressively advancing the family business research field. Finally, this dissertation offers valuable practical insights for firms, irrespective of their size, financial capacity, or organizational structure, that aim to amplify their innovative pursuits. The research equips businesses with strategies to cultivate intrapreneurship and innovation, which are

quintessential for enhancing firm performance, competitiveness, sustainable growth, and longevity. It elucidates how company leaders and managers can inspire their teams to embrace intrapreneurship and innovation, not necessarily by investing substantial resources, but by fostering an environment where employees feel valued and secure. Nonetheless, it's imperative for leaders to recognize the critical resources required for intrapreneurship and to provide them without hesitation. Moreover, instilling a sense of belonging and identification within the firm can serve as a catalyst for employee loyalty, commitment, and intrapreneurial spirit. A viable method to foster this sentiment includes establishing organizational rituals or commemorating achieved milestones.

The structure of this dissertation is as follows: Following this introductory chapter, chapter 2 provides a synopsis of key theoretical concepts that form the backbone of this research dissertation. Chapters 3 through 5 will detail the interconnected studies mentioned earlier, each bearing its distinct focus. In chapter 3, a qualitative study that explores how the enterprising family stirs the intrapreneurial motivation of non-family employees within family firms is presented. Chapter 4 then paves the way for the creation and validation of the Perceived Family Influence Scale, a pioneering instrument that captures family influence from the viewpoint of non-family employees. In chapter 5, a quantitative investigation of the link between individual entrepreneurial orientation, job fit, and employee intrapreneurship is included. Finally, Chapter 6 summarizes the overarching findings of this dissertation, providing a comprehensive discussion and illuminating potential avenues for future research.

2 Theoretical Background

This chapter provides a review of the relevant theories, models, and concepts of this dissertation. In section 2.1, the concept of intrapreneurship is introduced, distinguishing it from analogous ideas in the field of entrepreneurship. This provides a working definition of intrapreneurship for this dissertation. Furthermore, different drivers or triggers as well as a measurement of intrapreneurship are presented in this section. Section 2.2 then addresses the definition of family firms, going deeper into the idea of family influence by offering a precise description and discussion, tracing its evolution, and highlighting its connection with intrapreneurship. Section 2.3 brings into focus the definition and unique characteristics of SMEs. Finally, sections 2.4 and 2.5 briefly illuminate the concepts of job fit and individual entrepreneurial orientation, respectively. Both concepts are instrumental to the study implied in chapter 5.

2.1 Intrapreneurship

2.1.1 Definition of Intrapreneurship

Intrapreneurship, as a subset of entrepreneurial studies, was coined by Pinchot (1985), combining the terms “intra-corporate” and “entrepreneurship”. He encapsulates this idea as the manifestation of entrepreneurship within the corporate environment, in which intrapreneurial employees are visionaries who shoulder the responsibility for fostering innovation within an organization and transforming those visions into financially viable realities like products, services or processes (Pinchot, 1985). While entrepreneurship implies the creation and management of an independent enterprise by an entrepreneur or an entrepreneurial team (Douglas & Fitzsimmons, 2013), intrapreneurship involves employees proactively initiating novel concepts for their organizations, often outside the parameters set by their superiors (Vesper, 1984). Stevenson and Jarillo (1990), conversely, define intrapreneurship as the pursuit of opportunities within organizations, regardless of the current resources under one's control. Antoncic and Hisrich (2001) understand intrapreneurship as “*entrepreneurship within existing organizations*” (p. 498), which challenges the traditional business practices in established firms (Antoncic & Hisrich, 2003). According to them, this kind of irritation stimulates not only the creation of new ventures (Gawke et al., 2019; Stopford & Baden-Fuller, 1994; Zahra, 1991) but also sparks other innovative activities like product or service development, technology advancement, administrative techniques, or strategic renewal (Damanpour, 1996; Gawke et al.,

2019; Knight, 1997; Lumpkin & Dess, 1996; Ping et al., 2010; Vesper, 1984). As a result value is created (Kearney & Meynhardt, 2016; Parker, 2011) and organizational and environmental complexities are reduced (Baruah & Ward, 2015), leading to improved firm performance (Augusto Felício et al., 2012), success (Nicholson et al., 2016) growth (Rivera, 2017), and longevity (Ireland, 2003; Morris et al., 2011).

However, despite extensive research on intrapreneurship (Hernández-Perlines et al., 2022), its definition remains somewhat ambiguous (Edu Valsania et al., 2016; Turro et al., 2016). This confusion, as noted by Blanka (2019), may be due to the blurred lines between intrapreneurship and similar concepts such as entrepreneurial orientation (Covin & Slevin, 1989; Lumpkin & Dess, 1996; Miller, 1983), corporate entrepreneurship (Burgelman, 1983; Guth & Ginsberg, 1990; Kuratko et al., 1990; Stopford & Baden-Fuller, 1994), or corporate venturing (MacMillan et al., 1986; Sykes, 1986). Blanka (2019) attempts to address this “*puzzle of similar terms and synonyms*” (p. 930) by differentiating intrapreneurship from these related concepts. For example, entrepreneurial orientation refers to a company’s strategic inclination towards entrepreneurial activities (Covin & Wales, 2012; Wales et al., 2015); corporate entrepreneurship signifies a company’s strategic renewal behavior (Kuratko & Audretsch, 2013); corporate venturing denotes the creation of new ventures by a company (Antoncic & Hisrich, 2003). Intrapreneurship, however, focuses on the individual’s role in identifying opportunities and fostering innovation (Camelo-Ordaz et al., 2012). Therefore, intrapreneurship is an individual-level concept, contrasting with the firm-level concepts of its counterparts (Blanka, 2019).

In my dissertation, I am adopting Blanka’s (2019) rigor definition of intrapreneurship as an individual-level concept as it suits the best for my sample selection and the purpose of my thesis. In combination, I am also building on the understanding provided by Vesper (1984), Stevenson and Jarillo (1990), Antoncic and Hisrich (2001), and Gawke et al. (2019) that intrapreneurship is a process in which opportunities are pursued that benefit the firm in multiple ways. This leads to the following working definition of intrapreneurship, relevant for this thesis and the following research:

Intrapreneurship is the process wherein individual employees act entrepreneurially within their organizations by proactively pursuing opportunities leading to new venture creation, increased innovativeness, and self-renewal strategies that result in competitive advantages, improved firm performance, and growth.

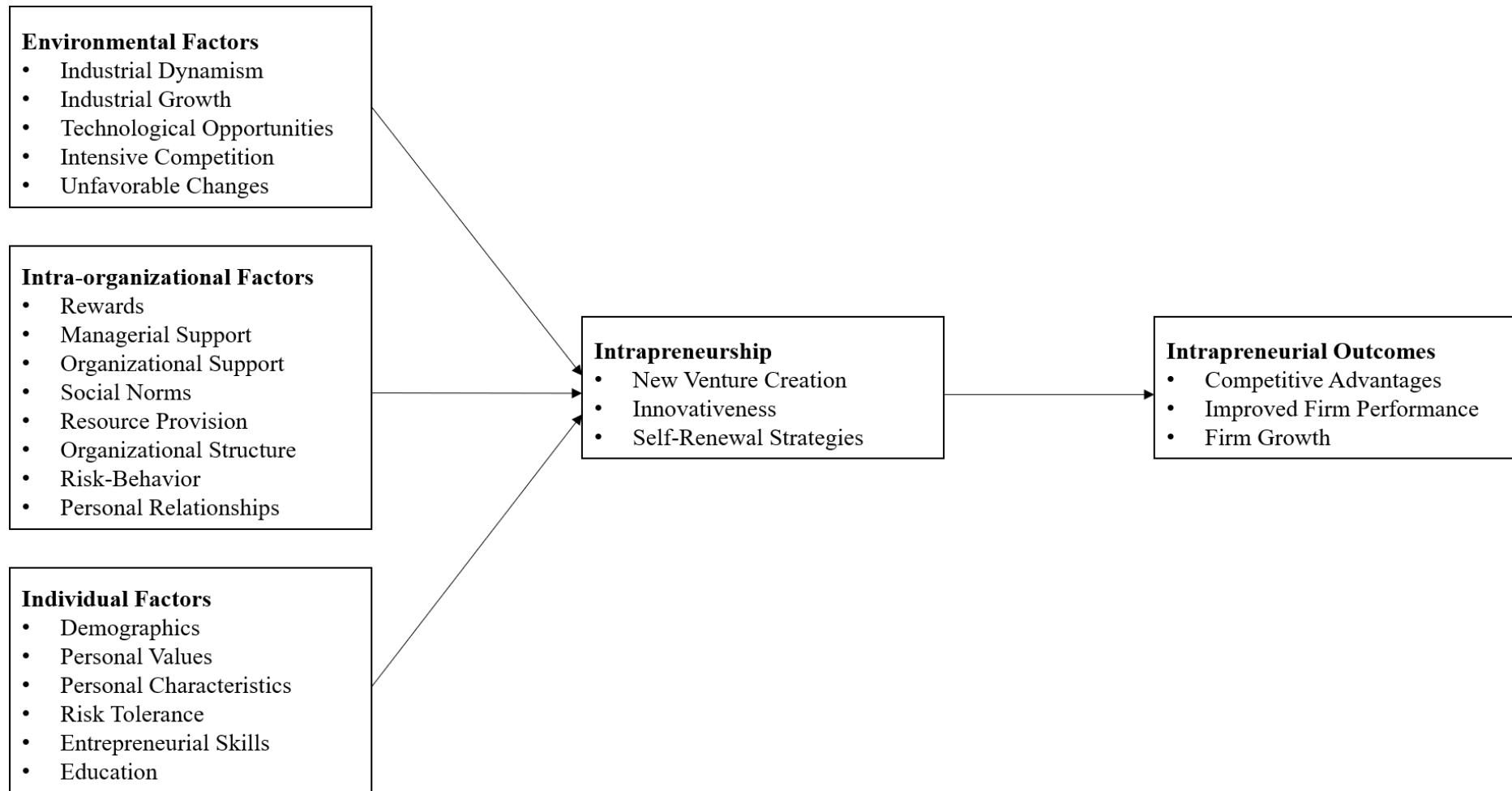
2.1.2 Drivers of Intrapreneurship

Due to the novelty of Blanka's (2019) clear distinction of intrapreneurship as an individual-level concept, much of the previous research is not recognizing this individual aspect, but rather analyzed intrapreneurship at the firm-level. Still, referring to these studies makes sense, to gain insights on certain intra-organizational and environmental factors being considered to be critical for intrapreneurship (Antoncic, 2007; Antoncic & Hisrich, 2001, 2003; Kuratko et al., 1990; Moriano et al., 2014). For example, intra-organizational factors such as rewards (Johanna De Villiers-Scheepers, 2012; Kuratko et al., 1990), managerial and organizational support (Alpkan et al., 2010; Hisrich & Peters, 1986), social norms (Neessen et al., 2019), provision and availability of resources (Von Hippel, 1977), organizational structure (Sykes, 1986), firm-level risk-behavior (MacMillan et al., 1986), or employees' general work satisfaction and their relationships within the business (Auer Antoncic & Antoncic, 2011) were indicated to positively influence intrapreneurship. Similarly, environmental factors such as industrial dynamism and growth (Guth & Ginsberg, 1990; Zahra, 1991), technological opportunities (Antoncic & Hisrich, 2001), or intensive competition, and unfavorable changes (Zahra, 1993) are found out to foster intrapreneurship within firms, as they force them to become innovative. Only a limited number of studies have related different and very heterogeneous individual variables to company-level measurements of intrapreneurship, explain the company factors or control for them. These variables are demographics and personal values (Camelo-Ordaz et al., 2012; Urbano & Turró, 2013), personality characteristics (Sinha & Srivastava, 2013), individual risk tolerance (Martiarena, 2013; Matthews et al., 2009), and specific human capital such as entrepreneurial skills and education (Bjornali & Anne Støren, 2012; Parker, 2011). The antecedents and outcomes of intrapreneurship are displayed in Figure 2.

2.1.3 Measuring Intrapreneurship – Employee Intrapreneurship Scale (EIS)

The discrepancy between firm-level and individual-level investigations is due to a lack of robust instruments to measure individual intrapreneurship (Gawke et al., 2019). To address this, Gawke et al. (2019) introduced the Employee Intrapreneurship Scale (EIS), which evaluates entrepreneurial behaviors of employees, such as championing behavior, innovation, new products and services. This scale distinguishes three conceptualizations of intrapreneurship: the entrepreneurial orientation approach, behavior-based approach, and the intrapreneurial outcomes approach.

Figure 2: Antecedents and Outcomes of Intrapreneurship



Source: Own illustration, referring to Antoncic & Hisrich (2001).

The entrepreneurial orientation approach highlights the individual-level characteristics that enable intrapreneurship, such as risk-taking, innovation, and a growth strategy focus (Augusto Felício et al., 2012; de Jong et al., 2015; Edú Valsania et al., 2016; Moriano et al., 2014; Sun & Wen Pan, 2011). The behavior-based approach emphasizes observable behaviors of individuals that reflect intrapreneurial characteristics, including taking initiative, being proactive, and fostering creativity and innovation (Hornsby et al., 2013; Matthews et al., 2009; Parker, 2011; Tietz & Parker, 2012; Urbano & Turró, 2013). The intrapreneurial outcomes approach focuses on the results of intrapreneurial activities, such as new product and service development, process improvement, and firm-level revenue growth (Gawke et al., 2017, 2018; Mustafa et al., 2016; Woo, 2018; Zampetakis et al., 2009). The EIS, founded on the behavior-based approach, provides superior conceptual clarity by focusing on employees' venture behavior and strategic renewal behavior compared to related behaviors like innovative work behaviors (Janssen, 2000) and championing behaviors (Howell et al., 2005). The behavior-based approach distinguishes itself by enhancing organizations to take risks and pursue opportunities. Therefore, this approach broadens the understanding of factors influencing employee intrapreneurship and includes behaviors beyond formal job requirements or supervisory control, such as exploring and experimenting (Globocnik & Salomo, 2015). Moreover, this approach aligns intrapreneurship with the broader category of strategic proactive work behaviors, allowing integration into established job design theories on employee motivation, wellbeing, and performance (Bakker & Demerouti, 2017; Parker et al., 2010). This alignment facilitates a deeper understanding of employee behaviors in intrapreneurial activities. The validated EIS is displayed in Table 28 (Appendix).

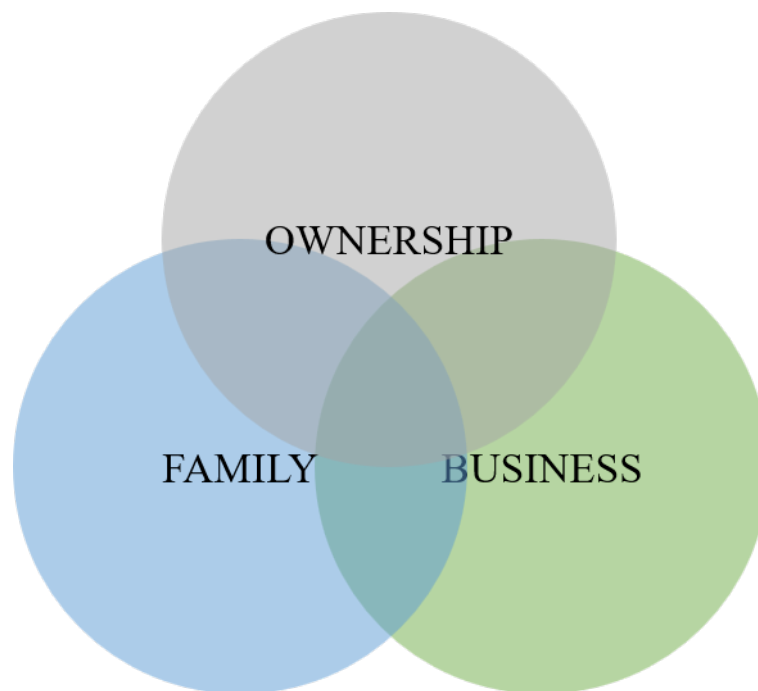
2.2 Family Firms and Family Influence

2.2.1 Definition of Family Firms

As cornerstones of economic history and development, family businesses have been pivotal in shaping the trajectory of commerce and civilization (Bird et al., 2002). From powering the wheels of the industrial revolution to preceding the advent of multinational corporations, these entities have been integral to economic evolution (Hall, 1988). Nowadays, they represent 60% of active businesses in the European Union (Niebler, 2015), and – depending on the kind of definition – minimum 60 percent (Wolff et al., 2022) up to 94% of firms in Germany (Kay et al., 2018; Wolter & Sauer, 2017). Despite their undoubted significance and historical pervasiveness, the scholarly investigation into family businesses only started gaining traction

during the 1990s. This academic awakening was largely fueled by findings suggesting the potential superior performance of family firms in comparison to their non-family counterparts (Bird et al., 2002). Their earlier lack of recognition was arguably due to the perceptual overlap with small and medium-sized enterprises (Bird et al., 2002), as well as the intricate interplay between family, ownership, and management dimensions (Tagiuri & Davis, 1996, 1992) (Figure 3).

Figure 3: The Three-circle Model of the Family Business System



Source: Own illustration, referring to Tagiuri & Davis (1992).

Further complicating this research landscape was the absence of a consistent, universally accepted definition of a family business (Handler, 1989). However, over time, scholars have delineated four distinctive features that mark family firms. Initially, Barry (1975) highlighted the control exerted by the family over the business. This was later supplemented by the family's active role in management, as put forward by Barnes & Hershon (1976). Ward (1987) enriched this dialogue further, proposing the notion of generational transition. Lastly, Litz (1995) contributed the element of the family's influence on the business's culture and behavior. In an early attempt to unify these diverging ideas, Chua et al. (1999) took a major step forward in their seminal work, in which they attempted to define the family business by their behavior. Their holistic definition acknowledged that no single characteristic could define a family firm.

Instead, they posited the essence of a family business as a collective vision steered by a dominant family coalition, aiming for sustainability across generations.

In line with Chua et al.'s (1999) definition, this dissertation focuses on family firms where a strong connection between the family and the business is present. Their definition not only captures the essence of a family firm, but it is also widely accepted in the research community. This acceptance facilitates comparison with other studies, thereby enhancing the significance of the research findings for the broader discourse on family businesses.

2.2.2 Family Influence and its Impact on Intrapreneurship of Non-family Employees

The strong connection between the family and the firm Chua et al. (1999) mentioned, often results in the fact that the entrepreneurial family significantly influences the family business, which is referred to as family influence in the literature. The concept of family influence constitutes a fundamental distinction between family firms and their non-family counterparts (Chrisman et al., 2003, 2012; Chua et al., 2012; Habbershon & Williams, 1999; Lamb & Butler, 2018; Lindow et al., 2010; Pearson et al., 2008), thereby forming a core aspect of modern family business definitions (Chua et al., 1999; Litz, 1995; Zachary, 2011). In 1964, seminal thoughts about family influence emerged in the conceptual work of Donnelley (1964). He was the first to acknowledge that family firms differ from their non-family counterparts by focusing on the family's entrepreneurial role and influence on the firm. Prior to this, family and non-family businesses were studied under the same parameters (Zachary, 2011). Donnelley (1964) highlighted the effects of family involvement in various aspects of the business, including succession planning, management, values, financial control, and independence. This ignited interest in family firms as distinct entities, overlapping in both family and business dimensions (Rosenblatt et al., 1985). Scholars including Cramton (1993), began to explore the unique characteristics of family firms driven by the entrepreneurial family's influence. Since then, research interest in family influence increased, resulting in manifold publications (Chrisman et al., 2005; Chua et al., 1999; Ensley & Pearson, 2005; Kellermanns et al., 2012; Minichilli et al., 2010; Zellweger et al., 2010). Still, subsequent studies (Kellermanns et al., 2012; Lindow et al., 2010; Litz, 1995) continued to emphasize features like ownership structure (Barry, 1975; Lansberg et al., 1988), involvement in the management (Barnes & Hershon, 1976, 1994; Burch, 1972) and transgenerational succession of the family firm (Ward, 1987), as fundamental aspects of the family influence construct, originally noted by Donnelley.

The significance of family influence in defining family businesses led to the development of reliable measures of family influence, such as the F-PEC scale (Astrachan et al., 2002) and the family influence familiness scale (FIFS) (Frank et al., 2017). Both scales measure family influence using items such as ownership, family involvement in the management, family control over the firm, and the intention to transfer the business to the next generation of family members. The F-PEC scale (Astrachan et al., 2002), developed to resolve definitional challenges, measures family influence across three areas: power, experience, and culture. Power pertains to family share ownership, governance, and management structures. Experience looks at business succession and the number of family members contributing to the business. Culture focuses on the intersection of family and business values, and the family's commitment to the business (Astrachan et al., 2002; Klein et al., 2005; Rau et al., 2018). A decade and a half after the creation of the F-PEC scale, Frank et al. (2017) introduced the FIFS. This scale, influenced by new system theory (Luhmann, 1995; Luhmann et al., 2013), evaluates family involvement through decision-making processes indicative of familiness (Habbershon et al., 2003; Habbershon & Williams, 1999). It features six subscales, which are: (1) Ownership, management, and control, reflecting family members' rights in these aspects; (2) Active family members' competency, compared to non-family workers; (3) Information sharing among involved family members; (4) Long-term focus, including business succession within the family; (5) Relationships between the family and non-family staff; (6) Self-identification as a family enterprise (Frank et al., 2017).

However, even though both scales are robust, valid, and well-established within the family business literature, they do face the limitation of measuring family influence only from the entrepreneurial family or owner-manager's perspective, ignoring external stakeholder perspectives. This could potentially lead to the collection of biased information, similar to the concept of organizational image (Tom, 1971), where organizational elites convey a certain image to appear socially desirable (Gioia et al., 2000; Whetten et al., 1992). Therefore, the question arises whether a business always qualifies as a family business based on specific criteria, or if it is designated as such only when perceived by a significant group (Gergen, 1978). This question brings up broader debates in social sciences about social constructivism and the nature of reality and how we understand it (Berger & Luckmann, 1967; Gergen, 1978; Kukla, 2000; Morgan & Smircich, 1980; Steffy & Grimes, 1986). Rather than delving into these philosophical discussions of ontology and epistemology, this dissertation suggests the development of a new scale, the Perceived Family Influence Scale, which measures family

influence from an angle different from the entrepreneurial family, specifically from the perspective of non-family employees (Chapter 4). This new approach address the issue of one-sided and potentially biased data about family influence, providing a more comprehensive understanding of family firms.

The PFIS focuses particularly on the perception of non-family employees as they build the most represented non-family stakeholder group within many family firms (Pimentel et al., 2020), and thus frequently experiencing family influence. Furthermore, they are essential to a family firm's success by fostering innovation (Ahluwalia et al., 2017; Eddleston et al., 2012; Mahto et al., 2010; Tabor et al., 2018) and enhancing internal processes (Damanpour & Gopalakrishnan, 2001; Hitt et al., 2000; Zhang & Bartol, 2010). Consequently, non-family employees are fundamental to many family firms (Yazici et al., 2022), underlining the need to understand their perception of family influence and its impact on their work attitudes.

In this context, this dissertation also qualitatively explores how family influence affect the intrapreneurial motivation of non-family employees, leading to innovation (Chapter 3). Previous studies have revealed varying results regarding the effect of family influence on the innovation behavior of family firms (De Massis, Kotlar, et al., 2013; Minola et al., 2021). While some studies argue that due to the enterprising family's impact, family firms exhibit less innovation because of their risk-aversion (Classen et al., 2012; Nieto et al., 2015; Patel & Chrisman, 2014), rejection of disruptive innovations (Zellweger, Nason, et al., 2012), and general lower investment in innovation (Chrisman & Patel, 2012; Classen et al., 2014; De Massis, Frattini, et al., 2013), Habbershon and Williams (1999) contend that the influence of the entrepreneurial family in the firm's management leads to unique resources that enhance more new products and services compared to non-family firms (Ayyagari et al., 2011; Gudmundson et al., 2003), and let family firms outperform non-family ones in terms of process innovations (Classen et al., 2014), even though they invest less (Duran et al., 2016).

Other researchers argue that a special relationship between members of the enterprising family and non-family employees might contribute to their innovativeness (Bammens et al., 2013, 2015). Committed non-family employees can indeed be a crucial driver of innovation that generates competitive advantage and business success through entrepreneurial activities (Ahluwalia et al., 2017; Eddleston et al., 2012; Mahto et al., 2010). However, there is an ongoing debate in the family business literature regarding the relationship between the enterprising family and non-family employees. Some scholars propose that non-family

employees face injustice, nepotism, ingroup-outgroup perceptions, or organizational identification issues due to family influence (Barnett & Kellermanns, 2006; Carmon et al., 2010; Marler & Stanley, 2018; Padgett & Morris, 2005; Sieger et al., 2011). Conversely, some contend that family influence solidifies the connection between the entrepreneurial family and non-family staff (Berrone et al. 2012). This is achieved by emphasizing employee welfare and dedicated caretaking (Bammens et al., 2010; Berrone et al., 2010; Cennamo et al., 2012; König et al., 2013). As a result, employees experience heightened job security, trust, adaptable work conditions, and an overall positive work environment (Block, 2010; Gomez-Mejia et al., 2011; Miller et al., 2009). Such conditions bolster their association with the company (Dutton et al., 1994; Mael & Ashforth, 1992; Terry et al., 2000). This strong sense of association subsequently results in lower attrition rates (Memili & Welsh, 2012; Vardaman et al., 2018), elevated loyalty and dedication (Carmon et al., 2010; Matherne et al., 2017), and a boost in proactive organizational engagement (Medina-Craven et al., 2021). As suggested by Bammens et al. (2013), the maintenance of socioemotional wealth (SEW) (Gomez-Mejia et al., 2011), which directs family firms' decision-making and policies (Berrone, Cruz, & Gomez-Mejia, 2012), may account for this distinct environment in family firms. They further suggest that certain aspects of SEW affect the innovation behavior of non-family employees. When the family deeply resonates with the enterprise (Berrone et al., 2012; Micelotta & Raynard, 2011), it cultivates an organizational ethos characterized by unity, support, and compassion (Stavrou et al., 2007). The emphasis on multi-generational thinking (Berrone et al., 2010; Zellweger, Kellermanns, Chrisman, et al., 2012; Zellweger & Astrachan, 2008) underscores the need for a devoted and steadfast team (Bammens et al., 2010, 2013; Miller, Le Breton-Miller, & Scholnick, 2007). Furthermore, robust interpersonal relationships (Berrone, Cruz, & Gomez-Mejia, 2012; Cennamo et al., 2012; Cruz et al., 2012; Miller et al., 2009) serve as the bedrock for the innovative spirit of non-family staff, propelling the firm towards a competitive edge and overall success (Ahluwalia et al., 2017; Eddleston et al., 2012; Mahto et al., 2010). However, why non-family employees decide to become intrapreneurial active and what precise role the influence of the enterprising family plays in this context, remains somewhat unclear. In chapter 3 these dynamics will be investigated and entangled.

2.3 Small and Medium-sized Enterprises

Not only do family firms, but also small and medium-sized enterprises, play a crucial role in economies and societies by creating jobs and wealth (Anastasia, 2015). In Europe, a business

is defined as an SME if it employs 249 people or fewer, maintains an annual turnover not exceeding 50 million Euros, or possesses total assets capped at 43 million Euros. Furthermore, the European Commission subdivides SMEs into three categories: micro, small, and medium-sized enterprises (European Commission, 2003). A detailed classification of SMEs according to the European Commission is graphically represented in Table 2. In contrast, in Germany, a business is considered an SME if it employs fewer than 500 people and its annual turnover does not exceed 50 million Euros. This difference in defining an SME can be attributed to the fact that in Germany, firms are typically larger and generate more turnover than the European average. As illustrated in Table 3, the Institut für Mittelstandsforschung Bonn (IfM Bonn) also categorizes SMEs into three groups: micro, small, and medium-sized firms (Institut für Mittelstandsforschung Bonn, 2017). This dissertation will utilize the definition put forth by the European Commission.

Table 2: Definition of SMEs by the European Commission

Firm size	Number of employees	Turnover €/year	Assets Achieves €/year
Micro	≤ 9	≤ 2 million	≤ 2 million
Small	≤ 49	≤ 10 million	≤ 10 million
Medium	≤ 249	≤ 50 million	≤ 43 million

Source: Own illustration, referring to European Commission (2003).

Table 3: Definition of SMEs by the IfM Bonn

Firm size	Number of employees	And	Turnover €/year
Smallest	≤ 9		≤ 2 million
Small	≤ 49		≤ 10 million
Medium	≤ 499		≤ 50 million
SME (total)	< 500		≤ 50 million

Source: Own illustration, referring to IfM Bonn (2017).

Beyond the quantitative delineation, SMEs also fundamentally differ from their larger counterparts through qualitative attributes (Curran & Blackburn, 2001; Josefy et al., 2015; Welsh et al., 1982). Many SMEs are steered by the original founders, thus embedding the leaders' personality, skills, and knowledge deeply into the company's operations (Bussiek, 1996; Supyuenyong et al., 2009). Goeke (2008) posits that this fact causes an integrated

approach to property, conduct, accountability, risk, and engagement towards each business decision, often accompanied by a long-term orientation (Pullen et al., 2009). Roppel (2014) suggests that SME owners often forge personal relationships with their employees, facilitating the diffusion of corporate values and mission statements. By acting as role models, these leaders influence the culture unconsciously through their everyday actions. This culture is considered to be special and is characterized by robust relationships and direct communication channels, which impacts the thoughts, behaviors, and innovation of its workforce as aspects like ethics, honesty, tolerance for failure, and direct communication were notably stronger (Hauser et al., 2008). SME leaders highly value their workforce, often treating them as extended family and vital company assets. Employee retention, thus, becomes a top priority for SMEs (Pfohl & Arnold 2006).

Despite these positive aspects of SMEs, which are focused on the employees' well-being and therefore might encourage intrapreneurship (Auer Antoncic & Antoncic, 2011), there are also inherent weaknesses, that could hinder employees to become intrapreneurial active. While SMEs' low hierarchies often result in direct communication, enhanced flexibility, effortless information exchange, reduced bureaucracy, and swift decision-making processes, these very strengths can sometimes become their Achilles' heel. The most prominent weaknesses often stem from a lack of resources and less systematically planned strategies. To show both sides of the same coin, Table 4 has been constructed to offer a transparent and lucid comparison between SMEs' characteristics that are considered to foster and inhibit intrapreneurship.

Table 4: Intrapreneurship Promoting and Inhibiting Characteristics of SMEs

Promoting characteristics	Inhibiting characteristics
Low hierarchies, less bureaucracy	Financial and investment shortages
Leadership by example	Fewer management skills, neglecting strategy
Flexibility, rapid decision-making	Improvisation and intuition
Direct and open communication	Lack of systematic planning
Uncomplicated and informal information transfer	Failure sensible through financial disadvantages
Close customers' and employees' relations	Confined capacities for training and experimentation
Personal and informal working relationships	Often patriarchal leadership style
Culture of trust and learning, less supervisory	Lack of professional personal

Source: Own illustration, referring to Carrier (1994), Antony et al. (2005), and Immerschitt & Stumpf (2014).

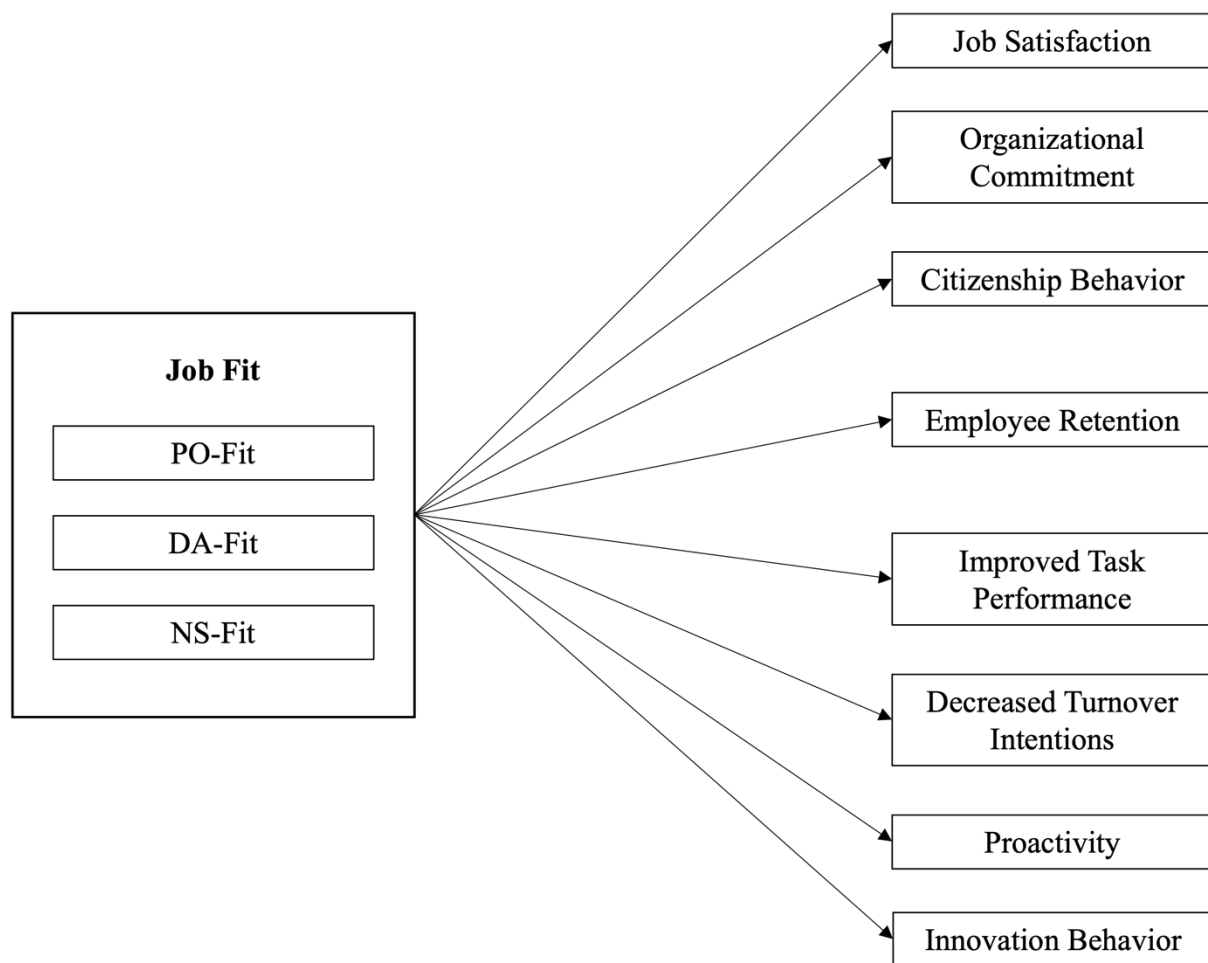
2.4 Job Fit

The preceding subsections have dealt with the peculiarities of family businesses and SMEs and linked them to intrapreneurship. In this context, examining not only the peculiarities of the general business form but also how the explicit design of a job aligns with an employee's personality and affects intrapreneurship is very interesting. This compatibility between an individual's personality and their work environment is better known as job fit, and originates from diverse research fields like organizational psychology and human resource management (Chatman, 1989; Kristof, 1996; Kristof-Brown et al., 2005). Initially, Holland (1959) introduced this concept, with Hackman and Oldham (1976) later linking it to employee motivation and satisfaction. Further, Schein (1983) underscored the need for employee values to align with organizational culture for optimal job fit. Kristof (1996) extended this concept by highlighting the necessity to synchronize personal competencies and characteristics with job requirements to enhance job satisfaction and performance. To accurately measure job fit, Resick et al. (2007) developed the job fit scale, drawing on the works of Kristof (1996) and Saks and Ashforth et al. (1997). This scale includes three distinct facets: Person-organization fit (PO-Fit), demands-abilities fit (DA-Fit), and needs-supplies fit (NS-Fit). PO-Fit gauges the congruence between an individual's characteristics, such as values and personality, and the organizational ethos, goals, and values. DA-Fit evaluates the degree to which an individual's skills and expertise align with specific job demands. Meanwhile, NS-Fit examines whether the position fulfills an individual's anticipated requirements, ranging from compensation and perks to autonomy, work-life harmony, and potential for career progression (Edwards & Cable, 2009; Kristof, 1996; Resick et al., 2007; Saks & Ashforth, 1997; Vogel et al., 2016).

Past research illustrates that job fit positively impacts job satisfaction, organizational commitment and citizenship behavior, employee retention, and task performance (Das, 2022; Hoffman & Woehr, 2006; Kristof-Brown et al., 2005; Peng & Mao, 2015; Verquer et al., 2003). Subramanian et al. (2022) identified a shift in the recent job fit literature from an emphasis on organizational entry to employee fit during the employment. In this context, they noted engagement, manifested as decreased turnover intentions, proactivity, organizational citizenship behavior, and improved job performance (Hicklenton et al., 2019; Kao et al., 2022; Lv & Xu, 2018; Memon et al., 2018) as a trending topic in the job fit literature. A second area gaining increased attention is job crafting, wherein employees actively tailor their jobs to better align with their values, interests, and passions (Kooij et al., 2017; Rodrigues et al., 2020; Tims

et al., 2012; Vogel et al., 2016; Wrzesniewski & Dutton, 2001). The third area highlighted by Subramanian et al. (2022) is the ethical considerations within the work environment (Coldwell et al., 2008; Dimitriou & Schwepker, 2019; Kerse, 2021; Zhao et al., 2021). Moreover, Afsar et al. (2015) suggest that job fit encourages innovative behavior among employees, even when such proactive behaviors are not explicitly part of job obligations. Huang et al. (2019) support their findings, by showing that job fit increases employee’s involvement and career commitment, which result in innovative behavior. The impact of job fit on the behavior of employees is displayed in Figure 4.

Figure 4: The Influence of Job Fit on Employees’ Behavior



Source: Own Illustration.

Given the understanding that high levels of job fit correlate with job satisfaction, organizational commitment and citizenship behavior, employee retention, task performance, and innovative work behavior, it is somewhat surprising that the connection between job fit, and intrapreneurship has been largely neglected in prior research. The study presented in chapter 5

aims to address this gap by exploring the relationship between job fit and employees' intrapreneurial behavior, among other aspects.

2.5 Individual Entrepreneurial Orientation

As the purpose of this dissertation is to delve deeper into the dynamics of intrapreneurship within family firms and SMEs, it is not only important to consider the influence of organizational factors on intrapreneurship, but also directing our attention to the individual, the potential intrapreneur. A pivotal inquiry in this domain involves understanding how an employee's overall attitude towards entrepreneurship influences their intrapreneurial actions. Such an attitude is foundational to the concept of individual entrepreneurial orientation (Basso et al., 2009; Kollmann et al., 2007), which comprehensively measures an individual's propensity towards entrepreneurial endeavors (Santos et al., 2020). This concept accounts for personal attitudes, values, and behaviors that shape their decision-making processes and their ability to adapt to change (Bolton & Lane, 2012; Taatila & Down, 2012). IEO suggests that individuals can seize and develop business opportunities when their entrepreneurial attitudes are acknowledged (Kollmann et al., 2007). Such an approach is recommended to be promoted at every stratum of an organization (Gupta et al., 2016; Taatila & Down, 2012).

IEO finds its origins in Miller's (1983), Covin and Slevin's (1989), and Lumpkin and Dess's (1996) concept of entrepreneurial orientation (EO), which is a strategic process that enables entrepreneurial decisions at the firm-level. EO always incorporates the three basic dimensions of risk-taking, proactivity, and innovativeness, and can be expanded by the dimensions of autonomy and competitive aggressiveness (Lumpkin & Dess, 1996). Each dimension of the EO-construct can be studied separately or jointly (Rauch et al., 2009). When Bolton and Lane (2012) aimed for a consistent measure of EO at the individual-level, they evaluated these dimensions separately, recognizing the need for a specific IEO measure, despite the previous analysis of traits, attitudes, and behaviors in assessing entrepreneurial characteristics. Consequently, they developed the individual entrepreneurial orientation scale, using individual entrepreneurial intention as a validating proxy, and endorsed 10 components, including risk-taking, innovativeness, and proactiveness (Bolton & Lane, 2012). This approval demonstrated that their metric was a trustworthy latent construct for gauging individual entrepreneurial intention. The IEO scale of Bolton and Lane (2012) was further broadened by Santos et al. (2020), who included perseverance and passion into their scale, as both dimensions are closely connected with entrepreneurial intention or activity (Gerschewski et al., 2016).

However although all IEO dimensions of Santos et al. (2020) such as risk taking (Kirby, 2006; Martiarena, 2013; Matthews et al., 2009; Tietz & Parker, 2012), proactiveness through self-efficacy (Douglas & Fitzsimmons, 2013; Globocnik & Salomo, 2015; Johnson & Wu, 2012), and opportunity recognition (Martiarena, 2013; Solymossy & Gross, 2015; Urbano & Turró, 2013), innovativeness through creativity and exploration (Amo, 2010; Rigtering & Weitzel, 2013; Sarooghi et al., 2015; Sinha & Srivastava, 2013), perseverance as the ability to maintain goal-oriented action despite obstacles (Baum & Locke, 2004), and passion though overcoming challenges and recognizing opportunities (Baron & Ward, 2004; Ho & Pollack, 2014; Iyortsuun et al., 2019; Smilor, 1997; Smith et al., 2001), are suggested to drive intrapreneurship, no empirical study really verified the relationship between IEO and intrapreneurship. Thus, in chapter 5 this specific relationship is examined.

As the literature review demonstrates the understanding of the dynamics of intrapreneurship at the individual level are still fragmented, especially in the context of family firms and SMEs. To fill this gap this dissertation aims to resolve this puzzle by examining how intrapreneurship takes place in the very specific contexts of family firms and SMEs. In the context of family firms, this dissertation places a strong focus on family influence and its impact on intrapreneurship. In SMEs, it investigates specific job designs, as job fit is linked to job satisfaction, which in turn positively affects intrapreneurship. In addition to the organizational factor of job fit, this dissertation also explores the concept of Individual Entrepreneurial Orientation (IEO), which represents an individual's inclination towards entrepreneurship. This concept is particularly relevant for investigating intrapreneurship at the individual level, as it demonstrates how individual tendencies translate into employees' actual behaviors and actions.

The comprehensive review of literature on intrapreneurship, family firms, family influence, SMEs, job fit, and individual entrepreneurial orientation has clarified the theoretical associations among these topics. This clarity allows to propose the following hypotheses:

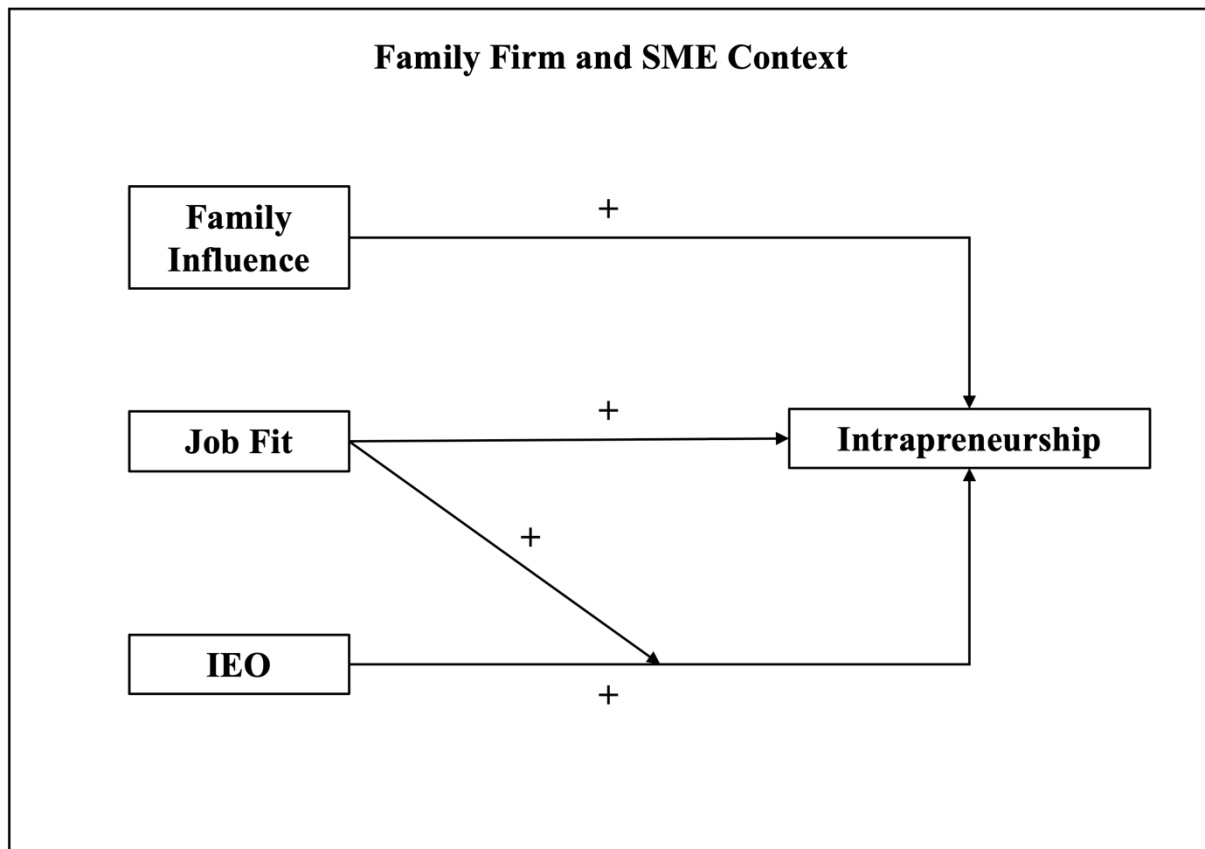
H1: Family influence positively affects intrapreneurship.

H2: Job fit (directly and via moderation effects) positively affects intrapreneurship.

H3: Individual entrepreneurial orientation positively affects intrapreneurship.

The hypotheses are depicted in Figure 5, which delineate the theoretical interrelationships among family influence, job fit, IEO, and intrapreneurship.

Figure 5: Theoretical Relationships Between Family Influence, Job Fit, Individual Entrepreneurial Orientation, and Intrapreneurship



Source: Own illustration.

3 Why are Non-family Employees Intrapreneurially Active in Family firms? A Multiple Case Study

Philipp Köhn, Philipp J. Ruf, & Petra Moog

ABSTRACT

This study sheds light on the intrapreneurial motivation of non-family employees in family firms. Although family involvement is known to enhance workforce motivation to contribute innovative ideas toward the firm's improvement, what motivates non-family employees in family firms and the role the enterprising family plays therein remain underexplored. Therefore, we conduct a multiple case study using a dyadic sample of interviews with owner-managers and non-family employees in nine German family firms. The cross-case analysis shows that in firms with strong enterprising family influence, the identification of non-family employees is heightened, intrinsically motivating them to become intrapreneurially active. Our findings also reveal that in family firms with reduced enterprising family influence, this intrinsic motivation decreases. Furthermore, we observe the establishment of certain business mechanisms in these firms aimed at fostering the extrinsic motivation of non-family employees.

Keywords: *Intrapreneurial motivation, Non-family employees, Family influence, Family firm, Identification, Intrapreneurship*

3.1 Introduction

Several studies emphasize the innovation potential of employees as an important source of innovation for firms (Ahluwalia et al., 2017; Eddleston et al., 2012). Entrepreneurship scholars recognized this innovative potential in the mid-1980s and introduced the concept of intrapreneurship (Pinchot, 1985), defined as “entrepreneurship within existing organizations” (Antoncic & Hisrich, 2001, p. 498). Since then, research interest in the intrapreneurship topic has steadily grown (Neessen, et al., 2019), emphasizing that in addition to certain extra-organizational factors, such as dynamism, industry growth, demand for new products, and competitive rivalry (Antoncic & Hisrich, 2001; Pinchot, 1985), intra-organizational factors, including strong and personal relationships within the business, values, and general work satisfaction (Antoncic & Hisrich, 2001; Auer Antoncic & Antoncic, 2011; Kuratko et al., 1990), foster the extrinsic and intrinsic motivation of employees to contribute to the firm’s entrepreneurial activities. In particular, considering intra-organizational factors, we assume that in family firms, the intrapreneurial motivation of non-family employees is likely to be high (Antoncic, 2007; Kuratko et al., 1990; Moriano et al., 2014), as the family dimension, encompassing the enterprising family’s values, culture, and goals, are intertwined with the business dimension, constituting the pillars of family firms (Anderson & Reeb, 2003; Dyer, 2003; Tagiuri & Davis, 1992). This leads to unique and strong relationships between the family business and its non-family employees (Berrone, Cruz, & Gomez-Mejia, 2012).

However, while early attempts to investigate this phenomenon show that the involvement of the enterprising family motivates the workforce to contribute to improving the firm’s current situation with innovative ideas (Bammens et al., 2015; Dibrell & Moeller, 2011; Eddleston et al., 2010), much less is known about how the enterprising family influences the intrapreneurial motivation of non-family employees. In their conceptual paper, Memili & Welsh (2012) propose that family influence fosters the identification of non-family employees with the firm, in turn reducing non-family employees’ turnover intention (Memili & Welsh, 2012). In this context, Vallejo (2009) indicates that this type of identification and the inherent loyalty of non-family employees motivates them to show strong commitment, resulting in the family firm’s increased profitability. This positive organizational attachment might stem from the fact that relationships in family firms are unique and characterized by care, trust, support, and concern for employee wellbeing (Bammens et al., 2010; Miller et al., 2009), thereby creating a satisfying work atmosphere (Block, 2010; Gomez-Mejia et al., 2011). However, adopting social identity theory (Tajfel et al., 1971; Turner et al., 1979), other studies argue that the

identification of non-family employees with family firms is lower than that of family employees (Deephouse & Jaskiewicz, 2013). Another reason for this assumption might derive from the fact that non-family employees are often confronted with injustice (Sieger et al., 2011) by way of nepotism (Padgett & Morris, 2005) or ingroup-outgroup perceptions (Barnett & Kellermanns, 2006). Given these contradicting findings, it is surprising that no research to date has empirically investigated the link between family influence and non-family employees' intrapreneurial motivation. Therefore, based on the assumption that identification might play an important role in this context, our study aims to fill this gap by answering the following research questions:

- 1. Why are non-family employees intrapreneurially active in family firms?*
- 2. What role does the enterprising family play in this context?*

To answer our questions, we adopt a multiple case study design (Eisenhardt, 1989, 2021) conducting 18 in-depth interviews with the owner-managers and non-family employees of nine German family firms as our main data source. In addition, as secondary data sources, we examine archival material, such as webpages, media coverage, and written documents to reinforce our data.

Our findings point to why non-family employees become intrapreneurially active and the role the enterprising family plays in this context. We find strong support that the family firm's enterprising family (family dimension) exerts high influence on non-family employees' identification and sense of belonging to the family and the firm, intrinsically motivating them to act intrapreneurially. At the same time, lower family influence leads to establishing mechanisms, such as managerial support, reward systems, or structured innovation management, to extrinsically motivate non-family employees' intrapreneurial activities. As such, our findings contribute to the family firm innovation and entrepreneurship enigma, enhancing knowledge of intrapreneurship as a decisive source of family firm innovativeness. Our study also helps identify the actions, measures, and mechanisms that might strengthen the intrapreneurial posture of non-family employees and thereby family firm innovation potential. Furthermore, our study suggest non-family firms could adopt certain family firm behaviors to improve their relationship with employees and thereby boost their intrapreneurial potential.

3.2 Theoretical Background

The innovation behavior of family firms is variously debated in the family business literature (De Massis, Kotlar, et al., 2013; Minola et al., 2021). Some studies claim that family firms are

less innovative, arguing that they are risk-averse (Classen et al., 2012; Nieto et al., 2015; Patel & Chrisman, 2014), reject disruptive innovations (Zellweger, Nason, et al., 2012), and invest less in innovation in general (Chrisman & Patel, 2012; Classen et al., 2014; De Massis, Frattini, et al., 2013). Other studies emphasize that family firms introduce more new products and services compared to non-family firms (Ayyagari et al., 2011; Gudmundson et al., 2003), and outperform them in terms of process innovations (Classen et al., 2014), even though they invest less (Duran et al., 2016). Habbershon and Williams (1999) argue that this innovativeness stems from family involvement in the firm's management, leading to unique resources that are only present in family firms. Other researchers postulate that their special relationship with non-family employees might constitute one of these resources (Bammens et al., 2013, 2015), as committed non-family employees can be a crucial driver of innovation that generates competitive advantage and business success through entrepreneurial activities (Ahluwalia et al., 2017; Eddleston et al., 2012; Mahto et al., 2010). The innovation and entrepreneurial potential of employees is an essential element of intrapreneurship (Pinchot, 1985), defined as "entrepreneurship within existing organizations" (Antoncic & Hisrich, 2001, p. 498). This process requires skillful and motivated employees pursuing opportunities (Baruah & Ward, 2015; Stevenson & Jarillo, 1990) that result in innovations (Ping et al., 2010; Vesper, 1984) and value for the firm (Parker, 2011). The value created can reduce organizational and environmental complexities (Baruah & Ward, 2015), lead to firm growth (Rivera, 2017), and improve firm performance (Augusto Felício et al., 2012). The literature often links intrapreneurship with corporate entrepreneurship or entrepreneurial orientation (Zahra, 1991). Although these concepts share similarities, they entail observable differences (Amo, 2010). Whereas corporate entrepreneurship includes corporate venturing and strategic entrepreneurship (Covin & Miles, 1999), entrepreneurial orientation refers to an entrepreneurial mindset at the organizational level (Covin & Wales, 2012). On the other hand, intrapreneurship mainly refers to employees' individual entrepreneurial activities within the firm (Amo & Kolvereid, 2005; Blanka, 2019; Rigtering & Weitzel, 2013; Sinha & Srivastava, 2013). As our study aims to determine what motivates non-family employees to actively contribute to the firm's innovation output by being entrepreneurial active, we focus on intrapreneurship as our theoretical concept.

The intrapreneurship literature indicates several determinants that foster intrapreneurship (Antoncic & Hisrich, 2001). In addition to extra-organizational factors, such as dynamism, technological opportunities, industry growth, demand for new products, and competitive

rivalry, these scholars also stress intra-organizational factors, including short communication paths, managerial support, allocation of free time, rewards, resource provision, tolerance to risk and failures, and corporate values (Alpkan et al., 2010; Antoncic & Hisrich, 2001; Kuratko et al., 1990). Furthermore, the intra-organizational factors that promote intrapreneurship include employees' general work satisfaction and their relationships within the business (Auer Antoncic & Antoncic, 2011), since satisfied employees are more likely to use their entrepreneurial potential, ultimately leading to increased innovation outcomes (Auer Antoncic & Antoncic, 2011; Baer, 2012; Bammens et al., 2013, 2015; Zhang & Bartol, 2010). These conditions are deemed the pillars of intrapreneurship (Antoncic, 2007; Kuratko et al., 1990; Moriano et al., 2014), as they underpin the value of employees (Arregle et al., 2007) and motivate them to engage entrepreneurially to improve the firm's current situation (Bammens et al., 2015).

Regarding the aforementioned intra-organizational factors, family firms seem to be a fertile environment for non-family employees' intrapreneurship, since the family dimension significantly influences the business dimension, and vice versa (Tagiuri & Davis, 1992). Although studies suggest that non-family employees might face injustice (Sieger et al., 2011), nepotism (Padgett & Morris, 2005), ingroup-outgroup perceptions (Barnett & Kellermanns, 2006; Marler & Stanley, 2018), organizational identification and commitment issues (Carmon et al., 2010), family firms maintain unique and strong social bonds and relationships with non-family employees (Berrone, Cruz, & Gomez-Mejia, 2012). These relationships are typically characterized by promoting employee wellbeing and intense caretaking (Bammens et al., 2010; Cennamo et al., 2012; König et al., 2013), reflected in job security, trust, flexible working conditions, and the pursuit of a generally satisfying work atmosphere (Block, 2010; Gomez-Mejia et al., 2011; Miller et al., 2009).

Bammens et al. (2013, 2015) suggest that this might be due to the family's involvement, as it encourages strong and personal relationships between the enterprising family and non-family employees, hence affecting the identification of non-family employees with the firm. This organizational identification (Mael & Ashforth, 1992) is defined as the extent to which organizational members (employees) align their beliefs and behaviors with those of the organization they work for (Dutton et al., 1994; Terry et al., 2000).

It is assumed that the higher organizational identification of non-family employees reduces their turnover intentions (Memili & Welsh, 2012; Vardaman et al., 2018), increases loyalty and

commitment (Carmon et al., 2010; Matherne et al., 2017), and organizational citizenship behavior (Matherne et al., 2017; Medina-Craven et al., 2021), ultimately motivating non-family employees to work on innovations that lead to competitive advantage and business success (Ahluwalia et al., 2017; Eddleston et al., 2012; Mahto et al., 2010). Oftentimes, due to their social embeddedness in the business context and their pronounced work-related knowledge, they incrementally improve internal work processes and methods in their work routines (Damanpour & Gopalakrishnan, 2001; Hitt et al., 2000; Zhang & Bartol, 2010). As such, non-family employees can thrive (Milton, 2008; Stewart & Hitt, 2012), with their ideas taken seriously and appreciated, in turn enabling a work culture that encourages developing and sharing innovative proposals (Somech & Drach-Zahavy, 2013). Bammens et al. (2015) quantitatively investigate the relationship between family business employment, perceived organizational support, obligation, and motivation on employees' innovative work involvement. Their results support the notion that family involvement is positively correlated with innovative work involvement, and partially mediated by perceived organizational support and work motivation. According to Bammens et al. (2013), the preservation of socioemotional wealth (SEW), which guides the decision-making and policies of family firms (Berrone, Cruz, & Gomez-Mejia, 2012), might explain this unique atmosphere in family firms. The authors further propose that certain dimensions of SEW influence the innovation behavior of non-family employees. Identification of the family with the business (Berrone, Cruz, & Gomez-Mejia, 2012; Micelotta & Raynard, 2011) nurtures the values of care, support, and solidarity within the firm (Stavrou et al., 2007). Furthermore, the transgenerational mindset (Berrone et al., 2010; Zellweger, Kellermanns, Chrisman, et al., 2012; Zellweger & Astrachan, 2008) requires a loyal and engaged workforce (Bammens et al., 2010, 2013; Miller, Le Breton-Miller, & Scholnick, 2007), while binding social ties (Berrone, Cruz, & Gomez-Mejia, 2012; Cennamo et al., 2012; Cruz et al., 2012; Miller et al., 2009) build the breeding ground for non-family employees' innovative posture.

According to the family business and intrapreneurship literature, the family firm environment provides the antecedents for intrapreneurial activities (Antoncic, 2007; Kuratko et al., 1990; Moriano et al., 2014), since family influence promotes strong and personal relationships within the organization (Bammens et al., 2010; Berrone, Cruz, & Gomez-Mejia, 2012; Cennamo et al., 2012; König et al., 2013), in turn promoting employees' innovative work behavior (Bammens et al., 2013, 2015). While some studies empirically show that family influence drives non-family employees' innovative behavior, the underlying link between family

influence and non-family employees' intrapreneurial motivation has yet to be proven. Early assumptions suggest that employee identification might play an important role in this context. Our study intends to fill this gap by investigating the enterprising family's influence on non-family employees and why this influence might lead to their higher intrapreneurial motivation.

3.3 Methodology

3.3.1 Research Design and Setting

The focal aim of our study is to investigate the motivation of non-family employees to become intrapreneurially active and the role the enterprising family plays therein. Although studies have identified and empirically tested multiple factors, the active engagement of non-family employees in intrapreneurial activities in family firms has yet to be fully explored. To connect the dots and obtain a more holistic view, we adopt a multiple case study approach (Eisenhardt, 1989), which allows an in-depth investigation (Kirtley & O'Mahony, 2020) and gaining a general understanding of a certain phenomenon (Yin, 2018). Furthermore, multiple case research enables understanding the dynamics at play in certain settings (Eisenhardt, 1989), identifying specific organizational dynamics (De Massis & Kotlar, 2014), and examining complex social processes (Graebner, 2009). As the intrapreneurial process in family firms is intrinsically linked to the relationship between the enterprising family and non-family employees, multiple organizational and social dimensions overlap. An in-depth analysis of each case paves the way for a cross-case comparison and determining whether a certain phenomenon is unique to one case or is replicated across several cases (Eisenhardt & Graebner, 2007). Finally, the identification of similarities or distinctions between each case enhances theory building (Davis & Eisenhardt, 2011; De Massis & Kotlar, 2014; Eisenhardt, 1989, 2021).

We selected German family firms as our setting for several reasons. First, in Germany, family firms are often labeled as the backbone of the economy, accounting for 90% of the corporate landscape and employing 58% of the entire workforce (Langenscheidt & May, 2020), thus constituting the heart of the so-called German "Mittelstand". Second, although German family firms are said to lack innovation potential, they also count an extremely high number of niche market leaders, the so-called "hidden champions" (Audretsch et al., 2018). These market leaders are often deemed very secretive and skeptical about open innovation, and as such, generate their ideas and product innovation internally rather than acquiring external

knowledge. As such, this is a promising setting to investigate what drives and motivates employees to become intrapreneurially active.

3.3.2 Sample

Our sample includes nine German family firms (FF_1–FF_9) from North-Rhine Westphalia selected theoretically, thus not randomly, to allow us to research cases with particular characteristics considered crucial in this study. As our aim is to determine why non-family employees become intrapreneurial in family firms and the role the enterprising family plays in this context, we set multiple sample selection criteria. First, we specifically chose and contacted firms that excel in their industry and thus show high innovation potential. We evaluated their innovation potential based on awards, news articles, and official reports. Second, we selected firms located in southern North-Rhine Westphalia, as this region is known for its high density of family firms and hidden champions. Third, we considered the heterogeneity (Eddleston et al., 2012; Memili & Dibrell, 2019) of our sample, as De Massis and Kotlar (2014) suggest, resulting in the inclusion of firms of different sizes (full-time employees between 28–1200), age (49–130), and industries. Furthermore, in accordance with Chua, Chrisman, and Sharma’s (1999) definition, we searched for firms in which the family holds more than 50% of voting shares, at least one family member is actively involved in management, and the business is managed by at least the second generation; three criteria that indicate that the family exerts significant influence on the business.

In each case, we conducted interviews with a member of the enterprising family active in management and one non-family employee as our primary data sources. Their different perspectives allowed determining whether the perceptions of intrapreneurship within the business are shared or differ among management and non-family employees, and why non-family employees become intrapreneurially active in family firms and the role the enterprising family plays. The main criteria for selecting our non-family employees is their connection with the innovation processes within the firm. In highly professionalized and larger firms, this is often product manager or product development employee. In smaller firm, we interviewed a sales manager or authorized signatory involved in all the ongoing processes. Table 5 provides an overview of our sampled firms, key data, and interviewees.

Table 5: Sample

Case information						Interviewee information	
Case	Industry	Founding year	Generation	Number of employees	Innovation Type	Interviewee	Company affiliation since
FF_1	Carpenter craft	1912	4	28	Incremental process innovation	Owner and CEO (FF_1.1) Carpenter and operations manager (FF_1.2)	2011 (FF_1.1) 1987 (FF_1.2)
FF_2	Metal processing	1935	3	80	Incremental product innovation	Owner and CEO (FF_2.1) Sales manager (FF_2.2)	2000 (FF_2.1) 2003 (FF_2.2)
FF_3	Engineering	1892	3	170	Incremental process innovation	Owner and CEO (FF_3.1) Process manager (FF_3.2)	1997 (FF_3.1) 1985 (FF_3.2)
FF_4	Producer of electric heating elements	1973	2	350	Incremental process innovation	Owner and CEO (FF_4.1) Product developer (FF_4.2)	1989 (FF_4.1) 1999 (FF_4.2)
FF_5	Automotive technologies	1938	2	410	Incremental process innovation 2–3 product innovation	Owner and CEO (FF_5.1) Sales manager (FF_5.2)	1994 (FF_5.1) 2007 (FF_5.2)
FF_6	Sanitary and air conditioning	1973	2	559	Incremental process and product innovation	Owner and CEO (FF_6.1) Product Manager (FF_6.2)	2008 (FF_6.1) 2019 (FF_6.2)
FF_7	Electrical installation	1931	3	800	Incremental process and product innovation	Owner and CEO (FF_7.1) Product manager (FF_7.2)	2012 (FF_7.1) 2005 (FF_7.2)
FF_8	Electrical installation	1935	3	1000	Incremental product innovation and complementary services	Owner and CEO (FF_8.1) Product developer (FF_8.2)	1984 (FF_8.1) 2010 (FF_8.2)
FF_9	Electrical installation systems	1912	3	1200	Incremental process and product innovation	Owner and CEO (FF_9.1) Product manager (FF_9.2)	1990 (FF_9.1) 2016 (FF_9.2)

3.3.3 Data Collection

To obtain accurate information, we used multiple data sources in this study (Yin, 2018), including interviews with the owner-managers, interviews with non-family employees, archival material, including webpages and media coverage, and informal emails and phone calls to clarify details or obtain additional information. Our primary data source consists of 18 semi-structured interviews conducted with one owner-manager and one non-family employee in each case. In general, interviews allow gathering information directly related to the topic under study (De Massis & Kotlar, 2014). We conducted the interviews between September 2018 and April 2021 either in the family firms' headquarters or via Zoom, recording and transcribing them. All information gathered has been stored and can be accessed upon request to ensure the "chain of evidence" (De Massis & Kotlar, 2014, p. 21). To avoid the pitfalls of biased responses due to poorly designed questions, we collected information about the interviewees from webpages and online articles beforehand and anticipated the topics to prepare (Gioia et al., 2013). We also ensured the anonymity of interviewees and firms to encourage honest and authentic responses. Each interview was structured and included general questions about the interviewee and the firm, the family values and corporate culture, the business mechanisms fostering innovation, intrapreneurship, and further questions and clarifications. As our interviewees are owner-managers and non-family employees, we adjusted the questions accordingly. All questions were open-ended and not sent to the interviewees beforehand to ensure responses would not be memorized for the interviews. The secondary data sources provided additional information about the cases. In particular, we searched for details of the corporate principles and values of each case and the perceptions of the firms as employers. Table 6 provides an overview of these secondary data sources. We focused on these aspects as intra-organizational factors that positively influence intrapreneurship (Alpkan et al., 2010; Block, 2010; Kuratko et al., 1990; Miller et al., 2009). Furthermore, to determine how the family firms in our sample are perceived as employers, we considered whether they provide managerial support (Antoncic & Hisrich, 2001), foster a positive and satisfying work atmosphere (Auer Antoncic & Antoncic, 2011), strong and personal social bonds in the organization (Bammens et al., 2010; Cennamo et al., 2012; König et al., 2013). Using multiple data sources allowed us to triangulate the data.

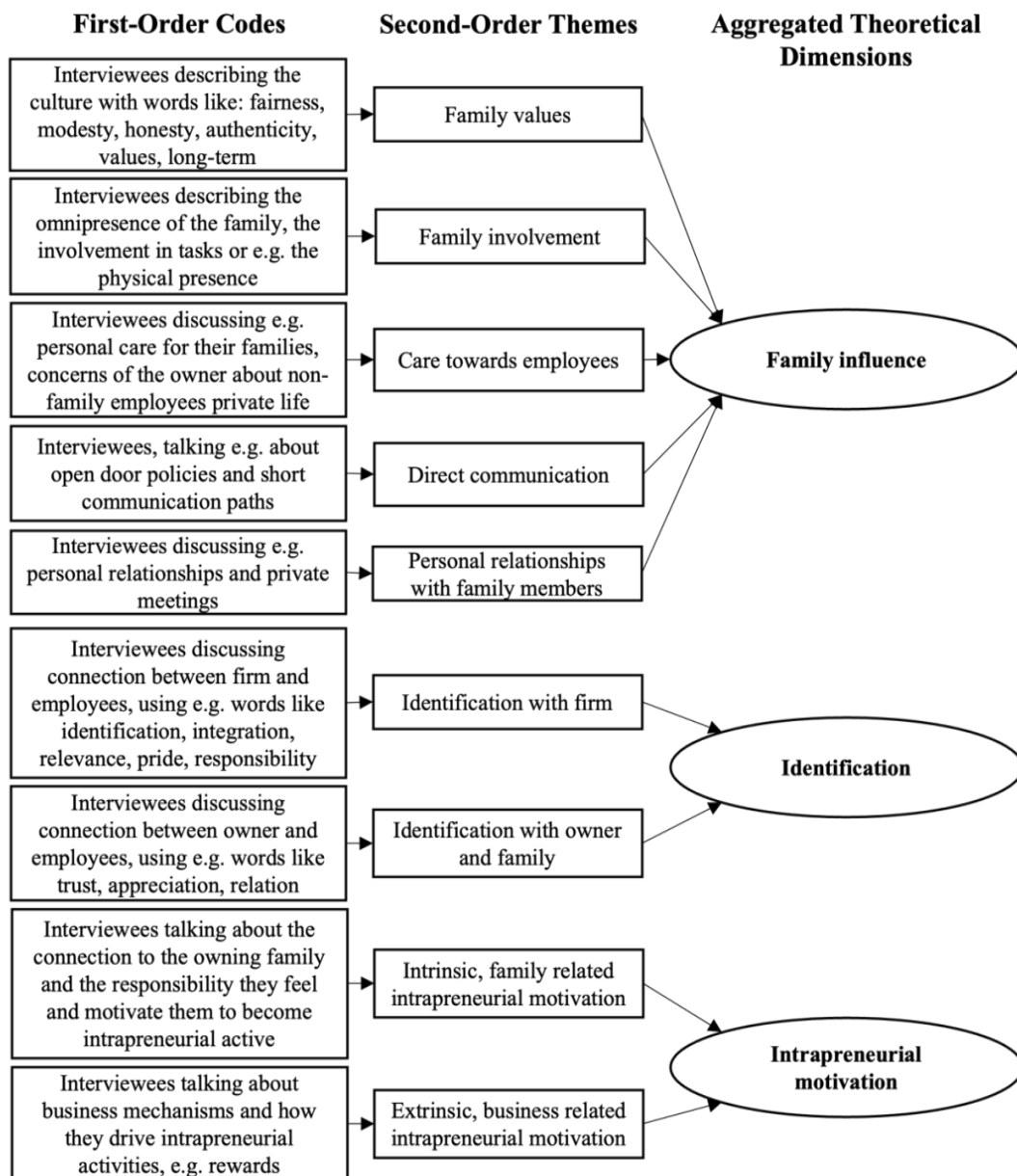
Table 6: Secondary Data

Case	Corporate principles and values	Firm as employer	Data source
FF_1	<ul style="list-style-type: none"> • Helpfulness • Honesty • Reliability 	<p>We organize numerous leisure activities that promote team spirit, a sense of togetherness, and enjoyment of work and the company. Christmas parties with our employees' partners and children, theme weeks, [...] were great successes and have strengthened the team spirit in our company.</p> <ul style="list-style-type: none"> • International Employer Award for Demography-Oriented Personnel Policy 2016 • Alfred Jacobi Prize for future education 	<ul style="list-style-type: none"> • Corporate webpage • Informal phone calls • Newspaper articles
FF_2	<ul style="list-style-type: none"> • Mutual respect • Trust • Honesty 	<p>Our company's success is the result of the joint efforts of all employees for the benefit of customers.</p>	<ul style="list-style-type: none"> • Corporate webpage
FF_3	<ul style="list-style-type: none"> • Modesty • Responsibility • Reliability • Partnership 	<p>Our employees are our most important capital. They are enthusiastic about our processes, plants, and products, contribute their expertise to the company and develop their ideas, which is why we like to call them "thinking workers".</p> <p>warded "Excellent training company" 2013–2020</p>	<ul style="list-style-type: none"> • Corporate webpage • Newspaper articles
FF_4	<ul style="list-style-type: none"> • Environmentally friendly • Social responsibility • Altruism 	<p>FF_3 offers its employees a secure job and the best possible framework to design their work. With their great sense of duty and high motivation, they contribute decisively to customer satisfaction and the associated success of the company.</p>	<ul style="list-style-type: none"> • Corporate webpage
FF_5	<ul style="list-style-type: none"> • Modesty • Responsibility • Efficiency • Open-mindedness 	<p>The greatest potential for our company is the passion and performance of our employees.</p> <p>Motivation and initiative are deeply rooted in our DNA. Through technological competence, many years of experience, and motivated employees we create trust and inspire our customers.</p>	<ul style="list-style-type: none"> • Corporate webpage • Newspaper articles
FF_6	<ul style="list-style-type: none"> • Long-term orientation • Family closeness • Respectful and appreciative cooperation • Personal culture trustful communication and cooperation 	<p>We want to offer our employees more than just a monthly salary. As a family business, it is our concern to support them in as many areas as possible. In this way, we can ensure that all employees feel welcome and valued.</p> <p>Only those who are satisfied are fully committed to the success and future of our brand. As an employer, we do everything to provide satisfying conditions for our employees.</p> <ul style="list-style-type: none"> • Awarded "Excellent Employer", consistently certified by TÜV Rhineland since 2014 • Awarded "Family-Friendly Company" 2017 • Excellent training company 	<ul style="list-style-type: none"> • Corporate webpage • Informal phone calls • Informal email contact • Newspaper articles
FF_7	<ul style="list-style-type: none"> • Teamwork • Participation • Long-term 	<p>Federal prize "Most Active Companies in Germany 2019". With this prize, the initiative "Healthy Companies" in Germany honors the performance of companies in the implementation of exemplary measures to promote employee health, as well as their integration into the corporate philosophy and everyday working life.</p>	<ul style="list-style-type: none"> • Corporate webpage • Informal email contact • Newspaper articles
FF_8	<ul style="list-style-type: none"> • Social responsibility • Transparency • Mutual respect and fairness • Trust and integrity 	<p>We have been driving innovation for decades. We achieve this with employees who want to make a big difference in the family environment of a medium-sized brand company. They are the true success drivers.</p> <ul style="list-style-type: none"> • Awarded "Family-Friendly Company" 2020 • Awarded "Excellent Training Company" 2020 	<ul style="list-style-type: none"> • Corporate webpage • Newspaper articles
FF_9	<ul style="list-style-type: none"> • Progress as tradition • Focus on the people 	<p>People are the focus. The respectful cooperation among shareholders, management, and employees characterizes our everyday work. Together we are successful as a team - worldwide.</p>	<ul style="list-style-type: none"> • Corporate webpage • Informal phone calls

3.3.4 Data Analysis

Our data analysis and categorization followed the multiple case study approach (Eisenhardt, 1989; Eisenhardt & Graebner, 2007), thus within-case and cross-case analyses. We followed an inductive logic (Gioia et al., 2013) and independently read and analyzed each case in isolation. In this within-case analysis, the focus was the factors that motivate non-family employees to become intrapreneurial. Through multiple readings, we filtered the data that would be useful to answer our research questions and/or represented interesting findings. We then developed preliminary first-order codes in the form of illustrative quotes for each case (Gioia et al., 2013). After completing the within-case analysis, we juxtaposed the preliminary first-order codes and elaborated their theoretical connections (J. A. Martin & Eisenhardt, 2010), a preparatory step for the cross-case analysis. Here, we integrated our first-order codes of individual cases and created provisional second-order themes for all cases. In so doing, we identified similar patterns among the cases as well as variances traced back to aspects such as firm size or degree of professionalization. This categorization was an ongoing process for each author individually and as a group, as certain first-order codes and second-order themes were grouped and named differently by each author. The agreed-upon categories constituted our second-order themes used to construct the aggregated theoretical dimensions. Following the previous two steps, we discussed the overarching categorization with the goal of answering our research questions. Once we agreed on an aggregated theoretical dimension, we went back to the first-order codes to check whether this dimension was also reflected in the interviewees' quotes, or whether we had made a mistake along the way. In total, we constructed five aggregated theoretical dimensions. Figure 6 provides a summary of the first-order codes and second-order themes that led to the first three aggregated dimensions. We used the secondary data to further identify suitable family firms, summarize, and validate the values, and provide an overview of the awards and employee-related work conditions. Our cross-case analysis led to five aggregated dimensions: family influence, identification, and intrapreneurial motivation (family related), business mechanisms and intrapreneurial activities (firm related) composing our models.

Figure 6: Example of the Data Analysis Leading to the Aggregated Dimensions



Source: Own illustration, referring to Gioia et al. (2013).

3.4 Results

3.4.1 Family Influence, Identification, and Family-related Intrapreneurial Motivation

A constant in our interviews and secondary data is the mention of a certain and unique family influence in the firm. Specifically, we identified five second-order themes that are influenced by the enterprising family in the eyes of non-family employees and owner-managers alike: (1) family values, (2) family involvement, (3) care towards employees, (4) direct communication, and (5) strong personal relationships. Table 7 illustrates the cases, the manifestation of the

different dimensions identified, and illustrative quotes of the owner-managers and non-family employees. The last column of the table shows the cumulative strength of family influence, which is the sum of all the second-order themes identified in the firm (0 points: no enterprising family influence; 5 points: strong enterprising family influence). Notably, in most firms, family influence is recognized through actively experienced values, not direct management interventions, but a subliminal value codex exemplified and spread by the enterprising family. These family values provide guidance and enable the workforce to understand how the firm works and how social interactions within the organization should be. The values directly mentioned include fairness, modesty, honesty, and authenticity. Besides these family values, especially in smaller family firms, a close and direct connection with management was mentioned. For example, a non-family employee of FF_1 spoke of the close connection with the enterprising family that strengthens his identification with the firm, as reflected in the second-order theme “care towards employees”. Certain family firms go far beyond their expected responsibilities, for example, caring when a non-family employee’s family has problems, helping with loans, or personally getting involved in solving problems. Another interesting finding is that personal relationships with the owner-manager or enterprising family are limited to smaller companies with fewer than 600 employees (FF_1 – FF_6). Although to some extent expected, close relationships and direct communication paths were the most frequently mentioned factors. Employees are seemingly proud of being close to the firm’s management and enterprising family, hence our next dimension, namely identification of employees with the firm and the enterprising family.

Table 7: Family Influence

Case	Family influence dimension					Family influence - Illustrative quotes -		Strength of family influence
	FV	FI	CTE	DC	PRF	Owner-manager	Non-family employee	
FF_1	●	●	●	●	●	<i>"As a family entrepreneur, you not only have the responsibility of 28 employees but also their families whom we also know."</i>	<i>"...the family also takes care of things when an employee has health or family problems. The family always has an open ear and simply cares for us."</i>	●●●●●
FF_2	●	●	○	●	●	<i>"Values are important, they are part of our culture of our life and a basis and framework for successful cooperation...."</i>	<i>"...the proximity to the management and its family [...] they know us and can address us by our names."</i>	●●●●○
FF_3	●	●	●	●	●	<i>"Social responsibility is huge. We also take this responsibility seriously and consider it in our decisions. I see this as a priority of the family entrepreneur."</i>	<i>"I would say that there is a lot of emphasis on maintaining personal contact [...] the door is open. [...] the boss is also physically present in the firm."</i>	●●●●●
FF_4	●	●	○	●	●	<i>"So, we have an open-door policy here, anyone can come in and there's plenty of room for ideas..."</i>	<i>"For example, we are really a family business – we help each other."</i>	●●●●○
FF_5	●	●	●	●	●	<i>"...you see the social responsibility towards the employees every day. That's 480 families [...] about 1,500 people who are dependent on this firm."</i>	<i>"Short distances. A bit more of a personal relationship, [...] are no airs and graces. He's just as much a human being as anyone else. [...] I appreciate that..."</i>	●●●●●
FF_6	●	●	●	●	●	<i>"Our employees have known us, as we were growing up, and we also know their personal histories." "We use the term [firm name]-family. For us, employees are not just workers, but go far beyond that. [...] These values can be felt and experienced..."</i>	<i>"Our core values state that we are proud of our tradition and that we attach great importance to a family-like atmosphere." "The management knows the personal background of the staff, and we are not considered a personnel number or someone who is easily replaceable."</i>	●●●●●
FF_7	○	●	●	●	○	<i>"It often works better in a family business because the closeness is much greater."</i>	<i>"...there is a great corporate identity with the family and the business, whether it is the junior or the senior, because they are omnipresent in the company. [...] Of course, that creates a team spirit...."</i>	●●●○
FF_8	○	●	●	○	○	<i>"The character of a family business is insanely important and very different from a corporation because it's not only a family business, it's also familial. The employees feel personally better off there and they also know what they are working for."</i>	<i>"My former employer, who is not family-owned [...]I did not know the management personally. [...] you had no relation to the management [...] and that is different here because here people know each other. [...] You can see that the climate here is different."</i>	●●○○○
FF_9	●	●	●	●	○	<i>"I was taught by my father and by my grandfather that people come before the machine and before someone is dismissed, an entrepreneur with social responsibility should be aware that behind every person is a destiny."</i>	<i>"There are company values that are really actively lived, and you also notice that it is a family business, not that it is family-run, but [...] there is a connection between the family and the company."</i>	●●●●○

Notes: FV: family values; FI: family involvement; CTE: care towards employees; DC: direct communication; PRF: personal relationships with family members.

Family influence and the related dimensions strengthen the identification of non-family employees with their firms (Table 4). For them, it is not just “any” firm they work for, as they perceive it as their “own business” (FF_1.2). Another non-family employee goes as far as calling his firm “a bit of a family” (FF_3.2), and not simply a means of providing an income. Interestingly, this identification of non-family employees with the firm was present in all cases, which is surprising, as we expected a similar effect as in the previous analysis, namely identification decreases with increasing firm size, as the direct connection of non-family employees with the owner-manager and enterprising family decreases. However, this was actively stated, as all respondents mentioned significantly high identification with the owner and the family, the family firm, or both. All non-family employees stated that identification is central to their work, and that this identification is a major advantage compared to non-family firms, reflected in “... low fluctuation. Many colleagues have been with the company for more than 40 years” (FF_6) (Table 8).

Table 8: Identification of Non-family Employees

Case	Strength of family influence	Non-family employee identification - illustrative quotes -
FF_1	●●●●●	<i>“And I think that’s the big difference between family-run businesses and non-family-run businesses, that everyone really identifies with the company and works with it as if it were their own business.”</i>
FF_2	●●●●○	<i>“There is a big identification with the values and with employees.”</i>
FF_3	●●●●●	<i>“The personal identification is just there and it’s big.” “In terms of how long I’ve been employed, it’s become a bit of a family. You’ve known your colleagues for a long time, you are familiar with the owner-manager. You spend a lot of your time here, so it’s more than just about earning money.”</i>
FF_4	●●●●○	<i>“There is simply a high level of identification with the corporate values and also with the employees.”</i>
FF_5	●●●●●	<i>“We’ve known each other for years and ultimately I got the chance as a very young person to join [FF_5] and when you see that you’re meant to be in a management position, you’re happy about that. What motivates me? Yes, I think a certain identification motivates me...”</i>
FF_6	●●●●●	<i>“The identification of the employees can be seen in the low fluctuation. Many colleagues have been with the company for more than 40 years.”</i>
FF_7	●●●○	<i>“Here, the employees tend to stay for a long time, they have a high level of identification with the company and come up with really great things...” “... it must be said that there is a great corporate identity with the firm and the family, whether it is the junior or the senior, because they are omnipresent in the company. They know people by name. Of course, that creates a team spirit.”</i>
FF_8	●●○○○	<i>“If you want to convince people, then you have already done a lot to make people feel included and also feel like a part of the whole.” (FF_8.1) “...it’s different here because here you know the people. The people come from the surrounding area, they wouldn’t close the company here next week because the figures were not as expected. It’s completely different for a large company, when the company is not profitable, then the company is closed or sold.”</i>
FF_9	●●●●○	<i>“And for me, personally, the values are also very important because in the end I can identify very well with these values and I also always say that such an owner-managed, medium-sized company also personally suits me very well.”</i>

Identification drives non-family employees to intrinsically work and care for the firm even though it is not their own business. This also has an impact on intrapreneurial motivation. Table 9 provides several illustrative quotes of this unique family influence and the resulting identification affecting innovation activities, growth, or generally the health of the business. Especially in the first six family firms, we identify a strong “family-related motivation” where a clear connection can be drawn between the identification of non-family employees and their intrinsic motivation. For example, FF_1.1 states that high identification with the family and the firm motivates everyone to make progress for the family firm. For FF_4.2, both the appreciation of innovativeness and the motivation of non-family employees are a major concern.

Table 9: Family-related Motivation of Non-family Employees

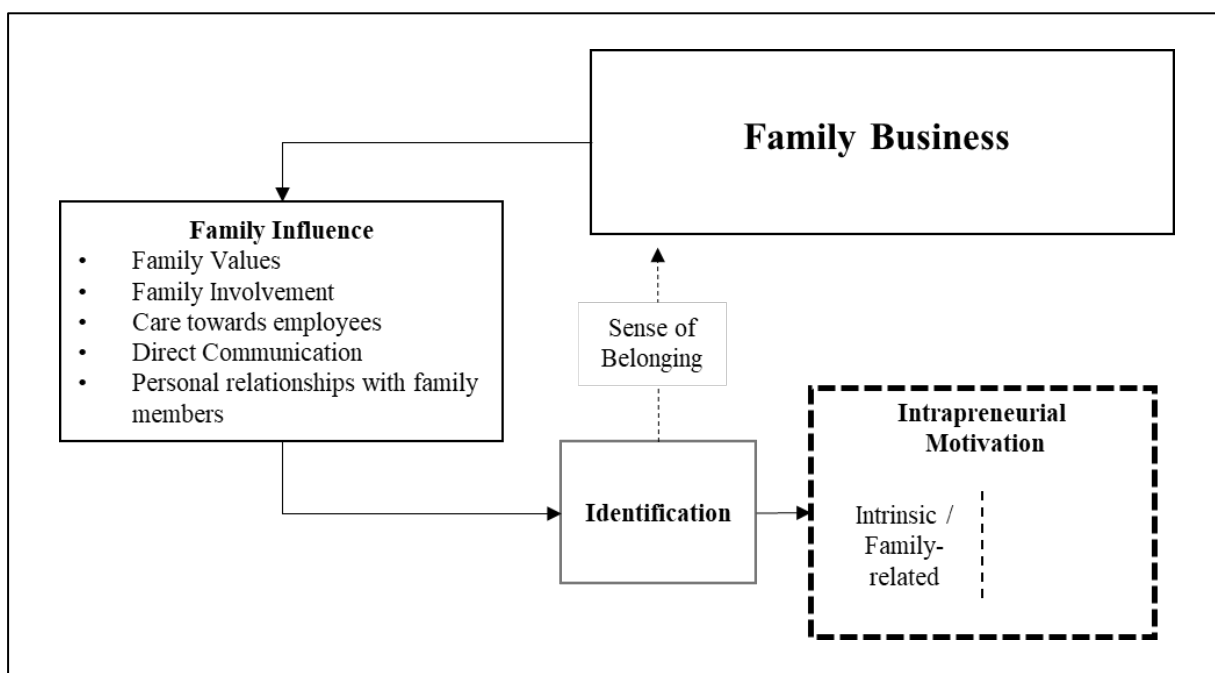
Case	Family-related motivation - illustrative quotes -
FF_1	<i>“And that’s the difference here; here, everyone identifies themselves and everyone wants to make progress.” (FF_1.2)</i>
FF_2	<i>“Values are very important, not only for the internal processes but also for our motivation to work for the firm and its image.” (FF_2.2)</i>
FF_3	<i>“There are people who make many suggestions, and you know that in a certain way they put their heart and soul into it.” (FF_3.1)</i>
FF_4	<i>“...there is also appropriate remuneration and, what is even more important for most of our employees, a certain appreciation.” (FF_4.1) “If employees are very innovative, and you notice that they fully identify with the firm you can also reward such things. But that doesn’t necessarily have to be money, it can also be other benefits...” (FF_4.2)</i>
FF_5	<i>“I think a certain identification already motivates you, so I would say that I give a lot for the company because I have a good relationship with management and the company and the other way round.” (FF_5.2)</i>
FF_6	<i>“...family businesses are more people-oriented than a corporation and when the individual is not anonymous, they’re not just a personnel number, but they are valued as a person. They will certainly be more inclined to get involved and to shape things in the firm.” (FF_6.1) “Our culture and the feeling of being part of the family is hugely motivating. There are no financial incentives. But the recognition replaces that. The short distance to management is also an important factor.” (FF_6.2)</i>
FF_7	<i>“It often works better in a family business because the closeness is much greater. So if I can reach someone emotionally, if I can reach someone directly in a speech, then it’s easier...” (FF_7.1)</i>
FF_8	N/A
FF_9	<i>“Someone who feels good is more likely to have ideas than someone who doesn’t feel good here in our firm. Many employees have been with us for 25 or 40 years.” (FF_9.1) “...there are really direct communication channels, you are not worker XYZ here, but you really have the opportunity to contribute.” (FF_9.2)</i>

However, they also mentioned that this appreciation does not necessarily need to be in monetary terms but can relate to other benefits. A non-family employee of FF_5 mentioned his good and personal connection with management and vice versa as the reason to “give a lot to the company” (FF_5.2) and a motivation to contribute. A non-family employee of FF_6 agreed with this and claimed that the unique family influence and the feeling of belonging to the

enterprising family are crucial motivating factors. However, looking at FF_8, no statement is directly related to the family’s influence or their motivation to contribute intrapreneurially. However, in general, with differences in their strengths, we observe a link between unique family influence, identification and the intrinsic intrapreneurial motivation of non-family employees.

Figure 7 summarizes the influence of the family dimension on the intrinsic intrapreneurial motivation of non-family employees. We specifically show that next to the direct link with intrapreneurial motivation is the creation of a certain “sense of belonging” among non-family employees and the enterprising family. When speaking about their identification with the family and their motivation to help the firm, they seem to refer to a sense of duty to the enterprising family because they feel that to a certain extent they belong to the wider family.

Figure 7: Family-related Intrapreneurial Motivation of Non-family Employees



Source: Own illustration.

3.4.2 Business Mechanisms and Business Related Intrapreneurial Motivation

However, the intrapreneurial motivation of non-family employees does not stem solely from the family dimension. Throughout the interviews and the written material, we observed the business mechanisms directly related to the motivation of non-family employees. These mechanisms are also mentioned in the literature and range from idea management (letterbox or

any system to hand in written ideas) and reward systems, to complex and structured innovation management systems with separate departments dedicated to driving innovation (Table 6). Interestingly, we observed a juxtaposition of family influence and the identification of non-family employees, indicating that the weaker the family influence, the more business mechanisms are in place, as also indicated in the motivations mentioned throughout the interviews (Table 10). We also observe that FF_1 and FF_2 did not mention any intrapreneurial motivation of non-family employees motivated by business mechanisms. Indeed, not all employees necessarily have the intrinsic motivation to innovate, despite a strong family influence, as observed in FF_3. Other interviewees highlighted the disadvantages of such systems. FF_5.1 mentioned that some employees use this type of system to receive rewards. The firms also mentioned that these systems tend to favor ideas that are part of normal improvement tasks in the workplace, and as such, not real innovations. This is also affirmed by FF_9.2 who mentioned that in 2 months, 71 proposals had been submitted, and even though many of these would be rewarded, others had to be rejected as they referred to just small continuous improvements rather than innovations.

Table 10: Business Mechanisms Supporting Intrapreneurial Motivation

Case	Aspect of business Mechanisms					Business mechanisms - Illustrative quotes -		Strength
	MS	EE	IM	RS	SIM	Owner-manager	Non-family employee	
FF_1	●	○	●	○	○	<i>"Then it is a matter of willingly accepting suggestions for improvements and ideas from the workforce."</i>	<i>"...suggestions can be discussed openly and honestly [...] with our superiors. [...] And also new ideas, so if I or someone else has an idea, we are also supported in implementing it, if it has potential."</i>	●●○○○
FF_2	○	○	●	○	○	<i>"Communicating verbally, someone asks for an appointment and then the person presents that." "No, we do not tempt our employees with rewards in order to make them jump."</i>	<i>"...the innovation process is not organized and there is no set way here."</i>	●○○○○
FF_3	●	○	●	●	○	<i>"The employees write it down and throw it in the letterbox or put it up on the notice board." "There are also monetary rewards for this."</i>	<i>"The suggestion scheme is a common practice..." "But I think the main reason is the monetary incentive."</i>	●●●○○
FF_4	●	●	●	●	●	<i>"I do think that we have to create spaces again where we can simply let our minds wander..." "...for suggestions for improvement, we have a box of notes everywhere [...] also monetarily rewarded..."</i>	<i>"...a room equipped with couches, and appropriate equipment in order to give creative space." "...we have a continuous improvement system, where employees can submit ideas [...] which are monetarily rewarded."</i>	●●●●●
FF_5	●	●	●	●	○	<i>"...an employee suggestion system [...] the employees can fill out a form and submit their ideas." "...there are various rewards [...] depending on what the suggestions are."</i>	<i>"The management gives us the freedom [...] development budget for this..." "The tolerance for mistakes is relatively high but it is expected to learn from them."</i>	●●●●○
FF_6	●	●	●	○	○	<i>"...we don't pay any bonuses in our idea management. [...] because for us it is part of [...] the job to contribute." "...is there such a thing as a concrete innovation process? No, there is no such thing, [...] we notice that the speed is not as we would like it to be [...] that will be different for us in the future."</i>	<i>"There are no financial rewards and product management that have been in place for 2 years. We are currently structuring and professionalizing the processes." "Capacities and resources must be made available to be able to innovate. You also have to be allowed to try things out."</i>	●●●○○
FF_7	●	●	●	○	○	<i>"We don't have an innovation process in that sense. [...] it's much more important to create the culture in the first place so that people have time and a budget for it and can simply try something..." "...rewarding with money makes the employee happy just for a while but not for the long-run."</i>	<i>"Quick. Faster! Due to flat hierarchies decisions can be made very fast. [...] At some point, money has to be spent [...] And I would say that this is easier in a family firm compared to a non-family firm."</i>	●●●○○
FF_8	●	●	●	●	●	<i>"...we have built product management departments that investigate the market..." "If you don't allow creativity, you can't be innovative." "...the employees get a bonus that is a motivating factor."</i>	<i>"We have idea management; you can bring in general improvements. [...] You can fill out a form and the idea is evaluated. This is done by a so-called idea manager..."</i>	●●●●●
FF_9	●	●	●	●	●	<i>"...you have to make mistakes. You can only learn from mistakes." "So at the moment, actually, only by monetary rewards."</i>	<i>"There is a reward system, it's an employee suggestion scheme and there are also bonuses paid out..."</i>	●●●●●

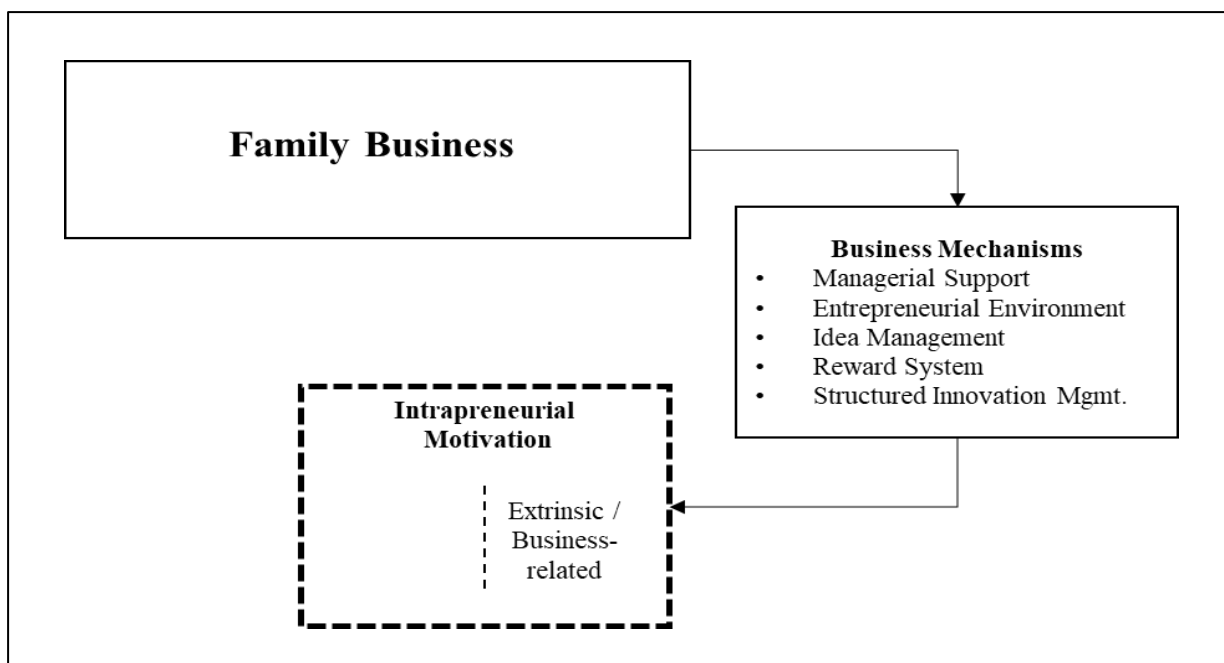
Notes: MS: managerial support, EE: entrepreneurial environment, IM: idea management, RS: reward system, SIM: structured innovation management

Table 11: Business-related Motivation of Non-family Employees

Case	Business-related motivation - Illustrative quotes -
FF_1	N/A
FF_2	N/A
FF_3	"There are also some who don't come up with anything, except when you remind them of monetary rewards." (FF_3.1)
FF_4	"Maybe the idea saves a few thousand euros, in return, the employee gets a thousand euros, which motivates others to join in too." (FF_4.1) "For example, this continuous improvement process, there is really someone assigned to take care of it..." (FF_4.2)
FF_5	"...the disadvantages are that many employees prefer to submit [...] suggestions for improvement in order to receive a certain reward." (FF_5.2)
FF_6	"There is nothing more frustrating for employees than when their submitted ideas are not considered and they get no feedback. Then they submit an idea once or twice, but never again. This means that motivation and potential are lost." (FF_6.2)
FF_7	"Cooperative leadership style, that's more like working with each other, that's more like removing obstacles out of the way than a top-down approach – you don't get innovations if you are very hierarchical by command." (FF_7.1)
FF_8	"...the employees personally participate in our success by getting a bonus, that is a motivating factor." (FF_8.1) "You can say that it will be sold and that it gives a certain profit for the firm, and that motivates you somewhere." (FF_8.2)
FF_9	"...but also many who have noticed and realized that if I make a suggestion for improvement, it will be rewarded." (FF_9.1) "Within 2 months, 71 new proposals were submitted, and many of those who submitted proposals looked forward to rewards..." (FF_9.2)

Although certain business mechanisms were criticized, they undeniably help motivate the workforce (Table 11). However, this motivation is much more extrinsic than the motivation stemming from the family dimension. Figure 8 shows this business-related extrinsic motivation.

Figure 8: Business-related Intrapreneurial Motivation of Non-family Employees



Source: Own illustration.

3.4.3 Intrapreneurial Activities

In nearly all cases, the intrapreneurial activities of non-family employees affect the internal processes, product improvements, or product development, and are closely related to their immediate work environment (Table 12).

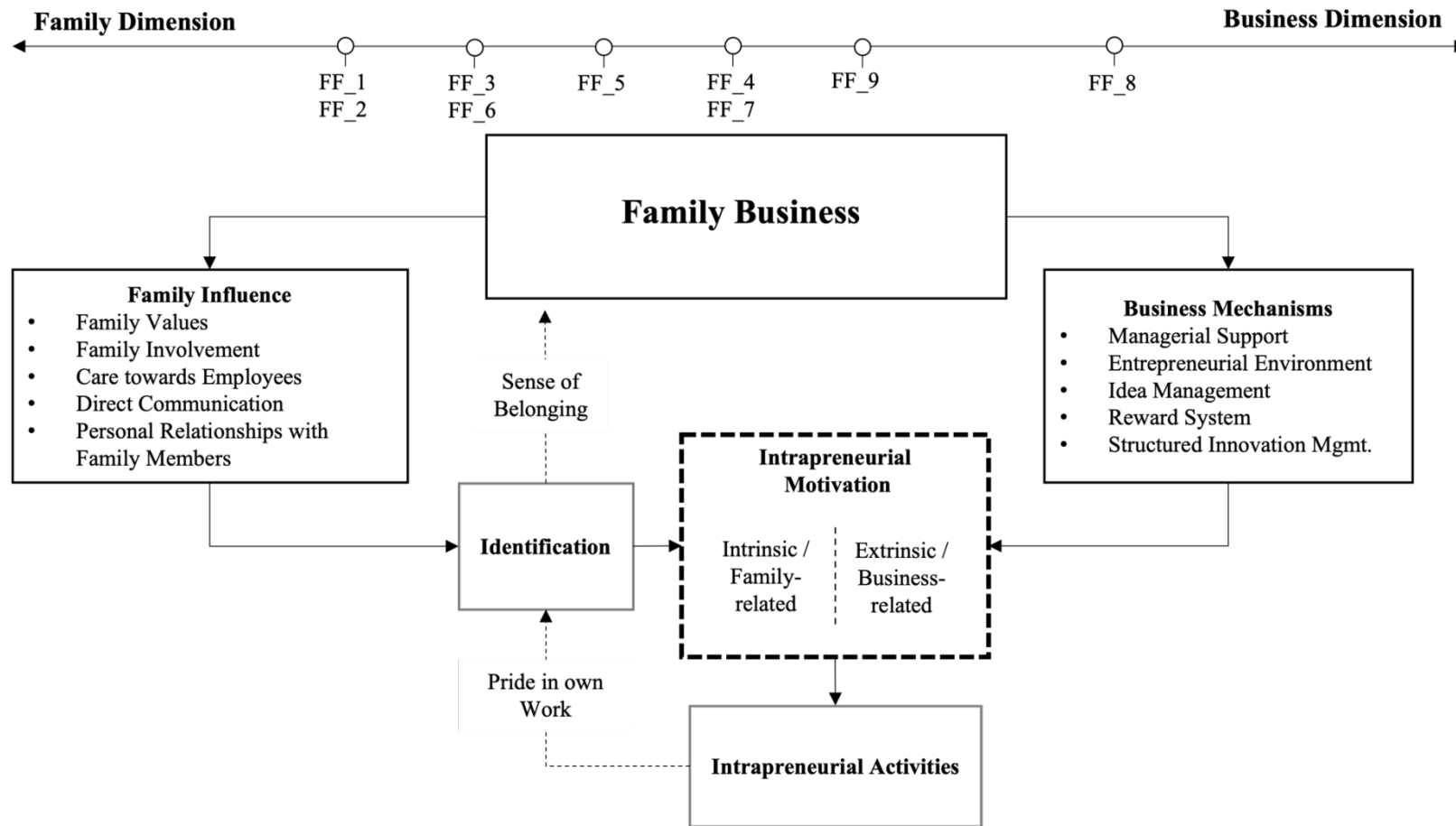
Table 12: Intrapreneurial Activities and Pride in own Work

Case	Intrapreneurial activities - Illustrative quotes -	Pride in own work - Illustrative quotes -
FF_1	<i>"Here, everyone is looking to be efficient, to be effective, and to make suggestions for improvement so that we can move forward and develop the firm." (FF_1.2)</i>	<i>"And in the end, it turns around again. If people enjoy doing it, then the profitability is higher and thus there is economic success because it is simply an interplay."</i>
FF_2	<i>"The employees from sales also come up with ideas and they are then implemented, but they are not usually large projects, they are simply small things that can be improved." (FF_2.2)</i>	<i>"...if you have a good idea and convince the management to pursue it, then the project is started and in most cases, the person who had the idea also is responsible for this project."</i>
FF_3	<i>"This team spirit, this identification, if you always have to run around the chair at home, then you actually put the chair away. That would, of course, also be expected here. We also like to talk about co-thinkers here." (FF_3.1)</i>	<i>"To strengthen the feeling of responsibility, of self-responsibility. [...]Yes, but it's also important for the employee to be perceived, to be involved in the process." "It's all about the appreciation, the recognition, 'You've made a great suggestion! Great!' even if it is not worthy of great praise or awardable but brings pride with it, which in turn can motivate employees to do it again." (FF_3.1)</i>
FF_4	<i>"One employee had this idea which he shared. He's not actually an engineer, but he had this idea and set up a small laboratory in his basement at home and built a prototype and convinced me. And that's where I saw the great advantage of family businesses because ultimately, it's my money, so I invested." (FF_4.1)</i>	<i>"Logically, an employee who does a good job and has ideas naturally enjoys more freedom than one who doesn't." "...if employees are very innovative fully identify with the firm, then, of course, this is acknowledged."</i>
FF_5	<i>"For example, the employee returns from the customer and sees an ongoing process which he thinks we could do differently. Then we try it, that is an innovation process, which runs through the management." (FF_5.1) "At home, you tend to think about it involuntarily. You catch yourself on the weekend when you have an idea like that when your mind is a bit free, then I just make a note or something or think about it for a quarter of an hour [...] Such thoughts often come when your mind is free." (FF_5.2)</i>	<i>"We can be really proud of that, we have implemented it and perhaps only a few others would have managed that." "And of course the success, when you see that the way you approach the people and the way you approach the projects [...] leads to reasonable new orders and a good economic situation in the company, a turnover record every year. Yes, that makes you proud somewhere, that you contribute a small part to it."</i>
FF_6	<i>"...we are also very proud of the fact that our employees always get involved, especially in internal processes. Innovations can take place in all areas..." (FF_6.1) "And even after retirement, former employees actively contribute to the company because they feel part of the family. A lot of heart and soul goes into it."</i>	<i>"The employees are proud of their product. It is also communicated internally when our products are installed in special buildings such as hotels or stadiums of world-famous football clubs. These are projects where you can proudly say, 'Look, these are our products.' People think that's cool, both internally and externally."</i>
FF_7	<i>"But it can also be during lunch in the canteen. Once, a colleague had an idea and painted it on a napkin while having coffee, and we all were convinced of the idea as it saves time, money and nerves. A small detail, but wonderful market displacement for the others." (FF_7.2)</i>	<i>"It may not have been the case a few decades ago but now it's acting on one's own responsibility and also knowing why he or she is actually doing it for. So giving sense is becoming more and more important for the employees." (FF_7.1) "Imagine you come to your grandmother and say: 'Look here at the new main catalog and here, this was my idea. You are proud of that.' And if the product sells millions of times, then that is a beautiful thing."</i>
FF_8	<i>"The whole thing starts with employees who simply think a bit smartly and develop an idea, or it comes from the customer..." (FF_8.1)</i>	<i>"When you're on holiday somewhere and see the red plugs on every corner. It's a company from the small Sauerland region and they sell these plugs worldwide, there must be something behind it." "Innovations are often a lot of work. [...] That's nice when you see that it's appreciated."</i>
FF_9	<i>"...ideally, starting with the lady in the production hall, provides suggestions for improvement. For us, it's not called innovation but suggestions for improvement..." (FF_9.1)</i>	<i>"I'm sticking to it: the staff potential, it's the most valuable resource we have!" (FF_9.1) "We had so many situations in which employees have said, 'I never thought that this idea would have been implemented.' But it's the little things that make it happen." (FF_9.1)</i>

Furthermore, the process of innovating for non-family employees appears not to be a specific event, but an ongoing process in their day-to-day tasks and beyond, as they see it as their duty to contribute to the firm's success. For example, the non-family employees of FF_1 and FF_5 like to think about "room for improvement" at home, while in FF_6, retired employees still come to work and contribute because they "are part of the family". One employee in FF_4 even built his own prototype in the basement of his home and was financially supported because the owner-manager believed in his idea. Interestingly, this involvement of employees seems to further strengthen the bond they have with the family and the firm. When employees actively help to develop a product, they felt connected to the product and the firm. For instance, one employee mentioned his pride when the product he worked on was displayed in the firm's product catalogue. Participation and being personally acknowledged by the owner-manager or enterprising family (business dimension) for their contribution instills in employees what we call "pride in own work". This pride in own work also heightens the identification of employees, and thus creates a feedback loop that strengthens the sense of belonging to the firm's family, further intrinsically motivating them to contribute.

In Figure 9, we summarize our results illustrating the creation and stimulation of non-family employees' intrapreneurial motivation in family firms. We include all cases positioned according to their strength of family influence (family dimension) and implementation of business mechanisms (business dimension). We discuss the results and Figure 9 in the next section.

Figure 9: Integrative Model of Intrapreneurial Motivation of Non-family Employees in Family Firms



Source: Own illustration.

3.5 Discussion

3.5.1 Theoretical Implications

This study investigates the intrapreneurial motivation of non-family employees in family firms and the role of the enterprising family therein using a multiple case study (Eisenhardt, 1989, 2021). Our primary data source is 18 in-depth interviews conducted with a dyadic sample comprising one owner-manager and one non-family employee of nine German family firms. Furthermore, archival data, including webpages and media coverage, served as our secondary data sources. The analysis of interviews followed an inductive approach (Gioia et al., 2013) resulting in five aggregated theoretical dimensions. Through within-case and cross-case analyses, we identified the common themes and disparities (Eisenhardt, 1989; Eisenhardt & Graebner, 2007), enhancing generalizable and grounded theory building (Davis & Eisenhardt, 2011). Our results show that the intrapreneurial motivation of non-family employees is either driven by the family firm family dimension, thus intrinsically motivated, or extrinsically motivated by the business dimension, or a combination of the two dimensions. Figure 9 above provides an overview of our findings.

Due to family influence, the culture in family firms is considered idiosyncratic and strongly shaped by family firm characteristics attributable to family involvement (Habbershon & Williams, 1999). Family influence fosters strong social bonds and relationships between the enterprising family and non-family employees (Berrone, Cruz, & Gomez-Mejia, 2012), enhancing informal ties and communication (Gomez-Mejia et al., 2011), and leading to a generally satisfying work environment (Miller et al., 2009). We identify multiple unique traits of family influence, supporting previous findings regarding family firm culture. We find that family influence is strongly driven by the personal values of the often-omnipresent enterprising family, reflected in strong personal relationships and intense care for the wellbeing of non-family employees (Bammens et al., 2010; Cennamo et al., 2012; König et al., 2013). The caretaking in our cases is remarkable and exceeds what ordinary employers normally provide their employees. Furthermore, we observed the direct communication paths and personal relationships between owner-managers and non-family employees. While these findings mostly correspond with known aspects of family firms, the implications of enhanced identification of non-family employees with the family and the firm deserve closer attention. In the cases in which we identified strong family influence, we also observed the strong identification of employees with the family and the firm. This identification in turn creates

what we called a “sense of belonging” to the family and the firm. Non-family employees show an enhanced feeling of responsibility to their firm, perceived as “a bit of a family” (FF_3.2). This perception of belonging to the family, feeling connected and directly responsible was mentioned by many of our non-family interviewees as one of the main reasons why they become intrapreneurially active. For example, “... that’s the difference here, here everyone identifies themselves and everyone wants to make progress” (FF_1.2). Deephouse and Jaskiewicz (2013) explain why family members have higher identification with their firm than non-family members, invoking social identity theory (Tajfel et al., 1971; Turner et al., 1979). Family members value membership, also due to regular financial and socioemotional wealth “compensation” (Gómez-Mejía et al., 2007), and employment security due to generational transfer (Berrone, Cruz, & Gomez-Mejia, 2012; Micelotta & Raynard, 2011; Stavrou et al., 2007). However, what happens when these benefits are transferred to employees through the unique family influence described? Our non-family members in firms with strong family influence clearly stated that they feel connected to the enterprising family, enjoy the benefits of long-term employment, and see the money reinvested in the firm as increasing its health, instead of paying dividends. According to our findings, this fosters the identification of non-family employees similarly to the identification of family members with the firm. Memili and Welsh (2012) propose an analogous effect: the participating or *laissez faire* culture of family firms strengthens the identification of non-family employees, in turn increasing organizational attachment and reducing turnover intention. Our multiple case study supports this assumption, showing that high family influence in the firm can lead to the stronger identification of non-family employees. Most interesting is our finding that this identification leads to employees’ higher intrinsic and family-related motivation to contribute to the firm’s success and thus engage in intrapreneurial activities. For example, “... I think that is the big difference between family-run businesses and non-family-run businesses, that everyone really identifies with the company and works with it as if it were their own business.” (FF_1.2.) This quote is exemplary of many similar statements of non-family employees. Due to their connectedness to the firm’s family, they contribute and engage in intrapreneurial activities even though they do not receive any direct financial compensation. Another family firm even stated, “No, we do not tempt our employees with rewards in order to make them jump” (FF_2.1). They purposely do not have any monetary rewards system in place but emphasize that it should be the employees’ own will to contribute to the firm. Consistent with our findings and the literature, we propose that family influence, based on the family dimension and the inherent family involvement in the firm,

fosters strong identification of employees with the family and the firm, thus enhancing their intrinsic motivation to contribute to the firm’s success. Hence, our first proposition:

P1. Through family influence, non-family employees’ identification with the firm and the family is heightened, ultimately creating a sense of belonging and intrinsically fostering their intrapreneurial motivation.

In addition to family influence, we identify the business mechanisms that strengthen the intrapreneurial motivation of non-family employees. These include managerial support, financial reward and idea management systems, the creation of an entrepreneurial atmosphere, or completely professionalized and structured innovation departments (Alpkan et al., 2010; Antoncic & Hisrich, 2001; Kuratko et al., 1990). While these mechanisms are not new and have been researched extensively, the findings of our cross-case analysis are novel and valuable. In particular, in Table 13 and Figure 9 our cases are ordered by the ratio of family influence to business mechanisms installed. As shown, there is a clear tendency for firms with stronger family influence to have fewer business mechanisms, and vice versa. Although this representation shows no statistically significant result or validation, the underlying implication is interesting.

Table 13: Family Influence to Business Mechanisms Ratio

Case	Family Influence	Business Mechanisms	Ratio
FF_1	●●●●●	●●○○○	3
FF_2	●●●●○	●○○○○	3
FF_3	●●●●●	●●○○○	2
FF_4	●●●●●	●●○○○	2
FF_5	●●●●●	●●●●○	1
FF_6	●●●●○	●●●●○	0
FF_7	●●●○○	●●○○○	0
FF_8	●●●●○	●●●●●	-1
FF_9	●●○○○	●●●●●	-3

Specifically, with a decrease in family influence, we see a decrease in the identification and intrinsic motivation of non-family employees. With an increase in business mechanisms, we see an increase in the extrinsic motivation of non-family employees. This variation of family influence and the adoption of business mechanisms might have several reasons. For example, decreasing family influence could be explained by the firm’s growth and development whereby active members of the enterprising family are forced to be more involved in strategy-making

processes instead of engaging in operational tasks. This also often implies engaging external managers who operate as intermediaries between the enterprising family at the strategic level and the workforce at the operational level. Thus, the connection of non-family employees to the enterprising family might gradually diminish with a firm's strategic development and growth, as the enterprising family is no longer perceived as omnipresent in the daily work routine. Another reason might be a conscious decision of the enterprising family, for example, due to improved orders, increased responsibilities, or events under duress, such as illness or succession where no successor is willing to step up. To avoid losing the intrapreneurial motivation of their employees and thus an inherent competitive advantage, family firms need to react and counteract this by providing employees with the drive to engage in intrapreneurial activities through establishing the aforementioned business mechanisms. A good example of this behavior is FF_6, a highly innovative firm operating in sanitary and air conditioning with over 500 employees, but no professional innovation management system. While the firm still lacks professionalization, it also deliberately does not pay rewards for ideas, "... we don't pay any bonuses in our idea management. [...] because for us it is part of [...] the job to contribute." However, one interviewee also mentioned they are facing upheaval as their innovativeness has decreased. In the past, employees could easily approach the enterprising family with suggestions over time, but this became more difficult due to increased responsibilities and complexities. Thus, they are in the process of establishing more business mechanisms that foster employee innovations, such as a structured innovation process. However, they are struggling, noting the refuting behavior of some long-term non-family employees not used to these new processes. Nevertheless, albeit a necessary process, they are also trying different interventions to keep the family influence alive and strong. Thus, we argue that family firms need to carefully balance the two business and family dimensions (R. C. Anderson & Reeb, 2003; Dyer, 2003; Tagiuri & Davis, 1992), also in terms of the intrapreneurial motivation of their non-family employees. This is clearly shown in the model in Figure 9 where the family and business dimensions are seamlessly connected and influence each other (Basco & Pérez Rodríguez, 2009; Olson et al., 2003; Tagiuri & Davis, 1992). In particular, when the business dimension is salient by way of firm growth, internationalization, new market entry, or increased orders, complexities arise. This forces the enterprising family to react by focusing on strategic issues. As such, family influence and the related aspects are no longer among the enterprising family's highest priorities, since their focus is on managing the emerging complexities (Jaskiewicz et al., 2015; Parada et al., 2010; Raitis et al., 2021). As a result, the family-related intrinsic motivation of non-family employees could suffer. However, in this particular

situation, the enterprising family still has the opportunity to install appropriate mechanisms to counteract the loss of intrinsic motivation by extrinsically motivating the workforce.

As all the firms in our sample were especially selected for their innovativeness and employee relationship, we propose that these firms developed gradually and the enterprising family has increasingly moved away from being actively involved in the day-to-day business, thus having less direct contact with employees, diminishing the “family-related” intrinsic motivation they generated through their physical presence and proximity. Consequently, professional business mechanisms have been put in place to counteract this process. As such, we propose:

***P2.** The reduced influence of the enterprising family leads to a decrease in the intrinsic intrapreneurial motivation of non-family employees, thus strengthening the business mechanisms to increase the extrinsic motivation of non-family employees.*

To a certain extent, this finding contradicts those of Bammens et al. (2015) who observe that motivation and obligation (extrinsic) are significantly and positively correlated with the innovative work behavior of employees, while intrinsic motivation showed no significant correlation. They also mention surprise at their findings, but support George (2007) stating that studies that empirically tested the link find different results. We suggest adding identification of non-family employees to this equation, which might yield different results to prior studies.

Furthermore, our results show that non-family employees are indeed a source of innovation in family firms, in line with studies that emphasize the importance of employees for family firms and their impact on innovation and firm performance (Damanpour & Gopalakrishnan, 2001; Hitt et al., 2000; Zhang & Bartol, 2010). Due to their knowledge and ability to meet day-to-day requirements, they are integrated into various organizational processes and contribute significantly to organizational innovation and success. In our study, non-family employees are seen as the family firm’s “most valuable capital” (FF_5.1). While seemingly contradictory, throughout the interviews we perceived this to be the case, as also reflected in the high appreciation that employees enjoy for their ideas and propositions. This is also supported by previous findings regarding non-family employees and their ideas being appreciated in family firms (Milton, 2008; Stewart & Hitt, 2012), leading to a work culture that encourages employees to share their insights (Somech & Drach-Zahavy, 2013). Such respect and recognition build strong identification of the workforce with the family and the firm, which motivates them to work hard for the success of both. By working hard and developing innovation, they crucially contribute to the family firm’s success. As a result, they are proud

of their outputs and perceive a sense of worth, talk enthusiastically about their work with their family and friends, work beyond their regular working hours, and conceive potential improvements to the firm's current situation in their leisure time, such as during family holidays or after-work drinks with colleagues. The pursuit of opportunities that result in innovations and create value for the firm is defined as intrapreneurial behavior (Baruah & Ward, 2015; Parker, 2011; Stevenson & Jarillo, 1990). This process and the recognition they receive for their work and innovations further strengthen identification when employees feel strong "pride in own work". Thus:

P3. Motivated non-family employees contribute to intrapreneurial activities, which creates "pride in own work", thereby further strengthening employee identification with the firm and the family.

3.5.2 Contributions to the Literature

Our findings and propositions provide a more holistic picture of why non-family employees become intrapreneurially active and the role the enterprising family plays in this context. We observe that the enterprising family has a significant impact on the intrinsic intrapreneurial motivation of non-family employees. However, we find that with a decrease in family influence, business mechanisms need to be established that level out the lacking intrinsic motivation by establishing processes that extrinsically motivate non-family employees.

Our study contributes to theory building in the innovation, entrepreneurship, and family business literature. First, it contributes to the family business literature by expanding current knowledge of intrapreneurship in family firms with an integrative model showing why non-family employees are motivated to become intrapreneurially active in family firms and the role of the enterprising family. Our model empirically supports the assumption of Bammens et al. (2013, 2015) that family involvement can positively influence the innovative and entrepreneurial behavior of non-family employees by strengthening the social identity of non-family employees (Tajfel et al., 1971; Turner et al., 1979). However, contradicting Bammens et al. (2015), we show that intrinsic motivation is perceived by employees and owner-managers as a major driving force of intrapreneurial motivation that translates into innovative activities.

Our study also contributes to the innovation and entrepreneurship literature by enhancing knowledge of the "innovation in family firms" enigma, helping to explain why certain family firms are so entrepreneurial (Ayyagari et al., 2011; Classen et al., 2014; Gudmundson et al.,

2003) despite investing less in innovation compared to non-family firms (Chrisman & Patel, 2012; Duran et al., 2016). Similarly, to Habbershon and Williams (1999), we find that family involvement is a crucial factor of family business innovativeness. This unique family influence leads to family values, extraordinary care toward employees, direct communication, and personal relationships, considered as fundamental antecedents of intrapreneurship (Alpkan et al., 2010; Antoncic & Hisrich, 2001; Auer Antoncic & Antoncic, 2011; Kuratko et al., 1990) that intrinsically motivate non-family employees to become intrapreneurially active and an important source of innovation for family firms (Ahluwalia et al., 2017; Eddleston et al., 2012).

3.5.3 Limitations and Future Research

Our study helps explain intrapreneurship in family firms, albeit with certain limitations that provide future research avenues. First, given our definition of family firms, different results might be expected for larger, publicly traded family firms. As the influence of the family's values and personal connections dwindle, so might the sense of belonging of non-family employees and their obligation to advance the firm. Therefore, focusing on different types of family firms, especially those in which the distance between the family and the workforce is greater, may be of interest in future studies. Second, as we only conducted two interviews per family firm (one with a family member and one with a non-family employee), more interviews within a single setting might reveal controversies that our research design did not unravel. Third, in investigating the strength of family influence, we only consider our second-order themes without examining the perceptions of the owner-manager and non-family employees. Thus, how perceived family influence strengthens or weakens identification, and thereby intrinsic motivation, might be of interest in future studies. Fourth, our research mainly focuses on the positive aspects of being a non-family employee in a family firm and how these influence intrapreneurial motivation, as this was our main goal and research intention. However, future research might investigate how the dark side of being a non-family employee in a family firm affects intrapreneurial motivation. Last, our research setting is family firms in a specific region of Germany known for its high density of innovative family firms (hidden champions). Researching our focal phenomenon in different geographic locations might yield different results.

3.5.4 Practical Implications

Our study also offers some contributions for practice. In general, firms seeking to increase the intrinsic intrapreneurial motivation of their employees, regardless of whether they are family-owned or not, should establish a corporate culture that incorporates the dimensions of family influence we identify in this study. For example, ensuring employee wellbeing and building and maintaining particularly strong and personal relationships can increase their identification with the firm, thereby motivating them to engage and contribute to the firm's success. Moreover, firms should integrate their employees in multiple processes, as they often have the knowledge and skills to improve the current situation. Considering family firms and the family behind the business, we recommend they value their non-family employees and personally show their gratitude. We find that acknowledgment and integration can lead to feeling part of the firm and the family, again intrinsically motivating them to become intrapreneurial. Last, growing family firms need to pay attention to not losing their non-family employees along the way, as otherwise the intrinsic motivation of non-family employees and their competitive edge might be lost.

3.6 Conclusion

Family firms are often deemed less entrepreneurial (Naldi et al., 2007; Schulze et al., 2001) and under pressure to rethink their business models to remain competitive within their markets. They are reproached for growing too slowly, not innovating radically enough, being outdated due to their long-term orientation, and hindering investments in risky projects (Classen et al., 2012; Habbershon & Williams, 1999; Zellweger, Nason, et al., 2012). Additionally, they often neglect professionalism (Stewart & Hitt, 2012) and have trouble finding a sufficiently skilled workforce (Chrisman et al., 2014). However, in reality, many family firms are market leaders in their respective domains. Research has identified the innovation potential of the workforce as one of the reasons family firms perform so well, despite neglecting the aforementioned factors that drive innovation (Bammens et al., 2013, 2015). Based on our findings, we argue that by employing a strategy that is strongly shaped by the enterprising family, family firms build stronger relationships with their non-family employees, thus heightening their identification with the enterprising family and the firm. This identification can lead to leveraging non-family employees' intrapreneurial potential, increasing their intrinsic motivation to contribute to the firm's success, driving intrapreneurship and innovation, turning

family firms into market leaders in their industry, and thus ensuring their survival over generations.

From the findings of this research, the significant impact of family influence within family-owned businesses becomes increasingly evident. Furthermore, the research underscores the pivotal role that non-family employees play within these firms and how they are affected by family dynamics. Yet, during our study involving both owner-managers and non-family employees, my co-authors and I identified a notable gap: the absence of a validated instrument to quantitatively assess family influence from the viewpoint of non-family employees. Consequently, dyadic perspectives on family influence remain unexplored. To address this gap, the subsequent study of the thesis seeks to develop and validate a new scale, the Perceived Family Influence Scale (PFIS). This instrument measures family influence as perceived by non-family employees, thereby facilitating the collection of more holistic and comprehensive data.

4 Measuring Family Influence from a Non-Family Employee Perspective: The Perceived Family Influence Scale (PFIS)

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ABSTRACT

Enhancing our understanding of family influence within family businesses, this study introduces the Perceived Family Influence Scale (PFIS). Diverging from existing owner-centric methodologies, the PFIS uses social constructivism theory to capture family influence from the perspective of non-family employees, a frequently neglected yet integral stakeholder group within the family firm ecosystem. Capturing their perceptions promises valuable contributions to the ongoing debate on family influence. Following a rigorous multistep development process involving 600 non-family employees, we validate the PFIS, revealing three core sub-dimensions of family influence: culture, involvement, and image. We also demonstrate the PFIS' practical applicability in examining the link between perceived family influence and non-family employee job satisfaction. Based on social constructivism, the PFIS is a reliable instrument that allows for the gathering of more unbiased and holistic data on family influence, thereby refining the family firm definition and advancing the family business research stream.

Keywords: *Family influence, non-family employees, scale development, job satisfaction*

4.1 Introduction

Family influence is a predominant concept to explain the idiosyncratic and complex nature of family firms (Chrisman et al., 2012; Chua et al., 2012; Lamb & Butler, 2018; Lindow et al., 2010) and therefore a key element in defining family businesses (Chua et al., 1999; Litz, 1995, 2008; Zachary, 2011). It crucially shapes family firms' innovation behavior (Classen et al., 2014; Habbershon et al., 2003; Minola et al., 2021), investments (Duran et al., 2016), and relationships with employees (Bammens et al., 2013, 2015). Given its importance to family business research (Sharma et al., 2012), sound family influence scales are indispensable (Irava & Moores, 2010) to expand our incomplete understanding of this concept (Holt et al., 2010; Rau et al., 2018). Such measurements allow us to refine the still fuzzy definition of family businesses (Chrisman et al., 2012; Daspit et al., 2021; Harms, 2014; Payne, 2018; Rovelli et al., 2022; Rutherford et al., 2008), which consequently benefits the development of the family business research (Pearson et al., 2014). Thus, it is not surprising that various family influence scales such as the F-PEC scale (Astrachan et al., 2002) or the Family Influence Familiness Scale (FIFS) (Frank et al., 2017) have been developed and applied in recent decades (Cox et al., 2022; Klein et al., 2005).

However, although the aforementioned scales are designed to measure family influence in a multidimensional approach, most studies still use single items to determine family influence (Evert et al., 2016). Moreover, existing scales only capture family influence from the perspective of the sender – the entrepreneurial family or owner-managers themselves, and not from the perspective of the recipients, such as non-family stakeholders. However, by neglecting their perspectives, we run the risk of collecting biased information and quickly find ourselves engaged in a general debate about social science, ontological assumptions, epistemological stances, and the subjective to objective view of what reality is within science (Gergen, 1978, 1985; Morgan & Smircich, 1980; Steffy & Grimes, 1986). We suggest taking a different approach in measuring family influence, by embedding the idea of our scale within social constructivism theory (Berger & Luckmann, 1967; Kukla, 2000; Morgan & Smircich, 1980). We propose that a business is a “family business” when perceived as such by the majority of people interacting with it and not just by measuring mere objective facts such as ownership percentage.

Thus, this paper develops and validates the Perceived Family Influence Scale (PFIS), the first robust measurement to capture family influence from the perspective of non-family

stakeholders, namely non-family employees. We focus on this stakeholder group because non-family employees tend to be the dominant non-family coalition of all stakeholders in family firms (Pimentel et al., 2020), who regularly experience the effects of family influence. In developing the PFIS, we follow a multistep development approach (DeVellis, 2017; Hinkin, 1995; Pearson et al., 2014). First, we empirically, and theoretically generate initial scale items. Secondly, we improve these items through an exploratory factor analysis and subsequently validate them through a confirmatory factor analysis with a total sample of 600 non-family employees. The results of this analysis yield three sub-dimensions of the PFIS: (1) culture; (2) involvement; (3) image. Third, we apply the PFIS to test the effect of the perceived family influence on job satisfaction among 499 non-family employees.

Our article makes three important contributions to the family business literature. First, it introduces a robust scale to measure family influence from the perspective of non-family employees. It thus offers the possibility to measure family influence from outside of the entrepreneurial family which, in combination with existing family influence scales or factual measurements such as ownership percentage, allows for a dyadic view of family influence and thus, more comprehensive, and holistic data. Second, given the above benefits, the PFIS is an appropriate tool to expand our knowledge about family influence in particular and the idiosyncratic and complex nature of family firms in general. This makes the PFIS a valuable piece of the mosaic in refining the fuzzy definition of family firms by introducing an outside perspective to the discussion. Our final contribution is the evidence that the PFIS is applicable to future research, as we used it to test the effect of perceived family influence on job satisfaction of non-family employees.

4.2 Theoretical Background

During the evolution of family business research, the concept of family influence as we understand it today was initially approached by the conceptual work of Donnelley (1964). He was the first to distinguish family firms from non-family firms by shedding light on the entrepreneurial family and its influence on the firm. Previously, family firms and non-family firms were treated the same, with only their general business aspects being investigated (Zachary, 2011). In an early attempt to provide a first definition of family business, Donnelley (1964) emphasized the influence of the entrepreneurial family on the firm as a key characteristic of family firms. According to him, this family influence is manifested in aspects such as business succession, family involvement in management, family values, financial

control, and independency (Donnelley, 1964). The interest in family firms as distinct from non-family firms has seen consistent growth. Scholars have discerned that family firms encompass two intertwined dimensions: the family and the business, as highlighted by Rosenblatt et al. (1985). Building on this notion, Cramton (1993) posits that the entrepreneurial family's influence on the business is pivotal to understanding the uniqueness of family firms. This idea of family influence has since garnered significant research attention, with several studies delving into the topic, such as those by Chrisman et al. (2005), Chua et al. (1999), and Zellweger et al. (2010), among others. Building on Donnelley's 1964 insights, subsequent research, including works by Kellermanns et al. (2012) and Litz (1995), continues to emphasize core aspects of family influence. These include the ownership structure, as indicated by Barry (1975) and Lansberg et al. (1988); family involvement in management, as suggested by Barnes & Hershon (1994) and Burch (1972); and the transgenerational succession, as discussed by Ward (1987). Nowadays, family influence is one of the predominant factors distinguishing family firms from non-family firms (Chrisman et al., 2003, 2012; Chua et al., 2012; Habbershon & Williams, 1999; Lamb & Butler, 2018; Lindow et al., 2010; Pearson et al., 2008). Thus, family influence represents a core element of the contemporary family business definition (Chua et al., 1999; Litz, 1995; Zachary, 2011).

The significance of family influence in defining family businesses and its broader implications in family business research has naturally led to the development of measurement scales. Two prominent scales that reliably measure family influence are the F-PEC scale by Astrachan et al. (2002) and the Family Influence Familiness Scale (FIFS) introduced by Frank et al. (2017). Both scales assess family influence by considering factors like ownership, family's managerial involvement, control exerted by the family, and intentions of business succession to the next family generation. Diving deeper, the F-PEC scale was crafted to address ambiguities in the family business definition. It breaks down family influence into three subscales: Power, Experience, and Culture. The Power subscale encompasses elements like family share ownership percentage, governance structure (represented by the proportion of family members on the board), and management structure (indicating the share of family members in the firm's managerial team). The Experience subscale captures details regarding business succession, such as ownership generation, active management generation, and those serving on the governance board. It also considers the number of family members actively contributing to the enterprise. Lastly, the Culture subscale evaluates the congruence of family and business values,

and the entrepreneurial family's commitment to the firm, as detailed by Astrachan et al. (2002), Klein et al. (2005), and Rau et al. (2018).

A decade and a half after the debut of the F-PEC scale, the Family Influence Familiness Scale was introduced by Frank et al. (2017). Rooted in the new system theory by Luhmann (1995, Luhmann et al., 2013), this scale gauges family influence using decision premises reflecting familiness (Habbershon et al., 2003; Habbershon & Williams, 1999). The scale comprises 20 items segmented into six subscales: (1) Ownership, management, and control focuses on decisions based on ownership rights, managerial roles, and controls wielded by family members; (2) Proficiency level of active family members assesses the active involvement of family members in the business relative to non-family staff; (3) sharing of information between active family members emphasizes decisions arising from information flow among family members engaged in business operations; (4) Transgenerational orientation captures decisions related to the business's longevity and the succession of the enterprise within the family; (5) Family-employee bond centers on the relationships between the entrepreneurial family and non-family workforce; (6) Family business identity focuses on the self-awareness of the entity as a family business. These dimensions collectively provide a nuanced understanding of family influence in businesses (Frank et al., 2017). Both scales capture family influence only from the perspective of the sender, the entrepreneurial family, or the owner-manager him- or herself. Adapting the scales for recipients other than family members is nearly impossible, as the questions are rather specific and require knowledge that can only be provided by family members (e.g., F-PEC: ownership percentage, governance, value congruence of family members and firm, feelings of family members; FIFS: sharing information between family members, family identity, emotional bond to firm). Additionally, the theoretical base of the FIFS are decision-making premises and not outcomes, which increases the difficulty to adapt the scale to the receiver of such decisions.

Only looking at the perspective of the sender of a message yields the threat of gathering biased information. In this context, a parallel can be drawn with the widely discussed concept of organizational image (Tom, 1971). Some authors argue that organizational image is the way organizational elites want their organization to be seen and recognized by others (Whetten et al., 1992). As a result, they display a certain image trying to convey a socially desirable message (Gioia et al., 2000). In addition to the aforementioned perspective limitations of existing scales, most studies still use single items and binomial variables to measure family

influence (Evert et al., 2016) and define family firms. However, multiple family business researchers agree that family influence cannot be adequately measured dichotomously (Anglin et al., 2017; Astrachan et al., 2002; Chrisman et al., 2012). Moreover, several authors (Miller, Le Breton-Miller, Lester, et al., 2007; Shanker & Astrachan, 1996; Westhead & Cowling, 1998) have shown that different measurements can lead to *“markedly different conclusions about family firms”* (Chrisman et al., 2012, S. 285). This controversial can be witnessed in a reproduction study by Miller et al. (2007) showing that different definitions of family firms (e.g. excluding lone founder businesses) yield the results that family firms do not outperform non-family firms in terms of innovation, and thus, do not support the well-known study of Anderson & Reeb (2003). Although this definition problem is well known, still studies use family firm definitions and measurement of family influence that are at least debatable. Brigham et al. (2014) and Anglin et al. (2017) e.g. coded firms as family firms if a *“principal shareholder (representing a 10% or more ownership stake) represented by two or more related family members, where at least one of whom was either an executive member of the top management team and/or a board member.”* (Brigham et al., 2014, S. 79) as this approach is *“more likely to identify companies that truly capture the essence of family business.”* (Brigham et al., 2014, S. 79). However, referring to the vivid debate about family firm definition and family influence (Chrisman et al., 2005; Mazzi, 2011; Mussolino & Calabrò, 2014), it is debatable if this approach captures the essence of family firms. Concluding, the data collection often appears one-dimensional (centered on the entrepreneurial family), risks biases, and is fragmented as researchers use different measurements of family influence, often represented by single items, dichotomous variables, or subjective views.

Searching for other means to measure family influence, we quickly encountered a general debate about social sciences, ontological assumptions, epistemological stances, and the subjective to objective view of reality in science (Morgan & Smircich, 1980). In this context, we would like to challenge the assumption that businesses are “family businesses” simply by looking at fixed parameters such as shares of the entrepreneurial family (ownership) or the evaluation based upon a member of the owning family (existing scales), which is the most common method to measure family influence thus far. We rather suggest, to embed future research in the social constructivism theory (Berger & Luckmann, 1967; Kukla, 2000; Morgan & Smircich, 1980), which suggest that reality is created by social interactions and as such a projection and interpretation of the perception of a majority. This means, a business is a “family

business” only if it is experienced as such by a dominant coalition (Gergen, 1978; Morgan & Smircich, 1980; Steffy & Grimes, 1986).

Thus, we propose to measure family influence by surveying non-family employees, as they build the most represented stakeholder group within many family firms (Pimentel et al., 2020) and therefore, frequently experiencing the business family and their influence on the firm. Furthermore, non-family employees are considered to be crucial for a family firm’s success by developing innovations (Ahluwalia et al., 2017; Eddleston et al., 2012; Mahto et al., 2010; Tabor et al., 2018) and improving internal processes (Damanpour & Gopalakrishnan, 2001; Hitt et al., 2000; Zhang & Bartol, 2010). Thus, non-family employees are indispensable for many family firms (Yazici et al., 2022), which makes it necessary for business families to be aware of how their influence actually affects the behavior and actions of non-family employees. Concluding, non-family employees appear to be an ideal stakeholder group for measuring perceived family influence and its impact. This shift in perspectives will also advance the ongoing debates about family firm heterogeneity and family firm definition, as there has been a shift from comparing non-family firms and family firms to within-group differences (Evert et al., 2016). In their semantic analysis of 781 articles, Daspit et al. (2021) categorize the existing traits of heterogeneity into temporal and family-centered foci. However, they also acknowledge that most distinctions so far have been made on the firm level and mention that observational heterogeneity varies depending on the level of analysis chosen. They suggest that a certain heterogeneity can also exist within the controlling family. We agree with this notion and claim that when talking about heterogeneity, an additional perspective should be considered, which is the perceived impact of the family influence by non-family stakeholders, especially non-family employees.

With the PFIS, we introduce a scale that makes an important contribution to ongoing discussions about family influence, heterogeneity, and the definition of family firms by measuring how family influence is perceived by non-family employees.

4.3 Development, Validation, and Application of the PFIS

The design of the PFIS follows acknowledged procedures for scale development (DeVellis, 2017; Hinkin, 1995; Pearson & Lumpkin, 2011) and is based on a multistep evolutionary approach that integrates qualitative and quantitative methods. According to this procedure, the first step of proper scale development begins with the generation of an initial item pool, which

we achieved through both theoretical and empirical conceptualization. Our empirical conceptualization is premised on inductive logic (Hinkin, 1998) and uses data from eighteen narrative semi-structured interviews with non-family employees from the study by Köhn et al. (2022). After developing the initial items, we conducted an internal pretest by discussing them with family business scholars in our department (step 1). In a second step, we mailed the first draft of the PFIS to 30,000 randomly selected non-family employees of family businesses listed in the Bureau van Dijk's AMADEUS database over a three-month time interval. With the resulting dataset (N = 600), we conducted an exploratory factor analysis (EFA) to improve and refine our scale, which we then validated through a confirmatory factor analysis (CFA) (step 2). Finally, to prove the applicability of the PFIS, we conducted a regression analysis to show the impact of perceived family influence on job satisfaction of non-family employees with a sample of non-family employees (N = 499) (step 3). The detailed process of our scale development is explained below.

4.3.1 Step 1: Initial Item Generation

Following established scale development approaches (DeVellis, 2017; Hinkin, 1995; Pearson & Lumpkin, 2011), the first step is the generation of an initial item pool. In doing so, we combined elements of theoretical and empirical conceptualization. For the empirical part regarding initial scale items, we follow an inductive logic (Hinkin, 1998) by using the data from the qualitative study by Köhn et al. (2022). Using a dyadic sample that includes 18 semi-structured interviews with nine owner-managers and nine non-family employees of German manufacturing family firms, which are located in the region of North-Rhine Westphalia and are heterogeneous in their number of employees (ranging from 28 to 1200 employees) and their founding year (the oldest was found in 1892 and the youngest in 1973), their multiple case study explores how the involvement of the entrepreneurial family influences the intrapreneurial motivation of non-family employees. Thus, the family influence on the firm and its non-family employees takes a central role in their interviews.

As we aim to develop a sound scale that captures the non-family employees' perceptions of family influence, we focused on the nine semi-structured interviews with the non-family employees and neglected the interviews with the owner-managers. To analyze their data we applied principles of within and cross-case analysis (Eisenhardt, 1989; Eisenhardt & Graebner, 2007) and used inductive logic (Gioia et al., 2013). Our data analysis reveals *family influence*

as an important category consisting of three essential dimensions: (1) physical presence (2) culture; (3) involvement.

Through multiple and careful readings, we identified certain peculiarities that were mentioned very often by the non-family employees and thus appear to be key characteristics of non-family employees' perceptions of family influence. One of these characteristics is the physical presence of the entrepreneurial family within the family firm. In this context, the non-family employees frequently state that the owner-manager and/or the entrepreneurial family are omnipresent in the firm and spend many hours a day in the business, as the following representative statement shows:

"...whether it is the junior or the senior, because they are omnipresent in the firm."
(FF_7.2)

This physical presence makes the entrepreneurial family easily approachable and enhances the establishment and maintenance of personal contacts within the firm:

"I would say that there is a lot of emphasis on maintaining personal contact [...] the door is open. [...] the boss is also physically present in the firm." (FF_3.2)

Besides the physical presence of the entrepreneurial family and inherent consequences, the interviewees often mentioned that the entrepreneurial family takes care of their employees and always has a sympathetic ear and an open door for them. The relationships of the entrepreneurial family even go so far as to support non-family employees even in very precarious situations, such as family or health problems.

"...the family also takes care of things when an employee has health or family problems. The family always has an open ear and simply cares for us." (FF_1.2)

We also identified that the involvement of the enterprising family is a critical determinant of the how non-family employees perceive family influence. One non-family employee, for example, stated that he recognized the strong connection between the enterprising family, which critically shapes the organization.

"There are company values that are really actively lived, and you also notice that it is a family business, not that it is family-run, but [...] there is a connection between the family and the company." (FF_9.2)

This statement goes in line with current literature indicating that the entrepreneurial family shows a high level of involvement and thus has a decisive influence on the operational and strategic decisions of the business (Anderson & Reeb, 2003; Chrisman et al., 2012; Martin & Gomez-Mejia, 2016; Schulze et al., 2003). Due to family ownership and/or active family involvement in the management board, decisions are significantly influenced by the interests of the entrepreneurial family (Koropp et al., 2014), leading to idiosyncratic decisions (Berrone, Cruz, & Gómez-Mejía, 2012; Berrone et al., 2010; Firfiray & Gomez-Mejia, 2021; Gomez-Mejia et al., 2011) and unique atmospheres that distinguish family firms from non-family firms (Berrone et al., 2012; Martin & Gomez-Mejia, 2016).

Considering these aspects, we identified a very special culture within family firms that is severely affected by family influence. According to one respondent, who previously worked in a non-family business, this culture is unique and not found in non-family businesses. Thus, the culture within family firms seems to be another important dimension of perceived family influence:

“My former employer, who is not family-owned [...] I did not know the management personally. [...] you had no relation to the management [...] and that is different here because here people know each other. [...] You can see that the climate here is different.”(FF_8.2)

In addition to interviews as the primary source of data, the study by Köhn et al. (2022) also refers to secondary ones like archive information, web pages, and newspaper articles, ensuring triangulation of the material. It became obvious that all interviewed family firms actively and proudly advertise their status as family businesses to attract new customers and employees. In this context, Zanon et al. (2019) indicated, that the promotion of a strong family image leads to a stronger brand authenticity and increase customer-company-identification. This remarkable fact let us propose that the image of a family firm also plays a key role in how it is perceived by non-family members outside and inside the firm. Our suggestion is supported by recent literature. Memili et al. (2010) for example found out that family ownership is positively correlated with the development of a family firm image. Van Gils et al. (2019) support this notion as the their study figured out that family influence significantly correlates with the establishment of a family firm image. Zellweger et al. (2012) claim that the image of a family business is the projection of family influence to external stakeholders. Thus, (4) image was added as fourth dimension measuring perceived family influence.

Table 14: Theory-based Questions and Latent Constructs Used for the Initial Construction of the PFIS

Question Members of the business family...	Source of the idea for the Question
Physical presence*	
v_31 ...are often seen in the company.*	(Ainsworth & Cox, 2003; Astrachan et al., 2002; Berrone, Cruz, & Gómez-Mejía, 2012; Chua et al., 1999; Jaskiewicz et al., 2015; Köhn et al., 2022)
v_32 ...are represented or present at different hierarchical levels of the company.*	
v_33 ...also lend a hand when necessary.*	
v_34 ...spend a lot of time in the company.*	
v_35 ...take part in company celebrations as a family.*	
Culture	
v_36 ...also have an open ear for employees' personal matters.	(Ainsworth & Cox, 2003; Astrachan et al., 2002; Chua et al., 1999; Fletcher et al., 2012; Frank et al., 2017; M. Huang et al., 2015; Köhn et al., 2022; Ruf et al., 2021; Salvato & Melin, 2008)
v_37 ...maintain a close relationship with employees.	
v_38 ...take the time to listen to employees' ideas.	
v_39 ...can be approached by employees from all departments.	
v_40 ...ensure that employees feel comfortable in the company.	
v_41 ...know most employees by name.*	
v_42 ...ensure that employees are aware of the company's history.	
v_43 ...recruit staff and secure jobs for the long term.	
v_44 ...also show understanding when employees have private problems.	
Involvement	
v_45 ...have a major influence on day-to-day decisions.	(Astrachan et al., 2002; Berrone, Cruz, & Gómez-Mejía, 2012; Carney, 2005; Chua et al., 1999; Cruz et al., 2011; Dyer, 1987; Fries et al., 2021; Handler, 1989; James et al., 2017; Köhn et al., 2022; Miller et al., 2017; Miller & Le Breton-Miller, 2014; Mussolino & Calabrò, 2014; Tabor et al., 2018)
v_46 ...have great influence on the long-term orientation of the company.	
v_47 ...like to distribute work instructions themselves.	
v_48 ...are directly involved in almost all work processes of the company.	
v_49 ...make the final decisions in the company alone.	
v_50 ...take responsibility for solving problems in the company.*	
v_51 ...like to select new employees themselves.	
v_52 ...consider it important to get to know new employees personally.*	
Image	
v_53 ...present the company externally as a family business.	(Berrone, Cruz, & Gómez-Mejía, 2012; Campopiano & De Massis, 2015; Craig et al., 2008; Frank et al., 2017; Klein et al., 2005; Köhn et al., 2022; Memili et al., 2010; Micelotta & Raynard, 2011; Salvato & Melin, 2008; Stough et al., 2015; Van Gils et al., 2019; Zanon et al., 2019; Zellweger, Kellermanns, Eddleston, et al., 2012)
v_54 ...use the word "family business" to advertise actively.	
v_55 ...present the company to our customers as a family business.*	
v_56 ...are engaged in the common good within the city / region.	
v_57 ...attach importance to the fact that the name of the family business is also known in the city / region.	

* Not included in the final scale

Concluding our empirical and theoretical conceptualization, we identified four dimensions that build the tentative subscales of the PFIS. These dimensions are physical presence, culture, involvement, and image. Based on these preliminary subscales, we articulated 27 items, presented in little sentences or statements. Interviewees can give a comment to all of these statements on a five-point Likert scale, which expresses agreement or disagreement with each of those. We chose this scale design because it is well-suited for capturing emotions and opinions related to perceptions and experiences. It also allows the respondent to grade their response (DeVellis, 2017). After developing the initial scale items, we conducted an internal review to refine the first draft of the PFIS (Hinkin, 1998). Therefore, we sent the survey as a pretest to family business scholars, discussed the initial draft with them, and incorporated their suggestions for improvement. The first revised version of the PFIS is displayed in Table 14.

4.3.2 Step 2: Scale's Improvement and Validation

The next step in our scale development process is the improvement and validation of the PFIS. We, therefore, conducted a survey using the revised initial items. Between July and October 2021, we sent emails to 30,000 randomly selected family businesses in Germany, and asked them to participate in our survey. We decided to focus on Germany, as here the density of family businesses in all industries is high and family firms are historically rooted in the national economy (Klein, 2000; Wolff et al., 2022). To contact potential participants, we took information from the AMADEUS database (Bureau van Dijk, 2021) and included only companies that were listed as active in the database, had an email address, employed a minimum of 5 employees, had been active for at least 5 years, and were not subsidiaries of other businesses. In addition, according to the NACE economic activities, the following sectors were excluded as family businesses are unlikely to be found here: Public administration and defense; compulsory social security; activities of households as employers; undifferentiated goods- and services-producing activities of households for own use; activities of extraterritorial organizations and bodies. Our email included a cover letter explaining the rather general purpose of our study and instructions, as well as a link directing participants to the online survey. 1643 people clicked on the link to the questionnaire, of which 1132 people filled out the questionnaire completely, which corresponds to a response rate of 3.77% in terms of completed questionnaires. Each company could only participate once.

To avoid non-response bias, we tested for any statistical differences between the responses of early and late respondents. To do this, we divided the sample into three parts and compared the

responses of the groups (Armstrong & Overton, 1977). Concerning our explanatory variables, there were no statistical differences observable between the groups' responses.

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

We checked the representativeness of our sample by comparing the key data of the contacted companies with the key data of the obtained sample from the survey. To do this, we compared the distributions of the number of employees (contacted mean 36.99, sample mean 41.02) and industries, finding a very similar structure.

To ensure that we reached our target group with the questionnaire, we asked several questions to determine whether the firm that employs the respondent is a family business and what position the respondent holds in the firm. Accordingly, we first filtered out all respondents who were owners of the businesses. Second, we removed all firms that do not meet the criteria of the family business definition by Chua et al. (1999). According to this definition, a firm is a family firm, if at least one family member is actively involved in the firm's management and at least 50% of the shares of the firm are held by members of the entrepreneurial family (Chua et al., 1999). The addition of these criteria yields a sample of 600 cases that forms the basis for our subsequent factor analyses of the PFIS and includes companies with 5 to 230 employees (mean 41). For all our calculations we used the statistical program R Studio version 2022.12.0 with the lavaan package with default parameter specifications.

4.3.2.1 Exploratory Factor Analysis

In the next step, we conducted an exploratory factor analysis (EFA) to investigate whether the conceptualized structure of our empirically and theoretically developed latent factors is displayed in an exploratory analysis. We use the maximum likelihood method combined with a varimax rotation for the analysis (Hair et al., 2019). The initial solution of the EFA is shown in Table 15.

The factor loadings of this initial solution, the eigenvalues, and the screeplot show that a solution with only three factors is more appropriate. We also iteratively removed from our

analysis all items that loaded on a factor less than 0.3 or cross-loaded on multiple factors with a loading distance less than 0.2 (Hair et al., 2019). As a result, the factors of culture, involvement, and image remained as shown in Table 2 (questions in italics were excluded for further analysis). The factors obtained from the EFA were then subjected to confirmatory factor analysis (CFA) to validate the developed scale (Hair et al., 2019).

Table 15: Exploratory Factor Analysis of the PFIS (Initial Solution with 4 Factors)

Question	Factor loadings			
	1	2	3	4
Members of the business family...				
Physical presence*				
v_31 <i>...are often seen in the company.*</i>	.330	.310		.782
v_32 <i>...are represented or present at different hierarchical levels of the company.*</i>				.308
v_33 <i>...also lend a hand when necessary.*</i>	.463	.316		.573
v_34 <i>...spend a lot of time in the company.*</i>	.325	.301		.749
v_35 <i>...take part in company celebrations as a family.*</i>				
Culture				
v_36 ...also have an open ear for employees' personal matters.	.852			
v_37 ...maintain a close relationship with employees.	.709			
v_38 ...take the time to listen to employees' ideas.	.785			
v_39 ...can be approached by employees from all departments.	.578			
v_40 ...ensure that employees feel comfortable in the company.	.785			
v_41 <i>...know most employees by name.*</i>	.468	.313		
v_42 ...ensure that employees are aware of the company's history.	.579			
v_43 ...recruit staff and secure jobs for the long term.	.646			
v_44 ...also show understanding when employees have private problems.	.813			
Involvement				
v_45 ...have a major influence on day-to-day decisions.		.746		
v_46 ...have great influence on the long-term orientation of the company.		.474		
v_47 ...like to distribute work instructions themselves.		.731		
v_48 ...are directly involved in almost all work processes of the company.		.666		
v_49 ...make the final decisions in the company alone.		.653		
v_50 <i>...take responsibility for solving problems in the company.*</i>	.517	.455		
v_51 ...like to select new employees themselves.		.632		
v_52 <i>...consider it important to get to know new employees personally.*</i>	.532	.440		
Image				
v_53 ...present the company externally as a family business.			.914	
v_54 ...use the word "family business" to advertise actively.			.780	
v_55 <i>...present the company to our customers as a family business.*</i>	.447		.375	
v_56 ...are engaged in the common good within the city / region.			.895	
v_57 ...attach importance to the fact that the name of the family business is also known in the city / region.			.605	

N=600. Maximum likelihood extraction with varimax rotation, values below .3 suppressed.

* Not included in the final scale.

Source: Own data.

4.3.2.2 Confirmatory Factor Analysis

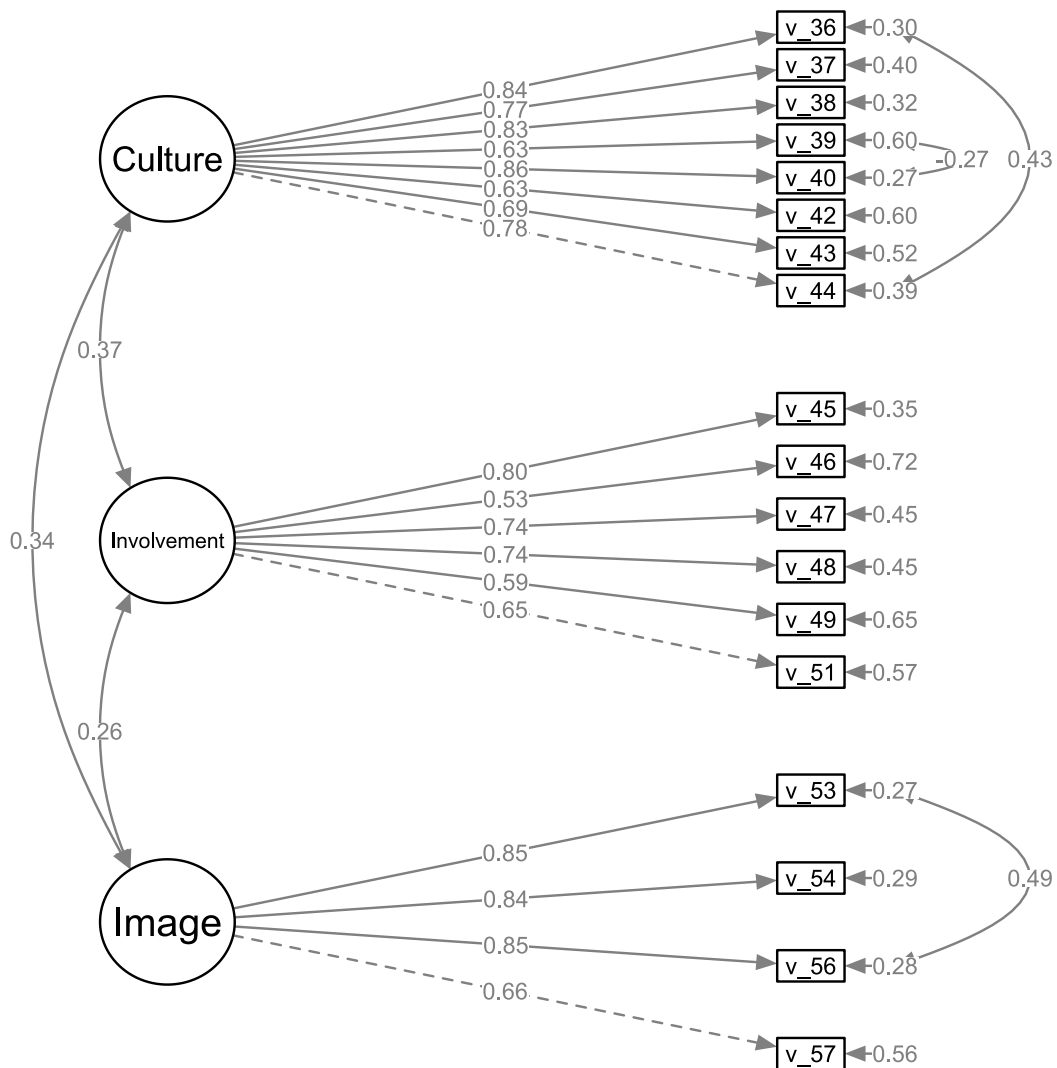
We specified the CFA model in R, and used the maximum likelihood method for the calculations. We also examined the item loadings, which showed similar results to the EFA (all > 0.53). The standardized residuals had very low values (all < 0.275). The fit indices of the initial CFA model were already good, but the modification index indicated that there was room for improvement. After a substantive review, three recommendations were made to improve model fit and three covariances between error terms within individual constructs were added. We then reran the updated CFA model. The results are shown in Tables 16 and 17, and Figure 10.

Table 16: Confirmatory Factor Analysis of the PFIS

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

Source: Own data.

Figure 10: Plot of the Results of the PFIS Confirmatory Factor Analysis



N = 600. The standardized factor loadings and the factor covariances are displayed.

Source: Own illustration.

The model fit diagnostics (Table 17) indicate that the model fits the data well, with a value of 0.961 for the Comparative Fit Index (CFI) and a value of 0.953 for the Tucker-Lewis Index (TLI). These values are both well above the recommended thresholds of 0.95 for CFI (Hu & Bentler, 1999) and 0.9 for TLI (Bentler & Bonett, 1980). The root mean square error of approximation (RMSEA) for the model is 0.048, with a lower confidence interval (CI) of 0.042 and an upper CI of 0.054. The RMSEA value is well below the threshold of 0.06 and the Standardized Root Mean Square Residual (SRMR) for the model is 0.068, which is below the threshold of 0.08. The model fit diagnostics indicate that the model fits the data well, with a value of 0.961 for the Comparative Fit Index (CFI) and a value of 0.953 for the Tucker-Lewis Index (TLI). These

values are both well above the recommended thresholds of 0.95 for CFI (Hu & Bentler, 1999) and 0.9 for TLI (Bentler & Bonett, 1980). The root mean square error of approximation (RMSEA) for the model is 0.048, with a lower confidence interval (CI) of 0.042 and an upper CI of 0.054. The RMSEA value is well below the threshold of 0.06 and the Standardized Root Mean Square Residual (SRMR) for the model is 0.068, which is below the recommended threshold of 0.08. Both values, therefore, show an excellent model fit (Hu & Bentler, 1999).

Table 17: Model Fit Diagnostics CFA PFIS

Variable	Estimate
Chi-square	307.885 (129 df, $p < .001$)
Comparative Fit Index (CFI)	0.961
Tucker Lewis Index (TLI)	0.953
RMSEA	0.048
RMSEA 90% CI lower bound:	0.042
RMSEA 90% CI upper bound:	0.054
robust RMSEA	0.054
SRMR	0.068
N	600

Note: Robust values are reported.

Concerning convergent validity, we first assessed the standardized factor loadings of the items, each of which is above the threshold of 0.5, all factors contain at least three variables and all loadings are highly significant, as required for convergent validity (Chin, 1998; Hair et al., 2019). Furthermore, Cronbach's alpha with values between 0.83 and 0.91 for the factors and a composite reliability ranging from 0.84 to 0.92 for the factors are in excellent ranges (Cronbach, 1951; Nunnally & Bernstein, 1994). The Average Variance Extracted (AVE) between 0.49 and 0.65 is deemed acceptable in this case due to the high composite reliability and Cronbach's alpha for all constructs (Fornell & Larcker, 1981; Hair et al., 2019).

To test discriminant validity, we first verified: all cross-loadings were lower than the indicator loadings. Our analysis also shows that the Fornell-Larcker criterion is met, as the discriminant validity within measurements exists when the square root of AVE is greater than any corresponding row or column entry of the correlation matrix (Table 18) (Fornell & Larcker, 1981).

To further demonstrate the robustness of our confirmatory factor analysis we randomly divided our sample into two subsamples. Subsequently, we performed separate confirmatory factor analyses on each subsample. Both analyses consistently validate the previously identified

factor structure, which further strengthens the validity of our findings (Figure 17 and 18, Appendix).

Table 18: Cronbach's Alpha, AVE, Composite Reliability, and Larcker Test for Discriminant Validity

	Cronbach's Alpha	AVE	Composite Reliability	<i>Culture</i>	<i>Involvement</i>	<i>Image</i>
<i>Culture</i>	0.91	0.58	0.92	0.76		
<i>Involvement</i>	0.83	0.49	0.84	0.33**	0.70	
<i>Image</i>	0.89	0.65	0.86	0.33**	0.23**	0.81

The diagonal values in bold represent the square root of the average variance extracted, and the off-diagonal values represent the squared inter-construct correlations. * $p < .05$. ** $p < .01$.
Source: Own data.

4.3.3 Step 3: The Effect of Perceived Family Influence on the Job Satisfaction of Non-family Employees

To test the applicability of the PFIS, we performed an OLS regression analysis, using the PFIS as our main independent variable and job satisfaction as a dependent variable. To account for potential confounding variables and improve the accuracy of our results, we included several control variables, in our regression analysis that are known to influence job satisfaction. These variables included the respondent's age, gender (J. H. Block et al., 2015; Clark, 1997), weekly working hours (Clark & Oswald, 1996), wage (Clark, 1997), firm size, and industry (J. H. Block et al., 2015; Querbach et al., 2022). In a second model, we test the influence of each subscale, PFIS-Culture, PFIS-Involvement, and PFIS-Image on job satisfaction. As respondents were required to indicate their weekly working hours and monthly salary, not all provided answers to these questions. Therefore, the subsample for this analysis consists of 499 non-family employees. Table 19 provides descriptions of the variables.

In the first model we calculated the relation of the control variables on job satisfaction. The dependent variable used was Bacharach, Bamberger, and Conley's (1991) job satisfaction scale, which consists of five items asking respondents to rate their satisfaction with various aspects of their job on a 4-point Likert scale (e.g., "The chance your job gives you to do what you are best at."). Therefore, we calculated the mean out of the five statements referring to job satisfaction to an overall score also ranging from 1 (very dissatisfied) to 4 (very satisfied).

To compute the mean scores for each subscale of the PFIS, we carefully average the responses given to each question therein. This is a critical process, whereby each response is considered an integral data point that reflects an aspect of the family's influence in that specific dimension.

Table 19: Variable Description

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

Reference categories: ¹wage (less than 1000€), ²industry (Manufacturing, mining, quarrying, and other industry).

The calculation is precise: for each subscale, we sum the response scores obtained from the survey participants and then divide this sum by the number of questions within the subscale, arriving at a mean score that stands as a representative indicator of that particular domain of family influence. These individual subscale means are not viewed in isolation; rather, they are integral components of a collective framework that we synthesize into an overall PFIS mean score. To arrive at this comprehensive mean, we aggregate the mean values of the Culture, Involvement, and Image subscales, producing a singular metric that encompasses the breadth of family influence as perceived by the individual. This holistic PFIS score is then poised to serve as a pivotal reference point in our subsequent analysis, allowing us to explore and quantify the complex interplay between family influence and other psychosocial variables within our research ambit.

Table 20 presents the descriptive statistics and correlations among the variables, and Table 21 shows the results of the OLS regression analysis. The second model indicates a significant positive relationship between the PFIS total scale and job satisfaction (0.28, $p < .001$), suggesting that individuals who perceive a stronger family influence at their work, are more satisfied with their job. Specifically, the third model shows that the perceived family culture of the organization has the strongest significant positive influence on job satisfaction (0.41, $p < .001$), while perceived family involvement has a significant negative influence (-0.13, $p < .01$). The perceived image of the organization as a family business also has a small but significant positive influence on job satisfaction (0.09, $p < .05$). In conclusion, the first test proves that the PFIS is a useful predictor of job satisfaction, demonstrating its practical utility and value for future research.

Table 20: Means, Standard Deviations, and Correlations

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

N=499. *M* and *SD* are used to represent mean and standard deviation, respectively. * $p < .05$. ** $p < .01$.

Table 21: Regression Analysis - Perceived Family Influence on Job Satisfaction

	Job satisfaction		
	Model 1	Model 2	Model 3
PFIS		0.28***	
PFIS-Culture			0.41***
PFIS-Involvement			-0.13**
PFIS-Image			0.09*
Age	0.16***	0.14**	0.11**
Female	0.10*	0.08	0.09
Employees	0.08	0.09*	0.08
Working hours per week	0.03	-0.01	-0.02
<u>Monthly wage</u>			
Less than 1000 € ¹			
1001 to 2000 €	0.14	0.07	0.06
2001 to 3000 €	0.39*	0.32*	0.27*
3001 to 4000 €	0.44**	0.37*	0.34*
4001 to 5000 €	0.40**	0.36**	0.33**
5001 to 6000 €	0.49**	0.42**	0.38**
more than 6000 €	0.71***	0.62***	0.54**
<u>Industry</u>			
Manufacturing, mining, quarrying, and other industry ²			
Agriculture, forestry, and fishing	0.08	0.08	0.10*
Construction	0.11*	0.06	0.06
Wholesale and retail trade, transportation and storage, accommodation, and food service activities	0.08	0.06	0.06
Information and communication	-0.06	-0.02	-0.03
Financial and insurance activities	0.02	0.03	0.03
Real estate activities	0.02	-0.00	-0.01
Professional, scientific, technical, administration, and support service activities	0.09*	0.10*	0.10*
Public administration, defense, education, human health, and social work activities	0.04	0.05	0.05
Other services	0.01	0.01	0.00
Observations	499	499	499
R ²	0.164	0.235	0.327
R ² adjusted	0.131	0.202	0.296

N=499. Standardized estimation coefficients are reported. * p<0.05 ** p<0.01 *** p<0.001.

Reference categories: ¹wage (less than 1000€), ²industry (Manufacturing, mining, quarrying, and other industry).

Source: Own data.

4.4 Discussion

Family influence is a critical determinant of family firms' uniqueness (Chrisman et al., 2012; Chua et al., 2012; Lamb & Butler, 2018; Lindow et al., 2010) and thus a fundamental aspect of the modern family business definition (Chua et al., 1999; Litz, 1995, 2008; Zachary, 2011). Therefore, the family business literature is dependent on robust instruments to measure family influence (Irava & Moores, 2010). Although multidimensional scales have been introduced in the past to measure family influence (Astrachan et al., 2002; Frank et al., 2017), their potential has not been fully realized as many studies use single items to measure the multidimensional concept of family influence (Evert et al., 2016).

Moreover, the aforementioned family influence scales only survey members of the entrepreneurial family and neglect the perspective of non-family stakeholders such as non-family employees. However, their perception appears to be very important to capture an unbiased and more holistic impression of family influence. As a result, our understanding of family influence is still incomplete (Holt et al., 2010; Rau et al., 2018). Our study addresses this gap by developing the PFIS, which measures how non-family employees perceive family influence. In doing so, we contribute theoretically, methodologically, and empirically to a better understanding of family influence.

From a theoretical perspective, our literature-based conceptualization of family influence shows the roots of family influence, and its historical development in the general management literature and later in the family business literature. We highlight the first understanding of family influence (Donnelley, 1964), which is quite similar to our contemporary understanding of family influence. Still, family business scholars (Kellermanns et al., 2012; Lindow et al., 2010; Litz, 1995) recognize ownership structure (Barry, 1975; I. S. Lansberg et al., 1988), involvement in the management (Barnes & Hershon, 1994; Burch, 1972) and transgenerational succession of the family firm (Ward, 1987) as formative aspects of family influence. In this sense, the PFIS identifies perception as a new aspect of family influence and thus expands our understanding of this concept. Therefore, the PFIS makes a valuable contribution to confounding the still fuzzy definition of family businesses (Chrisman et al., 2012; Daspit et al., 2021; Harms, 2014; Payne, 2018; Rovelli et al., 2022; Rutherford et al., 2008) and ultimately advancing family business research (Pearson et al., 2014).

From a methodological perspective, the PFIS is a complementary measurement to existing family influence scales. While the F-PEC scale (Astrachan et al., 2002) and the FIFS (Frank et al., 2017) measure family influence from the perspective of the entrepreneurial family, the PFIS is the first instrument that measures how non-family employees, who are important stakeholders within family firms (Pimentel et al., 2020), perceive family influence. Thus, the PFIS methodologically enables us to capture a more unbiased and holistic picture of family influence. Moreover, the PFIS enables a better explanation of how working in a family business actually affects non-family employees. Therefore, the PFIS contributes to the recent literature on the impact of family influence on non-family employees which has already shown that through family influence the relationships between the business family and non-family employees are based on care, trust, support, and concern for wellbeing (Bammens, Van Gils, & Voordeckers, 2010; Miller, Lee, Chang, & Le Breton-Miller, 2009), which in return lead to increased identification and reduced turnover intentions among non-family employees (Memili & Welsh, 2012).

From an empirical perspective, we prove that the PFIS is applicable to quantitative empirical research in the future. We used the PFIS to test the effect of the perceived family influence on the job satisfaction of non-family employees. Here, our research ties in with recent studies on the impact of family influence on job satisfaction of non-family employees (Pimentel et al., 2020; Querbach et al., 2022). Additionally, our results show that the effects of the PFIS are not uniform over all three dimensions and thus confirm the notion, that different measurements of family influence or different definitions can lead to markedly different results (Chrisman et al., 2012; Miller, Le Breton-Miller, Lester, et al., 2007). While culture and image have a positive effect on the job satisfaction of non-family employees, the involvement of the entrepreneurial family shows a contrary effect. This effect can be explained by the fact that a significant involvement in the daily work of non-family employees hinders their autonomy, which is associated with job satisfaction (DeCarlo & Agarwal, 1999). The non-uniformity of individual family influence dimensions is consistent with several previous studies on the impact of family influence on family firms (Arzubiaga et al., 2018; Calabrò et al., 2019; Gomez-Mejia et al., 2018; Neckebrouck et al., 2018; Querbach et al., 2022; Rondi et al., 2019; Sageder et al., 2018). Thus, the PFIS is a valid alternative to measure family influence. It also highlights the importance of embracing the different dimensions of family influence and family firm definitions, making the use of binomial or single items measurements further implausible. To

conclude, our findings show that for non-family employees, an overall higher perceived family influence has a positive impact on their job satisfaction.

4.4.1 Theoretical and Practical Implications

With the development and validation of the PFIS, we deliver valuable contributions to the under researched domain of non-family employees' perception of family influence (Yazici et al., 2022), which opens avenues for future research in this area. Thus, the PFIS is a promising tool to expand our understanding of family influence and family firms in general. Our first theoretical contribution is the introduction of the first scale that measures family influence, not from the perspective of the sender, the entrepreneurial family or the owner-manager (Astrachan et al., 2002; Frank et al., 2017). We address the call to develop appropriate measurements of family influence (Irava & Moores, 2010) by following the social constructivism theory and changing the perspective to the dominant coalition (non-family employees) (Gergen, 1978; Morgan & Smircich, 1980; Steffy & Grimes, 1986) experiencing the effects of family influence. Therefore, the PFIS is a new tool to collect unbiased information (Gioia et al., 2000; Morgan & Smircich, 1980; Whetten et al., 1992) and to display another reality of family firms. Due to the above benefits, the PFIS is a valuable instrument to expand our still lacking understanding of family influence in particular (Holt et al., 2010; Rau et al., 2018) and thus the idiosyncratic and complex nature of family firms in general (Chrisman et al., 2012; Chua et al., 2012; Lamb & Butler, 2018; Lindow et al., 2010). Because of this, and because family influence is considered a key element of the modern family business definition (Chua et al., 1999; Litz, 1995, 2008; Zachary, 2011), the PFIS can be an important piece of the puzzle to refine the still fuzzy family business definition (Chrisman et al., 2012; Daspit et al., 2021; Harms, 2014; Payne, 2018; Rovelli et al., 2022; Rutherford et al., 2008). We add to the discussion of the family business definition, by proposing, that a firm is a family firm when it is experienced as such thus looking at the effects rather than the cause itself.

Second, combining the PFIS with existing family influence scales or factual measurements such as ownership percentage enables us to view family influence from a dyadic perspective, thereby aligning the perspectives of the business family and non-family employees. As a result, the PFIS, in combination with other measurements, is an appropriate tool to collect more comprehensive and holistic data on family influence. This was not possible beforehand, as known scales to measure family influence could not simply be adopted to other stakeholder groups.

Third, we prove the applicability of the PFIS by testing the effect of the perceived family influence on the job satisfaction of non-family employees. Our results show that although severe family involvement leads to lower job satisfaction among non-family employees, pronounced family culture and image counteract this effect, so the overall effect of perceived family influence on the job satisfaction among non-family employees is positive. Based on our evidence that the PFIS is applicable to quantitative empirical research and that it has a proven verifiable impact on non-family employees in family firms in terms of their job satisfaction, family business scholars should be encouraged and invoked using the PFIS for future research efforts. For example, it could be very interesting to investigate how perceived family influence affects innovation behavior (Ahluwalia et al., 2017; Eddleston et al., 2012; Mahto et al., 2010; Tabor et al., 2018) of non-family employees or how perceived family influence affects non-family employees' bonds with the entrepreneurial family (Bammens et al., 2010; Berrone et al., 2010; Cennamo et al., 2012; König et al., 2013) and thus their organizational identification (Dutton et al., 1994; Mael & Ashforth, 1992; Terry et al., 2000). Furthermore, the PFIS can be utilized to examine how the perceived family influence impacts non-family employees' intrapreneurship behavior (Gawke et al., 2019) advancing the understanding of intrapreneurship in family firms, or how it influences the job fit (Kristof, 1996; Resick et al., 2007; Saks & Ashforth, 1997) of non-family employees.

Besides our manifold theoretical implications, we also offer implications for practitioners. First, the PFIS is a useful tool for owner-managers to measure the perceived family influence within their organization. As a result, they can see which family influence dimensions are more and which are less pronounced. If, for example, non-family employees perceive the culture as impersonal, owner-managers can take certain measures, such as establishing an open-door policy or taking care of the employees' needs, to improve the organizational climate. Second, using the PFIS, allows owner-managers to evaluate whether their family influence has a positive or negative impact on non-family employees. Considering the findings of our regression analysis, we see e.g., that culture and image have a positive effect on the job satisfaction of non-family employees, but involvement has a negative one. Therefore, being aware of how certain family influence dimensions affect non-family employees, helps owner-managers to adjust family influence in such a way that it benefits the employees and ultimately the family firm. Third, family firms that use the PFIS to ask their non-family employees how they perceive the family influence could have a positive effect on their motivation and productivity. We justify this assumption by referring to the pioneering Hawthorne experiments

conducted from 1924 to 1932. The purpose of these experiments was to find out whether illumination levels in production halls affect the productivity of employees. The findings suggest that the illumination levels had virtually no effect on employees' productivity, but rather the fact that employees paid a lot of attention during the experiments and were in constant communication with researchers and managers (Franke & Kaul, 1978). This might be also the case when non-family employees are asked how they perceive family influence in their organization, as they feel that they are seen and heard and that their opinions and thoughts are also important. This attention and appreciation can strengthen their self-esteem and consequently increase their commitment and productivity.

4.4.2 Limitations and Future Research

First, our study faces a geographical limitation. Although, we contacted more than 30.000 family firms from various industries, all non-family employees in our sample work in German family firms. Given that national culture has a crucial impact on the culture in firms (Boubakri et al., 2021; Ringov & Zollo, 2007), we acknowledge that future research may identify additional aspects of perceived family influence that we have not considered so far. Therefore, we invite future research to apply the PFIS in international contexts, or even use cross-national research settings to increase the generalizability of the PFIS. The second limitation of our work is that we collected our data by surveying single respondents from each firm. This key informant approach is limited by the fact that an individual employee may not always represent an entire firm accurately. Future research could solicit information from multiple employees of a firm to get a more accurate picture of each firm. Third, for our sample, we exclusively considered family firms where the entrepreneurial family holds at least 50% of shares and at least one family member is actively involved in management. In the future, it would be interesting to see whether other definitions of family businesses (e.g., only 10% of the shares are held by the entrepreneurial family, the business must be in the second generation, etc.) lead to different findings.

4.5 Conclusion

In this study, we examined the literature on family influence, allowing us to define family influence as the influence the entrepreneurial family exerts on the firm that makes family firms unique. Our literature review also revealed that current family influence scales measure family influence only from the perspective of the entrepreneurial family and neglect other perspectives

of non-family members, such as non-family employees. Therefore, we developed the Perceived Family Influence Scale (PFIS), the first valid and reliable scale to measure family influence from a non-family employee perspective. We encourage future research to use the PFIS as it allows for the collection of unbiased and more holistic data that will expand our knowledge of the intriguing yet complex nature of family influence and family firms. We also invite entrepreneurial families to use the PFIS as it is a helpful tool to measure family influence in their organizations and how it affects non-family employees. This allows them to adjust their family influence in such a way that it benefits their non-family employees and ultimately the family firm. Thus, the PFIS is not only a valuable instrument for advancing family business research, but also for improving managerial practice in family firms.

The previous study presented in chapter 3 of this dissertation qualitatively highlighted the significant role of family influence on the intrapreneurial activities of non-family employees within family firms. Building on this foundation, the subsequent study has pioneered the development and validation of the Perceived Family Influence Scale (PFIS). This innovative tool is the first-ever offering that enables to quantitatively assess family influence from the vantage point of non-family employees. As this study also has proven the applicability of the PFIS, its introduction invites for future research in this field and thus, holds promise to substantially advance the family business literature.

With the overarching goal of this dissertation being to delve deeper into the nuances of intrapreneurship in family firms as well as in SMEs, the research in chapter 5 shifts the spotlight to the latter. In this study, it is specifically examined how individual entrepreneurial orientation (IEO) and the congruence between an employee and their designated job, better known as job fit, contribute to shaping intrapreneurial behavior within SMEs. To explore this relationship, the forthcoming chapter employs a moderated ordinary least squares (OLS) regression analysis. This analytical approach aims to further elucidate the dynamics of intrapreneurial behavior in SME settings, thereby broadening our comprehensive understanding of intrapreneurship across diverse business environments.

5 From Intention to Behavior: How Individual Entrepreneurial Orientation and Job Fit Influence Employee Intrapreneurship in SMEs

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ABSTRACT

This study examines the intention-behavior dynamics of intrapreneurship at the individual level, an area that remains largely underexplored compared to the widely studied domain of firm-level intrapreneurship. To address this, we investigate the relationships between individual entrepreneurial orientation (as a measure of intention), job fit (representing context), and employee intrapreneurship (behavior) in small and medium-sized SMEs. We therefore, conducted moderated regression analyses using a sample of 649 employees from SMEs. Our results indicate that individual entrepreneurial orientation positively affects employee intrapreneurship, while, surprisingly, job fit has no significant effect. However, job fit positively moderates the relationship between individual entrepreneurial orientation and employee intrapreneurship, especially its sub-dimensions person-organization fit, and demands-abilities fit. Our findings enhance the theoretical comprehension of intrapreneurship, particularly the connection between intention and behavior, while also offering valuable practical insights for the contextual employment settings within SMEs.

Keywords: *Employee intrapreneurship, individual entrepreneurial orientation, job fit, SMEs, theory of planned behavior (TPB)*

5.1 Introduction

In today's rapidly evolving global economy, the prosperity of small and medium-sized enterprises (SMEs) relies heavily on their innovative capacity (Denicolai et al., 2021; Hock-Doepgen et al., 2021; Kuratko & Audretsch, 2013; Saunila, 2020). One notable driver of innovation is the individual intrapreneurial behaviors and activities of employees (Ahluwalia et al., 2017; Eddleston et al., 2012; Hernández-Perlines et al., 2022; Opland et al., 2022), better known as employee intrapreneurship (EI). This fosters growth, value creation, and competitiveness (Bierwerth et al., 2015; R. D. Ireland et al., 2009; Kearney & Meynhardt, 2016; Morris et al., 2011). Thus, uncovering the drivers of EI carries profound implications for both theory and practice.

Consequently, previous research has shed light on various individual factors influencing EI. Notably, the demographic background of an individual is a critical variable (Camelo-Ordaz et al., 2012; Urbano & Turró, 2013). Camelo-Ordaz et al. (2012) and Urbano and Turró (2013) offer divergent findings on the impact of education on innovative conduct – where the former observes an inverse relationship, the latter suggests a positive correlation. Furthermore, a spectrum of personal attributes such as creativity, altruism, ambition, perseverance, risk propensity, optimism, and proactivity has been identified as precursors to intrapreneurial activity (Camelo-Ordaz et al., 2012; Rigtering & Weitzel, 2013; Sinha & Srivastava, 2013; Williamson et al., 2013; Zhu et al., 2014). The domain of entrepreneurial behavior further underscores this narrative, revealing a significant alignment with intrapreneurship (Kirby, 2006; Tietz & Parker, 2012). Concerning human capital, Parker (2011) accentuates the role of generic competencies encompassing skills, knowledge, and expertise, while Martiarena (2013) emphasizes the import of specific entrepreneurial skills. Moreover, communicative, creative, and brokering competencies are shown to markedly enhance the innovative propensities of employees (Bjornali & Anne Støren, 2012). Complementarily, intra-organizational elements exert substantial influence. Organizational architectures characterized by flattened hierarchies (Bouchard & Basso, 2011; Menzel et al., 2007), managerial support and resource provision (Menzel et al., 2007) alongside a culture that encourages experimentation and accepts errors (Hagedorn & Jamieson, 2014), have been empirically associated with heightened levels of intrapreneurship.

However, despite these interesting insights delivering studies and inquiries, the intrapreneurship literature primarily focused on firm-level analyses (Niemann et al., 2022),

leaving our understanding of this concept at the individual employee level and its drivers fragmented (Blanka, 2019, Gawke et al., 2019). Based on the theory of planned behavior (TPB) and the interactionist perspective, two individually focused concepts that hold promise in advancing our understanding of EI are the intention to become entrepreneurially active and the immediate job-related context. The TPB (Ajzen, 1991) states that intention predicts behavior to a certain extent, as i.e. Franke and Lüthje (2004) showed in their study with business students. And the interactionist perspective proposes that employee behavior is influenced not only by their personalities and intentions but also by their job context (Oldham & Cummings, 1996; Woodman et al., 1993). Therefore, we work with the concept of Individual Entrepreneurial Orientation (IEO) (Kollmann et al., 2007), encapsulating individuals' entrepreneurial intentions rooted in attitudes and values such as risk propensity, perseverance, and passion (Santos et al., 2020). Moreover, we link IEO with the job fit of single employees, which signifies the individual's work-related context (Kristof, 1996; Resick et al., 2007; Saks & Ashforth, 1997). The combined analysis of the two concepts holds significant potential to deepen our comprehension of strategies that SMEs can utilize to amplify their entrepreneurial capacity. As discussed, until now the relationship between IEO, job fit, and EI remains underexplored and merits further scrutiny, where our paper contributes new insights to this scientific discussion.

To address this gap, we performed regression analyses with moderation effects and analyzed data from a sample of 649 cases using the IEO scale (Santos et al., 2020) as main explaining variable, the employee intrapreneurship scale (EIS) (Gawke et al., 2019) as dependent variable to measure intrapreneurship, and the job fit scale (Cable & Judge, 1996; Resick et al., 2007; Saks & Ashforth, 1997). Our findings unveiled a positive impact of IEO on EI, suggesting that entrepreneurial intent sparks intrapreneurial action at the individual level. Intriguingly, no direct relationship was found between job fit and EI, indicating that fitting into an organization, meeting job demands, or receiving the supplies needed, does not necessarily translate into employees' intrapreneurial activities. However, as our moderation analysis shows, for employees with existing entrepreneurial orientation, a strong job fit in terms of PO-FIT and DA-FIT significantly enhanced their likelihood of engaging in intrapreneurial activities. This suggests that context influences the interplay between intention and behavior.

Our results offer novel insights on how SMEs can cultivate EI by identifying and recruiting employees with strong entrepreneurial intentions, as they tend to be more intrapreneurial.

Additionally, aligning organizational values with those of entrepreneurially inclined employees, and ensuring job demands correspond with their abilities, can stimulate both intrapreneurship and thus, innovation in SMEs.

5.2 Theoretical Background and Development of Hypotheses

The dynamic and complex business environment, along with the pressure to constantly pursue innovation (Denicolai et al., 2021; Hock-Doepgen et al., 2021; Kuratko & Audretsch, 2013; Saunila, 2020), has led to increased interest in the concept of employee intrapreneurship in both theory and practice (Blanka, 2019). EI refers to the entrepreneurial activities carried out by employees within existing organizations (Gawke et al., 2019), and it is considered an important aspect of SMEs' innovativeness (Ahluwalia et al., 2017; Eddleston et al., 2012) as it leads to growth and value creation (Bierwerth et al., 2015; Kearney & Meynhardt, 2016; Veenker et al., 2008). The concept of EI originates from the seminal work of Pinchot (1985), who conceptualized intrapreneurship as a process of entrepreneurship within established organizations where employees play a decisive role in fostering firm-level innovation.

Although the concept of intrapreneurship has been the subject of extensive research, its definition is still unclear (Edú Valsania et al., 2016; Turro et al., 2016). Blanka (2019) has attributed this ambiguity to the absence of rigid distinctions between intrapreneurship and related concepts such as entrepreneurial orientation (Covin & Slevin, 1989; Lumpkin & Dess, 1996; Miller, 1983), corporate entrepreneurship (Burgelman, 1983; Guth & Ginsberg, 1990; Kuratko et al., 1990; Stopford & Baden-Fuller, 1994; Zahra, 1991) or corporate venturing (MacMillan et al., 1986; Sykes, 1986). To solve this *"puzzle of similar terms and synonyms"* (Blanka, 2019, p. 930), she distinguished intrapreneurship from its related concepts by arguing that while entrepreneurial orientation refers to a firm's strategic alignment towards entrepreneurial activities (Covin & Wales, 2012; Wales et al., 2015), corporate entrepreneurship refers to a firm's strategic renewal behavior (Kuratko & Audretsch, 2013), and corporate venturing refers to a firm's new venture creation behavior (Antoncic & Hisrich, 2003), intrapreneurship centers around the individual's role in recognizing opportunities and actively developing innovations (Camelo-Ordaz et al., 2012). Thus, intrapreneurship is an individual-level concept, while the others are firm-level concepts (Blanka, 2019).

Building upon this reasoning, past research has linked individual independent variables such as demographic factors, personal values (Camelo-Ordaz et al., 2012; Urbano & Turró, 2013),

personality traits (Sinha & Srivastava, 2013), uncertainty and risk (Martíarena, 2013; Matthews et al., 2009), or generic and specific human capital like entrepreneurial skills and education (Bjornali & Anne Støren, 2012; Parker, 2011) to dependent, firm-level measurement of intrapreneurship. These studies deliver first insights such as being creative, altruistic, ambitious, persistent, risk-affine, optimistic, and proactive (Camelo-Ordaz et al., 2012; Rigtering & Weitzel, 2013; Sinha & Srivastava, 2013; Williamson et al., 2013; Zhu et al., 2014), or having generic skills and knowledge as well as skills and knowledge that are directly related to specific entrepreneurial activities (Bjornali & Anne Støren, 2012; Martíarena, 2013; Parker, 2011). However, although these studies attempted to examine intrapreneurship at the individual level, they lack of valid tools to assess individual employee intrapreneurship (Gawke et al., 2019).

Therefore, Gawke et al. (2019) designed the Employee Intrapreneurship Scale (EIS) to gauge actual entrepreneurial behavior of employees, such as promoting change, innovation, or new products, overcoming this gap. They identified three different conceptualizations of intrapreneurship in their work. The entrepreneurial orientation approach, for example, focuses on the organizational-level characteristics that facilitate intrapreneurship, such as a willingness to take risks, a focus on innovation, and a strategic emphasis on growth (Augusto Felício et al., 2012; de Jong et al., 2015; Edú Valsania et al., 2016; Moriano et al., 2014; L.-Y. Sun & Wen Pan, 2011). The behavior-based approach focuses on the observable actions of employees that reflect intrapreneurial characteristics, such as taking initiative, being proactive, and being creative and innovative (Hornsby et al., 2013; Matthews et al., 2009; Parker, 2011; Tietz & Parker, 2012; Urbano & Turró, 2013). The intrapreneurial outcomes approach focuses on the results of intrapreneurial activity, such as new product development, process improvement, and revenue growth on firm level (Gawke et al., 2017, 2018; Mustafa et al., 2016; Woo, 2018; Zampetakis et al., 2009). However, the EIS was ultimately established following the behavior-based approach, which provides superior conceptual clarity by focusing on employee venture behavior and strategic renewal behavior, distinguishing it from related behaviors such as innovative work behaviors (Janssen, 2000) and championing behaviors (Howell et al., 2005). This approach allows for a broader theoretical exploration of factors that can hinder or foster employee intrapreneurship, encompassing behaviors beyond official mandates or supervisory control (Globocnik & Salomo, 2015). Moreover, adopting a behavior-based perspective aligns intrapreneurship with the broader category of strategic proactive work behaviors, facilitating integration into established job design theories on employee motivation, wellbeing, and

performance (Bakker & Demerouti, 2017; Parker et al., 2010), thus enabling researcher to enhance the understanding of employees' behaviors in pursuing intrapreneurial activities.

One concept that might explain this intrapreneurial behavior of employees is individual entrepreneurial orientation (IEO) (Basso et al., 2009; Kollmann et al., 2007). IEO is defined "*as a holistic assessment of individuals' tendency towards entrepreneurship*" (Santos et al., 2020, S. 193) and acknowledges the fact that individuals can act as entrepreneurs and exploit business opportunities if their entrepreneurial aptitude is acknowledged (Kollmann et al., 2007). Moreover, IEO is conceptualized by various researchers as a psychological construct encompassing individuals' beliefs, values, and practices influencing their decision-making and adaptability to change (Bolton & Lane, 2012; Taatila & Down, 2012). As such, IEO can serve as a reliable metric for identifying potential intrapreneurs within a company's workforce, which has been emphasized by experts to be encouraged on all levels of an organization (Gupta et al., 2016; Taatila & Down, 2012). In order to offer a consistent measurement of IEO Bolton and Lane (2012) developed the individual entrepreneurial orientation scale. This scale, derived from the EO scale by Lumpkin and Dess (1996), consists of 10 items, with risk-taking, innovativeness, and proactiveness as the primary constructs (Bolton & Lane, 2012).

Nevertheless, possessing IEO does not necessarily ensure its translation into intrapreneurial behavior. Psychological research distinguishes between intention, a conscious decision to perform a certain behavior, and the actual behavior. The constructs of intention and behavior are critical in psychology and are frequently examined in relation to one another. Intention denotes a person's conscious decision to perform a certain behavior, while behavior signifies the actual execution of that behavior. Despite a strong correlation between the two, the transition from intention to behavior is not always linear, and a myriad of factors can influence this conversion. This is demonstrated by the Theory of Planned Behavior (TPB) (Ajzen, 1991). A meta-analysis of 185 studies by Sheeran and Webb (2006), found that barriers or obstacles may impede the alignment of intention and behavior. Additionally, subjective norms, attitudes, and perceived behavioral control can significantly impact the behavior (Ajzen, 1991).

To account for such factors and the working environment, the job fit scale developed by Resick et al. (2007) based upon the work of Kristof (1996) and Saks and Ashforth et al. (1997) can be utilized. Job fit assesses the compatibility between an individual and their job. It determines if the individual's values and personality align with the organizational culture, values, and goals (person-organization fit); whether the individual's knowledge and skills fulfill the specific job

requirements (demands-abilities fit); and if the job satisfies the individual's needs and expectations, such as salary, benefits, autonomy, work-life balance, and career development opportunities (needs-supplies fit) (Kristof, 1996; Resick et al., 2007; Saks & Ashforth, 1997).

Originating from various research areas like organizational psychology and human resource management, job fit relies on the correlation between an individual's personality and their work environment. This concept was first introduced by Holland (1959), and later examined by Hackman and Oldham (1976) who linked job design to employee motivation and satisfaction. Schein (1983) emphasized the importance of aligning employees' values with organizational culture for optimal job fit. Kristof (1996) enhanced this understanding by stressing the need to match personal competencies and traits with job requirements for enhanced job satisfaction and performance.

Given this knowledge, and although Niemann et al. (2022) investigated how organizational and individual factors corporate entrepreneurship (firm-level analyses), it is imperative to examine the factors that enhance the successful conversion of employees' intention to engage in entrepreneurial activities (IEO) into actual intrapreneurial behavior within the organization (EI) to promote innovation. However, despite its significance, this aspect has been largely overlooked in previous research. Therefore, we suggest exploring the relationship between employees' individual entrepreneurial orientation and their intrapreneurial behavior scale while accounting for the moderating influence of job fit, which comprises the dimensions of demand-ability fit, organization-person fit, and needs-and-supplies fit.

5.2.1 The Relationship Between IEO and EI

IEO is rooted in the original concept of Entrepreneurial Orientation (EO) by Miller (1983), Covin and Slevin (1989), as well as Lumpkin and Dess (1996). EO, a strategy-making process that facilitates entrepreneurial decisions, incorporates three to five dimensions that can be analyzed collectively or independently (Rauch et al., 2009). Bolton and Lane (2012) examined these dimensions individually, recognizing that while traits, attitudes, and behaviors had been assessed to gauge entrepreneurial characteristics, no individual entrepreneurial orientation measure existed. They used entrepreneurial intention (e.g., "I plan to start my own business in the future") as a proxy to validate their scale, successfully confirming the dimensions of risk-taking, innovativeness, and proactiveness. This confirmation showed that their measurement is a reliable latent construct in measuring entrepreneurial intention. Santos et al. (2020) expanded

the IEO concept by adding passion and perseverance, following Gerschewski et al. (2016); both closely tied to entrepreneurial intention or activity.

In the realm of entrepreneurship, perseverance is recognized as an essential trait for success. Baum and Locke (2004) define perseverance as maintaining goal-directed action and energy, even when confronted with obstacles. They argue that this quality is indispensable for both initiating and running a successful entrepreneurial venture. Markman et al. (2005) further suggest that individual reactions to similar adversities can differ significantly, implying that the ability to persevere could be a key determinant of a new venture's success. Additionally, Gatewood et al. (1995) found that entrepreneurs with stable internal reasons for establishing their businesses, tend to persist more in their actions, which can lead to successful venture creation. Lastly, Baron (2000) demonstrated that entrepreneurs are less inclined to engage in counterfactual thinking (“What might have been?”) and experience significantly less regret over past actions than non-entrepreneurs.

Entrepreneurial passion, as outlined in academic literature, is a collective set of intense positive feelings consciously accessible and experienced by individuals engaged in entrepreneurial activities. These feelings are particularly associated with roles that entrepreneurs deem significant (Cardon et al., 2009) and is linked with a robust inclination towards activities that individuals find enjoyable, significant, and worthy of their time and energy (Vallerand et al., 2003). This intense positive emotion serves as a potent motivational force, inspiring entrepreneurs to surmount challenges and remain committed to their business endeavors (Cardon et al., 2009). Smilor (1997) even observed that passion is frequently identified as a central phenomenon in the entrepreneurial process. Smith et al. (2001) highlight that passion has an indirect positive relationship with business growth, mediated by factors like vision, goals, self-efficacy, competence, motivation, and competitive strategy. Furthermore, passion has been linked to broader recognition and exploitation of opportunities, the generation of new ideas (Baron & Ward, 2004; Shane et al., 2003), and improved performance (Ho & Pollack, 2014; Iyortsuun et al., 2019). Thus, passion is not only a central emotional experience in entrepreneurship but also a driving force behind venture success and growth.

The other three dimensions, predominantly used in the EO literature, are risk-taking, proactiveness, and innovativeness. Studies have already shown that individual behaviors such as risk tolerance, the pursuit of independence and recognition (Kirby, 2006; Tietz & Parker, 2012), and perceptions of uncertainty and risks (Martiarena, 2013; Matthews et al., 2009)

impact intrapreneurial behavior. Moreover, recognizing business opportunities (Martiarena, 2013; Solymossy & Gross, 2015; Urbano & Turró, 2013), and entrepreneurial self-efficacy (Douglas & Fitzsimmons, 2013; Globocnik & Salomo, 2015; Johnson & Wu, 2012), which are closely related to proactiveness, have been identified as critical determinants of intrapreneurship. Lastly, the innovativeness dimension of the IEO scale consists of questions dealing with creativity and exploration. For example, Sarooghi et al. (2015) and Sinha and Srivastava (2013) showed that there is a strong positive relationship between creativity and innovations, especially at the individual level. Furthermore, people with a stronger tendency towards taking the initiative are more likely to be intrapreneurs (Amo, 2010; Rigtering & Weitzel, 2013) which is also reflected in the questions about innovativeness.

In addition to the above-mentioned connections, the TPB (Ajzen, 1991) and subsequent studies, also within the field of entrepreneurship (Engle et al., 2010; Kautonen et al., 2015) have shown that a positive connection between intent and behavior can be assumed. Kautonen (2015) showed that business start-up intentions strongly and positively correlate with activities, time, and money invested in start-up activities. Franke & Lüthje (2004) provided similar findings for business students, showing that their entrepreneurial intention correlates with starting a business. Considering the aforementioned relationships, we propose the following hypothesis:

H1: Individual entrepreneurial orientation (intention) positively influences employee intrapreneurship (behavior).

5.2.2 The Relationship Between Job Fit and EI

Moreover, we anticipate that besides an individual's tendency towards entrepreneurial orientation, the job fit of an employee also influences their intrapreneurial behavior. This assumption is based on various findings within the literature. For example, Hackman and Oldham (1976) highlighted that workplace characteristics and job design significantly impact employee motivation and satisfaction. This finding has received consistent support of several subsequent studies (Kristof, 1996; Peng & Mao, 2015; Wang et al., 2020; Warr & Inceoglu, 2012). Integrated with insights from the intrapreneurship literature, particularly regarding factors that stimulate intrapreneurial behavior, it is observed that motivated and satisfied employees are more inclined to engage in intrapreneurial actions (Auer Antoncic & Antoncic, 2011; Baer, 2012; Bammens et al., 2013, 2015; Zhang & Bartol, 2010).

Additionally, the literature reveals numerous studies that scrutinize how specific job characteristics – pertaining to certain job fit subdimensions – directly affect intrapreneurship. For instance, several studies have explored the relationships between personal values, organizational culture, and intrapreneurship. Sinha and Srivastava (2013) investigated how the compatibility between organizational and individual values drives intrapreneurship, concluding that aligning organizational values with employee values enhances intrapreneurship. Similarly, Chandler and Krajcsák (2021) examined how the organizational culture affects intrapreneurship and found that specific organizational culture types fertilize intrapreneurial behavior among employees. These findings suggest that a strong PO-Fit fosters intrapreneurial behavior among employees.

Furthermore, Urbano et al. (2013) examined the impact of individual capabilities on intrapreneurship. They showed e.g., that entrepreneurial competences such as being able to recognize opportunities, or to design the environment so that opportunities occur (Ensley et al., 2000) and having the confidence to decide whether to exploit such opportunities or not (Daft & Weick, 1984), foster intrapreneurship. However, they also argue that such entrepreneurial competences cannot be unfolded when the job requires to plan, or to control as main task, but rather if the job provides a certain degree of autonomy (Urbano et al., 2013). Therefore, it can be anticipated that a fit between an individual's abilities and the requirements of the job (DA-Fit) has a positive effect on employee intrapreneurship.

In parallel, numerous studies have assessed the effects of various organizational determinants, such as managerial support, rewards, and resource provision, on intrapreneurship (Neessen, Caniëls, Vos, & De Jong, 2019; Opland et al., 2022). These determinants align with the job fit subdimension of need-supplies fit (NS-Fit). For instance, managerial support (Chouchane & St-Jean, 2022; DiLiello & Houghton, 2006; Hornsby et al., 2002, 2009; Kuratko et al., 1990; Urban & Wood, 2015) and trust (Rigtering & Weitzel, 2013) has been identified as a crucial antecedent of intrapreneurial behavior among employees. Additionally, rewards such as monetary incentives or promotions (Kuratko & Montagno, 1989; Urban & Nikolov, 2014) and resource provision like financial support, and availability of time and resources (Alpkan et al., 2010; Brinkhurst et al., 2011; Marvel et al., 2007; Puech & Durand, 2017) have been found to positively influence intrapreneurship. Considering the findings of the relationship between organizational factors and intrapreneurship, it is reasonable to propose that a strong NS-Fit positively influences employee intrapreneurship.

However, despite indications of a positive relationship between certain job fit subdimensions and intrapreneurship, no study to date has examined the association between job fit construct and employee intrapreneurship. This research gap has led us to hypothesize that:

H2: Job fit (context) positively influences employee intrapreneurship (behavior).

5.2.3 The Moderation Effect of Job Fit on the Relationship Between IEO and EI

We propose two hypotheses suggesting that both an individual's entrepreneurial orientation and the organizational environment independently influence employee intrapreneurship. Yet, considering the interactionist perspective (Oldham & Cummings, 1996; Woodman et al., 1993), the impact of employees' behaviors on the organization is rather a complex interplay between the individual's personality and the organizational context.

For instance, creativity, defined as regular generation of ideas (N. Anderson et al., 2014), shows that employees with high creative tendencies exhibit enhanced creativity when the organizational context provides motivational and sense-making factors (Amabile, 1983; Ford, 1996). However, routine tasks, lack of support, negative leadership, and incompetent colleagues can hinder their creativity (Jin Nam Choi et al., 2009). Chang and Teng (2017) discovered that a prevention-focused organizational environment, which emphasizes safety and responsibility (Higgins, 1997, 1998; Higgins & Silberman, 1998), encourages creatively inclined individuals to apply their creativity to their job, thereby increasing their organizational value. Similar patterns can be observed in research on intrinsic motivation. For example, Joo and Lim (2009) found that organizational learning and perceived job complexity enhanced the intrinsic motivation of employees. They reported that intrinsically motivated employees become even more motivated when job complexity is high, which, in turn, increases their proactivity (Joo & Lim, 2009).

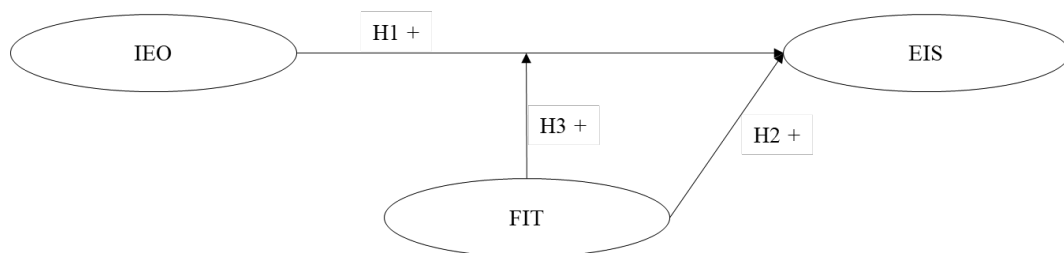
From the perspective of intrapreneurship research, Badoiu et al. (2020) examined how top management support, work discretion, rewards, time availability, and organizational boundaries affect intrapreneurs and the intrapreneurial behavior within an new technology-based firm. Their findings reveal that employees already engaged in intrapreneurial actions become more intrapreneurial in innovation-focused and supportive management settings, with autonomy in decision-making and a motivating reward system (Badoiu et al., 2020).

Considering the interactionist perspective (Oldham & Cummings, 1996; Woodman et al., 1993) and findings on creativity (Amabile, 1983; Chang & Teng, 2017; Ford, 1996; Jin Nam Choi et al., 2009), intrinsic motivation (Joo & Lim, 2009) and intrapreneurship (Badoiu et al., 2020), it becomes clear that job-related contextual factors moderate individual intrinsic tendencies and behaviors. Consequently, we propose that an employee’s intrapreneurial behavior (EI), particularly one who exhibits a strong inclination towards entrepreneurial orientation (IEO), is enhanced when the organizational context aligns with their personality, abilities, and needs (job fit). Thus, we hypothesize that:

H3: Job fit (context) positively moderates the relationship between individual entrepreneurial orientation (intention) and employee intrapreneurship (behavior).

Figure 11 shows an overview of all hypothesized relationships.

Figure 11: Hypothesis



Source: Own illustration.

5.3 Methodology and Data

To examine the relationship between IEO, job fit, and EI by testing our hypotheses, we employed multiple Ordinary Least Squares (OLS) regression analyses with the data from a survey conducted among employees of SMEs in Germany in 2021. We selected Germany as our setting, given its robust industry, innovative landscape, skilled workforce, and job security – all elements conducive to SMEs, innovation and intrapreneurial behavior. We sourced contact information for the survey from the Amadeus database (Bureau van Dijk, 2021), selecting companies that were active, had an operational history of at least five years, were not subsidiaries, and provided an email address. The survey, incorporating a cover letter outlining the study’s intent, instructions, and an online survey link, was distributed to 30,000 employees. To motivate participation, we introduced a voucher raffle. From the 1,643 respondents who accessed the survey link, 1,132 completed the questionnaire, indicating a response rate of 3.77%.

To mitigate potential sample bias, we compared the survey responses with Amadeus selection data, considering industry and firm size characteristics and found no notable discrepancies. We further took steps to counter potential common method biases, assuring participants of anonymity, not disclosing the exact data collection purpose, and randomizing questions within blocks to minimize structural or sequence influences (Podsakoff et al., 2003). Moreover, we tested for non-response bias by comparing early and late responders for statistical differences and found no significant differences between the responses of the two groups (Armstrong & Overton, 1977). To ensure that our study included the desired participants, we collected data on both the key characteristics of the companies and the positions of the respondents within these organizations. The sample was subsequently filtered for our analysis, based on a set of criteria: First, we included only those cases in which respondents answered all questions pertinent to our analysis. Second, as our study is focused on employees, we excluded all company owners from our dataset. Third, due to our focus on SMEs, we incorporated only firms with a workforce size of 2 to 249, in line with the European SME definition (European Commission, 2003), while excluding self-employed respondents. This selection yielded a dataset of 649 cases used for our analyses. To test our hypotheses, we performed ordinary least squares regression analyses with moderation effects using the statistical software R 4.3.0 (R Core Team, 2023).

The survey incorporated previously validated constructs: the employee intrapreneurship scale (EIS) (Gawke et al., 2019), the individual entrepreneurial orientation scale (IEO scale) (Santos et al., 2020), and job fit scale (Cable & Judge, 1996; Resick et al., 2007; Saks & Ashforth, 1997).

5.3.1 Dependent Variable

Our study employs the employee intrapreneurship scale (EIS) developed by Gawke et al. (2019) as the dependent variable. This scale consists of 15 questions on strategic renewal and venture behavior. Respondents indicate the frequency of actions such as “I undertake activities that change the structure of my organization / my department” on a 7-point Likert scale, where 1 denotes ‘never’ and 7 signifies ‘always’.

After a pretest, we slightly amended two aspects for clarity. We appended “my department” to questions relating to organizational influence, reflecting how many respondents think in terms of smaller units. Moreover, we replaced the statement “I exploit opportunities in the labor

market or society to renew my organization” with a more understandable version: “I exploit opportunities in the labor market or society to create new impulses for my organization / my department.” All questions are presented in Table 28 in the Appendix.

We validated the EIS scale using a confirmatory factor analysis (Figure 19, Appendix) establishing its structure and convergent validity via high factor loadings (>0.67) for each factor (Hair et al., 2019) and a sound model fit (Chi-square 319.962 (89 df, $p < .001$), CFI 0.954, TLI 0.945, RMSEA 0.063, SRMR 0.049), underscoring the scale’s validity (Bentler & Bonett, 1980; Hu & Bentler, 1999). We used the maximum likelihood method for the calculations. The scale also exhibits an excellent Cronbach’s alpha reliability coefficient of 0.94 (Cronbach, 1951; Nunnally & Bernstein, 1994). Furthermore, we calculated the mean scores for the two critical subscales of the EIS, namely, strategic renewal and venture behavior. Our computation of the mean scores involved an in-depth analysis of the responses to a series of 15 carefully curated statements that respondents rated, reflecting their perceptions and behaviors in relation to the intrapreneurial constructs we aimed to measure. For each subscale, the procedure entailed summing the individual scores assigned by participants to each relevant statement and then calculating the average by dividing this total by the number of statements associated with that subscale. This approach yielded two distinct mean values, each providing insight into the specific aspects of entrepreneurial intensity they represent. Building upon these insights, we proceeded to amalgamate the mean scores of the strategic renewal and venture behavior subscales to generate a new composite mean score for the EIS. This comprehensive EIS mean score thus serves as a pivotal variable in our analysis, reflecting the synergistic effect of the organization’s capacity for strategic renewal and its propensity for entrepreneurial ventures.

5.3.2 Independent Variables

We used the Individual Entrepreneurial Orientation (IEO) scale developed by Santos et al. (2020) as our independent variable. This 19-statement scale, which expands Bolton and Lane’s (2012) IEO scale by integrating the dimensions of passion and perseverance, encompasses risk-taking, innovativeness, proactivity, perseverance, and passion. Respondents rated their agreement with statements such as ‘I like to venture into the unknown and make risky decisions’ on a 7-point Likert scale, where 1 signifies ‘Strongly disagree’ and 7, ‘Strongly agree’ All questions are detailed in Table 28 in the appendix.

A confirmatory factor analysis of the IEO scale necessitated the exclusion of the ‘I always finish what I start’ statement from the perseverance dimension due to its low factor loading (Figure 20, Appendix). Following this exclusion, we confirmed the scale’s structure and convergent validity with high factor loadings (>0.56) for each factor (Hair et al., 2019) and a solid model fit (Chi-square 242.209 (125 df, $p < .001$), CFI 0.968, TLI 0.961, RMSEA 0.038, SRMR 0.047), validating the scale (Bentler & Bonett, 1980; Hu & Bentler, 1999) (Figure 21, Appendix). We used the maximum likelihood method for the calculations. The Cronbach’s alpha for the total scale is excellent at 0.91 and ranges between 0.75 and 0.88 for the subscales (Cronbach, 1951; Nunnally & Bernstein, 1994). To calculate the mean score of the five IEO subscales we again computed the average score of each subscale utilizing the 15 statements ranked by the respondents. Derived from these five means of the subscales, we again calculated an overall mean score for the IEO scale, which we used as variable in our analysis.

5.3.3 Moderator Variables

Our moderator variables were drawn from the job fit scale (FIT) and its subscales – person–organization fit, demands–abilities fit, and needs–supplies fit (Cable & Judge, 1996; Resick et al., 2007; Saks & Ashforth, 1997). Respondents rated their agreement with statements like ‘I think the values and personality of this organization reflect my own values and personality’ on a 5-point Likert scale, where 1 stands for ‘Strongly disagree’ and 5 for ‘Strongly agree’. We modified the original scale’s six statements that referred to internships to pertain to current jobs, as our survey targets employees. Please see Table 28 in the appendix for all questions.

A confirmatory factor analysis of the scale necessitated the exclusion of two variables with low factor loadings (Figure 22, Appendix): ‘My job performance is hurt by a lack of expertise on the job.’ From the demands–abilities fit subscale and ‘My values match those of current employees in this organization.’ From the person–organization fit subscale. Following this, we confirmed the scale’s structure and convergent validity, with high factor loadings (Hair et al., 2019) and a strong model fit (Chi-square 77.360 (41 df, $p < .001$), CFI 0.986, TLI 0.981, RMSEA 0.037, SRMR 0.039), which demonstrates the validity of the scale (Bentler & Bonett, 1980; Hu & Bentler, 1999) (Figure 23, Appendix). We used the maximum likelihood method for the calculations. The Cronbach’s alpha for the total scale is excellent at 0.89 and ranges between 0.81 and 0.91 for the subscales (Cronbach, 1951; Nunnally & Bernstein, 1994). Again, as we did for the dependent and independent variable, we calculated comprehensive mean for the job fit scale. We therefore, computed the mean of all three subdimensions based on how

the respondents ranked the 13 statements of the scale. The resulting three means were then the basis for the calculation of an overall mean score for the job fit scale.

Table 22: Variable Description

#	Variable	Description
1	EIS - Employee Intrapreneurship Scale	Scale consisting of 15 questions on Strategic Renewal Behavior and Venture Behavior according to Gawke et al. (2019). Respondents were asked how often you take certain actions. <i>e.g. "I undertake activities to realize change in my organization."</i> <i>Measured on 7-point Likert scales ranging from 1-7; never = 1 to always = 7.</i>
2	IEO – Individual Entrepreneurial Orientation	Scale consisting of five dimensions: Risk taking, Innovativeness, Proactivity, Perseverance, Passion according to Santos et al. (2020). Each dimension contains three to five statements that had to be rated by the respondent. <i>e.g. "I like to venture into the unknown and make risky decisions."</i> <i>Measured on 7-point Likert scales ranging from 1-7; Strongly disagree = 1 to Strongly agree = 7.</i>
3	FIT	Scale consisting of three subscales regarding the person–organization fit, the demands–abilities fit, and the needs–supplies fit according to Resick et al. (2007), Saks & Ashforth (1997) and Cable & Judge (1996) . <i>e.g. "I think the values and personality of this organization reflect my own values and personality"</i> <i>Measured on a 5-point Likert scale ranging from 1-5; Strongly disagree = 1 to Strongly agree = 5.</i>
4	Age	Age of the respondent (in 2021)
5	Female	Dummy = 1 for females.
6	Employees	Number of employees.
7	Company affiliation	Years of the employee’s affiliation with the company.
8	Agriculture, forestry, and fishing	Dummy = 1 for agriculture, forestry, and fishing industry.
9	Manufacturing, mining, ... ¹	Dummy = 1 for manufacturing, mining, quarrying, and other industry.
10	Construction	Dummy = 1 for construction industry
11	Wholesale and retail trade...	Dummy = 1 for Wholesale and retail trade, transportation and storage, accommodation, and food service activities.
12	Information and communication	Dummy = 1 for the information and communication industry.
13	Financial and insurance activities	Dummy = 1 for financial and insurance activities.
14	Real estate activities	Dummy = 1 for real estate activities.
15	Professional, scientific, ...	Dummy = 1 for professional, scientific, technical, administration, and support service activities.
16	Public administration, ...	Dummy = 1 for public administration, defense, education, human health, and social work activities.
17	Other services	Dummy = 1 for other services.

¹ Reference category

5.3.4 Control Variables

We included control variables to offset potential confounding factors. These included respondent demographics such as age in 2021 and gender (coded as a ‘female’ dummy variable), which could influence results (de Jong et al., 2015; Gawke et al., 2019; Santos et al., 2020). Additionally, company information such as employee count was included to control for size effects (Carrier, 1994). We also asked for employees' affiliation to the firm. Lastly, we

included 10 dummy variables for various industries, according to the categorization of the NACE Rev. 2 high-level SNA/ISIC aggregation. All variables are displayed in Table 22.

5.4 Results

Table 23 contains the descriptive statistics and correlation matrix, and Table 24 shows the results of the OLS regression models. Regarding the main effects, IEO demonstrated a significant positive influence on EI (std. β 0.64, $p < 0.001$). This finding provides support for hypothesis 1, which stated that IEO has a positive influence on EI. At the same time, however, there is no direct significant influence of FIT on EI, thus hypothesis 2 that job fit positively influences employee intrapreneurship cannot be confirmed in our analysis. Considering the moderation analysis, we discovered that the job fit has a positive moderation effect on the connection between IEO and EI (std. β 0.07, $p < 0.05$) and thus hypothesis 3 can be confirmed. Figure 12 illustrates the interaction effect. By employing a more detailed analysis, we can show that, in particular, the person-organization fit (std. $\beta = 0.05$, $p < 0.05$) and the fit between demands and abilities (std. $\beta = 0.08$, $p < 0.01$) cause this positive moderation effect. Regarding the control variables, only a negative association with EI can be observed for the female gender (std. β -0.16, $p < 0.01$).

Table 23: Means, Standard Deviations, and Correlations

#	Variable	M	SD	Min	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
1	EIS	3.96	1.15	1	7																	
2	IEO	5.38	0.83	2.55	7	.68**																
3	FIT	4.24	0.60	1.64	5	.31**	.39**															
4	Age	47.50	11.97	19	77	.10*	.18**	.25**														
5	Female	0.49	0.50	0	1	-.25**	-.16**	-.10*	-.12**													
6	Employees	36.19	31.40	2	220	.04	.03	-.02	-.05	-.05												
7	Company affiliation	14.35	11.40	0	50	.05	.07	.23**	.64**	-.14**	-.06											
8	Agriculture, forestry, and fishing	0.25	0.43	0	1	.03	.03	.01	.01	-.08*	.10**	.04										
9	Manufacturing, mining,...	0.02	0.13	0	1	.00	-.04	-.02	-.02	.12**	-.05	-.05	-.08*									
10	Construction	0.20	0.40	0	1	-.09*	-.07	.03	-.03	.03	-.01	-.01	-.29**	-.07								
11	Wholesale and retail trade...	0.20	0.40	0	1	-.06	-.04	-.04	.06	-.02	-.04	.11**	-.29**	-.07	-.26**							
12	Information and communication	0.08	0.28	0	1	.03	.02	.03	.01	-.01	.02	-.06	-.17**	-.04	-.15**	-.15**						
13	Financial and insurance activities	0.01	0.11	0	1	.02	.04	.05	.08*	-.05	-.03	.09*	-.06	-.02	-.06	-.06	-.03					
14	Real estate activities	0.01	0.12	0	1	.02	.01	-.02	-.06	.07	-.07	-.01	-.07	-.02	-.06	-.06	-.04	-.01				
15	Professional, scientific, ...	0.09	0.29	0	1	.03	.00	.01	-.04	-.06	-.07	-.07	-.18**	-.04	-.16**	-.16**	-.09*	-.03	-.04			
16	Public administration, ...	0.04	0.20	0	1	.05	.08*	.01	.01	.07	.08*	-.06	-.12**	-.03	-.11**	-.11**	-.06	-.02	-.02	-.07		
17	Other services	0.08	0.27	0	1	.05	.04	-.04	-.02	.07	-.02	-.04	-.17**	-.04	-.15**	-.15**	-.09*	-.03	-.04	-.09*	-.06	

N=649. *M* and *SD* are used to represent mean and standard deviation, respectively. * $p < .05$. ** $p < .01$.

Source; Own data.

Table 24: Regression Analysis IEO on EIS Moderated by FIT

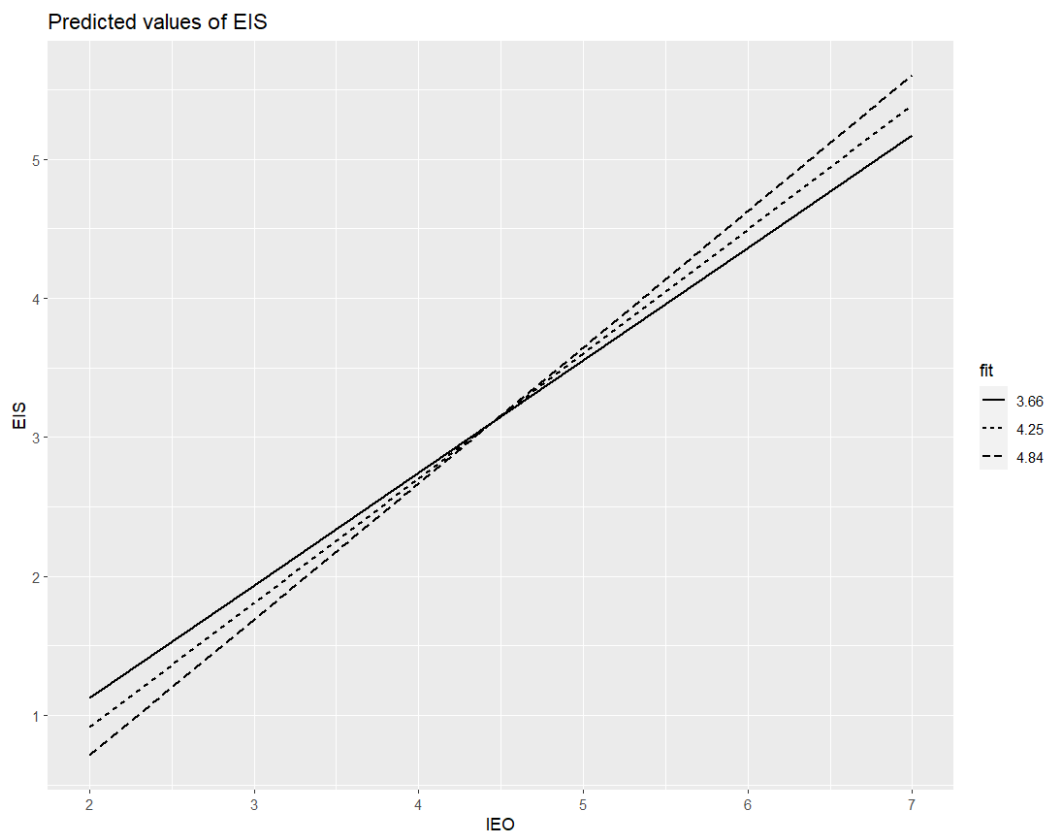
	EIS					
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Main effect						
IEO	0.64***	0.64	0.65**	0.65	0.66***	0.64
Moderation						
FIT	0.06	0.07*				
IEOxFIT		0.06*				
Person–Organization Fit			0.07			0.07
IEOxPerson–Organization Fit			0.05*			0.04
Demands–Abilities Fit				0.06*		0.05*
IEOxDemands–Abilities Fit				0.08**		-0.07*
Needs–Supplies Fit					0.03	-0.02
IEOxNeeds–Supplies Fit					0.03	-0.02
Controls						
Age	-0.05	-0.05	-0.05	-0.06	-0.05	-0.05
Female	-0.16***	-0.16**	-0.16***	-0.17***	-0.16***	-0.16***
Employees	0.02	0.02	0.02	0.02	0.02	0.02
Company affiliation	0.01	0.01	0.00	0.02	0.02	0.01
<i>Industry</i>						
Agriculture, forestry, and fishing	0.05	0.05	0.05	0.05	0.05	0.05
Manufacturing, mining, ... ¹						
Construction	-0.03	-0.04	-0.03	-0.04	-0.03	-0.04
Wholesale and retail trade, transportation and storage, accommodation, and food service activities	-0.02	-0.03	-0.02	-0.03	-0.03	-0.03
Information and communication	0.01	0.01	0.01	0.01	0.01	0.01
Financial and insurance activities	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02
Real estate activities	0.03	0.03	0.03	0.02	0.03	0.03
Professional, scientific, technical, administration, and support service activities	0.02	0.02	0.02	0.03	0.02	0.02
Public administration, defense, education, human health, and social work activities	0.01	0.01	0.01	0.01	0.01	0.01
Other services	0.04	0.03	0.03	0.03	0.03	0.03
Observations	649	649	649	649	649	649
R ²	0.50	0.50	0.50	0.50	0.50	0.50
R ² adjusted	0.48	0.49	0.49	0.49	0.48	0.49

N=649. Standardized estimation coefficients are reported. * p<0.05 ** p<0.01 *** p<0.001.

¹Reference category: industry (Manufacturing, mining, quarrying, and other industry).

Source: Own data.

Figure 12: Plot of the Moderation Effect



Source: Own illustration.

5.5 Discussion

5.5.1 Theoretical Implications

The focal aim of this study was to examine the interaction of intention, context and behavior of employee intrapreneurship by connecting individual entrepreneurial orientation (IEO) (Kollmann et al., 2007), with job fit (Cable & Judge, 1996; Resick et al., 2007; Saks & Ashforth, 1997), and employee intrapreneurship (EI) (Blanka, 2019; Gawke et al., 2019). By doing so, we address the call for more research on intrapreneurship at the individual level (Blanka, 2019), thus clarifying the concept of intrapreneurship (Hernández-Perlines et al., 2022).

To unravel the underexplored relationship between IEO, job fit, and EI, we used regression analysis with moderation effects, and utilized a dataset of 649 employees from small and medium enterprises (SMEs). Our model was set up with the employee intrapreneurship scale (EIS) (Gawke et al., 2019) as the dependent variable, while the individual entrepreneurial scale

(IEO scale) (Santos et al., 2020), and the job fit scale (Cable & Judge, 1996; Resick et al., 2007; Saks & Ashforth, 1997) were selected as independent variables. Additionally, the job fit scale and its subdimensions served as variables to test for any moderation effects within our analysis. Our model unveils a significant positive effect of IEO on EI, suggesting that an individual's entrepreneurial intent (IEO) plays a significant role in fostering their entrepreneurial behavior (EI). This finding is congruent with Ajzen's theory of planned behavior (1991), which proposes that behavior is shaped by intent. Furthermore, our finding is in line with previous studies that underscored associations between key IEO components such as risk-affinity (Kirby, 2006; Martiarena, 2013; Matthews et al., 2009; Tietz & Parker, 2012), proactiveness (Douglas & Fitzsimmons, 2013; Globocnik & Salomo, 2015; Johnson & Wu, 2012; Martiarena, 2013; Solymossy & Gross, 2015; Urbano & Turró, 2013), and innovativeness (Amo, 2010; Rigtering & Weitzel, 2013; Sarooghi et al., 2015; Sinha & Srivastava, 2013), and their influence on EI. Notably, our research also expands this understanding by demonstrating that entrepreneurial perseverance, which so far has only been shown to have a positive impact on starting and running an entrepreneurial venture (Baum & Locke, 2004; Markman et al., 2005, Franke & Lüthje 2004) and entrepreneurial passion, which was mainly examined in the entrepreneurial process (Cardon et al., 2009; Iyortsuun et al., 2019; Shane et al., 2003; Smilor, 1997; Smith et al., 2001) can also significantly enhance employee intrapreneurship.

In contrast, we found no significant effect of job fit on EI, suggesting that job context alone does not shape employees intrapreneurial behavior. This finding was surprising, given the numerous studies highlighting the pivotal role of work environment and job design in driving employee motivation and satisfaction (Hackman & Oldham, 1976; Kristof, 1996; Opland et al., 2022; Peng & Mao, 2015; Wang et al., 2020; Warr & Inceoglu, 2012), which have both shown to foster intrapreneurial activities (Auer Antoncic & Antoncic, 2011; Baer, 2012; Bammens et al., 2013, 2015; Zhang & Bartol, 2010). This finding partially contradicts prior research advocating for the importance of alignment between the organization and the person (Chandler & Krajcsák, 2021; Sinha & Srivastava, 2013), between employees' abilities and job requirements (Daft & Weick, 1984; Ensley et al., 2000; Urbano et al., 2013), and between employee needs and organizational supply (DiLiello & Houghton, 2006; Hornsby et al., 2002, 2009; Kuratko & Montagno, 1989; Marvel et al., 2007; Rigtering & Weitzel, 2013) in driving employee intrapreneurship.

Despite the lack of a direct significant influence of job fit on EI, we however could show its function as a moderating factor in the relationship between IEO and EI, specifically via its person-organization fit (PO-FIT) and demands-abilities fit (DA-FIT) dimensions. This finding

aligns with the interactionist perspective (Oldham & Cummings, 1996; Woodman et al., 1993) and consolidates prior findings on creativity (Amabile, 1983; Chang & Teng, 2017; Ford, 1996; Jin Nam Choi et al., 2009), intrinsic motivation (Joo & Lim, 2009) and intrapreneurship (Badoiu et al., 2020), and thus confirming the proposition that job-related contextual factors serve as moderators of individual intentions and behaviors (Niemann et al., 2022). Thus, the overall fit, as well as two specific fits, enhance the impact of IEO on EI.

Our manuscript enriches the academic discourse in several ways. Firstly, we enhance the domain of entrepreneurship studies by emphasizing the significance of individual components in driving employees' intrapreneurial conduct. Historically, investigations have primarily concentrated on personal determinants such as demographic profile (Camelo-Ordaz et al., 2012; Urbano & Turró, 2013), individual attributes (Rigtering & Weitzel, 2013; Sinha & Srivastava, 2013; Williamson et al., 2013), or certain internal organizational elements such as corporate structure (Bouchard & Basso, 2011), leadership support (Menzel et al., 2007), and company culture (Hagedorn & Jamieson, 2014). Our work bridges entrepreneurial intention with intrapreneurial behavior, demonstrating that individual psychological aspects considerably affect employee activities within an organization. We reveal that intention is a more potent predictor of intrapreneurial conduct than job fit, with no significant correlation identified between the context of the job and entrepreneurial behavior. Consequently, the distinct individuality of employees should not be overlooked in research aimed at promoting intrapreneurial initiatives within corporations. We, therefore, align with Blanka's (2019) suggestion for research to place greater emphasis on the individual level when examining intrapreneurship and its motivators.

Secondly, our work adds to the growing literature employing the Theory of Planned Behavior (TPB) in an entrepreneurial context. Until now, TPB has primarily been utilized in relation to entrepreneurs initiating or expanding their own enterprises (Lortie & Castogiovanni, 2015). Our investigation demonstrates that TPB is also instrumental in predicting intrapreneurial activities of employees in existing firms, thus creating new avenues for identifying prospective intrapreneurs within established organizations and driving innovation.

Lastly, we assist in the development and validation of multiple scales. As per Santos et al. (2020), their scale carries certain limitations, some of which our study addressed. We have validated the scale in a distinct geographical and cultural environment (Portugal vs. Germany), encompassing all industry sectors, and have expanded its representativeness by incorporating a dataset of 649 cases. We conducted and applied a confirmatory factor analysis and only eliminated a single variable, as opposed to the seven variables omitted by Santos et al. (2020).

We also validate the relevance of entrepreneurial perseverance and passion, which are relatively new inclusions in the Individual Entrepreneurial Orientation (IEO) scale. Consequently, we have approved the robustness of the proposed construct, endorsing its continued application in determining individual entrepreneurial orientation. Furthermore, we also bolster the integrity of the Employee Intrapreneurship Scale (EIS) scale developed by Gawke (2017), by validating it within a different national and cultural context.

5.5.2 Practical Implications

The practical implications of our research are manifold and of direct relevance to SMEs aiming to tap into the intrapreneurial capacities of their employees. First, these organizations should proactively identify employees who demonstrate a strong inclination toward entrepreneurship. Furthermore, during the recruitment of potential new employees, SMEs might consider utilizing the IEO scale within the job interview. This instrument can help pinpoint candidates who possess a heightened entrepreneurial orientation and are therefore more likely to become valuable intrapreneurs within the organization. Secondly, SMEs should be aware that designing the job context to fit the individual personalities, aligning job requirements with competencies, or providing necessary resources for employees' needs does not, by default, cultivate intrapreneurial tendencies among all employees. However, the alignment of values and beliefs of an entrepreneurially inclined employee and the company does foster intrapreneurial behavior. Additionally, matching the job's demands with the unique capabilities of entrepreneurially inclined employees is also paramount as it motivates them to fully leverage their potential.

In conclusion, SMEs aiming to augment their intrapreneurial capacity, three core parameters are imperative. Firstly, as previously iterated, SMEs should strategically recruit personnel demonstrating pronounced entrepreneurial inclinations. Secondly, there should be a concerted effort to ensure that the values and principles of these personnel are congruent with the organization's established values and beliefs. Lastly, the complexity and specifications of the assigned tasks should be commensurate with the individual abilities of the employees. This in turn, can significantly boost their intrapreneurship behavior and consequently amplify firm-level innovation outputs.

5.5.3 Limitations and Future Research

Our study acknowledges several limitations. Firstly, despite reaching out to over 30,000 firms, our sample exhibits geographical and cultural limitations as we solely collected data from

German SMEs. Extending the scope of our study to an international context could potentially enrich the findings and further propel research in the domain by investigating the influence of IEO and job fit in various regions. Furthermore, due to the focus on German SMEs, the influence of cultural factors was not evaluated. Given the potential variations in entrepreneurial orientation and job fit across different cultures, future research could investigate cross-cultural comparisons. Secondly, our study is inherently biased towards SMEs, often constrained by resource scarcity. The field of intrapreneurship, however, suggests that certain resources such as time, money, and facilities play a pivotal role in fostering intrapreneurial activities. As such, an examination of the relationship between IEO, job fit, and EI within a broader corporate context may yield intriguing and valuable insights, thereby contributing to strategies aimed at promoting EI. Third, our study was based primarily on quantitative data. Future research could incorporate qualitative methods, such as interviews or case studies, to gain a deeper, more nuanced understanding of the relationship between IEO, job fit, and EI. This could provide valuable context and complement the findings of quantitative studies. Another issue could be a selection bias as employees at the different SMEs might have selected themselves in a context and environment fitting them and their interest from the beginning. This could explain why the fit variable might have no significant effect. This could be rechecked with more controls like tenure and job satisfaction or a question why people did choose the employer, or other variables and analysis instruments.

Lastly, there may be other factors not examined in this study that could influence the relationship between IEO, job fit, and EI. Future research could consider potential moderating or mediating variables, such as leadership style, organizational culture, or economic climate. We invite researchers seeking to address these limitations in the future, thus broadening our understanding of the topic.

5.6 Conclusion

This study investigated the relationship between individual entrepreneurial orientation (IEO), job fit, and employee intrapreneurship (EI) through a regression analysis with moderation effects, using a sample of 649 employees from small and medium enterprises (SMEs). The results underscore a significant positive effect of individual entrepreneurial orientation on employee intrapreneurship. This outcome supports the theory of planned behavior, which asserts that intentions are pivotal in shaping behavior. Furthermore, it was shown that job fit has no significant impact on employee intrapreneurship, implying that context alone does not affect entrepreneurial behavior. However, the job fit dimensions, such as person-organization

fit and demands-abilities fit, enhance the positive relationship between IEO and EI. This endorses the interaction perspective, which posits employee behavior as a complex synergy of individual intrinsic tendencies and intentions with job-related contexts. Beyond its theoretical implications, this study offers promising insights for managerial practice by highlighting potential approaches to foster employee intrapreneurship, thus paving the way for innovation in SMEs.

6 Findings and Implications

6.1 Summary of Findings

Family firms and SMEs that understand how to stimulate and utilize the intrapreneurial potential of their employees can significantly increase their innovation outputs (Antoncic & Hisrich, 2001; Blanka, 2019; Gawke et al., 2019; Pinchot, 1985; Vesper, 1984). As market structures become increasingly complex and competitive, this becomes an imperative (Denicolai et al., 2021; Hock-Doepgen et al., 2021; Kuratko & Audretsch, 2013; Saunila, 2020), since innovative capabilities have been closely correlated with enhanced firm performance, competitive advantage, and firm survival (Augusto Felício et al., 2012; Baruah & Ward, 2015; R. Ireland, 2003; Kearney & Meynhardt, 2016; Morris et al., 2011; Nicholson et al., 2016; Parker, 2011; Rivera, 2017). Therefore, this dissertation examines various drivers of intrapreneurship within the often-understudied spheres of family firms and SMEs (Carrier, 1994; Cerón Ríos et al., 2020). The unique characteristics inherent in these types of organizations, as opposed to non-family firms or larger corporations (Chua et al., 1999; Curran & Blackburn, 2001; Habbershon & Williams, 1999; Josefy et al., 2015; Welsh et al., 1982), suggest the potential for distinctive triggers of intrapreneurship (J. Sun et al., 2023).

To reveal these special triggers of intrapreneurship in family firms and SMEs, this dissertation grounds on three consecutive studies. The first study (Chapter 3) explores the realm of intrapreneurial motivations of non-family employees in family businesses. While family involvement often amplifies employees' innovativeness (Bammens et al., 2015; Dibrell & Moeller, 2011; Eddleston et al., 2010), the precise drivers of non-family employees' intrapreneurial activities within family firms and the role the entrepreneurial family plays in this context remain under-explored. To tackle this issue, a multiple-case study (Eisenhardt, 1989, 2021) was conducted, gathering insights from a dyadic sample of interviews involving owner-managers and non-family workers across nine German family firms. The cross-case analysis revealed that intense family influence within the firm intensifies the sense of identification among non-family employees, intrinsically encouraging their commitment to intrapreneurial endeavors. On the contrary, in firms with diminished family influence, the identification and the inherent intrinsic motivation tend to decrease. As a compensatory mechanism, such firms introduce business strategies, such as monetary rewards, designed to

stimulate extrinsic motivation among their non-family staff. The facilitation of intrapreneurial motivation among non-family employees in family firms is depicted in Figure 9 (p. 47).

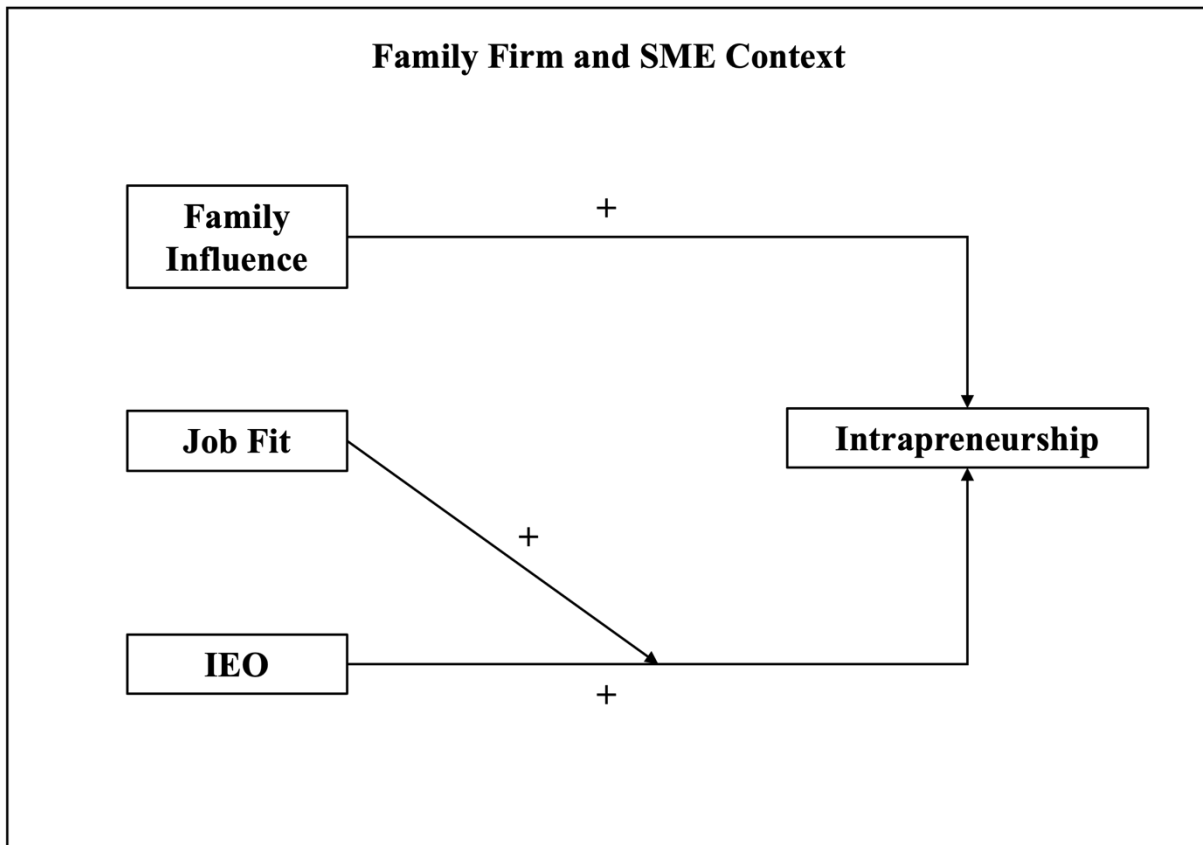
The second study (Chapter 4) of this dissertation presents and validates the Perceived Family Influence Scale (PFIS), a novel instrument designed to capture the perception of non-family employees regarding family influence in family businesses. The PFIS distinguishes itself from existing scales (Astrachan et al., 2002; Frank et al., 2017; Klein et al., 2005) by encapsulating family influence from a non-family member's perspective. This perspective broadens our understanding of family influence and paves a path for future inquiries. The PFIS was developed using a multistep process (DeVellis, 2017; Hinkin, 1995; Pearson et al., 2014), starting with the theoretical and empirical development of initial scale items. Through exploratory factor analysis, these items were refined and subsequently validated using confirmatory factor analysis, uncovering three subscales (culture, involvement, and image). This step solidified the scale's validity and reliability. The final PFIS is represented in Table 15 (p. 70). In addition to the development and validation of the PFIS, its applicability was demonstrated by using the scale to investigate the impact of non-family employees' perceived family influence on their job satisfaction (Bacharach et al., 1991). This analysis, based on a sample of 499 non-family employees from German family firms, indicates that the perception of family influence positively impacts the job satisfaction of non-family employees (Table 21, p. 78).

The third study (Chapter 5) examines the interplay between intention and behavior in individual-level intrapreneurship, an area that remains relatively uncharted in comparison to studies focusing on intrapreneurship at the organizational level (Blanka, 2019; Gawke et al., 2019; Niemann et al., 2022). To address this, the study delved into the relationships between individual entrepreneurial orientation (measuring intention) (Bolton & Lane, 2012; Kollmann et al., 2007; Santos et al., 2020), job fit (representing context) (Cable & Judge, 1996; Kristof, 1996; Resick et al., 2007; Saks & Ashforth, 1997), and employee intrapreneurship (denoting new venture and strategic renewal behavior) (Gawke et al., 2019), within the sphere of SMEs. A moderated regression analysis, using a sample of 649 employees from SMEs, shows that IEO positively influences EI. Intriguingly, while job fit did not exhibit a notable direct effect, it positively moderates the connection between IEO and EI, particularly with regard to the sub-dimensions of person-organization fit and demands-abilities fit (Table 24, p. 103; Figure 12, p. 104). These findings augment our theoretical comprehension of intrapreneurship, specifically

the relationship between intention, context, and behavior, and concurrently provide actionable insights for contextualizing employment environments within SMEs.

Reflecting on the theoretical interplay among family influence, job fit, IEO, and intrapreneurship, as depicted in Figure 5 (p. 23), the outcomes of my three studies substantially support almost all hypotheses I developed in Chapter 2. While both family influence and IEO exert a positive impact on intrapreneurship (supporting H1 and H3), intriguingly, job fit does not significantly influence it directly, and thus partially contradicting hypothesis H2. Instead, job fit displays a moderating effect, leveraging the positive linkage between IEO and intrapreneurship, as illustrated in Figure 13.

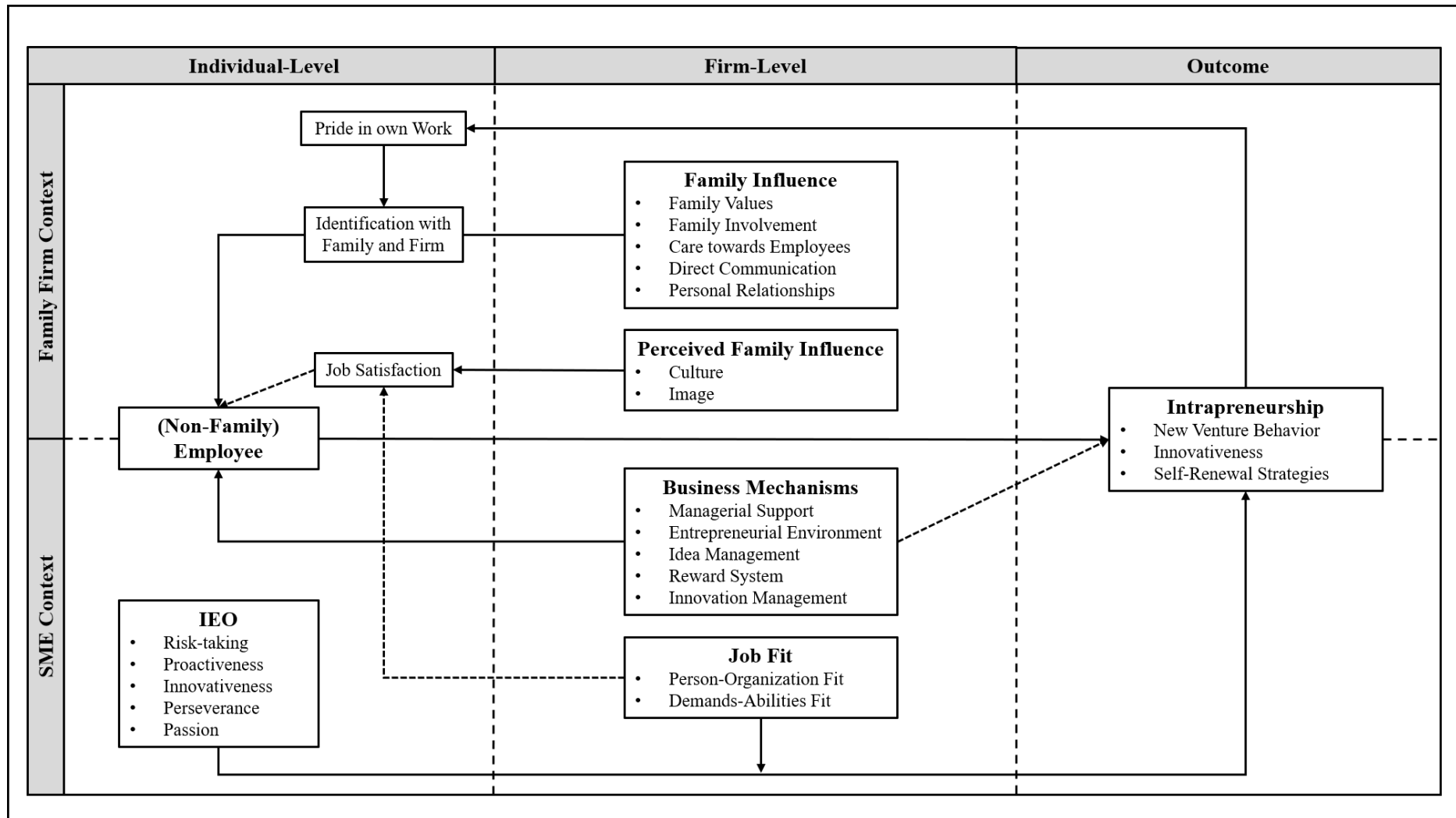
Figure 13: Relationships Between Family Influence, Job Fit, Individual Entrepreneurial Orientation, and Intrapreneurship



Source: Own illustration.

Integrating and synthesizing the findings of the three comprehensive studies and the insights from the literature review, a cohesive model depicting the interplay of family influence, job fit, and IEO on intrapreneurship within the context of family firms and SMEs could be developed (Figure 14).

Figure 14: The Impact of Family Influence, Job Fit, and IEO on Intrapreneurship in Family Firms and SMEs



Source: Own illustration.

While the solid arrows in this model display relationships that could be empirically proven within my three studies, the dotted arrows represent connections that are based on findings of previous studies. Combining them result in a holistic model that contributes to a better understand how intrapreneurship can be fostered in family firms and SMEs.

The model shows that in the realm of family firms, where the impact of family influence is pronounced, the firm's distinct culture, deeply rooted in family values and active family involvement, plays a pivotal role in fostering a unique intrapreneurial spirit among its non-family employees. These firm-level aspects, in turn, fuel the intrinsic motivation of non-family employees to engage in intrapreneurial activities. As a result, we witness the emergence of incremental process or product innovations that not only instill a sense of pride in their work but also reinforce their identification with the entrepreneurial family and the firm. Thus, the relationship between non-family employees' intrapreneurship and their identification with the family and firm is invigorated, leading to a dynamic and synergistic connection (Chapter 3). Additionally, this work reveals that perceived family influence, in the form of culture and image, now quantifiable through the PFIS, has a positive influence on the job satisfaction of non-family employees (Chapter 4). This correlation, in turn, is proposed to directly impact their inclination towards intrapreneurial pursuits (Antoncic & Hisrich, 2001; Auer Antoncic & Antoncic, 2011; Block, 2010; Kuratko et al., 1990; Miller et al., 2009). Contrastingly, in family firms with a less pronounced family influence, alternative mechanisms such as managerial and organizational support, monetary incentives, and a well-defined innovation management framework come into play to extrinsically motivate non-family employees towards intrapreneurial behavior (Chapter 3). Some of these empirically found mechanisms were also emphasized by previous studies to positively influence intrapreneurship (Alpkan et al., 2010; Hisrich & Peters, 1986; Johanna De Villiers-Scheepers, 2012; Kuratko et al., 1990). Shifting the focus to SMEs, the findings of this dissertation shed light on the significance of individuals' intentions and their job context in influencing intrapreneurial behavior. Employees who inherently display entrepreneurial attributes, such as risk affinity, proactiveness, innovativeness, perseverance, and passion, are naturally predisposed to embrace intrapreneurship within their organization. Intriguingly, my empirical findings indicate that job fit per se does not encourage employees to behave intrapreneurially, although previous research has shown that job fit has a positive impact on employees' job satisfaction (Hackman & Oldham, 1976; Kristof, 1996; Peng & Mao, 2015; Wang et al., 2020; Warr & Inceoglu, 2012),

decreased turnover intentions, proactivity, organizational citizenship behavior, improved job performance, and innovative behavior Afsar et al., 2015; Hicklenton et al., 2019; Huang et al., 2019; Kao et al., 2022; Lv & Xu, 2018; Memon et al., 2018), which are all aspects closely linked to intrapreneurship (Antoncic & Hisrich, 2001; Auer Antoncic & Antoncic, 2011; Block, 2010; Kuratko et al., 1990; Miller et al., 2009). However, this thesis uncovered that the alignment between an employee's personality and the organizational values, and his or her abilities and demands of their job, further reinforces, and amplifies their intrapreneurial activities (Chapter 5).

6.2 Theoretical Implications

This dissertation illuminates the complex dynamics of intrapreneurship in family businesses and SMEs. Therefore, it contributes to the current discourse in entrepreneurship literature about the determinants of intrapreneurship. It also advances the theoretical understanding of family influence and its impact on the firm, which helps to refine the still fuzzy definition of family firms. Additionally, the findings of this dissertation further untangle the riddle of innovation in family firms and SMEs by showing how certain intra-organizational and individual factors foster intrapreneurship within these organizations.

The findings of the first study (Chapter 3) serve as a rich exploration into the reasons why non-family employees become intrapreneurial and the significant role the entrepreneurial family occupies in this context. In doing so, it brings a new depth to the family business literature, by offering an integrative model that illustrates the motivations and dynamics of non-family employee intrapreneurship in family firms (Figure 9, p. 47). The model adds empirical weight to Bammens et al.'s (2013, 2015) theory that family involvement can boost the innovative and entrepreneurial activities of non-family employees by reinforcing their social identity (Tajfel et al., 1971; Turner et al., 1979). Nevertheless, veering from Bammens et al.'s. (2015) perspective, intrinsic motivation fuels intrapreneurial motivation leading to innovative endeavors. Further, this study enhances the innovation and entrepreneurship field by shedding new light on the enigma of innovation in family firms, providing insights into why some family firms display outstanding innovativeness (Ayyagari et al., 2011; Classen et al., 2014; Gudmundson et al., 2003), despite lesser innovation investments than non-family firms (Chrisman & Patel, 2012; Duran et al., 2016). In harmony with Habbershon and Williams

(1999), it is highlighted that family influence is a potent catalyst of business innovation. This singular family influence cultivates family values, exceptional care for employees, clear communication, and deep personal bonds - the vital pillars of intrapreneurship (Alpkan et al., 2010; Antoncic & Hisrich, 2001; Auer Antoncic & Antoncic, 2011; Kuratko et al., 1990). Consequently, it prompts a strong intrinsic motivation in non-family employees to engage in intrapreneurial activities, establishing them as a critical innovation source for family firms (Ahluwalia et al., 2017; Eddleston et al., 2012).

The second study (Chapter 4) introduces and validates the Perceived Family Influence Scale, offering substantial contributions to the relatively unexplored domain of how non-family employees perceive family influence (Yazici et al., 2022). First, in contrast to prior scales that assessed family influence from the family's or owner-manager's perspective (Astrachan et al., 2002; Frank et al., 2017), the PFIS is a novel response to the call for improved measures of family influence (Irava & Moores, 2010). Grounded in social constructivism (Gergen, 1978; Morgan & Smircich, 1980; Steffy & Grimes, 1986), it shifts the perspective to non-family employees, providing a new view on family influence in particular (Holt et al., 2010; Rau et al., 2018) and therefore, the uniqueness of family firms in general (Chrisman et al., 2012; Chua et al., 2012; Lamb & Butler, 2018; Lindow et al., 2010). As a result, the PFIS crucially contributes to the refinement of the still fuzzy family business definition (Chrisman et al., 2012; Daspit et al., 2021; Harms, 2014; Payne, 2018; Rovelli et al., 2022; Rutherford et al., 2008), by suggesting that a family firm defines itself through internal perceptions of the enterprising family and through external perceptions of non-family stakeholders such as non-family employees. Second, combining the PFIS with existing scales or factual measurements such as ownership percentage allows a dyadic perspective of family influence, and consequently, the gathering of more unbiased and comprehensive information (Gioia et al., 2000; Morgan & Smircich, 1980; Whetten et al., 1992). Third, the PFIS demonstrates its real-world applicability when tested for its impact on non-family employees' job satisfaction. Although high family involvement can slightly lower the job satisfaction of non-family employees, a strong family culture and image effectively counterbalance this effect, leading to an overall positive effect. The negative effect might emerge as a severe involvement of the management in the day to day work of employees limits their autonomy, which correlates with job satisfaction (DeCarlo & Agarwal, 1999). Given its effectiveness, the PFIS is a reliable instrument for future research efforts. This tool could offer transformative insights into how perceived family influence

impacts areas like innovation behavior (Ahluwalia et al., 2017; Eddleston et al., 2012; Mahto et al., 2010; Tabor et al., 2018), employees' bonds with the entrepreneurial family (Bammens et al., 2010; Berrone et al., 2010; Cennamo et al., 2012; König et al., 2013), organizational identification (Dutton et al., 1994; Mael & Ashforth, 1992; Terry et al., 2000), intrapreneurship (Gawke et al., 2019), and job fit (Kristof, 1996; Resick et al., 2007; Saks & Ashforth, 1997), significantly advancing the family business research stream.

The central objective of the third study (Chapter 5) was to examine the interplay between individual entrepreneurial orientation (Kollmann et al., 2007), job fit (Cable & Judge, 1996; Resick et al., 2007; Saks & Ashforth, 1997), and employee intrapreneurship (Blanka, 2019; Gawke et al., 2019). Thus, this study responds to the call for additional intrapreneurship research at the individual level (Blanka, 2019), thereby enriching our understanding of the intrapreneurship concept (Hernández-Perlines et al., 2022). The results indicate a substantial positive relationship between IEO and EI, suggesting that an individual's entrepreneurial intention significantly contributes to catalyze their entrepreneurial behavior. This finding aligns with Ajzen's theory of planned behavior (1991), which posits that intention affects behavior. This outcome is also consistent with previous research that emphasized the links between core IEO components such as risk-affinity (Kirby, 2006; Martiarena, 2013; Matthews et al., 2009; Tietz & Parker, 2012), proactiveness (Douglas & Fitzsimmons, 2013; Globocnik & Salomo, 2015; Johnson & Wu, 2012; Martiarena, 2013; Solymossy & Gross, 2015; Urbano & Turró, 2013), and innovativeness (Amo, 2010; Rigtering & Weitzel, 2013; Sarooghi et al., 2015; Sinha & Srivastava, 2013), and their impact on EI. Significantly, this research extends this understanding by illustrating that entrepreneurial perseverance, which has so far only been shown to be beneficial for initiating and managing an entrepreneurial venture (Baum & Locke, 2004; Markman et al., 2005) and entrepreneurial passion, which was primarily examined in the entrepreneurial process (Cardon et al., 2009; Iyortsuun et al., 2019; Shane et al., 2003; Smilor, 1997; Smith et al., 2001), can also substantially bolster EI. Contrarily, no significant influence of job fit on EI was detected, indicating that the job context alone does not shape employees' intrapreneurial behavior. This finding was unexpected, given the numerous studies underscoring the critical role the work environment and job design play in driving employee motivation and satisfaction (Hackman & Oldham, 1976; Kristof, 1996; Opland et al., 2022; Peng & Mao, 2015; Wang et al., 2020; Warr & Inceoglu, 2012), and leading to decreased turnover intentions, proactivity, organizational citizenship behavior, improved job

performance, and innovative behavior Afsar et al., 2015; Hicklenton et al., 2019; Huang et al., 2019; Kao et al., 2022; Lv & Xu, 2018; Memon et al., 2018), all known to foster intrapreneurial activities (Auer Antoncic & Antoncic, 2011; Baer, 2012; Bammens et al., 2013, 2015; Zhang & Bartol, 2010). This finding somewhat contradicts previous research emphasizing the importance of alignment between the organization and the person (Chandler & Krajcsák, 2021; Sinha & Srivastava, 2013), between the capabilities of employees and the job requirements (Daft & Weick, 1984; Ensley et al., 2000; Urbano et al., 2013), and between employee needs and organizational supply (DiLiello & Houghton, 2006; Hornsby et al., 2002, 2009; Kuratko & Montagno, 1989; Marvel et al., 2007; Rigtering & Weitzel, 2013) in driving employee intrapreneurship. Despite job fit's lack of direct significant influence on EI, its role as a moderating factor in the relationship between IEO and EI could be revealed, particularly through its person-organization fit and demands-abilities fit dimensions. This finding aligns with the interactionist perspective (Oldham & Cummings, 1996; Woodman et al., 1993) and solidifies previous findings on creativity (Amabile, 1983; Chang & Teng, 2017; Ford, 1996; Jin Nam Choi et al., 2009), intrinsic motivation (Joo & Lim, 2009) and intrapreneurship (Badoiu et al., 2020), thus confirming the proposition that job-related contextual factors serve as moderators of individual intentions and behaviors (Niemann et al., 2022).

The findings of study 3 significantly advance the academic dialogue in several ways. First, it elevates the discipline of entrepreneurship studies by underlining the critical role of individual factors in promoting intrapreneurial behaviors among employees. Historically, research has been chiefly devoted to personal determinants such as demographic characteristics (Camelo-Ordaz et al., 2012; Urbano & Turró, 2013), individual traits (Rigtering & Weitzel, 2013; Sinha & Srivastava, 2013; Williamson et al., 2013), or specific intra-organizational aspects such as corporate structure (Bouchard & Basso, 2011), leadership support (Menzel et al., 2007), and corporate culture (Hagedorn & Jamieson, 2014). It also creates a link between entrepreneurial intent and intrapreneurial behavior, illustrating that individual psychological factors heavily influence activities within an organization. It was uncovered that intention is a stronger determinant of intrapreneurial action than job compatibility, with no substantial correlation observed between job context and entrepreneurial behavior. Thus, the unique personality of employees should not be underestimated in studies aiming to encourage intrapreneurial endeavors within organizations. Consequently, the findings resonate with Blanka's (2019) suggestion that greater emphasis should be placed on the individual level when scrutinizing

intrapreneurship and its drivers. Second, this research contributes to the expanding body of literature applying the TPB (Ajzen, 1991) in an entrepreneurial setting. Until this point, TPB has mostly been used concerning entrepreneurs launching or growing their own businesses (Lortie & Castogiovanni, 2015), while this study shows that TPB is also effective in forecasting intrapreneurial actions of employees within existing companies, thereby paving the way for the recognition of potential intrapreneurs within established organizations and fostering innovation. Lastly, this study supports the evolution and validation of several scales. According to Santos et al. (2020), their scale presents certain limitations, a few of which this research addresses. It validates the scale in a separate geographical and cultural context (Portugal vs. Germany), covering all industrial sectors, and has broadened its representativeness by incorporating a dataset of 649 cases. Additionally, a confirmatory factor analysis only discarded a single variable, in contrast to the seven variables removed by Santos et al. (2020). It is also affirmed that the importance of entrepreneurial perseverance and passion, which are recent additions to the IEO scale. Therefore, this study confirms the solidity of the suggested construct, advocating for its ongoing use in identifying individual entrepreneurial orientation. Finally, the credibility of the Employees Intrapreneurship Scale devised by Gawke (2017) was validated within a different cultural and national context.

6.3 Managerial Implications

The practical and managerial implications stemming from this dissertation hold immense value, particularly for family firms, SMEs, and businesses aiming to bolster the intrapreneurial spirit within their workforce. At the core, these organizations need to establish a corporate culture that reflects the dimensions of family influence identified in this dissertation. Such culture helps cultivate strong personal relationships, promotes employee well-being, and ensures the integration of employees in various processes, all of which significantly contribute to the employees' identification with the firm, stimulating their intrapreneurial motivation. This is particularly vital for family firms that must value and show gratitude to their non-family employees. My findings demonstrate that such recognition and integration lead to feelings of belonging, intrinsically motivating employees towards intrapreneurship. Given the importance of corporate culture and family influence, there is a clear need for leadership training programs. These programs should be tailored to help leaders understand and foster an environment that nurtures intrapreneurial tendencies. For example, such a program should help leaders, whether

part of the family or external hires, to comprehend the complexity of familial dynamics and its influence on organizational behavior, thus including modules on understanding, navigating, and leveraging these dynamics for the overall good of the organization. Furthermore, leaders of family businesses should act as bridge builders between the entrepreneurial family and the non-family employees paying increased attention to the integration and acknowledgement of every team member. This involves fostering open communication, addressing biases, and creating collaborative opportunities that dissolve traditional barriers. By embedding these modules into leadership training programs, family firms and SMEs can ensure that their leaders are not only aware of the unique challenges and opportunities presented by the family influence but are also empowered with the skills and knowledge to navigate them effectively. This, in turn, will drive intrapreneurial initiatives, fostering innovation, and ensuring sustained organizational growth.

Further, the Perceived Family Influence Scale offers an actionable framework for businesses. Owner-managers, equipped with insights from the PFIS, can gain a granular understanding of the family influence dynamics within their organizations. This allows them to identify and bolster areas that resonate positively while reevaluating and adapting aspects that might be less conducive. A salient discovery is the positive influence of certain dimensions, such as organizational culture and image, on non-family employees' job satisfaction, while family involvement has an opposite effect. This nuanced understanding enables family businesses to strategically align their family influence in such a way that it enhances job satisfaction among non-family employees, which in turn can increase their intrapreneurial efforts, as the literature has shown (Auer Antoncic & Antoncic, 2011; Baer, 2012; Bammens et al., 2013, 2015; Zhang & Bartol, 2010). In this context, regularly using the PFIS, allows managers to periodically gather non-family employees' perceptions of family influence. On the one hand, this could bridge the enterprising family and non-family employees and also lead to informed, adaptive decision-making. However, given the close-knit environment in family businesses, non-family employees might be hesitant to voice concerns openly. Thus, guaranteeing anonymity can create a safe space for genuine insights, ensuring that employees can be candid about their experiences without fear of repercussions. Finally, insights drawn from non-family employees' feedback can be instrumental in designing training programs that allow managers to better understand the impact of family influence on non-family employees and consequently on the family firm itself.

Moreover, for firms seeking to harness intrapreneurial potential, this dissertation reveals a holy trinity implying the interplay between intention, context, and behavior. First, I recommend that such firms identify current employees with a high tendency towards entrepreneurship within their organization or strategically recruit individuals exhibiting strong entrepreneurial inclinations. In both cases, whether identifying or recruiting such employees, the IEO scale can be utilized as a valuable tool. Secondly, after such employees are identified or hired, managers should be aware that the alignment of employees' values and beliefs with the company's ethos fosters intrapreneurial behavior, and hence should ensure such congruity. Thirdly, the job demands must match the unique capabilities of entrepreneurially inclined employees, as this encourages them to fully exploit their potential. By carefully considering these three core parameters – identification or recruitment of employees with high IEO, PO-Fit, and DA-Fit - SMEs can substantially transform employees' entrepreneurial intentions into actual intrapreneurial behaviors, ultimately resulting in firm-level innovation outputs. Given this knowledge, managers of SMEs could, for example, consider creating innovation hubs or labs. These dedicated spaces would first attract entrepreneurially inclined employees and second allow them to experiment, collaborate, and bring innovative ideas to fruition. In such an environment, employees can strive and exploit the full intrapreneurial potential.

6.4 Limitations and Future Research

While the three studies forming the basis of this dissertation have provided valuable insights into the nuances of intrapreneurship in family firms and SMEs, they acknowledge several limitations that pave the way for future research opportunities. Firstly, all studies have geographical constraints as the samples only involve German family firms and SMEs. This limitation may not fully encapsulate the influence of diverse national cultures on firm culture and intrapreneurship dynamics. Future research could extend the study's scope to international contexts and incorporate cross-cultural comparisons, to uncover similarities and differences between nations in fostering intrapreneurship. Furthermore, adopting the PFIS in other international research settings could increase its generalizability and potentially uncover additional aspects of family influence.

Secondly, the characterization of family firms in the studies might yield differing outcomes when applied to larger, publicly traded family businesses. Future studies could consider focusing on various types of family firms, particularly those where the family's influence on

values and personal connections may dwindle due to scale. This variation could impact the sense of belonging among non-family employees, their motivation, and obligation to advance the firm. In this context, the family firms' samples were specifically drawn from family firms where the entrepreneurial family holds at least 50% of shares and has at least one actively participating family member in management. Future research could use varied definitions of family businesses, and this could potentially lead to different findings.

Thirdly, the first study predominantly focused on the positive aspects of being a non-family employee in family firms, overlooking potential challenges or negative experiences that may also impact intrapreneurial motivation. The literature has already shown that non-family employees in family firms are often confronted with injustice, nepotism, ingroup-outgroup perceptions, or organizational identification issues (Barnett & Kellermanns, 2006; Carmon et al., 2010; Marler & Stanley, 2018; Padgett & Morris, 2005; Sieger et al., 2011). Future research should put a stronger focus on investigating these "dark sides" of non-family employment in family firms.

Lastly, the research methodology, particularly the limited number of interviews conducted per family firm in study one and the reliance on single respondents in study two and three, could benefit from expansion. Conducting more interviews within a single firm setting or soliciting information from multiple employees could yield a more nuanced understanding of intra-firm dynamics, perceived family influence, and might reveal potential controversies.

6.5 Conclusion

Delving into the qualitative and quantitative empirical findings presented in this dissertation, we gain profound insights into the dynamics of intrapreneurship within family firms and SMEs. Based on three consecutive studies, the mechanisms enabling these organizations to kindle intrapreneurial tendencies among their employees could be demonstrated. In the context of family firms, family influence emerges as crucial driver of intrapreneurship. This influence shapes culture, values, relationships, and the overarching image, thereby enhancing non-family employees' association with both the family and the firm and increasing their job satisfaction. Notably, increased identification and job satisfaction are discerned to positively affect intrapreneurship. Given the importance of family influence, another significant contribution of this dissertation is the development and introduction of the Perceived Family Influence Scale,

the first tool specifically designed to gauge family influence from the perspective of non-family employees. This innovative approach offers a more integrated view of family influence, enriching our understanding of family firm dynamics. In the SME landscape, intrapreneurial behavior appears intricately linked to the balance between individual intentions and job context. While the individual entrepreneurial orientation of an employee (intention) spurs their intrapreneurship (behavior), job fit (context) has no significant impact on it. However, nuanced aspects of job fit, particularly the alignment of organizational and personal values and the match between job demands and abilities, act as moderators between employees' individual entrepreneurial orientation and their intrapreneurship behavior. This finding suggests that context itself has no direct influence on behavior but rather a moderating effect on the connection between intention and behavior. In synthesizing insights from family influence, job fit, and individual entrepreneurial orientation, this dissertation delivers critical knowledge on the dynamics of intrapreneurship in family firms and SMEs. It underscores the importance of fostering an intrapreneurial culture, crafting effective motivational strategies, and ensuring optimal job fit to stimulate intrapreneurial activities. In conclusion, this dissertation provides valuable perspectives and directions for further research in the ever-evolving fields of entrepreneurship, family business and SMEs. It also empowers practitioners to leverage these insights in nurturing a thriving and intrapreneurial-friendly environment in their organization to benefit from the increased innovative outputs inherent with intrapreneurship. Such outputs are closely tied to competitive advantages, improved firm performance, and firm survival.

7 Bibliography

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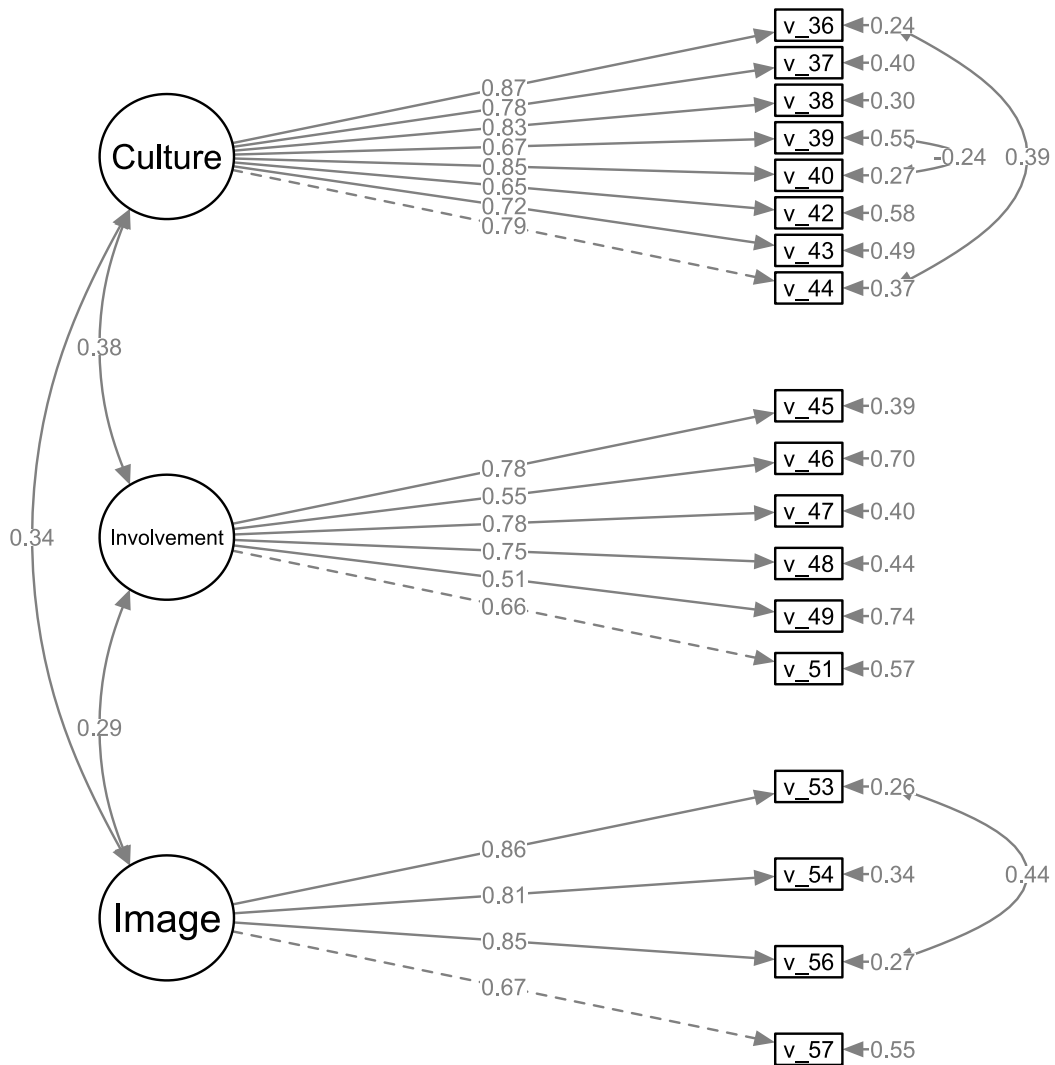
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8 Appendix

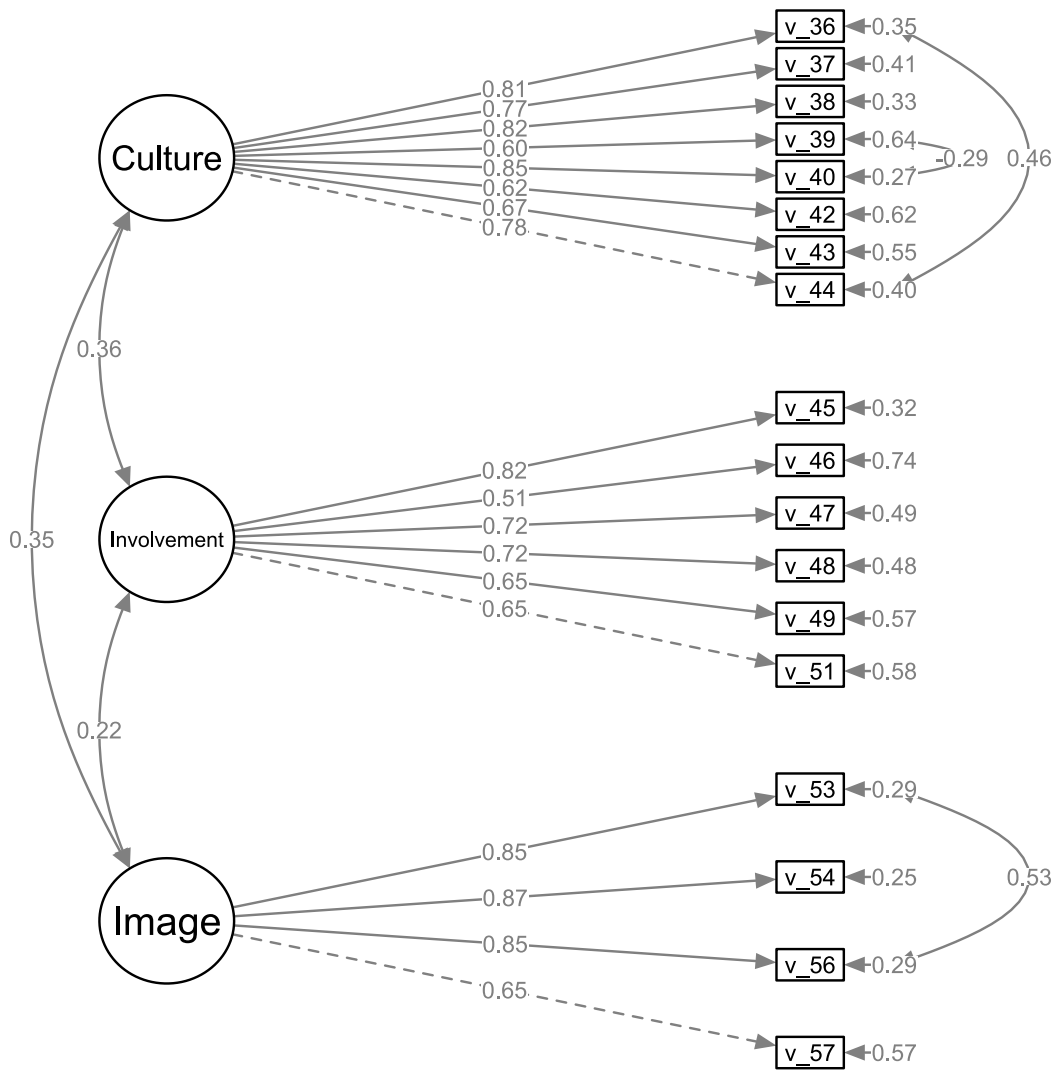
Figure 15: Robustness Test PFIS Confirmatory Factor Analysis Subsample 1



N = 300 Subsample 1 (random selected). The standardized factor loadings and the factor covariances are displayed. Fit indices: Chi-square = 236.924 (df = 129 p < 0.000), CFI = 0.955, TLI = 0.947, RMSEA = 0.053, RMSEA 90% CI lower bound: 0.043, RMSEA 90% CI upper bound: 0.062, robust RMSEA = 0.058, SRMR = 0.072. Robust values are reported.

Source: Own Illustration

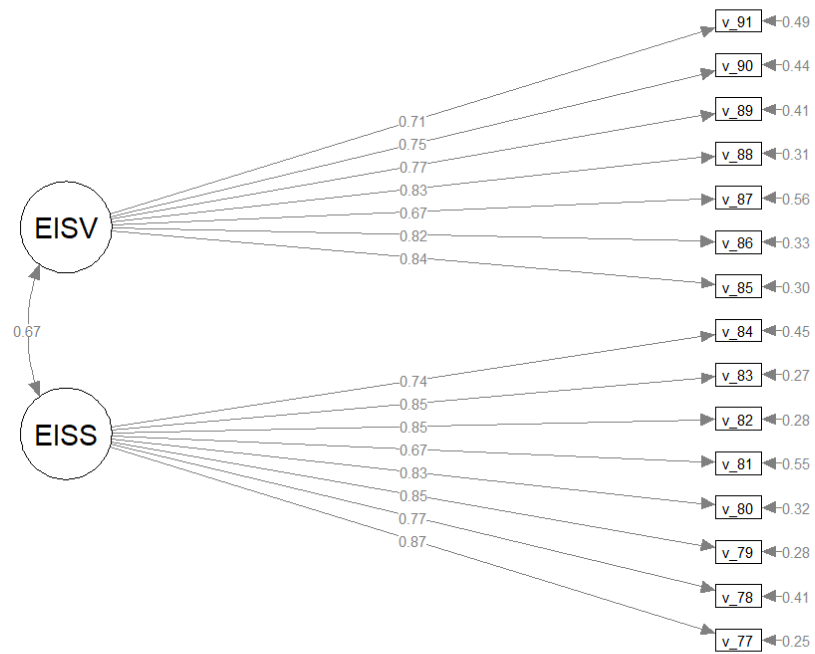
Figure 16: Robustness Test PFIS Confirmatory Factor Analysis Subsample 2



N = 300 Subsample 2 (random selected). The standardized factor loadings and the factor covariances are displayed. Fit indices: Chi-square = 269.140 (df = 129 p < 0.000), CFI = 0.940, TLI = 0.929, RMSEA = 0.060, RMSEA 90% CI lower bound: 0.051, RMSEA 90% CI upper bound: 0.069, robust RMSEA = 0.067, SRMR = 0.079. Robust values are reported.

Source: Own Illustration

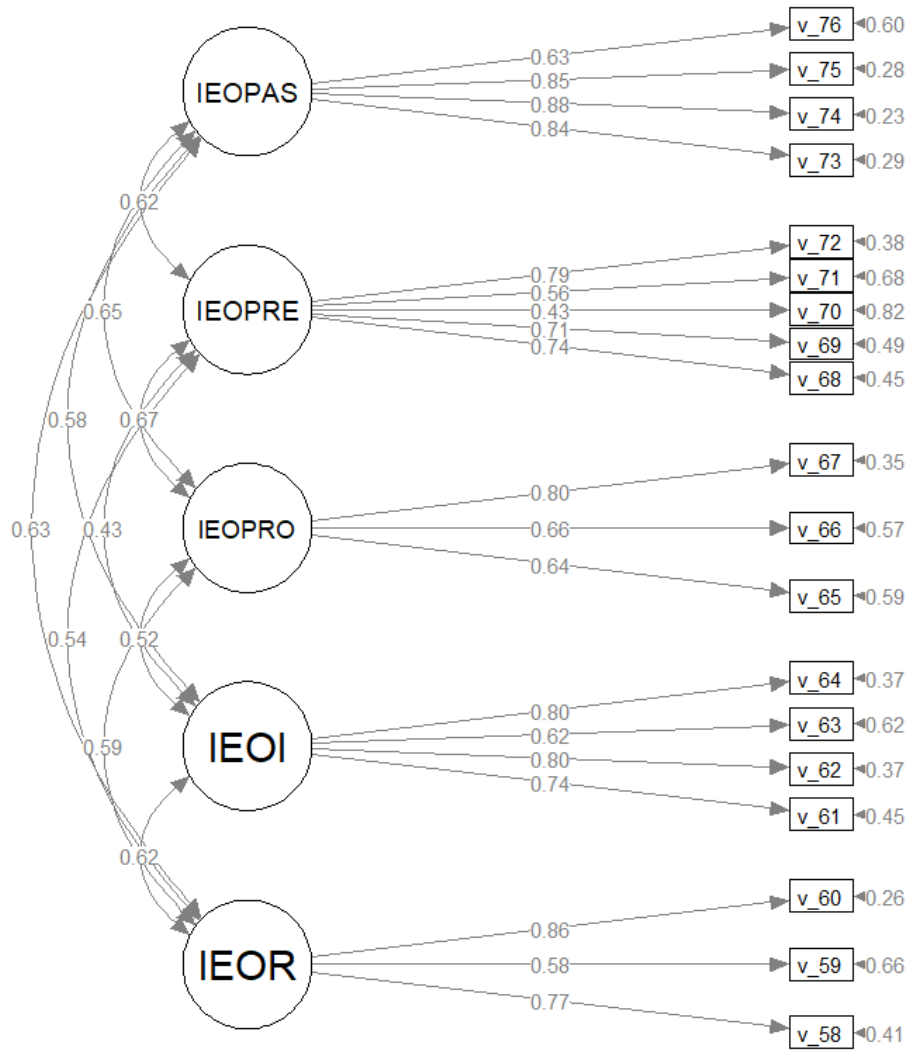
Figure 17: Confirmatory Factor Analysis EIS



N = 649. The standardized factor loadings and the factor covariances are displayed.
 Chi-square 318.450 (89 df, p < .001), CFI 0.954, TLI 0.946, RMSEA 0.063, SRMR 0.049.

Source: Own Illustration

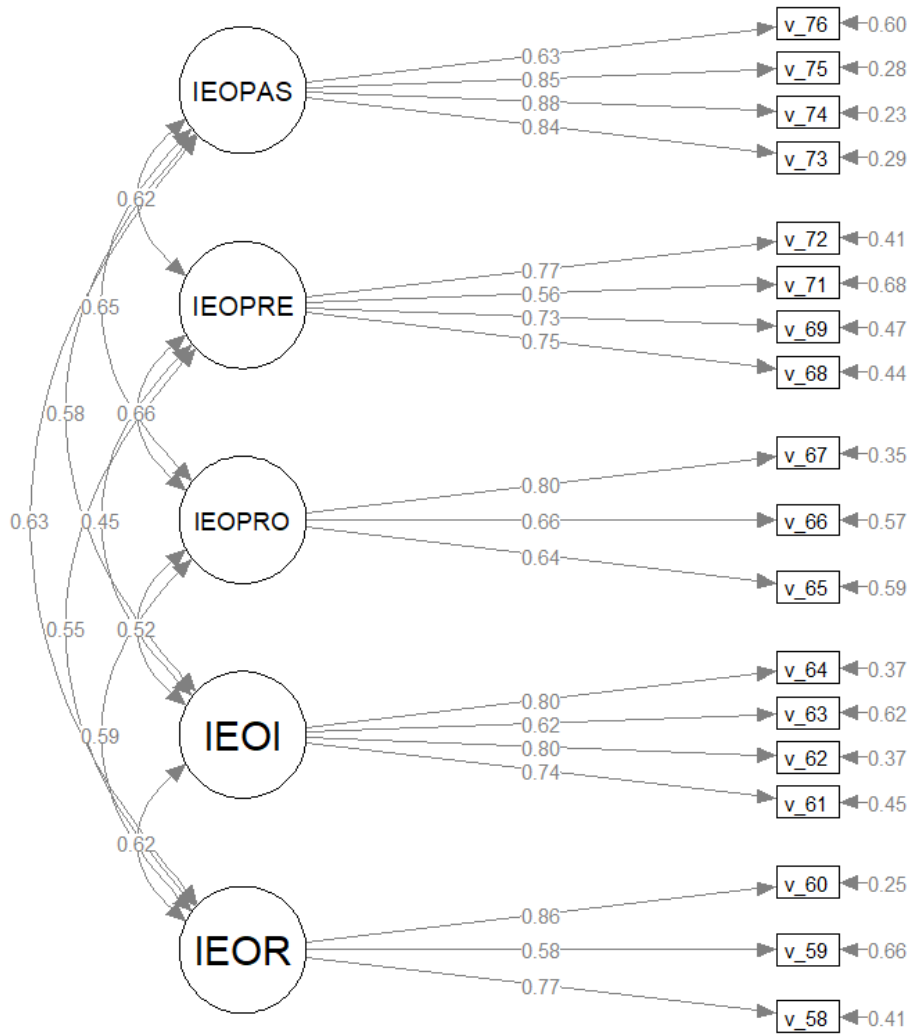
Figure 18: Initial Confirmatory Factor Analysis IEO



N = 649. The standardized factor loadings and the factor covariances are displayed.
 Chi-square 296.223 (142 df, $p < .001$), CFI 0.961, TLI 0.953, RMSEA 0.041, SRMR 0.040.

Source: Own Illustration

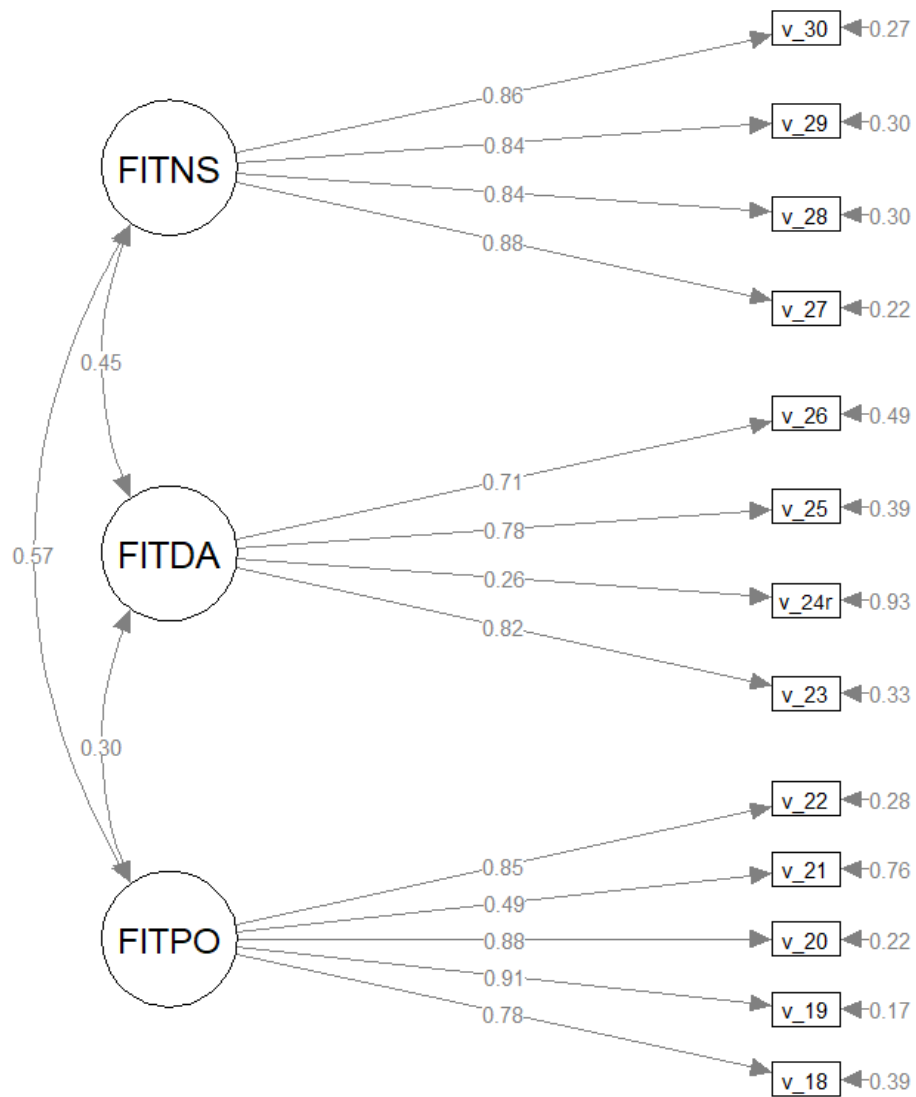
Figure 19: Updated Confirmatory Factor Analysis IEO



N = 649. The standardized factor loadings and the factor covariances are displayed.
 Chi-square 248.530 (125 df, p < .001), CFI 0.967, TLI 0.960, RMSEA 0.039, SRMR 0.048.

Source: Own Illustration

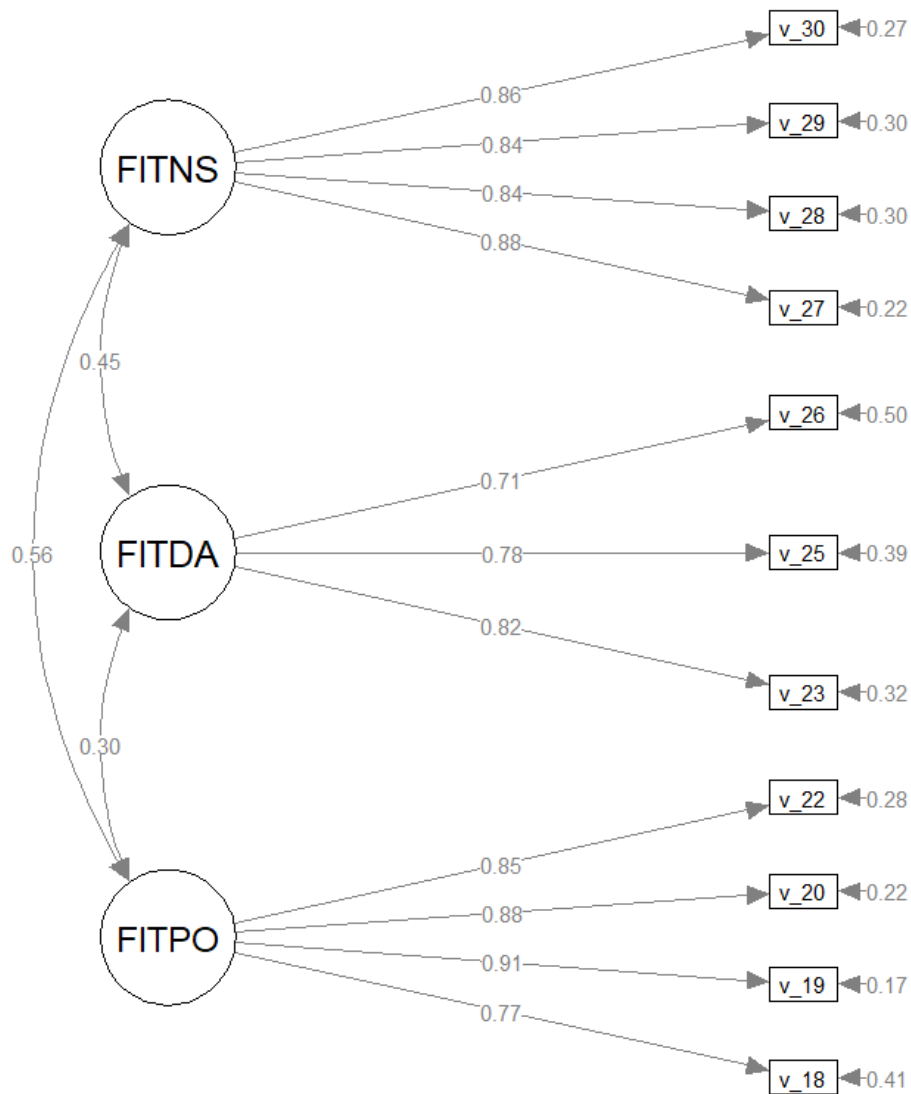
Figure 20: Initial Confirmatory Factor Analysis FIT



N = 649. The standardized factor loadings and the factor covariances are displayed.
 Chi-square 155.221 (62 df, $p < .001$), CFI 0.970, TLI 0.962, RMSEA 0.048, SRMR 0.040.

Source: Own Illustration

Figure 21: Updated Confirmatory Factor Analysis FIT



N = 649. The standardized factor loadings and the factor covariances are displayed.
 Chi-square 78.167 (41 df, $p < .001$), CFI 0.986, TLI 0.982, RMSEA 0.037, SRMR 0.038.

Source: Own Illustration

Table 25: Main Survey Questions

Scales & Questions	Variable	Source
EIS (<i>never = 1 to always = 7</i>)		(Gawke et al., 2019)
Strategic Renewal Behavior		
I undertake activities to realize change in my organization / my department.	v_77	
I undertake activities to change the current products/services of my organization / my department.	v_78	
I contribute ideas for strategic renewal for my organization / my department.	v_79	
I conceptualize new ways of working for my organization / my department.	v_80	
I utilize insights of other experts to innovate in my organization / my department.	v_81	
I undertake activities that change the structure of my organization / my department.	v_82	
I undertake activities that change the work practices of my organization / my department.	v_83	
I exploit opportunities in the labor market or society to create new impulses my organization / my department.	v_84	
Venture behavior		
I undertake activities to set up new business units.	v_85	
I undertake activities to reach new market or communities for my organization / my department.	v_86	
I undertake activities that result in new departments outside of my organization / my department.	v_87	
I conceptualize new ways of service for my organization / my department.	v_88	
I undertake activities that result in new projects within my organization / my department.	v_89	
I actively establish new collaborations with experts outside of my own profession.	v_90	
I conceptualize new products for my organization / my department.	v_91	
IEO (<i>Strongly disagree = 1 to Strongly agree = 7</i>)		(Santos et al., 2020)
Risk Taking		
I like to venture into the unknown and make risky decisions.	v_58	
I am willing to invest a great deal of time and/or money into something that can give high returns.	v_59	
I tend to act boldly in risk situations.	v_60	
Innovativeness		
I often like to try new and unusual activities.	v_61	
In general, I prefer a strong emphasis on innovative approaches rather than previously tested and used approaches.	v_62	
I prefer, when I learn something new, to try to do it in my way than to do it like everyone else does.	v_63	
I am in favor of trying out new approaches to problem solving rather than using methods that others often use.	v_64	
Proactivity		
I usually act in anticipation of future problems, needs or changes.	v_65	
I tend to plan projects in advance.	v_66	
I would rather get up and put projects in motion than sit around waiting for someone else to do it.	v_67	
Perseverance		
I have achieved goals that took me some time to reach.	v_68	

I have overcome setbacks to meet major challenges.	v_69	
I always finish what I start.	v_70	
Setbacks do not discourage me.	v_71	
In many complex situations, I persist in achieving my goals despite seeing others give up.	v_72	
Passion		
I have a passion for finding good business opportunities, developing new products or services, exploiting business applications and creating new solutions for existing problems and needs.	v_73	
I am passionate about the process of gathering the financial, human and social resources (e.g. contacts and partnerships) needed to create a new business.	v_74	
I have a passion for envisioning, growing and expanding my business.	v_75	
I am passionate about what I do, and, when I am away from my business, I cannot wait to return.	v_76	
<hr/>		
FIT (<i>Strongly disagree = 1 to Strongly agree = 5</i>)		(Cable & Judge, 1996; Resick et al., 2007; Saks & Ashforth, 1997)
Person–Organization Fit		
I feel my values “match” or fit this organization and the current employees in this organization.	v_18	
I think the values and personality of this organization reflect my own values and personality.	v_19	
The values of this organization are similar to my own values.	v_20	
My values match those of current employees in this organization.	v_21	
I feel my personality matches the “personality” or image of this organization.	v_22	
Demands–Abilities Fit		
I believe my skills and abilities match those required by my actual job.	v_23	
My job performance is hurt by a lack of expertise on the job.	v_24	
My knowledge, qualifications and skills meet the requirements of my job description.	v_25	
I possess the skills and abilities to perform my job.	v_26	
Needs–Supplies Fit		
I feel that my current job allows me to do the work that I want to do.	v_27	
My current position matches what I was looking for.	v_28	
My job is a good fit for me.	v_29	
My job fulfills my needs.	v_30	
<hr/>		

9 Statutory declaration

I hereby certify that I have written this thesis independently and have not used any sources or aids other than those indicated, in particular no information from the internet other than that indicated.

I have taken note of those paragraphs of the doctoral regulations applicable to me which concern possible attempts at fraud.

I agree to the storage of my work for the purpose of checking plagiarism. I assure that the content of the electronic version corresponds to the content of the printed version.

Philipp Köhn

Siegen, 13. Dezember 2023