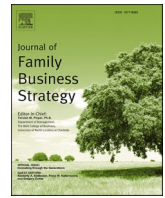


Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Journal of Family Business Strategy

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

Socioemotional wealth (SEW) across borders: Integrating national context into SEW research

Valeriano Sanchez-Famoso ^{a,*}, Cristina Cruz ^b, Mohamed Mazen Batterjee ^b,
Jorge-Humberto Mejia-Morelos ^{c,2}, Luis Cisneros ^{d,3}, Nhu Tuyen LE ^{e,4}

^a University of the Basque Country UPV/EHU, Spain

^b IE Business School – IE University, IE Tower, Paseo de la Castellana, 259, Madrid 28046, Spain

^c Entrepreneurship & Innovation Department, Observatory of Entrepreneurship La Sphère, HEC Montreal 3000, Chem. de la Côte-Sainte-Catherine, Montréal, QC H3T 2A7, Canada

^d Entrepreneurship & Innovation Department, Observatory of Entrepreneurship La Sphère, Business Families Center, HEC Montreal 3000, Chem. de la Côte-Sainte-Catherine, Montréal, QC H3T 2A7, Canada

^e Grenoble Ecole de Management, 12 Rue Pierre Semard, Grenoble 38000, France

ARTICLE INFO

Keywords:

SEW
FIBER scale
Context research
Measurement invariance
Cross-country comparison

ABSTRACT

This study addresses the challenges associated with integrating the national context into socioemotional wealth (SEW) research and highlights the consequences of overlooking contextual variations. We emphasize two critical issues: inadequate testing of SEW assumptions and threats to the construct validity of SEW measurement. We recommend that cultural and institutional aspects of the national context should be incorporated to understand how family owners prioritize SEW dimensions, and how their willingness trades off current SEW wealth for prospective financial gains. We also conduct an exploratory study measuring the FIBER scale in Canada, Mexico, Saudi Arabia, Spain, and Vietnam. We survey 1464 family owners to enhance SEW construct validity by probing the cross-country measurement invariance of the FIBER scale. Furthermore, we conduct comparative research to investigate how cultural and institutional aspects shape the FIBER dimensions across national contexts.

1. Introduction

The socioemotional wealth (SEW) framework originated from the seminal work of Gómez-Mejía et al. (2007) is a pivotal advancement in family business research (Brigham & Payne, 2019, p. 326). It is widely used across various domains within family firm contexts, including firm strategic decisions (Dehlen, 2013; Feldman et al., 2014; Kotlar et al., 2018; Laffranchini et al., 2022), corporate governance (Bammens et al., 2011; Di Vito & Trottier, 2022; Labaki & D'Allura, 2021), social responsibility (Combs et al., 2023; Cruz et al., 2014; Dayan et al., 2019), and entrepreneurial outcomes (Block et al., 2013; Chrisman & Patel, 2012; Rodrigues et al., 2022). At its core, the SEW framework posits that family owners' decisions are motivated by their commitment to

safeguarding the family SEW—the non-financial aspects of the firm—which fulfills their affective needs (Gómez-Mejía et al., 2007).

Despite the extensive literature on SEW, a significant gap persists due to the lack of contextualization. Although studies often apply the SEW logic, they borrow arguments from others and ignore the specificities of each context (Krueger et al., 2021). This oversight is troubling, given that contextualized SEW research suggests that family owners' preferences are deeply influenced by their institutional and cultural surroundings (Berrone et al., 2012; Gomez-Mejia et al., 2020). The challenge of conducting “context-free” SEW research becomes apparent when considering the validation of SEW as a construct, which remains uncertain (Brigham & Payne, 2019). The widely used FIBER scale has significant variation across countries (Gerken et al., 2022; Hauck et al.,

* Corresponding author.

E-mail addresses: valeriano.sanchezfamoso@ehu.eus (V. Sanchez-Famoso), cristina.cruz@ie.edu (C. Cruz), mbatterjee.dba2016@alumni.ie.edu (M.M. Batterjee), jorge-h.mejia@hec.ca (J.-H. Mejia-Morelos), luis-felipe.cisneros-martinez@hec.ca (L. Cisneros), nhu-tuyen.le@grenoble-em.com (N. Tuyen LE).

¹ ORCID: 0000-0003-3977-3337

² ORCID: 0000-0001-7324-2367

³ ORCID: 0000-0001-5983-8973

⁴ ORCID: 0000-0003-3057-2563

<https://doi.org/10.1016/j.jfbs.2024.100647>

Available online 30 December 2024

1877-8585/© 2024 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC license (<http://creativecommons.org/licenses/by-nc/4.0/>).

2016), highlighting the need for a deeper understanding of the reasons and implications of these differences. Unfortunately, there is no comprehensive explanation of how context matters for the conceptualization of SEW (Gómez-Mejía & Herrero, 2022).

This study addresses the challenges of integrating national context into SEW research, building on recent findings emphasizing the contextual specificities of family owners in different regions (Basco et al., 2019; Gomez-Mejia et al., 2020; Krueger et al., 2021). We highlight that failing to consider these contextual variations raises two critical issues: inadequate testing of the relevant assumptions of the SEW approach and threats to overall construct validity regarding the SEW measurement. Thus, we propose that both cultural and institutional aspects of the national context should be incorporated when conducting SEW research. These factors partly determine how family owners prioritize SEW dimensions and their willingness to trade off current SEW for future financial gains. Additionally, we emphasize the importance of enhancing construct validity in SEW research by testing the cross-country measurement of SEW measurement instruments, this is to say testing whether these instruments assess the SEW concept in a consistent manner across countries (Cheung & Rensvold, 2002; Harkness et al., 2003). If the SEW instrument shows cross country measurement invariance, we can confidently attribute the discrepancies identified in SEW across countries arise from varying cultural and institutional conditions, and not to limitations of the scale itself, thus enabling meaningful cross-country comparisons.

To advance in this direction, we employ a comparing approach to SEW research and develop an exploratory study that measures SEW in five countries: Canada, Mexico, Saudi Arabia, Spain, and Vietnam. Surveying 1464 family owners across these countries, we initially investigate the cross-country measurement invariance of the FIBER scale. This scale is the most widely cited tool for SEW measurement (Swab et al., 2020). Our results confirm the cross country measurement invariance of the SEW scale. This means that, while there may be variations in the importance attributed to each FIBER dimension across national contexts, family owners' responses to the FIBER scale can be meaningfully compared across countries. Based on our findings, we conduct comparative SEW research to reveal the nuances of SEW dimensions across countries. This exploratory comparison reveals significant differences among the five countries regarding how family owners prioritize various SEW dimensions. We theorize that cultural and institutional aspects of the national context may help explain these variations.

Overall, our results address recent calls for a more context-sensitive approach in family business research in general (Amato et al., 2022; Basco et al., 2019; Krueger et al., 2021) and SEW research in particular (Gomez-Mejia et al., 2024; Gómez-Mejía & Herrero, 2022). Despite advances in the research on family businesses, the importance of context in shaping SEW antecedents and outcomes remains largely underexplored (Cruz et al., 2023; Gómez-Mejía & Herrero, 2022). Moreover, by highlighting the nuances related to the specificities of family firms in different countries, we contribute to a better interpretation of context as a source of family firm heterogeneity (Basco et al., 2020)

2. Theoretical background

Substantial academic evidence demonstrate that the conduct of firms is contingent upon their national context. Boundaries between countries represent a unique set of cultural norms that drive shared beliefs, values, customs, traditions, and behaviors (Sundin & Horowitz, 2002). Moreover, companies within a particular country are embedded in an institutional environment related to the formal and informal rules, laws, and regulatory systems that shapes internal and external corporate governance mechanisms to foster economic exchanges (Lien et al., 2016; Peng & Jiang, 2010). Cultural expectations and institutional frameworks vary widely across nations and have profound implications for the interrelationship among work, family, and business (Kossek & Ollier-Malaterre,

2013).

Family firms and their owners are also prone to these influences. Family owners across various countries exhibit significant disparities in their goals and behavior (Gupta et al., 2010; Howorth et al., 2010). For instance, Howorth et al. (2010) revealed different tendencies among family firm owners in European countries, such as Spain, Greece, and Italy, in contrast to those in the United States. European family owners are often reluctant to part with their businesses, viewing them as integral extensions of their families. In contrast, family owners in the United States are more inclined to consider selling their businesses, provided the price is right. This cross-country variation in generational intentions among family owners is further corroborated by Corbetta and Montemerlo (1999), who highlighted a notable contrast between American and Italian family owners. Similarly, Sharma and Rao (2000) compared successor's attributes in Indian and Canadian family firms, and found that, whereas it was extremely important for Indian family owners that the successor should be from their bloodline, this was not as important for Canadian owners.

Recent years have seen growing recognition that the underlying logic of SEW reasoning may not operate in a standardized manner across national contexts (Cruz et al., 2023; Gomez-Mejia et al., 2024). The SEW approach, rooted in prior family-firm and behavioral studies, assumes that family firms are commonly motivated by and committed to preserving their SEW (Berrone et al., 2012), defined as the "non-economic utilities of family owners" (Gómez-Mejía et al., 2007). It refers to family owners' intentional pursuit of noneconomic objectives, such as control, transgenerational succession, social capital, emotional connection to the firm, and reputation (Berrone et al., 2012). Hence, family owners represent the focal decision-making group regarding SEW (Swab et al., 2020). The operating strategies of families may differ across national boundaries based on cultural norms and institutional differences (Wright et al., 2014). Further, building on the behavioral agency model (Wiseman & Gomez-Mejia, 1998), the SEW approach argues that family firms base their decision on the framing of the problem and reference point when making strategic decisions (Kotlar et al., 2013). The reference point would be strongly shaped by situational aspects that occur at the family and/or business level (Basco, 2018; Gómez-Mejía & Herrero, 2022).

Understanding these SEW differences across national contexts where the family firm operates could substantially broaden our perception of the heterogeneity among family firms and generalizability of SEW research findings. Specifically, conducting "national context-free" SEW research—research that does not consider the specificities of the cultural and institutional setting where the family firms operate across national boundaries—poses two critical issues: inadequate testing of the relevant assumptions of the SEW approach and its influence on firm outcomes, and threats to overall construct validity regarding SEW measurement.

2.1. National context-free SEW research and inadequate theory testing

The predominant depiction of SEW as an explanatory variable tends to treat it as a latent concept rather than operationalizing it directly (Gomez-Mejia et al., 2011). SEW is often equated with distal proxies like family ownership or management (e.g., Chirico et al., 2020; Cruz et al., 2014; Gomez-Mejia et al., 2018). This conceptualization portrays SEW as an asset as well as a liability for family firms, impacting strategic decision-making in both positive and negative ways (Swab et al., 2020). However, there is no consensus regarding the relationship between SEW and firm outcomes, particularly its impact on firm performance (Gómez-Mejía & Herrero, 2022). Some suggest a positive correlation, hinting that SEW fosters commitment and longer investment horizons (Cruz et al., 2010; Zellweger et al., 2012). Others propose a potential "dark side," positing that family firms might prioritize SEW over financial returns (Kellermanns et al., 2012). Cross-study comparisons are hindered by the diversity of contexts, thus affecting the establishment of prevalent positions.

To address this inconclusiveness, Davila et al. (2023) conducted a meta-analysis and revealed a positive correlation between SEW and family firm performance. They highlighted two crucial nuances in the relationship: the non-uniform influence of SEW dimensions on performance and the negative relationship between SEW and specific strategic choices impacting firm performance. However, including culturally distant countries in the meta-analyses raises concerns regarding the influence of the national culture in explaining the SEW-performance relationship. Examining these nuances through a national contextual lens could be significant in SEW research.

Cultural settings may shape how family members prioritize SEW dimensions, influencing the relationship between SEW dimensions and performance (Gomez-Mejia et al., 2024; Swab et al., 2020). Davila et al. (2023) found that while most SEW dimensions correlate positively with firm performance, dynastic succession is negatively correlated. Gómez-Mejía and Herrero (2022) found that in highly collectivistic societies, where family ties are paramount, family owners prioritized the renewal of family ties through succession (the “R” dimension of the FIBER scale). Consequently, including the national culture may explain SEW-performance variations across countries: highly collectivistic societies may prioritize dynastic succession, thus potentially impacting performance negatively.

Examining the negative relationship between SEW and specific strategic choices impacting firm performance through a national contextual lens can also bring interesting findings to light. According to the SEW logic, family owners often do not pursue diverse strategic options to safeguard family control (Chrisman & Patel, 2012). This is particularly true for countries with high power distance, where cultural norms promote autocratic leadership and emphasize family authority, reinforcing family control over the business (Hofstede, 1983). Consequently, in such societies, the positive relationship between SEW and performance may weaken compared to those with lower scores in this cultural dimension. This may stem from an intensified focus on the family control dimension of SEW, potentially hindering family firms from engaging in value-enhancing strategic activities.

Recent SEW studies suggest that family owners’ behavior is influenced by the institutional framework within a specific country (Berrone et al., 2022). Gomez-Mejia et al. (2024) suggested that the volatile, uncertain, complex, and ambiguous (VUCA) nature of the Latin-American and Caribbean context (LAC) are important institutional factors that influence SEW in the region. Their review of the five FIBER dimensions considering the contextual peculiarities of the region concludes that because of cultural aspects, family businesses in this region are “SEW intensive.” This means that they give high priority to all SEW dimensions. However, the institutional environment shapes how family owners prioritize each dimension. For instance, while the concept of an extended family in LAC emphasizes the importance of the “I” (Family Identification) dimension of SEW, a VUCA environment moderates this relationship negatively, due to associated risks of kidnappings and extortions because of maintaining a strong public image in these countries.

Further, a recent study conducted by Pinelli et al. (2023) examined SEW and family firm acquisitions and delved into the implications of considering how the institutional context affects the SEW approach. They suggest that SEW concerns make family firms more likely than nonfamily firms to undertake related acquisitions when operating in uncertain environments. This is done to avoid losses to the family’s current SEW. Nevertheless, family owners are more likely to undertake unrelated acquisitions when the target firm operates in a more developed institutional context. Taking a closer look at this from a contextual lens, we realize that institutional environments with robust frameworks supporting economic transactions, such as enforcement contracts, protection of property rights, and stable national governance, facilitate unrelated acquisitions. This is because these elements enhance predictability regarding prospective financial gains from such acquisitions, making them more appealing to family firms.

To summarize, this discussion underscores the significant influence

of cultural and institutional norms on SEW. Neglecting them may lead to inadequate testing of SEW assumptions. Therefore, incorporating cultural and institutional contexts in theoretical arguments is crucial for comprehensive SEW research.

2.2. National context-free SEW research and lack of construct validity

In addition to the challenges related to inadequate theory testing, the issue of context-free SEW also raises concerns about construct validity. There is a lack of clarity regarding the validity of the SEW construct and its measurement (Brigham & Payne, 2019; Chua et al., 2015; Newbert & Craig, 2017).

This criticism is evident in studies that test the SEW construct using the FIBER scale across culturally diverse countries such as Spain (Gómez-Mejía & Herrero, 2022), Bangladesh (Razzak & Jassem, 2019), Finland (Filser et al., 2018), Mexico (Angulo et al., 2016), and the United Arab Emirates (Dayan et al., 2019). These studies yielded inconclusive results regarding the dimensions constituting the SEW construct. For example, while Razzak and Jassem (2019) concluded that all 27 items of the FIBER model load onto the scale, Dayan et al. (2019) suggested that the “F” dimension may not be significant in explaining SEW for United Arab Emirates families.

To overcome these limitations, recent studies have attempted to validate the psychometric properties of the original FIBER scale using samples from different countries. The first attempt, Hauck et al. (2016), was built on 216 questionnaires—112 from German and 104 from Austrian firms. The authors acknowledge that the sample is entirely based on the German context and calls for future research to “revalidate the scale with a sample composed of more heterogeneous firms” (p. 143). Gerken et al. (2022) responded to this call by conducting a replication study using five samples from five different studies that used questionnaires in which the FIBER scale was included (Heider et al., 2021; Schäfer, 2016; Schneider, 2018; Weimann, 2020). The total sample included 1206 responses from family owners in Europe, Asia, and the US. The authors validated the scale, but they did not acknowledge the influence of cultural context on SEW measurement. Last, Gómez-Mejía and Herrero (2022) tested the FIBER scale in Spain and recognized the lack of contextualization, emphasizing that “the extent to which the overarching culture makes a difference in the content structure of SEW and its effects still remains an open question” (p. 8).

Together, these studies highlight the significance of contextual variations among countries in shaping the family SEW. However, they also suggest that discrepancies among studies may have emerged from inconsistencies in the scale itself, including methodological disparities or divergent understandings of SEW across countries. If this is the case, the universality of SEW to capture family owners affective endowment would be questionable and this would invalidate conducting SEW cross country research. Hence, having a cross-cultural valid and reliable SEW instrument is an essential to contextualize SEW research.

2.3. Advancing SEW research: Context by comparing five national contexts

The preceding discussion concludes that unconsidered contextual variation in SEW studies may lead to issues, including overall threats to validity and insufficient theory testing. To advance further, we incorporate the national context into SEW research, drawing inspiration from the recommendations of Bamberger (2008). This approach, recently applied to family firm studies by Amato et al. (2022), Gomez-Mejia et al. (2020), and Krueger et al. (2021), proposes a progressive introduction of (national) context research in family business studies in different stages. First, more SEW studies are conducted in diverse national settings (context by sampling). Next, more comparative SEW studies are developed across countries (context by comparing). Last, context is introduced into theoretical arguments of the SEW approach, adopting a context by theorizing research strategy.

In existing SEW research that considers contextual factors, a prevalent approach involves incorporating context through a context by sampling strategy. This spectrum ranges from studies treating context as tangential (e.g., Berrone et al., 2010) to those highlighting its critical role in SEW antecedents and outcomes (e.g., Calabrò et al., 2018). While context by sampling contributes to consistency in SEW research, it does not facilitate a nuanced understanding of the causal or moderating relationship between national context and SEW. Hence, we embrace the next step proposed by Bamberger (2008) and embark in “context by comparing” SEW research. We undertake a comparative study of SEW in five countries representing distinct national contexts. By gaining insight into the challenges associated with measuring SEW across national contexts and by shedding light on the heterogeneity of SEW across nations, we aim to enhance our comprehension of how various SEW dimensions are altered, modified, or constrained by national culture.

Conducting context by comparing SEW research is a major challenge for SEW researchers, making it imperative to examine if available scales to measure SEW are valid across nations, as emphasized by cross-country research (Lacko et al., 2022). Consequently, we initially focus on assessing whether the FIBER scale can be universally applied across countries, gauging its reliability in capturing SEW within the five-country context. The preferred method of conducting the statistical and psychometric assessment of the cross-cultural equivalence of an instrument is through testing its “measurement invariance” (Cheung & Rensvold, 2002; Harkness et al., 2003). Building on these established methodologies, we delve into testing the cross-country measurement invariance of the FIBER scale.

Once we confirm the measurement invariance of the SEW scale, we focus on creating a comparative understanding of SEW across nations. We contend that developing this comparative knowledge is a crucial prerequisite before adopting a context theorizing SEW approach.

2.4. Testing the cross-country measurement invariance of the FIBER scale

2.4.1. Sample selection

We chose five countries with distinct national contexts and where family firms have an important economic impact: Canada, Mexico, Saudi Arabia, Spain, and Vietnam.

In Canada, family firms generate 49 percent of the private sector real gross domestic product (GDP) and account for 47 percent of private sector employment (Forbes & Basset, 2019). In Mexico, more than 70 percent of the businesses have a family structure and employ approximately 54 million people (Grant-Thornton, 2011). Family business in Saudi Arabia constitute up to 90 percent of all companies, employing 80 percent of the workforce and contributing to 60 percent of the region’s GDP (PwC, 2016). In Spain, family firms generate 70 percent of the total GDP, representing around 75 percent of total private employment (Spanish Family Enterprise Institute, 2021). Last, while official statistics are lacking, 95 percent of Vietnamese enterprises are family businesses (Nguyen Dang Tuan et al., 2019). Moreover, according to the PwC family Business Survey (2021), in Vietnam, the top 100 family businesses account for 25 percent of the country’s GDP.

Furthermore, these five countries show important cultural differences, and thus, this is a stringent test to ensure the generalizability of our results. In Table 1a, we compare the cultural dimensions among

Table 1a
Hofstede’s cultural dimensions scores in the five sampled countries.

Hofstede Cultural Dimensions	Canada	Mexico	Spain	Vietnam	Saudi Arabia
Power Distance	39	81	57	70	95
Individualism	80	30	51	20	25
Masculinity	52	69	42	40	60
Uncertainty Avoidance	48	82	86	30	80
Long-Term Orientation	36	24	48	57	36
Indulgence	68	97	44	35	52

countries using Hofstede’s dimensions and classify the countries’ sample based on Hofstede scale scores to ensure that we have selected culturally distant countries (Debicki et al., 2016; Hofstede, 2001). As Table 1a shows, Canada is the most individualistic society, whereas Vietnam, Saudi Arabia, and Mexico are collectivist societies. Nevertheless, Canada has the lowest power-distance score in our sample, while Mexico and Saudi Arabia rank high in this dimension. Further, although there are two “Latin societies,” Mexico scores 97 in the “Indulgence” dimension, which is in sharp contrast with Spain’s score of 35.

The selected countries also differ in their institutional context. As Table 1b shows, they rank very differently regarding the World Bank Governance Indicators (Kaufmann et al., 2010), which provide information on various dimensions of a country’s institutional context (i.e., voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption). For all six indicators, Canada’s ratings compare favorably with the rest of the countries, showing its strong institutional environment. On the contrary, Vietnam, Saudi Arabia, and Mexico rate below at least 60 percent of countries on most governance indicators, suggesting weak institutional frameworks.

We followed the suggestions of recent cross-country studies dealing with scale validation (Kankaraš & Moors, 2014; Lacko et al., 2022) and ensured the cross-cultural comparability of our sample. We used the same definition of family firms across the five countries. Following previous studies (Voordeckers et al., 2007; Westhead & Howorth, 2006), the selected firms met two conditions: a) at least 51 % of the ownership belongs to the family and b) at least one family member occupies a governance and/or management position. Nevertheless, as access to family firms’ data varies a lot across countries, we built the database of family firms convergent with cross-cultural comparability (Lacko et al., 2022). In Canada, we compiled data provided by Business Families - HEC Montréal and the National Bank Institute of Entrepreneurship - HEC Montréal. Next, we complemented this data with those provided by the Business Families Foundation, which generously provided us access to its data on Québec family businesses. For robustness check, we checked the Enterprise Register of Québec to verify that the selected firms classify as family firms according to our two conditions. Thus, 1938 companies from all regions of the province of Québec were contacted.

Similarly, Saudi Arabian family firms were identified through databases provided by associations such as the Jeddah Chamber of Commerce, the Family Business Council in the Council of Saudi Chambers, the Family Business Forum, and the National Center for Family Business. Through these databases, we identified 1189 firms that were classified as family firms based on our definition.

The selection of family firms in Spain was done using the SABI¹ database (Casillas et al 2024). To obtain a sample, based on our

Table 1b
Institutional differences among the five sampled countries.

	Canada	Mexico	Saudi Arabia	Spain	Vietnam
Political Stability and Absence of Violence/Terrorism	81.6	17.9	23.5	58	49
Governance Effectiveness	95.7	39	63.8	79.5	53.33
Regulatory Quality	96	55.7	49	52	39
Control of corruption	92.8	18	62.3	73	32.86

¹ The SABI database contains information on 2600,000 companies from Spain and 800,000 companies from Portugal, and includes public and private Spanish and Portuguese companies. SABI is the Spanish/Portuguese (Iberic) version of the Orbis database, from Bureau Van Dijk, which has worldwide coverage. Spain is one of the countries in which the coverage of this database is greater (Bajgar et al., 2020).

definition of family firms, we conducted an exhaustive review of the shareholding structures (percentage of common stock) and composition (name and surnames of shareholders)² of these firms. Thus, we selected companies from SABI that met the following criteria: i) non-listed Spanish companies with more than nine employees; ii) companies with financial information for (at least) the last five years; iii) companies not affected by special situations such as insolvency, wind-up, liquidation or zero activity; and iv) companies in which at least 51 percent of the firm owners were members of the family. From the original dataset of 27,355 Spanish enterprises that fell within the set of parameters, 1312 companies met the specified family criteria.

In Mexico, there is not a single professional association with public databases for family business. Thus, we built our sample in three steps. First, we identified family firms listed in the National Institute of Statistics and Geography (INEGI, 2015). Second, we verified these data with scholars (experts) participating in research on family businesses in four universities in Mexico, as well as with consultants collaborating with family businesses. Then, we targeted family firms in the states of Mexico having the highest contribution to PIB: Campeche, Ciudad de Mexico, Estado de México, Jalisco, Nuevo León, and Veracruz (National Statistical Directory of Economic Units of INEGI, 2015). Last, we contacted 650 family firms that met our criteria to invite them to participate in the study.

In Vietnam too, there is no professional association of family firms. Moreover, family owners in Vietnam receive high social consideration, so it is not easy to reach out to them. Therefore, we relied on our informal networks to set up contacts with directors and managers of family firms. The research team contacted each of these managers to explain to them the goal of the project as well as the content of the questionnaire. We contacted 295 firms.

We followed a rigorous process to ensure the validity of the questionnaire across countries (Tan et al., 2020). We carefully translated the English version of the FIBER questionnaire into French, Arabic, Spanish, and Vietnamese. Then, all the translations were modified based on a review by three native social scientists with a doctoral degree. We carefully minimized the problems inherent in simple translation, such as linguistic or psychometric nonequivalence between the different language versions (Hulin & Mayer, 1986). Back translation (Brislin & Olmstead, 1973) was performed on the final versions by bilingual individuals. A comparison of the original and back-translated items indicated substantial similarity between the original and translated versions. We ran a pilot test to make sure that the meanings of the questions were adequate for each cultural context. For example, in Vietnam, the notion of kinship translated into Vietnamese may generate confusion, as the concept of kinship in Western cultures means a blood relationship. However, in Vietnam, it means the relationship between family members (in the sense of community). Thus, we took care of these cultural differences and adapted our final scale accordingly.

The data were collected between July 2018 and June 2019. A company that specializes in market research administered the survey and collected data in all countries except Vietnam. In Vietnam, we selected a group of 20 students enrolled in Management Science courses in Vietnamese universities and trained them in data collection. With hard copies of the questionnaire, the students took on the role of interviewers and conducted face-to-face interviews with each respondent.

The total final sample across the five countries comprised 1464 respondents: we received 495 completed questionnaires (25.5 percent response rate) from Canada, 114 (17.5 percent) from Mexico, 400 (33.6 percent) from Saudi Arabia, 160 (17.7 percent) from Spain, and in the case of Vietnam, we sent 500 questionnaires, out of which 295 interviews were completed successfully (59 percent).

² In Spain, people have two surnames. The first is the first surname of the father, and the second is the first surname of the mother. Therefore, family relationships among shareholders are more evident than in other countries.

To test for non-response bias, we performed a Kolmogorov-Smirnov test (Siegel & Castellan, 1988) between responding and non-responding firms in Canada, Mexico, Saudi Arabia, and Spain. The analysis revealed no significant differences in the main demographic features between the two groups (i.e., number of employees, annual sales, firm size, and age). Table 2 shows some descriptive statistics. It reveals interesting differences in the family influence across the sample countries. For instance, family ownership is higher than 90 percent in all countries, except in Canada where the family ownership mean is 77 percent. Spain shows a higher percentage of family members involved in the TMT, while Saudi Arabia has the lowest family involvement in management responsibilities. Last, while most family firms in Canada and Mexico are in the first generation, in the rest of the countries, the majority of firms are controlled by the second generation.

3. Results

Cross-country management studies pose a crucial question: can instruments validated in one country be readily applied in different contexts without assessing their cross-cultural applicability (Durvasula et al., 1993; Mavondo et al., 2003)? Responding research has predominantly aimed at mitigating the methodological and statistical challenges associated with the issue of measurement non-invariance. The most widely adopted approach to scrutinize the cross-cultural equivalence of an instrument is the examination of “measurement invariance” (Cheung & Rensvold, 2002; Harkness et al., 2003). In essence, this concept seeks to determine whether a measurement instrument assesses the same underlying concept consistently across various subgroups of respondents (Chen et al., 2008; Horn & Mcardle, 1992, p. 117). Before embarking on a comparative analysis of SEW across different countries, it is imperative to subject the FIBER scale to rigorous cross-country measurement invariance testing.

To do so, we draw upon MultiGroup Confirmatory Factor Analysis (MG-CFA) (Jöreskog, 1971) as it “represents the most powerful and versatile approach to testing for cross-national measurement invariance” (Steenkamp & Baumgartner, 1998, p. 78). It involves setting cross-group constraints and comparing more restricted models with less restricted ones (Byrne et al., 1989; Steenkamp & Baumgartner, 1998). Additionally, we follow the stepwise procedure proposed by these authors, testing from the least to the most demanding form of invariance.

We started by testing whether the FIBER factor structure is adequate in each country by estimating a confirmatory factor analysis (CFA) model for each of the five data sets (countries). Table 3 shows the CFAs for all the datasets. All Cronbach’s alphas (CA) are above the recommended value of 0.70, and the composite reliability (CR) indices are above 0.70 (Fornell & Larcker, 1981). Moreover, the average variance extracted (AVE) of the constructs exceed the recommended threshold value of 0.50 (Fornell & Larcker, 1981).

After testing that the scale is acceptable for each country, we tested whether it shows configural equivalence, that is, whether it exhibits the

Table 2
Descriptive statistics of the sample.

	Canada	Mexico	Saudi Arabia	Spain	Vietnam	Total
Number of Respondents	495	114	400	160	295	1464
Male	395	68	338	80	142	1023
Female	100	46	62	80	153	441
Company Size Mean (No. of employees)	55	200	39	42	119	95
Ownership Mean (%)	77	94	88	92	89	88
Family in TMT (%)	54	58	48	66	54	56
Generation in Charge	1	1	2	2	2	2

Table 3
Validation of the measurement model – reliability and convergent validity.

Dimension	Indicator	Canada		Mexico		Saudi Arab		Spain		Vietnam		All Together	
		Standardised Loading	CA =	Standardised Loading	CA =	Standardised Loading	CA =	Standardised Loading	CA =	Standardised Loading	CA =	Standardised Loading	CA =
F	Item 1	0.707	CA = 0.89	0.610	CA = 0.86	0.681	CA = 0.86	0.806	CA = 0.91	0.710	CA = 0.86	0.721	CA = 0.88
	Item 2	0.703	CR = 0.89	0.748	CR = 0.86	0.795	CR = 0.86	0.814	CR = 0.91	0.838	CR = 0.87	0.785	CR = 0.88
	Item 3	0.790	AVE = 0.59	0.797	AVE = 0.51	0.683	AVE = 0.51	0.765	AVE = 0.62	0.739	AVE = 0.54	0.737	AVE = 0.55
	Item 4	0.812		0.783		0.673		0.782		0.410		0.635	
	Item 5	0.799		0.777		0.705		0.742		0.820		0.780	
	Item 6	0.771		0.546		0.743		0.819		0.797		0.780	
I	Item 7	0.838	CA = 0.85	0.768	CA = 0.87	0.768	CA = 0.88	0.794	CA = 0.88	0.531	CA = 0.86	0.721	CA = 0.88
	Item 8	0.655	CR = 0.86	0.784	CR = 0.88	0.797	CR = 0.88	0.753	CR = 0.88	0.724	CR = 0.88	0.749	CR = 0.88
	Item 9	0.720	AVE = 0.51	0.520	AVE = 0.54	0.836	AVE = 0.56	0.821	AVE = 0.56	0.829	AVE = 0.55	0.789	AVE = 0.55
	Item 10	0.622		0.840		0.729		0.686		0.850		0.735	
	Item 11	0.789		0.700		0.737		0.838		0.867		0.805	
	Item 12	0.647		0.772		0.580		0.578		0.572		0.644	
B	Item 13	0.831	CA = 0.94	0.703	CA = 0.85	0.656	CA = 0.87	0.664	CA = 0.84	0.772	CA = 0.86	0.725	CA = 0.89
	Item 14	0.905	CR = 0.94	0.826	CR = 0.86	0.731	CR = 0.87	0.775	CR = 0.85	0.681	CR = 0.86	0.789	CR = 0.89
	Item 15	0.916	AVE = 0.75	0.773	AVE = 0.55	0.763	AVE = 0.58	0.850	AVE = 0.54	0.759	AVE = 0.55	0.827	AVE = 0.61
	Item 16	0.832		0.728		0.828		0.660		0.768		0.788	
	Item 17	0.842		0.663		0.807		0.705		0.713		0.772	
E	Item 18	0.681	CA = 0.86	0.539	CA = 0.86	0.730	CA = 0.085	0.763	CA = 0.89	0.666	CA = 0.88	0.680	CA = 0.87
	Item 19	0.761	CR = 0.86	0.622	CR = 0.86	0.777	CR = 0.85	0.807	CR = 0.89	0.659	CR = 0.88	0.773	CR = 0.87
	Item 20	0.851	AVE = 0.52	0.808	AVE = 0.50	0.814	AVE = 0.50	0.821	AVE = 0.58	0.850	AVE = 0.56	0.821	AVE = 0.53
	Item 21	0.458		0.608		0.707		0.695		0.702		0.657	
	Item 22	0.841		0.809		0.479		0.723		0.755		0.707	
	Item 23	0.646		0.820		0.677		0.749		0.817		0.732	
R	Item 24	0.785	CA = 0.80	0.666	CA = 0.79	0.818	CA = 0.84	0.730	CA = 0.86	0.795	CA = 0.87	0.781	CA = 0.84
	Item 25	0.526	CR = 0.80	0.680	CR = 0.80	0.674	CR = 0.84	0.702	CR = 0.87	0.747	CR = 0.87	0.657	CR = 0.84
	Item 26	0.705	AVE = 0.51	0.808	AVE = 0.50	0.796	AVE = 0.58	0.831	AVE = 0.63	0.774	AVE = 0.62	0.774	AVE = 0.57
	Item 27	0.805		0.675		0.745		0.887		0.831		0.796	

Notes: CA: Cronbach Alpha; CR: Composite Reliability; AVE: Average Variance Extracted.

same configuration of factor loadings in different countries (Horn & Mcardle, 1992). We ran a MultiGroup Confirmatory Factor Analysis (MGCFAs) for all the data together in one dataset. Table 4 shows that the Bentler-Bonett non-normed fit index (BBNNFI), comparative fit index (CFI), and incremental fit index (IFI) are all above 0.80, which indicates a good model fit (Srinivasan et al., 2002).³ In addition, Table 4 shows the root mean square error of approximation (RMSEA) for the model. Its value lower than 0.095 indicates good fit (Hu & Bentler, 1995; Kline, 2005). Moreover, all factor loadings are greater than 0.40, which is the cut-off demonstrating adequate levels of fit (Ford et al., 1986; Nunnally & Bernstein, 1994), all p s < .001. Therefore, Tables 3 and 4 provide evidence of convergent validity and internal consistency of the FIBER scale for all the datasets. Thus, factors' structure does not differ in the five cultural groups (Lacko et al., 2022; Widaman & Reise, 1997).

Evidence of discriminant validity is necessary to ensure configural invariance as well. Accordingly, we followed two criteria. First, we applied the Fornell-Larcker criterion that compares the square root of the AVE values with the latent variable correlations. To show discriminant validity, the square root of each dimension's AVE of an instrument should be greater than its highest correlation with any other dimension. The heterotrait-monotrait (HTMT) criterion is the second and more conservative approach. The HTMT is computed as the geometric mean of the heterotrait-heteromethod correlations divided by the average of the monotrait-heteromethod correlations. If the HTMT value is below the (conservative) threshold value of 0.85, discriminant validity would be supported (Hair et al., 2017). Table 5 shows evidence of discriminant validity⁴ (for all countries together) with both the Fornell-Larcker criterion and HTMT criterion. This implies that the FIBER scale has discriminant validity, that is, each dimension of the FIBER scale is unique and captures phenomena not represented by other dimensions in the scale. These results confirm the configural invariance of the FIBER scale. This means that family owners in all five countries conceptualize the preservation of their SEW in same manner.

The second step involves testing whether the various dimensions and the items associated with each dimension are understood in the same way across countries, that is, testing the metric invariance of the FIBER scale. Metric cross-country invariance requires that the factor loadings between items and factors are invariant across nations. It is tested by restricting the factor loading of each item on its corresponding factor to be the same across groups. Once the factor loading of each item is restricted, we test if the difference between the configurational model (without restrictions) and metric invariance model (with restrictions) is

significant. If it is, the metric invariance does not exist. In our case, the configural invariance model has a $\chi^2(1570) = 3806.87$, while the metric invariance model has a $\chi^2(1678) = 3892.16$. Thus, the difference between the models is ($\Delta \chi^2(108) = 85.293, p > .10$). Therefore, as the metric invariance model is not significantly worse than the fit of the configural invariance model, and as the RMSEA and other indicators of model fit have improved or at least remained equal to those in the configural model (see Table 6), metric invariance is supported. This means that the FIBER construct has the same metric and same meaning across groups.

While metric invariance implies that the instrument used to measure the construct has been perceived similarly across national cultures (Wernsing, 2014), it does not imply that the scores of the instrument can be meaningfully compared across groups. Such comparisons are meaningful only if the items exhibit "scalar" invariance (Meredith, 1993; Steenkamp & Baumgartner, 1998). Scalar invariance shows that item scores from different groups have the same scaling, origin, and interpretation across groups. To assess scalar invariance, both factor loadings and item intercepts are constrained to be equal across countries. We tested the scalar invariance of the FIBER scale by constraining all factor loadings and item intercepts. The model of metric invariance (with only factor loading of each item constrained) has a $\chi^2(1678) = 3892.16$, while the model of scalar invariance (with both factor loadings and item intercepts constrained) has a $\chi^2(1766) = 187.842$. Once we have the fit of the metric model and scalar model, we check if the difference between the fit of the two models is significant. If it is, scalar invariance would not be established. In our case, the difference between the two models is statistically significant ($\Delta \chi^2(88) = 187.842, p < .010$), such that we cannot ensure the scalar invariance of the SEW scale (see Table 6).

Ideally, it would be preferable SEW measures that show scalar invariance, wherein the factor structure of the instrument is fully equivalent across countries. However, several researchers have emphasized that full measurement invariance does not hold, and thus represents too strict a requirement for group comparisons, especially in cross-country studies (Muthén & Christofferson, 1981; Schmitt & Kuljanin, 2008; Steenkamp & Baumgartner, 1998). Therefore, Byrne et al. (1989) and Steenkamp and Baumgartner (1998) proposed that it is sufficient to have a minimum of two invariant loadings and intercepts to ensure partial scalar invariance, that is, it is not necessary to have the constraints of all the loadings and intercepts being equal and invariant across groups (Millsap & Kwok, 2004). Hence, as the last step, we tested the partial invariance of the FIBER scale. Partial scalar invariance is supported when the parameters of at least two indicators are equal across countries (Steenkamp & Baumgartner, 1998). This means we must ensure that at least two items per latent construct have equal loading and intercepts (Byrne et al., 1989). In our case, more than two indicators are constrained in terms of loadings and intercepts, and are equal across countries. Thus, partial scalar invariance was supported for the FIBER scale across all countries. It indicates that the interpretation of at least one question from each dimension differed across the groups. However, at least two questions from each dimension did not differ across the groups (that is, had the same meaning). Thus, partial scalar invariance of the FIBER scale ensures meaningful and valid group comparisons (Byrne et al., 1989; Steenkamp & Baumgartner, 1998). Scalar measurement invariance allows researchers to at least compare the group-specific (standardized) coefficients of the relationships in the structural model. Otherwise, when less than two items per latent variable (dimension) have equal loadings and/or intercepts, multigroup comparisons in SEM may be problematic (Henseler et al., 2016).

Our test of the measurement invariance of the FIBER scale suggests that family owners in all five countries conceptualize the preservation of their SEW in same manner (i.e., the FIBER scale shows configural invariance). Further, the scale exhibits metric invariance, signifying that family owners across these countries respond to the scale's dimensions consistently. Last, the confirmation of partial invariance underscores that the operational definition of SEW preservation using the FIBER

Table 4
Model fit of the FIBER scale.

	Chi-Square Test	Degrees of Freedom	BBNNFI	CFI	IFI	RMSEA
Canada	749.872	314	0.932	0.940	0.940	0.053
Mexico	574.249	314	0.826	0.845	0.848	0.081
Saudi Arabia	762.277	314	0.911	0.921	0.921	0.060
Spain	753.218	314	0.827	0.845	0.847	0.094
Vietnam	727.875	314	0.893	0.904	0.905	0.067
All together	1422.08	314	0.938	0.944	0.944	0.049

³ The goodness of fit describes how well it fits a set of observations. In other words, how close the model-implied covariance matrix approximates the observed covariance matrix (Garson, 2016). Measures of goodness of fit typically summarize the discrepancy between observed values and the values expected under the model in question (Byrne, 2006). If a model has a good fit, it is supposed that the model quality is good and in our case that the FIBER scale is reliable.

⁴ The discriminant validity for all the countries independently is available on request.

Table 5
Discriminant validity (Fornell-Larcker criterion and HTMT criterion).

Fornell- Larcker Criterion					HTMT ₈₅ Criterion						
	F	I	B	E	R		F	I	B	E	R
F	0.789					F					
I	0.487	0.790				I	0.550				
B	0.350	0.342	0.829			B	0.394	0.386			
E	0.115	0.203	0.186	0.781		E	0.134	0.230	0.208		
R	0.377	0.391	0.391	0.196	0.818	R	0.438	0.454	0.458	0.222	

Note: In the Fornell-Larcker criterion, the diagonal represents the square root of AVEs.

Table 6
Test of measurement invariance of the FIBER scale.

	Chi-Square Test	Degrees of Freedom	Chi-Square Δ	Degrees of Freedom Δ	p-Value	RMSEA	BBNNFI	CFI	IFI
Single Group Solutions									
Canada	749.872	314				0.053 [0.048–0.058]	0.932	0.940	0.940
Mexico	547.249	314				0.081 [0.069–0.092]	0.826	0.845	0.848
Saudi Arabia	762.277	314				0.060 [0.054–0.065]	0.911	0.921	0.921
Spain	753.218	314				0.094 [0.085–0.102]	0.802	0.823	0.847
Vietnam	727.875	314				0.067 [0.060–0.073]	0.893	0.904	0.905
Measurement Invariance									
Equal Form	3806.87	1570				0.070 [0.067–0.073]	0.897	0.908	0.909
Equal Factor Loadings	3892.16	1678	85.293	108	0.948	0.067 [0.064–0.070]	0.905	0.909	0.909
Scalar Invariance									
Equal Intercepts	6617.92	1796	2725.763	118	0.000	0.098 [0.095–0.100]	0.788	0.806	0.807

scale remains consistent across diverse cultural settings.

To obtain further evidence of cross-cultural applicability of the FIBER scale, we ran measurement invariance tests by looking at company size and generation in control.⁵ The scale shows partial scalar invariance across size and generations (see Table 7a and Table 7b). At least two indicators are constrained in terms of loadings and intercepts and are equal in the two multigroups in each dimension (one multigroup considers the size of the company, and the other considers the generation in control of the family firm).

To further test the cross-country validity of the scale, we tested its nomological validity. Its importance is well documented in the literature (e.g., Cronbach & Meehl, 1955). Following Lee et al. (2019) and Ellinger et al. (2011), we ran the structural model and compare the chi-squares and the fit of the model with the measurement model. If the measurement model has a significantly better fit than the structural model (Ellinger et al., 2011; Lee et al., 2019), then the nomological validity is not tested (see Table 8a and Table 8b); or in our case, the models are not significantly different (1423.09 – 1422,8 = 1,01^{not significant}).

To further verify the nomological validity of the FIBER scale, we follow Lee et al. (2019). As can be seen, in Table 8a, all correlations among the different dimensions are significant and positive (p<0.01). These findings provide support the nomological validity (Lee et al., 2019) of the FIBER measure by indicating that all the dimensions of the FIBER scale are significantly positively correlated to one another. For researchers and practitioners, this verification implies that all the dimensions of the FIBER scale need to be understood with consideration of the variables’ interdependency and high correlations.

We conducted an additional test to explore the connections between SEW dimensions and other relevant and “popular” constructs used in family business literature as performance (Hernández-Linares et al., 2020; Sanchez-Famoso et al., 2015).⁶ In this sense, performance is measured using three questions using items adopted from Sorenson et al. (2009) with an alpha Cronbach equal to 0.82. As BBNNFI equals to 0.98; CFI equals to 0.98; IFI equals to 0.97, RMSEA equals to 0.059 and R² is 0.38, we can conclude that the structural model has an excellent fit

(Kline, 2005). Thus, the accurate recomputation of covariances is possible (Bentler, 1990). All the dimensions have a significant effect on performance: i) “F” dimension ($\beta = 0.26$; t -value = 2.03); ii) “I” dimension ($\beta = 0.55$; t -value = 3.92); iii) “B” dimension ($\beta = 0.31$; t -value = 2.23); iv) “E” dimension ($\beta = 0.32$; t -value = 2.24); and v) “R” dimension ($\beta = 0.28$; t -value = 2.14). These findings show the nomological network of the FIBER scale.

With these findings, we can confidently assert that the FIBER scale is robust and can be meaningfully compared across various national cultural contexts. This sets the stage for us to embark on making cross-country comparisons of the results derived from the scale within these countries.

3.1. Conducting comparative SEW research: Examining the cross-country variations of the FIBER scale

The analyses conducted in the preceding section provide support to the robustness of the FIBER scale, indicating its suitability for meaningful comparison across diverse national contexts. Importantly, we can confidently attribute the discrepancies identified in the dimensions of the scale in this section to differences arising from varying cultural and institutional conditions.

Table 9 presents the mean scores for each SEW dimension across the five sampled countries. Although exploratory, the table provides preliminary evidence on how national context shapes the significance attributed to different SEW dimensions.

As shown in Table 9, Mexico ranks highest in both, the Family Control and Renewal of Family Bonds, dimensions of SEW. Table 1a reveals that Mexico is characterized by a collectivistic and high power-distance society. This observation aligns with Gomez-Mejia et al. (2024), suggesting that in Latin American and Caribbean (LAC) countries, which are characterized by high collectivism and power distance, family businesses prioritize extended family concepts. We speculate that these cultural aspects of the context foster family owners’ unencumbered discretion to provide jobs for a greater number of relatives. They also facilitate them to obtain perquisites to maintain the extended family lifestyle. Moreover, a context where the family is conceptualized as extended also increases the importance of the “R” dimension, that is, the family’s concern to transfer the business to the next generation, as the

⁵ We thank the anonymous reviewers for this insightful suggestion.

⁶ We thank one of our anonymous reviewers for this insightful suggestion.

Table 7a
Test of measurement invariance of the FIBER scale (taking into account company size).

	Chi-Square Test	Degrees of Freedom	Chi-Square Δ	Degrees of Freedom Δ	p-Value	RMSEA	BBNNFI	CFI	IFI
Single Group Solutions									
Companies (employees > 100) (n = 754)	914.64	314				0.052 [0.048–0.055]	0.931	0.938	0.939
Companies (employees < 101) (n = 710)	903.07	314				0.051 [0.047–0.055]	0.933	0.940	0.940
Measurement Invariance									
Equal Form	1844.71	628				0.051 [0.044–0.054]	0.932	0.939	0.939
Equal Factor Loadings	1881.42	655	36.71	27	0.101	0.051 [0.048–0.053]	0.934	0.938	0.938
Scalar Invariance									
Equal Intercepts	3.074,96	692	1193.54	37	0.000	0.070 [0.067–0.071]	0.871	0.882	0.882

Table 7b
Test of measurement invariance of the FIBER scale (taking into account generation in control).

	Chi-Square Test	Degrees of Freedom	Chi-Square Δ	Degrees of Freedom Δ	p-Value	RMSEA	BBNNFI	CFI	IFI
Single Group Solutions									
Group 1 (Generation 1 and 2) (n = 907)	1015.39	314				0.050 [0.047–0.054]	0.937	0.944	0.944
Group 2 (Generation > 2) (n = 557)	812.60	314				0.053 [0.049–0.058]	0.925	0.933	0.933
Measurement Invariance									
Equal Form	1827.99	628				0.051 [0.048–0.054]	0.933	0.940	0.940
Equal Factor Loadings	1866.43	655	38.44	27	0.071	0.051 [0.048–0.054]	0.933	0.938	0.938
Scalar Invariance									
Equal Intercepts	3160.64	692	1294.21	37	0.000	0.070 [0.067–0.072]	0.872	0.883	0.883

Table 8a
Nomological validity of the FIBER scale.

	Measurement Model	Structural Model
Chi-Square	1422.08	1423.09
Degrees of Freedom	314	313
BBNNFI	0.938	0.935
CFI	0.944	0.942
IFI	0.944	0.942
RMSEA	0.049	0.050

Table 8b
Latent variable intercorrelations in the FIBER nomological network.

	F	I	B	E
I	0.543			
B	0.398	0.386		
E	0.124	0.227	0.209	
R	0.430	0.441	0.437	0.221

Table 9
Cross-country comparison of the FIBER dimensions.

SEW DIMENSIONS	Canada		Mexico		Spain		Vietnam		Saudi Arabia	
	SEW value	Rank	SEW value	Rank	SEW value	Rank	SEW value	Rank	SEW value	Rank
(F)amily Control and Influence	4.337	2	4.722	2	4.443	2	3.948	1	3.890	3
(I)dentification of Family Members with the Firm	4.375	1	3.319	5	4.426	3	3.768	4	4.085	1
(B)inding Social Ties	4.26	3	4.387	3	4.234	4	3.927	3	3.956	2
(E)motional Attachment of Family Members	3.952	5	4.058	4	3.292	5	3.436	5	3.826	5
(R)enewal of Family Bonds Through Dynastic Succession	3.998	4	4.883	1	4.478	1	3.94	2	3.874	4

extended family implies that more family members are available to lead the firm now or in the distant future.

The relatively higher importance of these two dimensions in Mexico is also understood in the context of a high power-distance society, where there is a significant power gap between authority figures and subordinates. In a family business context, this may result in a more autocratic leadership style and a culture of respecting and complying with family authority, thereby amplifying the family’s control over the business both in short and long run.

Interestingly, Mexico scores lowest in the “I” dimension, contrary to expectations in a collectivistic society where “social life revolves around the family and close relations” (Field, 1985, p. 87). In Saudi Arabia, however, this dimension is prioritized. While both countries share low individualism, differences in institutional stability may explain this variance. The greater instability and corruption that characterize the Mexican landscape compared to Saudi may explain why family owners may exercise caution in drawing excessive attention to the family’s identity. Unforeseen events or political changes could negatively impact both the family’s and business’s reputation. More importantly, as

mentioned, Mexican family owners may be highly reluctant to maintain a strong public image due to the heightened risk of negative consequences such as kidnappings and extortions (Gomez-Mejia et al., 2024).

Differences in the institutional environment may also explain variations in the transgenerational intention between Saudi Arabia and Vietnam, despite both being collectivistic societies. Saudi Arabia, wealthier and more politically stable nation compared to Vietnam, may reduce the urgency for immediate wealth transfer or succession planning, as the next generations have more alternatives and opportunities beyond succeeding their parents in family businesses. The international comparison also yields interesting insights on how context shapes the importance of the “Binding social ties” dimension of SEW. Among the five countries, Saudi family owners seem to give relatively higher importance to this dimension. We speculate that the uniqueness of the Saudi context, characterized by the importance of religion in society and laws, may partly explain this finding. Kayed and Hassan (2010) found that most Saudi entrepreneurs identified themselves as committed and faithful Muslims conducting their business according to religious principles. The Islamic principles and tribal values of Saudi Arabia emphasize the importance of generating halal (lawful) income and contributing to the *alah* (well-being) of the community (Kayed & Hassan, 2010). This coupled with a tribal culture that is vital to Saudi society (Ayoob & Kosebalaban, 2009; Pharaon, 2004) may explain why family owners emphasize on building strong relationships with their stakeholders in Saudi.

This comparative analysis underscores the profound influence of cultural and institutional contexts on family business priorities. It highlights the intricate interplay between SEW and sociocultural dynamics, emphasizing the need for nuanced SEW understanding tailored to each context. While this study offers valuable insights, its exploratory nature calls for further research to delve deeper into SEW complexities within diverse cultural and institutional landscapes.

4. Discussion

As SEW gains prominence in family business studies, conducting comparative research across contexts is imperative (Amato et al., 2021; Gomez-Mejia et al., 2020; Krueger et al., 2020). Our study emphasizes the need to consider cultural and institutional differences to accurately understand SEW heterogeneity. We advocate national context-specific theorizing to refine SEW theory, acknowledging that the underlying assumptions of this framework should be interpreted through the lens of the cultural and institutional conditions in which the family firm is embedded (Gomez-Mejia et al., 2024). Addressing these differences is important to avoid emphasizing a “one-size-fits-all” approach to family firms that extrapolate the findings from one country to another (Gomez-Mejia et al., 2020). Applying SEW findings from Western economies to emerging countries may lead to misleading conclusions (Dinh et al., 2022). The anticipated influence of cultural and institutional elements on the foundational premises of SEW theory opens opportunities for future research. It is necessary to question the prevailing assumptions that have typically been applied to different contexts and refine the SEW approach to suit the unique characteristics of specific regions (Gomez-Mejia et al., 2024). Our study also enhances the validity of SEW as a construct (Brigham & Payne, 2019; Swab et al., 2020) by validating the FIBER scale as a reliable instrument for conducting comparative research across countries. Applying measurement invariance techniques to the FIBER scale measured in five widely divergent cultural and institutional contexts showed that the scale had the same operational definition across national settings. This is proven by the (partial) scalar invariance of the model, which opens up numerous opportunities for meaningful cross-country comparisons in SEW studies. Without establishing this measurement invariance, SEW comparative research across countries can be meaningless because differences may not reflect true country differences but the different functioning of the instrument between countries (Jeong & Lee, 2019). Family owners not

only conceptualize the preservation of their SEW in the same manner but also respond to the dimensions of the FIBER scale, independent of the cultural context (Byrne et al., 1989; Steenkamp & Baumgartner, 1998). However, as partial scalar invariance has been tested, not all questions in each dimension are fully equivalent across countries, which means that at least two questions in each dimension have equal loading in different contexts (understanding each other in the same way); thus, multigroup comparison is possible, which opens a wide range of opportunities to study SEW across the FIBER scale (Henseler et al., 2016; Steenkamp & Baumgartner, 1998).

While we can confirm the partial cross-country measurement invariance of the FIBER scale, the cross-country comparison, albeit exploratory, suggests that the “essence” of family firms differs across nations, as family owners put different weights to each FIBER dimension. It is possible that respondents in the different countries use different frames of reference, especially with respect to how “family” is understood (Gomez-Mejia et al., 2024), as families represent the focal decision-making group regarding SEW (Swab et al., 2020). The evolving nature of familial relationships, which includes blended families, cohabitation arrangements, and various permutations of kinship networks (Labaki & Mustafa, 2023), along with the diverse cultural, socioeconomic, and demographic factors influencing family structures, underscores the need for future research on a nuanced understanding of the influence of the concept of family in SEW research (Kammerlander, 2022).

This study has several practical implications. Recognizing which SEW dimensions are relevant in each context will help family firms devise strategies for competitiveness, as it may help conduct more fine-grained analyses to consider the unique role of various SEW dimensions in firm performance (Gomez-Mejia et al., 2023). It may also help better understand the mediating role of strategic choices, corporate governance, and stakeholder management variables, among others, in the SEW-performance relationship. Understanding the importance of specific SEW dimensions can guide the development of more effective cohesion and generational transition strategies to address the unique challenges and opportunities presented by the specific environment in which a family firm operates. For example, in countries such as Mexico and Spain, where family control and influence are highly valued, cohesion strategies may focus on maintaining strong family governance and involving multiple family members in decision-making processes to ensure a unified vision. In Saudi Arabia, where the Identification with the Firm and Binding Social Ties are more pronounced, cohesion and succession strategies may focus on strengthening family identity and building robust relationships with stakeholders. Further, our study supports policymakers’ task since knowing the effect of context on SEW issues could help develop and tailor policies that foster SEW as a source of competitive advantage in family firms in each country.

Our study has some limitations that should be addressed in future research. First, the complexity of our international study involves the collective efforts of scholars in five different countries to ensure the comparability of the FIBER instrument; however, this limits our sample of countries. Future research should consider refining and replicating our findings in a larger set of countries. In this regard, the STEP project, integrated with 48 academic institutions from Europe, Latin America, Asia, and North America, represents an opportunity to further contextualize family business research. The STEP Consortium conducts online surveys on family firms worldwide. It was recently used by Basco et al. (2019) to investigate the differences and similarities in the transgenerational entrepreneurship construct across cultural contexts. Future research should also expand the geographical scope to include less-explored settings, such as African countries. Studies in these regions can offer valuable insights into how cultural, socioeconomic, and institutional factors influence SEW dimensions. For instance, Agyapong and Fenny (2017) discuss the dynamics of family businesses in Ghana, highlighting the unique role of familial ties and sociocultural values in business operations.

We also emphasize the exploratory nature of our comparative analyses. We encourage researchers to engage in more rigorous investigations to develop formal propositions regarding the relationships between cultural and institutional aspects and SEW dimensions and to test these relationships with a larger set of countries. This approach enhances our theoretical understanding and contributes to the practical applicability of SEW research in diverse cultural and institutional contexts.

Due to the complexity of this study, we constrained the definition of context to the national context. However, context is a broader concept encompassing “the institutional, organizational, and temporal factors that impact the behaviors and decisions of organizational stakeholders” (Wright et al., 2014, p. 1247). Future research should contextualize SEW research using other contextual dimensions, such as industry-specific factors or temporal changes. For example, Zellweger and Nason (2008) highlight how industry characteristics influence family firms’ strategic priorities and governance structures. Similarly, temporal changes, including generational shifts and evolving market conditions, can affect the relevance and application of SEW dimensions, as Le Breton-Miller and Miller (2013) suggest. Our findings do not provide conclusions regarding the measurement invariance of other shortened models to capture SEW (e.g., REI) (Hauck et al., 2016) (e.g., SEWi, Debicki et al., 2016). Understanding this will help researchers uncover the most suitable and practical tools for capturing SEW. Furthermore, since scalar invariance was partially confirmed, researchers may consider this when analyzing what it means to compare the scores of different SEW dimensions. In addition, future research should emphasize the importance of multiple respondents from the same family firm. For example, it would be interesting to investigate the differences in SEW among family members who are active in the business and those who are not.

In conclusion, our research underscores the importance of considering cultural and institutional differences when studying SEW within family businesses. By advocating for context-specific theorizing and conducting cross-cultural comparative studies, we further refine SEW theory. Furthermore, the validation of the FIBER scale across diverse cultural settings provides a valuable tool for researchers and practitioners, facilitating meaningful cross-country comparisons.

CRedit authorship contribution statement

Nhu Tuyen: Data curation. **Jorge-Humberto Mejia-Morelos:** Data curation, Writing-review & editing, Validation, Investigation. **Luis Cisneros:** Data curation, Writing-review & editing, Validation, Investigation. **Valeriano Sanchez-Famoso:** Writing – review & editing, Writing – original draft, Validation, Project administration, Methodology, Formal analysis, Data curation, Conceptualization. **Cristina Cruz:** Writing – review & editing, Writing – original draft, Validation, Supervision, Methodology, Conceptualization. **Mohamed Mazen Batterjee:** Investigation, Data curation.

Declaration of Competing Interest

We would like to confirm you that the submitted article represents an original piece of research; it has not been published elsewhere; and it is not under consideration elsewhere at present.

Acknowledgements

The authors received financial support from the Basque Government (Grant number IT1641-22). We also highly appreciate the institutional support received from the Family Business Centre at the UPV/EHU in collaboration with the DFB/BFA.

Data availability

Data will be made available on request.

References

- Agyapong, D., & Fenny, A. P. (2017). Dynamics of family business development in Ghana. *Journal of Family Business Management*, 7(1), 37–54.
- Amato, S., Basco, R., & Lattanzi, N. (2022). Contextualizing employment outcomes in family business research: Current findings and future research avenues. *Management Review Quarterly*, 72(2), 531–604. <https://doi.org/10.1007/s11301-021-00226-9>
- Angulo, A. A. Z., Villanueva, J. E. G., & Solís, E. R. R. (2016). The determinants of socioemotional wealth and the family firm’s outcomes. *International Journal of Entrepreneurship*, 20, 16–32.
- Ayoub, M., & Kosebalaban, H. (2009). *Religion and Politics in Saudi Arabia: Wahhabism and the State*. London: Lynne Rienner Publisher.
- Bajgar, M., Berlingieri, G., Calligaris, S., Criscuolo, C., & Timmis, J. (2020). Coverage and representativeness of Orbis data, OECD science, technology and industry working papers, 2020(06). doi:(10.1787/c7bdaa03-en).
- Bamberger, P. (2008). From the editors beyond contextualization: Using context theories to narrow the micro-macro gap in management research. *Academy of Management Journal*, 51(5), 839–846. <https://doi.org/10.5465/amj.2008.34789630>
- Bammens, Y., Voordeckers, W., & Van Gils, A. (2011). Boards of Directors in family businesses: A literature review and research agenda. *International Journal of Management Reviews*, 13(2), 134–152. <https://doi.org/10.1111/j.1468-2370.2010.00289.x>
- Basco, R. (2018). Family business in emerging economies. In R. Grosse & K. Meyer (Eds.). *Oxford handbook on management in emerging markets* (pp. 527–546). Oxford.
- Basco, R., Calabrò, A., & Campopiano, G. (2019). Transgenerational entrepreneurship around the world: Implications for family business research and practice. *Journal of Family Business Strategy*, 10(4), 1–16. <https://doi.org/10.1016/j.jfbs.2018.03.004>
- Basco, R., Omari, Y., & Abouchkaier, L. (2020). *Family Business Ecosystem in the United Arab Emirates*. Sharjah: UAE.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238–246. <https://doi.org/10.1037/0033-2909.107.2.238>
- Berrone, P., Cruz, C., & Gomez-Mejia, L. R. (2012). Socioemotional wealth in family firms: Theoretical dimensions, assessment approaches, and agenda for future research. *Family Business Review*, 25(3), 258–279. <https://doi.org/10.1177/0894486511435355>
- Berrone, P., Cruz, C., Gomez-Mejia, L. R., & Larraza-Kintana, M. (2010). Socioemotional wealth and corporate responses to institutional pressures: Do family-controlled firms pollute less? *Administrative Science Quarterly*, 55(1), 82–113. <https://doi.org/10.2189/asqu.2010.55.1.82>
- Berrone, P., Duran, P., Gómez-Mejía, L., Heugens, P. P., Kostova, T., & van Essen, M. (2022). Impact of informal institutions on the prevalence, strategy, and performance of family firms: A meta-analysis. *Journal of International Business Studies*, 53(6), 1153–1177. <https://doi.org/10.1057/s41267-020-00362-6>
- Block, J., Miller, D., Jaskiewicz, P., & Spiegel, F. (2013). Economic and technological importance of innovations in large family and founder firms: An analysis of patent data. *Family Business Review*, 26(2), 180–199. <https://doi.org/10.1177/0894486513477454>
- Brigham, K. H., & Payne, G. T. (2019). Socioemotional wealth (SEW): Questions on construct validity. *Family Business Review*, 32(4), 326–329. <https://doi.org/10.1177/0894486519889402>
- Brislin, R. W., & Olmstead, K. H. (1973). An examination of two models designed to predict behavior from attitude and other verbal measures. *Proceedings of the annual convention of the American Psychological Association*. American Psychological Association.
- Byrne, B. M. (2006). *Structural equation modeling with EQS. Basic concepts, applications, and programming*. New York: Lawrence Erlbaum.
- Byrne, B. M., Shavelson, R. J., & Muthén, B. (1989). Testing for the equivalence of factor covariance and mean structures: The issue of partial measurement invariance. *Psychological Bulletin*, 105(3), 456–466. <https://doi.org/10.1037/0033-2909.105.3.456>
- Calabrò, A., Minichilli, A., Amore, M. D., & Brogi, M. (2018). The courage to choose! Primogeniture and leadership succession in family firms. *Strategic Management Journal*, 39(7), 2014–2035. <https://doi.org/10.1002/smj.2760>
- Casillas, J. C., Escrivá-Estevé, A., Gómez-Miranda, M. E., López-Fernández, M. C., Lorenzo-Gómez, D., Requejo, I., & Rojo-Ramírez, A. A. (2024). SAFER Methodology: A Proposal for the Identification of Family Firms in Spain Based on the SABI Database. *European Journal of Family Business*, 14(1), 85–97.
- Chen, M. H., Chang, Y. C., & Hung, S. C. (2008). Social capital and creativity in R&D project teams. *R and D Management*, 38(1), 21–34. <https://doi.org/10.1111/j.1467-9310.2007.00494.x>
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling: A Multidisciplinary Journal*, 9(2), 233–255. https://doi.org/10.1207/S15328007SEM0902_5
- Chirico, F., Gómez-Mejia, L. R., Hellerstedt, K., Withers, M., & Nordqvist, M. (2020). To merge, sell, or liquidate? Socioemotional wealth, family control, and the choice of business exit. *Journal of Management*, 46(8), 1342–1379. <https://doi.org/10.1177/0149206318818723>
- Chrisman, J. J., & Patel, P. C. (2012). Variations in R&D investments of family and nonfamily firms: Behavioral agency and myopic loss aversion perspectives. *Academy of Management Journal*, 55(4), 976–997. <https://doi.org/10.5465/amj.2011.0211>

- Chua, J. H., Chrisman, J. J., & De Massis, A. (2015). A closer look at socioemotional wealth: Its flows, stocks, and prospects for moving forward. *Entrepreneurship Theory and Practice*, 39(2), 173–182. <https://doi.org/10.1111/etap.12155>
- Combs, J. G., Jaskiewicz, P., Ravi, R., & Walls, J. L. (2023). More bang for their buck: Why (and when) family firms better leverage corporate social responsibility. *Journal of Management*, 49(2), 575–605. <https://doi.org/10.1177/014920632110066057>
- Corbetta, G., & Montemerlo, D. (1999). Ownership, governance and management issues in small and medium-sized family businesses: A comparison of Italy and the United States. *Family Business Review*, 12(4), 361–374. <https://doi.org/10.1111/j.1741-6248.1999.00361.x>
- Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin*, 52(4), 281–302. <https://doi.org/10.1037/h0040957>
- Cruz, C., Batterjee, M., & Sanchez-Famoso, V. (2023). Enhancing the validity of socioemotional wealth: A context-focused approach. In K. H. Brigham, & G. T. Payne (Eds.), *Field guide to family business research* (pp. 173–187). Edward Elgar Publishing.
- Cruz, C. C., Gómez-Mejía, L. R., & Becerra, M. (2010). Perceptions of benevolence and the design of agency contracts: CEO-TMT relationships in family firms. *Academy of Management Journal*, 53(1), 69–89. <https://doi.org/10.5465/amj.2010.48036975>
- Cruz, C., Larraza Kintana, M., Garcés-Galdeano, L., & Berrone, P. (2014). Are family firms really more socially responsible? *Entrepreneurship Theory and Practice*, 38(6), 1295–1316. <https://doi.org/10.1111/etap.12125>
- Davila, J., Duran, P., Gómez-Mejía, L., & Sanchez-Bueno, M. J. (2023). Socioemotional wealth and family firm performance: A meta-analytic integration. *Journal of Family Business Strategy*, 14(2). <https://doi.org/10.1016/j.jfbs.2022.100536>
- Dayan, M., Ng, P. Y., & Ndubisi, N. O. (2019). Mindfulness, socioemotional wealth, and environmental strategy of family businesses. *Business Strategy and the Environment*, 28(3), 466–481. <https://doi.org/10.1002/bse.2222>
- Debicki, B. J., Kellermanns, F. W., Chrisman, J. J., Pearson, A. W., & Spencer, B. A. (2016). Development of a socioemotional wealth importance (SEWI) scale for family firm research. *Journal of Family Business Strategy*, 7(1), 47–57. <https://doi.org/10.1016/j.jfbs.2016.01.002>
- Dehlen, T. (2013). *Acquisitions and divestitures in family firms: The role of socioemotional wealth* (Dissertation). University of St. Gallen.
- Di Vito, J., & Trotter, K. (2022). A literature review on corporate governance mechanisms: Past, present, and future. *Accounting Perspectives*, 21(2), 207–235. <https://doi.org/10.1111/1911-3838.12279>
- Dinh, T. Q., Calabrò, A., Campopiano, G., & Basco, R. (2022). The impact of politically connected CEOs and boards of directors on firm performance: A study of Vietnamese family and nonfamily firms. *Entrepreneurship Theory and Practice*, 46(5), 1284–1316. <https://doi.org/10.1177/1042258720985477>
- Durvasula, S., Lysonski, S., & Andrews, J. C. (1993). Cross-cultural generalizability of a scale for profiling consumers' decision-making styles. *Journal of Consumer Affairs*, 27(1), 55–65. <https://doi.org/10.1111/j.1745-6606.1993.tb00737.x>
- Ellinger, A. D., Ellinger, A. E., Bachrach, D. G., Wang, Y. L., & Elmadag Baş, A. B. (2011). Organizational investments in social capital, managerial coaching, and employee work-related performance. *Management Learning*, 42(1), 67–85. <https://doi.org/10.1177/1350507610384329>
- Feldman, E. R., Gilson, S. C., & Villalonga, B. (2014). Do analysts add value when they most can? Evidence from corporate spin-offs. *Strategic Management Journal*, 35(10), 1446–1463. <https://doi.org/10.1002/smj.2169>
- Field, M. (1985). *The Merchants*. Woodstock, New York: The Overlook Press.
- Filser, M., De Massis, A., Gast, J., Kraus, S., & Niemand, T. (2018). Tracing the roots of innovativeness in family SMEs: The effect of family functionality and socioemotional wealth. *Journal of Product Innovation Management*, 35(4), 609–628. <https://doi.org/10.1111/jpim.12433>
- Forbes, R., & Basset, M. (2019, September). *The economic*. Canada: Impact Publications of Family-Owned Enterprises in Canada. the Conference Board of Canada.
- Ford, J. K., Maccallum, R. C., & Tait, M. (1986). The application of exploratory factor analysis in applied psychology: A critical review and analysis. *Personnel Psychology*, 39(2), 291–314. <https://doi.org/10.1111/j.1744-6570.1986.tb00583.x>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.1177/002224378101800104>
- Garson, G. D. (2016). *Partial least squares: Regression & structural equation models*. Asheboro, NC: Statistical Associates Publishing.
- Gerken, M., Hülsbeck, M., Ostermann, T., & Hack, A. (2022). Validating the FIBER scale to measure family firm heterogeneity—A replication study with extensions (Article). *Journal of Family Business Strategy*, 13(4), Article 100497. <https://doi.org/10.1016/j.jfbs.2022.100497>
- Gomez-Mejia, L., Basco, R., Gonzalez, A. C., & Muller, C. G. (2020). Family business and local development in Iberoamerica. *Cross-Cultural and Strategic Management*, 27(2), 121–136. <https://doi.org/10.1108/CCSM-02-2020-223>
- Gomez-Mejia, L. R., Cruz, C., Berrone, P., & De Castro, J. (2011). The bind that ties: Socioemotional wealth preservation in family firms. *Academy of Management Annals*, 5(1), 653–707. <https://doi.org/10.5465/19416520.2011.593320>
- Gomez-Mejia, L. R., Mendoza-Lopez, A., Cruz, C., Duran, P., & Aguinis, H. (2024). Socioemotional wealth in volatile, uncertain, complex, and ambiguous contexts: The case of family firms in Latin America and the Caribbean. *Journal of Family Business Strategy*, 15(1), Article 100551. <https://doi.org/10.1016/j.jfbs.2022.100551>
- Gomez-Mejia, L. R., Patel, P. C., & Zellweger, T. M. (2018). In the horns of the dilemma: Socioemotional wealth, financial wealth, and acquisitions in family firms. *Journal of Management*, 44(4), 1369–1397. <https://doi.org/10.1177/0149206315614375>
- Gómez-Mejía, L. R., Haynes, K. T., Nuñez-Nickel, M., Jacobson, K. J. L., & Moyano-Fuentes, J. (2007). Socioemotional wealth and business risks in family-controlled firms: Evidence from Spanish olive oil mills. *Administrative Science Quarterly*, 52(1), 106–137. <https://doi.org/10.2189/asqu.52.1.106>
- Gómez-Mejía, L. R., & Herrero, I. (2022). Back to square one: The measurement of socioemotional wealth (SEW). *Journal of Family Business Strategy*, 13(4). <https://doi.org/10.1016/j.jfbs.2021.100480>
- Grant-Thornton (2011). Family businesses. Recovered from: (<http://ssgt-correos.blogspot.com/2011/03/empresas-familiares.html>).
- Gupta, V., Levenburg, N., Moore, L., Motwani, J., & Schwarz, T. V. (2010). Family business in sub-Saharan Africa versus the Middle East. *Journal of African Business*, 11(2), 146–162. <https://doi.org/10.1080/15228916.2010.508992>
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2017). Modeling observed heterogeneity. *Advanced issues in partial least squares structural equation modeling (PLS-SEM)* (pp. 135–174). Sage Publications.
- Harkness, J. A., van de Vijver, F. J., Mohler, P. P., & Wiley, J. (2003). *Cross-cultural survey methods*, 325. New York: Wiley Interscience.
- Hauck, J., Suess-Reyes, J., Beck, S., Priügl, R., & Frank, H. (2016). Measuring socioemotional wealth in family-owned and -managed firms: A validation and short form of the FIBER Scale. *Journal of Family Business Strategy*, 7(3), 133–148. <https://doi.org/10.1016/j.jfbs.2016.08.001>
- Heider, A., Gerken, M., van Dinther, N., & Hülsbeck, M. (2021). Business model innovation through dynamic capabilities in small and medium enterprises—Evidence from the German Mittelstand. *Journal of Business Research*, 130, 635–645. <https://doi.org/10.1016/j.jbusres.2020.04.051>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2016). Testing measurement invariance of composites using partial least squares. *International Marketing Review*, 33(3), 405–431. <https://doi.org/10.1108/IMR-09-2014-0304>
- Hernández-Linares, R., Kellermanns, F. W., López-Fernández, M. C., & Sarkar, S. (2020). The effect of socioemotional wealth on the relationship between entrepreneurial orientation and family business performance. *BRQ Business Research Quarterly*, 23(3), 174–192. <https://doi.org/10.1177/2340944420941438>
- Hofstede, G. (1983). National cultures in four dimensions: A research-based theory of cultural differences among nations. *International Studies of Management and Organization*, 13(1–2), 46–74. <https://doi.org/10.1080/00208825.1983.11656358>
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*. London: SAGE.
- Horn, J. L., & Mcardle, J. J. (1992). A practical and theoretical guide to measurement invariance in aging research. *Experimental Aging Research*, 18(3–4), 117–144. <https://doi.org/10.1080/03610739208253916>
- Howorth, C., Rose, M., Hamilton, E., & Westhead, P. (2010). Family firm diversity and development: An introduction. *International Small Business Journal: Researching Entrepreneurship*, 28(5), 437–451. <https://doi.org/10.1177/0266242610373685>
- Hu, L. T., & Bentler, P. M. (1995). Evaluating model fit. In R. H. Hoyle (Ed.), *Structural equation modelling: Concepts, issues, and applications* (pp. 76–99). Sage.
- Hulin, C. L., & Mayer, L. J. (1986). Psychometric equivalence of a translation of the Job Descriptive Index into Hebrew. *Journal of Applied Psychology*, 71(1), 83–94. <https://doi.org/10.1037/0021-9010.71.1.83>
- INEGI - National Institute of Statistics and Geography (2015). Reporte de la micro, pequeña, mediana y gran empresa. Estratificación de los establecimientos (Censos Economicos 2014). Mexico. Retrieved from (http://internet.contenidos.inegi.org.mx/contenidos/productos/prod_serv/contenidos/espanol/bvinegi/productos/nueva_estruc/702825077952.pdf).
- Jeong, S., & Lee, Y. (2019). Consequences of not conducting measurement invariance tests in cross-cultural studies: A review of current research practices and recommendations. *Advances in Developing Human Resources*, 21(4), 466–483.
- Jöreskog, K. G. (1971). Statistical analysis of sets of congeneric tests. *Psychometrika*, 36(2), 109–133. <https://doi.org/10.1007/BF02291393>
- Kammerlander, N. (2022). Family business and business family questions in the 21st century: Who develops SEW, how do family members create value, and who belongs to the family? *Journal of Family Business Strategy*, 13(2), Article 100470.
- Kankaraš, M., & Moors, G. (2014). Analysis of cross-cultural comparability of PISA 2009 scores. *Journal of Cross-Cultural Psychology*, 45(3), 381–399. <https://doi.org/10.1177/0022022113511297>
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2010). *Worldwide governance indicators*. World Bank Group.
- Kayed, R. N., & Hassan, M. K. (2010). Islamic entrepreneurship: A case study of Saudi Arabia. *Journal of Developmental Entrepreneurship*, 15(4), 379–413. <https://doi.org/10.1142/S1084946710001634>
- Kellermanns, F. W., Eddleston, K. A., & Zellweger, T. M. (2012). Article Commentary: Extending the socioemotional wealth perspective: A look at the dark side. *Entrepreneurship Theory and Practice*, 36(6), 1175–1182. <https://doi.org/10.1111/j.1540-6520.2012.00544.x>
- Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2nd ed.). New York: The Guilford Press.
- Kossek, E. E., & Ollier-Malaterre, A. (2013). Work-family policies: Linking national contexts, organizational practice and people for multi-level change. In S. A. Y. Poelmans, J. H. Greenhaus, & M. Las Heras Maestro (Eds.), *Expanding the boundaries of work-family research: A vision for the future* (pp. 3–30). Basingstoke, England: Palgrave MacMillan.
- Kotlar, J., De Massis, A., Frattini, F., Bianchi, M., & Fang, H. (2013). Technology acquisition in family and nonfamily firms: A longitudinal analysis of Spanish manufacturing firms. *Journal of Product Innovation Management*, 30(6), 1073–1088. <https://doi.org/10.1111/jpim.12046>
- Kotlar, J., Signori, A., De Massis, A., & Vismara, S. (2018). Financial wealth, socioemotional wealth, and ipo underpricing in family firms: A two-stage gamble model. *Academy of Management Journal*, 61(3), 1073–1099. <https://doi.org/10.5465/amj.2016.0256>

- Krueger, N., Bogers, M. L. A. M., Labaki, R., & Basco, R. (2021). Advancing family business science through context theorizing: The case of the Arab world. *Journal of Family Business Strategy*, 12(1). <https://doi.org/10.1016/j.jfbs.2020.100377>
- Labaki, R., & D'Allura, G. M. (2021). A governance approach of emotion in family business: Towards a multi-level integrated framework and research agenda. *Entrepreneurship Research Journal*, 11(3), 119–158. <https://doi.org/10.1515/erj-2021-2089>
- Labaki, R., & Mustafa, M. J. (2023). The family effect: A compass for research on heterogeneity of family businesses in embedded contexts. *Entrepreneurship Research Journal*, 13(3), 533–548.
- Lacko, D., Čeněk, J., Točík, J., Avsec, A., Dordević, V., Genc, A., & Subotić, S. (2022). The necessity of testing measurement invariance in cross-cultural research: Potential bias in cross-cultural comparisons with individualism–collectivism self-report scales. *Cross-Cultural Research*, 56(2–3), 228–267. <https://doi.org/10.1177/106939712111068971>
- Laffranchini, G., Hadjimarou, J., & Kim, S. H. (2022). The first turnaround response of family firms in a crisis situation. *Journal of Family Business Strategy*, 13(1). <https://doi.org/10.1016/j.jfbs.2021.100434>
- Lee, Y., Berry, C. M., & Gonzalez-Mulé, E. (2019). The importance of being humble: A meta-analysis and incremental validity analysis of the relationship between honesty-humility and job performance. *Journal of Applied Psychology*, 104(12), 1535–1546. <https://doi.org/10.1037/apl0000421>
- Lien, Y. C., Teng, C. C., & Li, S. (2016). Institutional reforms and the effects of family control on corporate governance. *Family Business Review*, 29(2), 174–188. <https://doi.org/10.1177/0894486515609202>
- Mavondo, F., Gabbott, M., & Tsarenko, Y. (2003). Measurement invariance of marketing instruments: An implication across countries. *Journal of Marketing Management*, 19, 523–540.
- Meredith, W. (1993). Measurement invariance, factor analysis and factorial invariance. *Psychometrika*, 58(4), 525–543. <https://doi.org/10.1007/BF02294825>
- Millsap, R. E., & Kwok, O. M. (2004). Evaluating the impact of partial factorial invariance on selection in two populations. *Psychological Methods*, 9(1), 93–115. <https://doi.org/10.1037/1082-989X.9.1.93>
- Muthén, B., & Christofferson, A. (1981). Simultaneous factor analysis of dichotomous variables in several groups. *Psychometrika*, 46(4), 407–419. <https://doi.org/10.1007/BF02293798>
- Newbert, S., & Craig, J. B. (2017). Moving beyond socioemotional wealth: Toward a normative theory of decision making in family business. *Family Business Review*, 30(4), 339–346. <https://doi.org/10.1177/0894486517733572>
- Nguyen Dang Tuan, M., Nguyen Thanh, N., & Le Tuan, L. (2019). Applying a mindfulness-based reliability strategy to the Internet of Things in healthcare—A business model in the Vietnamese market. *Technological Forecasting and Social Change*, 140, 54–68. <https://doi.org/10.1016/j.techfore.2018.10.024>
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric Theory*. New York: McGraw-Hill.
- Peng, M. W., & Jiang, Y. (2010). Institutions behind family ownership and control in large firms. *Journal of Management Studies*, 47(2), 253–273. <https://doi.org/10.1111/j.1467-6486.2009.00890.x>
- Pharaon, N. A. (2004). Saudi women and the Muslim State in the twenty-first century. *Sex Roles*, 51(5/6), 349–366. <https://doi.org/10.1023/B:SERS.0000046618.62910.ef>
- Pinelli, M., Chirico, F., De Massis, A., & Zattoni, A. (2023). Acquisition relatedness in family firms: Do the environment and the institutional context matter? *Journal of Management Studies*. <https://doi.org/10.1111/joms.12932>
- PwC. (2016). Keeping it in the family: Family firms in the Middle East. Retrieved from (<https://www.pwc.com/m1/en/publications/family-business-survey/middle-east-family-business-survey-2016.pdf>).
- Razzak, M. R., & Jassem, S. (2019). Socioemotional wealth and performance in private family firms: The mediation effect of family commitment. *Journal of Family Business Management*, 9(4), 468–496. <https://doi.org/10.1108/JFBM-05-2019-0035>
- Rodrigues, P. P., Pai, P. K., Joshi, H. G., & Prabhu, N. (2022). Influence of socio-emotional wealth on entrepreneurial orientation in family firms: A bibliometric analysis and systematic review. *Business Perspectives and Research*, 1–20. <https://doi.org/10.1177/22785337221098484>
- Sanchez-Famoso, V., Akhter, N., Iturralde, T., Chirico, F., & Maseda, A. (2015). Is non-family social capital also (or especially) important for family firm performance? *Human Relations*, 68(11), 1713–1743. <https://doi.org/10.1177/0018726714565724>
- Schäfer, J. (2016). *Pay variation in family firms*. Berlin: Springer.
- Schmitt, N., & Kuljanin, G. (2008). Measurement invariance: Review of practice and implications. *Human Resource Management Review*, 18(4), 210–222. <https://doi.org/10.1016/j.hrmr.2008.03.003>
- Schneider, T. (2018). *Foreign direct investment and internationalisation in family firms (Doctoral Dissertation)*. Witten/Herdecke University.
- Sharma, P., & Rao, S. (2000). Successor attributes in Indian and Canadian firms: A comparative study. *Family Business Review*, 13, 313–330.
- Siegel, S., & Castellan, N. J. (1988). *Nonparametric statistics for the Behavioral Science*. New York: McGraw-Hill.
- Sorenson, R. L., Goodpaster, K. E., Hedberg, P. R., & Yu, A. (2009). The family point of view, family social capital, and firm performance: An exploratory test. *Family Business Review*, 22(3), 239–253. <https://doi.org/10.1177/0894486509332456>
- Spanish Family Enterprise Institute. (2021). *La empresa familiar en España*. Instituto de la Empresa Familiar.
- Srinivasan, S. S., Anderson, R., & Ponnavaolu, K. (2002). Customer loyalty in e-commerce: An exploration of its antecedents and consequences. *Journal of Retailing*, 78(1), 41–50. [https://doi.org/10.1016/S0022-4359\(01\)00065-3](https://doi.org/10.1016/S0022-4359(01)00065-3)
- Steenkamp, J. B., & Baumgartner, H. (1998). Assessing measurement invariance in cross-national consumer research. *Journal of Consumer Research*, 25(1), 78–107. <https://doi.org/10.1086/209528>
- Sundin, E. C., & Horowitz, M. J. (2002). Impact of event scale: Psychometric properties. *British Journal of Psychiatry*, 180(3), 205–209. <https://doi.org/10.1192/bjp.180.3.205>
- Swab, R. G., Sherlock, C., Markin, E., & Dibrell, C. (2020). ‘SEW’ what do we know and where do we go? A review of socioemotional wealth and a way forward. *Family Business Review*, 33(4), 424–445. <https://doi.org/10.1177/0894486520961938>
- Tan, T. X., Yi, Z., Kim, E., Li, Z., & Cheng, K. (2020). Linguistic equivalence, construct validity, but lack measurement invariance: An illustration of challenges in cross-cultural research on adolescent adjustment. *Cross-Cultural Research*, 54(4), 323–345. <https://doi.org/10.1177/1069397120914875>
- Voordeckers, W., Van Gils, A., & Van den Heuvel, J. (2007). Board composition in small and medium-sized family firms. *Journal of Small Business Management*, 45(1), 137–156. <https://doi.org/10.1111/j.1540-627X.2007.00204.x>
- Weimann, V. (2020). *Corporate entrepreneurship in family firms—insights into essential firm and family antecedents of innovation, strategic renewal and corporate venturing (Doctoral dissertation)*. Universität Witten/Herdecke.
- Wernsing, T. (2014). Psychological capital: A test of measurement invariance across 12 national cultures. *Journal of Leadership and Organizational Studies*, 21(2), 179–190. <https://doi.org/10.1177/1548051813515924>
- Westhead, P., & Howorth, C. (2006). Ownership and management issues associated with family firm performance and company objectives. *Family Business Review*, 19(4), 301–316. <https://doi.org/10.1111/j.1741-6248.2006.00077.x>
- Widaman, K. F., & Reise, S. P. (1997). Exploring the measurement invariance of psychological instruments: Applications in the substance use domain. In K. J. Bryant (Ed.), *The science of prevention: Methodological advances from alcohol and substance abuse research* (pp. 281–324). American Psychological Association.
- Wiseman, R. M., & Gomez-Mejia, L. R. (1998). A behavioral agency model of managerial risk taking. *Academy of Management Review*, 23(1), 133–153. <https://doi.org/10.2307/259103>
- Wright, D. J., Williams, J., & Holmes, P. S. (2014). Combined action observation and imagery facilitates corticospinal excitability. *Frontiers in Human Neuroscience*, 8, 951. <https://doi.org/10.3389/fnhum.2014.00951>
- Zellweger, T. M., Kellermans, F. W., Eddleston, K. A., & Memili, E. (2012). Building a family firm image: How family firms capitalize on their family ties. *Journal of Family Business Strategy*, 3(4), 239–250. <https://doi.org/10.1016/j.jfbs.2012.10.001>