Family Social Capital in the Family Firm: A Taxonomic Classification, Relationships With Outcomes, and Directions for Advancement

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Abstract

The unique form of social capital among family involved in the business, or family social capital (FSC), has both positive and negative effects on the family firm. To better understand how FSC exists across family firms and advance related theory, we develop a taxonomy of FSC. Using configuration analyses on two samples of family firms, we find that three clusters of family firms exist, which include firms with Instrumental, Identifiable, and Indistinguishable FSC. The specific configurations of each cluster are noted, and effects on economic and noneconomic outcomes are identified to advance understanding of the heterogeneous nature of family firms.

Keywords

family social capital, taxonomy, heterogeneity

Introduction

The involvement of the family in the business generates a unique bundle of resources that possesses the potential to yield a competitive advantage for the family firm (Habbershon & Williams, 1999; Habbershon, Williams, & MacMillan, 2003). Among the potentially valuable resources that manifest from the family's involvement in the business is social capital (Pearson, Carr, & Shaw, 2008). Social capital—or the aggregate of resources embedded in and accessible through a network of relationships (Nahapiet & Ghoshal, 1998)-develops over long periods and is based on a foundation of trust, stability, and interdependence (Bubolz, 2001; Tsai & Ghoshal, 1998). Social capital can exist at various levels in the organization (e.g., individual and collective) and can be characterized as having an internal or external focus (e.g., bonding or bridging; see the review by Payne, Moore, Griffis, & Autry, 2011). The family ties in the business create a unique form of social capital known as "family social capital" (FSC; Arregle, Hitt, Sirmon, & Very, 2007), and this form encompasses the collective, internal type of social capital present among family members involved in the family firm (Carr, Cole, Ring, & Blettner, 2011).

FSC is a unique and valuable resource with the potential to deliver a competitive advantage. In fact, studies have noted that FSC has positive effects on family cohesiveness and human capital (Salvato & Melin, 2008), venture preparedness (Chang, Memili, Chrisman, Kellermanns, & Chua, 2009), and the establishment of corporate goals (Cabrera-Suárez, Déniz-Déniz, & Martín-Santana, 2015). These same social resources, however, are potentially constrictive and noted to hinder strategic adaptation (Salvato & Melin, 2008), create a risk of opportunism (Arregle et al., 2007), and enable

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Paul Sanchez-Ruiz, Driehaus College of Business, Department of Management and Entrepreneurship, DePaul University, I East Jackson Boulevard, Suite 7100, Chicago, IL 60604, USA. Email: psr_20@hotmail.com groupthink and dysfunctional power arrangements (Janis, 1981; Leana & Van Buren, 1999). While attempts have been made at understanding how family firms can balance this "double-edge sword" of FSC, we suggest that before prescriptive recommendations can be made, scholarship must advance theoretically in understanding FSC and its variation across family firms.

Building on prior work of FSC, we seek to answer the "what" question required for sound theory development, which according to Whetten (1989, p. 491), consists of providing ". . . a framework for interpreting patterns . . ." To this end, a primary objective of this study is to identify what the key configurational differences are among family firms based on FSC. To identify these differences, we develop a framework for interpreting patterns of FSC by empirically creating a taxonomy of family firms (Payne, 2006; Short, Payne, & Ketchen, 2008). Without articulating core differences among FSC in family firms, this area of scholarship, as it advances, may result in imprecise theoretical development, inconsistent measurement, and/or an overall misunderstanding of the construct and organizational form (Chua, Chrisman, Steier, & Rau, 2012; Holt, Pearson, Carr, & Barnett, 2017; Melin & Nordqvist, 2007).

Using a large sample of family firms in the United States, three distinct clusters of family firms based on FSC are identified: "Instrumental" (high), "Identifiable" (moderately low), and "Indistinguishable" (low) degrees of FSC. Not only does this taxonomy and configurational perspective offer a parsimonious way of understanding and organizing family firms, but also, in doing so, the manifestations of the structural, relational, and cognitive dimensions of FSC are simultaneously highlighted, whereas previous research has taken a more limited view examining the dimensions of FSC (cf. Cabrera-Suárez et al., 2015; Mustakallio, Autio, & Zahra, 2002). Extending this further, we examine the effects on economic and noneconomic outcomes, which indicates the identified configurational types have theoretical implications that relate to enhanced and restricted value creation. Finally, as recommended by Miller (1996), we replicate the taxonomy and assessment of outcomes using a second data set of family firms, which yields consistent results and enhances validity. In all, these pursuits answer questions related to what types of family firms exist given the variation in FSC across such organizations and what theoretical implications this variation has on family firm outcomes.

This study offers several contributions to current knowledge on family firm heterogeneity by identifying three distinct clusters of family firms that manifest through distinct combinations of FSC. First, using a configurational perspective, we offer a taxonomic classification of family firms that connotes the variation existing in the dimensions that constitute FSC. With this understanding, we articulate how FSC commonly manifests in distinctively different configurations among family firms, which provides a foundation for more precise theory building and empirical exploration. Second, we deconstruct the types of FSC identified and examine the effects on economic and noneconomic outcomes, showing how various configurations of FSC affect the family and firm. Thus, the overall findings demonstrate that, in a specified type of family firm, different outcomes can be achieved using distinctly different combinations of the dimensional resources of FSC. Third, the degree of FSC varies across the types of family firms with some firms characterized by value-enhancing idiosyncratic social resources while others are highly constrained in FSC. The amount of FSC available to family firms creates differing profiles where there is a single, dominant configuration that achieves higher levels of noneconomic performance. In contrast, a dominant configuration exists that is related to greater economic performance. In all, the findings demonstrate that family firms are heterogeneous with respect to unique configurations of FSC, explaining the trade-offs between levels of these idiosyncratic social resources in the family firm.

Literature Review

Using an organizational lens, a social capital perspective posits that resources are embedded in relationships among individuals or groups and that variation in these relationship-based resources affects the performance of diverse organizational forms (Adler & Kwon, 2002). Social capital reflects the relationships and the "sum of the actual and potential resources embedded within, available through, and derived from the network" that are likely to influence collective action and the flow of information (Nahapiet & Ghoshal, 1998, p. 243). These relational networks may consist of linkages that extend beyond the boundary of the firm—known as "bridging" social capital—and include external relational resources, which increase the ability of an organization to gather information, gain access to network power, and recognize new opportunities (Adler & Kwon, 2002; Burt, 1992). Furthermore, these relational networks may consist of linkages that remain within the boundary of the firm known as "bonding" social capital—which consist of internal relational resources that facilitate trust and cohesion and are beneficial to the pursuit of collective organizational goals (Coleman, 1990; Nahapiet & Ghoshal, 1998). Both bridging and bonding forms of social capital may exist within or across multiple levels in the firm (e.g., individual, collective) as outlined by Payne et al. (2011).

When the family is involved in the firm, the family and firm do not coexist as distinct entities but, instead, exist as intertwined domains that create a network of interwoven relationships (e.g., Pearson et al., 2008). The involvement of the family in the firm results in an internal (bonded) social network of rich relationships rooted in family-based ties. These ties create a form of social capital that is complex and relates to shared norms, values, vision, purpose, trust, and collective goal orientations within the organization (Leana & Van Buren, 1999; Oh, Labianca, & Chung, 2006) and may yield a competitive advantage for the family firm (Arregle et al., 2007; Dess & Shaw, 2001; Pearson et al., 2008). This unique form of bonded social capital among kin, referred to as "FSC," develops over a long period of time and is deeply rooted in a shared familial identify, creating an inimitable resource (Arregle et al. 2007). Similar to the broader conceptualization of social capital, FSC is composed of three core dimensions-structural, cognitive, and relational resources (Nahapiet & Ghoshal, 1998)that constitute the social resources among kin in the firm (Habbershon & Williams, 1999).

The structural dimension includes the configuration, pattern, and strength of social interactions among family members. The configuration and density of ties govern the flow of resources, and it is through the structural configuration of the ties that the family and organizational social capital are linked (Arregle et al., 2007). More precisely, structural connection between the family and firm allows for appropriability, which enables the transfer of ties among kin to be appropriated to the organization (Coleman, 1988).

The shared meanings, aligned values, and common vision among family members exist as part of the cognitive dimension of FSC (Nahapiet & Ghoshal, 1998). Actors with similar perceptions and interpretations of how to interact minimize misunderstandings in communications (Tsai & Ghoshal, 1998), and because family members have a long-shared history, common experiences, and similar values, interpersonal interactions are more easily facilitated among individuals within the group.

The relational dimension is arguably the most central dimension to FSC given that this dimension includes the trust, norms, commitment, and identity among family members (Nahapiet & Ghoshal, 1998). The inherent commitment, family-specific norms, and family-based identity create a unique bond among kin that is shared (exclusively) among individuals within the family group. These relational factors create a shared bond among kin and provide the motivation for individuals to engage in exchange (Nahapiet & Ghoshal, 1998).

Overall, the structural, cognitive, and relational dimensions, together, create FSC. The family is noted as an ideal environment for the development of social capital (Coleman, 1988) given the richness of the familial ties that develop on foundations of trust, stability, and interdependence. This unique form of social capital has the potential to yield benefits for the family firm. It is noted, in fact, that nonfamily firms are unable to perfectly create or imitate this type of social capital (Herrero, 2018); thus, family firms may have a distinct competitive advantage over nonfamily firms when FSC is developed and strategically leveraged.

Family firms vary across an array of factors, with resources being a primary factor that differs across the landscape of family firms (Chrisman, Sharma, Steier, & Chua, 2013; Chua et al., 2012). Pursuits to conceptualize FSC and understand its effects in the family firm have grown in recent years with many studies noting the positive effects of FSC on family firm dynamics. For instance, because family members have a shared history, language, and vision, kin involved in a firm engage in exchange more efficiently, which yields positive firm outcomes (Carnes & Ireland, 2013; Sirmon & Hitt, 2003). That is, family members gain valuable knowledge given that they are raised listening to businessrelated discussions, oftentimes in informal settings, and acquire tacit knowledge regarding the short-term and long-term management strategies of the firm (Cabrera-Suárez, De Saá-Pérez, & García-Almeida, 2001). Moreover, the common language that family members share facilitates internal knowledge transfer, allowing firms to engage in seamless internal communication and exchange.

In addition to yielding potential benefits, however, FSC has the potential to constrain the firm. While FSC enhances exchange among family members, such efficient exchange reinforces social bonds, resulting in kin becoming embedded within a common network and ultimately placing less priority on exchange beyond the confines of the common family network (Carney, 2005; König, Kammerlander, & Enders, 2013). Furthermore, FSC is noted to hinder strategic adaptation and value creation (Salvato & Melin, 2008), create a risk of opportunism (Arregle et al., 2007), and enable groupthink and dysfunctional power arrangements (Janis, 1981; Leana & Van Buren, 1999). These varied effects of FSC-both enhancing and restrictive-on the family firm have led scholars to refer to FSC as a "double-edge sword."

Researchers have sought to understand the Janis-like effect that FSC has on the family firm because without fully understanding FSC and its effects, offering prescriptive recommendations to managers is challenging. Thus, to advance understanding of FSC and its paradoxes, we suggest that further theory development is required. To this end, we attempt to answer the "what" question of theory advancement by developing a configurational framework of FSC. Contrary to a causal approach that assumes the same theoretical framework applies uniformly (e.g., Khelil, 2016), the configurational approach assumes that a population may contain a number of homogenous subsets that differ from one another. This approach enables the identification of the configurational "types" of FSC that exist across family firms. With a more refined understanding of how FSC exists in family firms and how the dimensions of FSC are interrelated, researchers can pursue more refined theoretical and empirical analyses.

Moving forward, we use a taxonomic approach to develop a classification of FSC among family firms. Thus, we proceed by suggesting that various types of family firms exist with differing FSC configurations. Furthermore, by understanding the observed configurations of FSC, insight is gained into the unique effects of FSC on economic and noneconomic outcomes.

Method

Taxonomic Classification

Meyer, Tsui, and Hinings (1993, p. 1175) define configurations as "any multidimensional constellation of conceptually distinct characteristics that commonly occur together" in an organization, and each constellation of distinct organizational characteristics that is numerically derived is a "taxonomy" (Hambrick, 1984). A taxonomy is particularly important to the study of multiple, interlinked, and mutually reinforcing organizational characteristics that, in turn, can be aligned with each other (in seemingly endless combinations) to enable the achievement of preferred strategic development and performance objectives (e.g., Miller & Friesen, 1978, 1984). In addition to the critical role of a combination between discrete parts of strategy or gestalts, the taxonomic approach is based on two core assumptions: (a) the idea of equifinality, that is, that different gestalts can be equally effective in a given industry or environment (Fiss, 2007), and (b) while theoretically an infinite number of combinations of structural and organizational factors may exist, practically these characteristics have a tendency to fall into a few coherent patterns that change only intermittently (Hambrick, 1984). For example, Meyer et al. (1993) conceive a taxonomy as "the upshot [of] just a fraction of the theoretically conceivable configurations [that] are viable and apt to be observed empirically" (p. 1176). In this way, configuration theorists (e.g., Doty, Glick, & Huber, 1993; Meyer et al., 1993) use taxonomies to identify ideal types of organization configurations that maximize strategic alignment and effectiveness over time.

Although empirically driven taxonomies are generally rare in organizational studies (Sanchez, 1993), taxonomic classifications are valuable as they enable advanced theory building, creation of more refined hypotheses, and advanced understanding of organizational behaviors and outcomes (Haas, Hall, & Johnson, 1966). Prior organizational taxonomies (e.g., Mintzberg, 1979; Pugh, Hickson, Hinings, & Turner, 1968; Ulrich & McKelvey, 1990) tend to classify organizations without distinguishing between family and nonfamily firms, and rather than taking this approach, we focus solely on the classification of family firms. By focusing on family firms, the approach extends prior work on family firm taxonomies (e.g., Sharma, 2004; Short et al., 2008) and introduces an FSC-specific taxonomy that advances general understanding of family firms given that a limited number of family firm taxonomies exist (a few notable exceptions include García-Álvarez & López-Sintas, 2001; Yu, Lumpkin, Sorenson, & Brigham, 2012).



Figure 1. Conceptual framework of family social capital configurations and relationships with outcomes.

A taxonomic categorization uses an empirical method, consisting of complex numerical analyses of data, to identify similarities and assign corresponding family firms, in this case, into groups (McKelvey, 1975). The taxonomy is built on sets of similar groups (taxa) of organizations that are built into larger groups, allowing for comparison between and among groups across dimensions (Miller & Friesen, 1978). This approach provides empirically supported results that minimize bias from the influence of "individual creativity" (Rich, 1992) and allows for an inductive and empirically driven taxonomic classification to be developed.

The development of a taxonomy of FSC requires several steps. First, empirically quantifiable measures for each dimension of FSC are developed following the work of Pearson et al. (2008), and then, these measures are validated. Second, cluster analyses are conducted to determine whether commonalities of FSC exist among firms. Third, the clusters are broadly assessed for relationships with economic and noneconomic outcomes. Last, the validity of the results is assessed using a second study. Our orienting framework is shown in Figure 1.

Data

The data were obtained from the American Family Business Survey (AFBS), which is a national survey of U.S. family firms that has been used in other family firm research (e.g., Sanchez-Ruiz, Maldonado-Bautista, & Rutherford, 2018; Schulze, Lubatkin, & Dino, 2003). This study uses two samples from this survey: The main analysis in this investigation includes responses from the 2002 AFBS, and the second analysis, used for replication, includes responses from the 2007 AFBS. These data sets are among the largest and most comprehensive surveys of family firms (Gersick, Davis, Hampton, & Lansberg, 1997) and are statistically representative of family firms in the United States.¹ (Astrachan & Dean, 2001; Bird, Welsch, Astrachan, & Pistrui, 2002).

The 2002 AFBS was reviewed by a focus group of family business owners and pilot tested on a holdout sample before being mailed to the chief executive(s) in 37,500 privately held U.S. family firms. Consistent with other large-scale surveys administered by professional consulting firms, this single mailing yielded 3,860 responses within 1 month (a response rate of 10.3%). This rate is comparable to the 10% to 12% rate typical for studies that target executives in upper echelons (Geletkanycz, 1997; Koch & McGrath, 1996) and chief executives in small- to medium-sized enterprises (McDougall & Robinson, 1990). Of these responses, 1,143 usable surveys were received. Similarly, the 2007 AFBS yielded usable responses from 1,035 family firms. As in previous years, a professional survey firm selected family firms that were at least 10 years old, had at least \$1 million in sales, and had at least two officers or directors with the same last name. The median age of the family firms was 22 years (the oldest four firms in the sample are from the 1800s), and the median firm size was 181 employees. In both data sets, the vast majority of respondents were senior executives (i.e., over 85% reported serving as the chief executive officer, president, or board chairperson). These family firms represented a variety of industries and were from each of the 50 states and the District of Columbia.

We define a family firm as a firm controlled by a dominant familial coalition through involvement in management and ownership coupled with a transgenerational sustainability intention and a need for self-verification, which is capable of influencing aspects of that firm (Chua, Chrisman, & Sharma, 1999; Habbershon & Pistrui, 2002; Sharma, Chrisman, & Chua, 1997; Ward, 1997). We excluded cases with extensive missing data on cluster-relevant variables and excluded cases that were, principally, outliers.² Our final sample size was 845 family firms in the 2002 AFBS and 646 family firms in the 2007 AFBS.

Measures

Independent Variables. As noted, FSC is a broad, multidimensional construct consisting of structural, cognitive, and relational dimensions. To measure FSC, dimensional-level measures were modeled after similar measures that capture the family's involvement in the firm (e.g., Holt, Rutherford, & Kuratko, 2010; Klein, Astrachan, & Smyrnios, 2005)³ and that represent the dimensions of social capital (e.g., Pearson et al., 2008). For both data sets, a principal component factor analysis with varimax rotation was used to assess the dimensionality and convergent validity of the dimensions⁴ (Conway & Huffcutt, 2003; Kerlinger & Lee, 2000). In all, 15 items were used to measure FSC (see Table 1 for measurement descriptions).

For both data sets, the resulting eigenvalues (3.47 AFBS 2002; 3.41 AFBS 2007) for the cognitive dimension favored a one-factor solution as predicted. All items loaded on one factor,⁵ with a cumulative variance for the factors totaling greater than 90% and with uniqueness loading values less than 0.40. The reliability of the cognitive dimension was acceptable ($\alpha = .85$). Similarly, the resulting eigenvalues (3.71 AFBS 2002; 3.76 AFBS 2007) for the relational dimension favored a one-factor solution, with a cumulative variance for the factor loadings greater than 90% and with uniqueness values of less than 0.55. The reliability of the relational dimension was also acceptable ($\alpha = .85$).

To test robustness, a principal component factor analysis with varimax rotation using the polychoric correlations between the items was used to examine the factors, and the resulting factors were similar (Fabrigar, Wegener, MacCallum, & Strahan, 1999; Ruscio & Roche, 2012). The results of these analyses are provided in Table 2 and indicate that a single-factor solution describes both the cognitive and relational dimensions of FSC; thus, the two subscales are relatively homogeneous for both data sets, which yield models with proper fit (AFBS 2002: $\chi^2 = 137.63$, root mean square error of approximation [RMSEA] = 0.16, comparative fit index [CFI] = 0.84, Tucker–Lewis index [TLI] = 0.79, standardized root mean square residual [SRMR] = 0.06; AFBS 2007: $\chi^2 = 160.68$, RMSEA = 0.24, CFI = 0.68, TLI = 0.58, SRMR = 0.33). Tables 3 and 4 include descriptives and correlations for the 2002 and 2007 AFBS, respectively.

Dependent Variables. We follow the family firm outcome model (Holt et al., 2017) that encompasses both economic and noneconomic outcomes for the family and firm. Seven dependent variables were used to assess relationships between FSC clusters and outcomes. Specifically, we examined two economic (sales revenue, growth, and family meetings) and five noneconomic outcomes (transgenerational succession intentions, optimism, successor experience, and family identity in the community). These outcomes were selected to represent financial, nonfinancial internal, and nonfinancial external outcomes⁶ for the firm and family as outlined by Holt et al. (2017).

For economic outcomes, we assessed the measure of sales revenue as a 1-year historical measure similar to measures used in previous family business studies (Rutherford, Buller, & McMullen, 2003; Sanchez-Ruiz et al., 2018; Schulze et al., 2001). For this measure, sales revenue was represented by the level of sales revenue (in millions) achieved during the previous fiscal year, which provides the benefit of objectivity (Rutherford, Muse, & Oswald, 2006). Growth was represented by the historical measure of growth (Hoy, McDougall, & D'Souza, 1992), which also provides the benefit of objectivity. Past growth is highly correlated to perceptions of and actual future growth (McMahon, 2001); thus, growth is measured as the sales growth achieved during the previous fiscal year (Rutherford et al., 2003; Schulze et al., 2001). Both sales revenue and growth are noted as firmlevel financial outcomes. Additionally, Holt et al. (2017) note that family control is a family-focused financial outcome. To assess control, we measure *family meetings* to examine how often the family meets outside of formal shareholder meetings to gauge the extent of desired control.

For noneconomic outcomes, several measures were used to assess internal and external noneconomic outcomes for the family and firm. *Optimism* was assessed as the extent to which the senior generation is optimistic about its company's prospects. This measure represents

Variable	Conceptualization	Measure(s)
Structural dimension	Conceptualized as the social interactions (strength, density, cohesion, and connectivity of ties) among family members working in the family firm	Ownership dispersion: Measured as the total number of owners (similar to De Massis, Kotlar, Campopiano, & Cassia, 2013; Eddleston, Otondo, & Kellermanns, 2008; Schulze et al., 2003; Wiklund, Nordqvist, Hellerstedt, & Bird, 2013)
Cognitive dimension	Reflects the shared values and meanings of family members involved in the family firm	Family-to-firm values scale: Please rate the extent to which the family members share similar values, support the business, loyalty ($I = strongly disagree$ to $5 = strongly agree$): (a) family members share similar values; (b) family and business share similar values; (c) values are compatible with those of the business; and (d) family members feel loyal to the family firm (similar to Astrachan, Klein, & Smyrnios, 2002)
Relational dimension	Consists of personal relationships, including attachments and commitment to a common purpose: the firm	Family-to-firm commitment scale: Rate the following $(I = strongly disagree to 5 = strongly agree): (a) family members put in a great deal of effort; (b) family members support the family firm; (c) family members feel proud of being part of the family firm; (d) family members agree with family firm goals; (e) family firm has a positive influence in family members; and (f) family members support future decisions regarding the future of the family firm (similar to Astrachan et al., 2002; Carlock & Ward, 2001)$
Sales revenue	Sales revenue (in millions) achieved during the previous fiscal year	"Approximately what was the sales revenue last year? [in millions/1000]"
Growth	Historical measure of growth	"What was the level of sales growth achieved during the previous fiscal year?" (1 = decreased more than 5%; 2 = decreased 1% to 5%; 3 = no change; 4 = increased 1% to 5%; 5 = increased 6% to 10%; 6 = increased 11% to 15%; 7 = increased 16% or more)
Family meetings	Number of annual family meetings	How many formal family meetings (other than shareholder meetings) are held each year? 0, 1, 2, 3-4, 5 or more
Optimism	The extent to which the senior generation is optimistic about its company's prospects	"How optimistic are you (senior generation) about your company's prospects?" (I = not at all; 2 = slightly; 3 = somewhat; 4 = for the most part; 5 = very much so)
Transgenerational succession intentions	Intention to pass the firm to a future generational family member	"How strongly does the senior generation want the business to stay in the family?" ($I = not at all; 2 = a little; 3 = some; 4 = very; 5 = extremely/completely$)
Successor experience	External experience of the successor gained outside of the family firm	How much full-time work experience does the successor have outside the family business? ($0 = none$; $I = 1-2$ years; $2 = 3-5$ years; 3 = more than 5 years)
Family identity in the community	Firm's role in community- specific identity of the family	How much does the business contribute to the family's identity in the community and elsewhere? $(1 = not at all; 2 = slightly; 3 = somewhat; 4 = for the most part; 5 = very much)$

Table I. Conceptualizations and Measures of Family Social Capital (2002 AFBS and 2007 AFBS).

Note. AFBS = American Family Business Survey. Conceptualizations are drawn from Pearson, Carr, and Shaw (2008) and Holt, Pearson, Carr, and Barnett (2017).

nonfinancial internal outcomes for the firm. We assessed *transgenerational succession intentions* by measuring the extent to which the senior generation wants the business to stay in the family, and *successor experience* was

assessed to examine how much external experience the successor has outside the family business. Both succession intentions and successor experience are types of family nonfinancial internal outcomes. Finally, *family*

	2002 AFBS (<i>I</i>	N = 845)	2007 AFBS (N = 646)		
ltem	Factor loadings	Uniqueness	Factor loadings	Uniqueness	
Cognitive dimension (Cronbach's $\alpha = .85$)					
FM share similar values	0.79	0.28	0.79	0.28	
FM and FF share similar values	0.84	0.23	0.84	0.23	
FF values compatible with FF values	0.77	0.32	0.77	0.32	
Loyalty to the FF	0.70	0.40	0.70	0.40	
Relational dimension (Cronbach's $\alpha = .85$)					
FM extra effort	0.64	0.54	0.64	0.54	
Support the FF	0.72	0.43	0.72	0.43	
Proud about the FF	0.74	0.46	0.74	0.46	
Agree FF goals	0.73	0.46	0.73	0.46	
FF positive influence	0.66	0.53	0.66	0.53	
Support FF decisions	0.75	0.39	0.75	0.39	

Table 2. Internal Consistency and Factor Analysis.

Note. AFBS = American Family Business Survey; FM = family member; FF = family firm.

Table 3. Means, Standard Deviations, and Correlations (2002 AFBS).

	М	SD	Minimum	Maximum	Ι	2	3	4	5	6	7	8	9	10
I. Sales revenue	3.50	0.16	I	2.5	1.00									
2. Growth	4.40	1.94	I	7	.04	1.00								
3. Family meetings	4.07	0.79	I	5	.00	.01	1.00							
4. Optimism	4.26	1.06	Ι	5	.04	.28	10	1.00						
5. TSI	1.96	1.91	0	5	02	00	04	.14	1.00					
6. Successor experience	2.33	1.18	I	4	03	04	.09	06	12	1.00				
7. FIC	3.90	1.25	I	5	.06	.02	.04	.08	.19	07	1.00			
8. Structural dimension	6.06	1.80	I	12	00	.04	.15	.00	.02	.11	.09	1.00		
9. Cognitive dimension	4.34	0.66	I	5	.07	.08	.09	.19	.25	01	.18	.05	1.00	
10. Relational dimension	4.32	0.67	I	5	.05	.11	.15	.17	.15	00	.20	.10	.59	1.00

Note. AFBS = American Family Business Survey; TSI = transgenerational succession intentions; FIC = family identity in the community. Sales revenue in millions of dollars.

identity in the community (a family-specific nonfinancial external outcome) was assessed to determine the extent to which involvement in the business contributes to the family's identity in the community. Details of these measures are outlined in Table 1.

Analytical Methods

To develop a taxonomy, we used a three-step approach (Denzin, 1978; Homburg, Jensen, & Krohmer, 2008; Jick, 1979; Ketchen & Shook, 1996). We began by using a two-step cluster analysis technique where both hierarchical clustering and k-means cluster analysis

processes were applied to the 2002 AFBS data set. These analyses allowed for the identification of empirically derived clusters of FSC based on the structural, cognitive, and relational dimensions. Second, while cluster analysis provides established techniques for identifying groups with similar characteristics along the specified cluster variables, it is not necessarily meant to test assumptions regarding the associations between clusters and outcomes. Therefore, we examined the significance of the clusters in the 2002 data using a multivariate analysis of variance (MANOVA). Third, after identifying specific clusters and assessing general relationships with outcomes, we then conducted a second set

						<i>,</i>								
	М	SD	Minimum	Maximum	I	2	3	4	5	6	7	8	9	10
I. Sales revenue	2.10	0.46	I	5	1.00									
2. Growth	3.93	0.90	I	7	.03	1.00								
3. Family meetings	4.57	0.74	I	5	.00	01	1.00							
4. Optimism	1.84	1.35	I	5	00	.03	00	1.00						
5. TSI	1.66	1.84	0	5	00	00	04	.11	1.00					
6. Successor experience	2.23	1.33	I	4	.00	.00	08	.13	.05	1.00				
7. FIC	2.10	1.31	I	5	00	05	04	.09	.12	.13	1.00			
8. Structural dimension	3.73	1.61	I	9	.02	01	01	.04	04	02	00	1.00		
9. Cognitive dimension	4.22	0.76	I	5	.03	.00	.13	09	13	22	13	.00	1.00	
10. Relational dimension	4.27	0.70	I	5	.04	04	.18	12	11	21	18	.00	.70	1.00

Table 4. Means, Standard Deviations, and Correlations (2007 AFBS).

Note. AFBS = American Family Business Survey; TSI = Transgenerational succession intentions; FIC = Family identity in the community. Sales revenue in millions of dollars.

of analyses using the 2007 AFBS data to examine the consistency of the findings. We also conducted a test for common method variance (CMV). Specifically, the results of a Harmon one-factor test (Podsakoff & Organ, 1986) suggest CMV was not likely a concern.⁷

Results

Cluster Analysis and Related Outcomes

To determine the appropriate number of clusters, the hierarchical clustering algorithm developed by Ward (1963), complemented by the cubic clustering criterion proposed by Sarle (1983), was used. This analysis provided strong support for a three-cluster solution.⁸ Furthermore, we assigned the cases in our sample to the appropriate cluster using the *k*-means clustering method and then assessed the stability of this cluster assignment using McIntyre and Blashfield's (1980) cross-validation procedure. Results indicated a high level of stability.⁹

As noted above, we then supplemented the cluster analysis results by assessing whether the identified clusters allow for meaningful relations with outcomes (Rich, 1992). Table 5 shows the cluster means for each of the FSC dimensional variables used to identify the clusters and the seven outcome variables. To determine significant differences for the cluster and outcome variables, we compared the means of the clusters using two multiple comparison criteria: Waller and Duncan's (1969) multiple-range test and Tukey's honestly significant difference test (both at p < .05). Based on these results, we assigned the clusters to brackets for each variable, expressed by the superscript labels in Table 5. The

cluster means for a given variable that carry the same superscript do not differ at the 5% level, and for all cluster means, both criteria led to the same bracket assignments. Table 5 contains the *k*-means cluster solutions and MANOVA results for the 2002 AFBS data. The *k*-means approach reveals that a three-cluster solution is robust and parsimonious, indicating that there is notable heterogeneity among family firms (F = 4.73, Roy's largest root = 0.13; p < .001).¹⁰

Replication: Validation of Cluster Analysis and Related Outcomes

Consistent with Miller's (1996) recommendation for the development of an empirical taxonomy, our analyses were replicated using data from the 2007 AFBS (see Table 6). These analyses provided strong support for a three-cluster solution as identified in the prior data. We then further validated the clusters by determining significant differences for the cluster and outcome variables (both at p < .05). The subsequent MANOVA indicates that FSC is indeed an effective discriminator among the family firms (Roy's largest root = 0.06, F = 8.66, p < .001).¹¹

Interpretation of the FSC Clusters

In all, the dimensions of FSC—structural, cognitive, and relational resources—were used to determine whether family firms can be clustered effectively. Based on the analyses from both data sets, three distinct clusters of FSC in family firms emerged. Furthermore, the three

Outcome variables by cluster	Cluster 1: Instrumental (n = 323, 38%)	Cluster 2: Indistinguishable (n = 228, 27%)	Cluster 3: Identifiable (n = 294, 35%)	F	Significance
I. Sales revenue	0.02 ^b	9.04 ^a	0.03 ^b	0.38	
2. Growth	4.23ª	4.09 ^a	4.23ª	0.51	
3. Family meetings	1.38 ^b	I.22 ^b	I.46 ^b	4.54	**
4. Optimism	4.42 ^a	3.82 ^ª	4.27 ^a	5.16	***
5. TSI	4.10 ^a	3.77 ^a	4.50 ^ª	3.87	***
6. Successor experience	3.80ª	3.31 ^b	4.35ª	2.67	***
7. FIC	4.01 ^ª	3.50 ^{a,b}	4.09 ^a	5.96	***

Table 5. Results of Cluster Analysis Solutions and MANOVA (2002 AFBS).

Note. MANOVA = multivariate analysis of variance; AFBS = American Family Business Survey; TSI = transgenerational succession intentions; FIC = family identity in the community. Reported (*n*) values in parentheses are counts for the number of family firms in each cluster. The count is followed by the overall relative distribution percentage of family firms in each cluster. Numbers in cells are means. In each row, cluster means with the same superscript are not significantly different (p < .05) on the basis of Waller and Duncan's multiple-range test. The highest bracket is labeled with superscript "a," the next highest bracket with superscript "b," and so on. See Note 12 for an example of how to interpret the brackets.

p < .05. p < .01; p < .01.

Table 6.	Results of	Cluster /	Analysis	Solutions and	I MANOV	A (2007	AFBS)
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Outcome variables by cluster	Cluster 1: Instrumental (n = 295, 46%)	Cluster 2: Indistinguishable (n = 219, 34%)	Cluster 3: Identifiable (n = 132, 20%)	F	Significance
I. Sales revenue	0.22 ^b	0.17 ^b	0.23 ^b	1.08	
2. Growth	3.95ª	3.94 ^a	3.91ª	0.11	
3. Family meetings	1. 79 ^b	1.12 ^b	I. 78 [♭]	8.51	***
4. Optimism	I.75 ^b	2.12 ^b	1.81 ^b	4.37	***
5. TSI	1.97 ^b	2.11 ^b	1.76 ^b	5.46	**
6. Successor experience	2.16 ^b	2.74 ^b	2.08 ^b	15.03	***
7. FIC	2.09 ^b	2.45 ^b	I.96 ^b	7.91	***

Note. MANOVA = multivariate analysis of variance; AFBS = American Family Business Survey; TSI = transgenerational succession intentions; FIC = family identity in the community.

Reported (*n*) values in parentheses are counts for the number of family firms in each cluster. The count is followed by the overall relative distribution percentage of family firms in each cluster. Numbers in cells are means. In each row, cluster means with the same superscript are not significantly different (p < .05) on the basis of Waller and Duncan's multiple-range test. The highest bracket is labeled with superscript "a," the next highest bracket with superscript "b," etc. See Note 12 for an example of how to interpret the brackets. *p < .05. **p < .01; ***p < .001.

clusters identified are consistent across both data sets. (See graphical results in Figures 2 and 3.)¹²

Cluster 1: Instrumental FSC. Cluster 1 contains aboveaverage values of structural, cognitive, and relational resources, which demonstrates a salient level of FSC in the family firm. Given the salience of the FSC resources, these firms are noted to have "Instrumental FSC." Although the levels of all dimensional resources are above average, not all dimensions of FSC manifest at the same level. Specifically of note, the cognitive resources among kin are most prominent among all dimensions in the cluster, which suggests that firms with Instrumental FSC are characterized by kin with exceptionally similar values, goals, and decisions that are likely to, for example, minimize misunderstandings and facilitate communication (Tsai & Ghoshal, 1998). Not surprisingly, firms with this heightened FSC are also noted for the highest level of relational social capital among all clusters. These family members have strong



Figure 2. Cluster analysis of family social capital (AFBS 2002).

Note. AFBS = American Family Business Survey. The relative distribution percentage of firms is noted for each cluster.



Figure 3. Cluster analysis of family social capital (AFBS 2007).

Note. AFBS = American Family Business Survey. The relative distribution percentage of firms is noted for each cluster.

family and firm identity, are proud of their association, and share a unique relational bond. Furthermore, while family firms with Instrumental FSC have salient levels of cognitive and relational social capital, the level of structural social capital is not as pronounced. Specifically, although the level of structural social capital is firms with Instrumental FSC.

above average, it exists at the lowest level among the dimensions in this cluster. While interesting, this does, perhaps, confirm that the unique value associated with FSC primarily lies in the relational and cognitive dimensions rather than the structural configuration or density of network ties. In all, firms in Cluster 1 exhibit the highest levels of FSC overall and are classified as family

Cluster 2: Indistinguishable FSC. A second cluster of family firms includes those with "Indistinguishable FSC." These firms contain levels of structural, cognitive, and relational social capital among kin that are well below the average of other family firms. Among the dimensions of FSC in this cluster, the relational dimension is the lowest. This finding suggests that these family firms have kin that exhibit less commitment and support compared to other family firms. Additionally, firms with this type of FSC possess below-average cognitive social capital, which yields less similarity in values, more dissimilar goals, and lower levels of loyalty compared to other family firms. These differences make intrafamily communication and exchange more difficult (compared to Cluster 1). Like the relational and cognitive dimensions, the structural social capital is well below average; yet the level is not as low as the other dimensions in this cluster. This results in the relational and cognitive dimensions being the most (negatively) salient among all FSC dimensions. In all, firms in Cluster 2 have the lowest overall FSC, and as a result, potential benefits from FSC that exist in Cluster 1 are likely to be negligible in Cluster 2, making firms in Cluster 2 nearly indistinguishable from firms with no FSC (e.g., nonfamily firms).

Cluster 3: Identifiable FSC. A third cluster of firms contains levels of structural, cognitive, and relational resources that are marginally below average, creating a type of FSC that we term "Identifiable FSC." Family firms in this cluster are identified by levels of all FSC dimensions being slightly below average compared to other clusters, and among these dimensions, the cognitive dimension is the lowest. Family members involved in this type of firm possess somewhat dissimilar values and goals and tend to have varied levels of loyalty. Similarly, family members in these firms exhibit relational social capital; however, these family members are defined by an intermediate level of commitment rather than the strongest level of commitment as exhibited by firms with Instrumental FSC in Cluster 1. The structural dimension, unlike in the other clusters, is more similar to the cognitive and relational dimensions in strength, which highlights that in this intermediate cluster, all dimensions are more closely aligned compared to other clusters. Overall, firms in Cluster 3 exhibit a level of FSC that is neither "high" (Cluster 1) nor "low" (Cluster 2); rather, these firms have a level of FSC that is identifiable but not necessarily at a polar extreme. (Table 7 provides further details on each cluster type).

Post Hoc Analyses

Although we demonstrate that significant differences exist across clusters with outcomes, to offer additional insight into the precise nature of the effects between the identified clusters and outcomes, we conducted post hoc analyses. First, we modeled the 2002 AFBS data in a multivariate regression to assess relationships between clusters and outcomes. Then, we replicated the analyses with the 2007 AFBS data. Overall, the results were consistent.

The findings demonstrate that in Cluster 1 (Instrumental FSC), the configuration of FSC resources is negatively associated with growth (-0.98, p < .05, AFBS 2002; -0.94, p < .01, AFBS 2007) while positively associated with optimism (0.26, p < .05, AFBS 2002; 0.24, p < .05, AFBS 2007, transgenerational succession intentions (0.25, p < .05, AFBS 2002; 0.07, p < 0.05, AFBS 2007), and successor experience (0.77, p < .01, AFBS 2002; 0.10, p < .05, AFBS 2007). Additionally, the findings demonstrate that in Cluster 2 (Indistinguishable FSC), the configuration of FSC resources is positively associated with growth (0.00, p < .05, AFBS 2002; 0.06, p < .05, AFBS 2007) while negatively associated with family meetings (-0.61, p < .001, AFBS 2002; -0.19, p < .05, AFBS 2007) and family identity in the community (-0.29, p < 0.05, AFBS2002; -0.13, p < 0.05, AFBS 2007). Finally, Cluster 3 (Identifiable FSC) showed no significant associations with the outcome variables examined.¹³

Discussion

While advancements have been made in understanding the unique bundle of social resources that manifest when the family is involved in the business, understanding the details of these family-specific social capital resources has proven challenging. Studies have noted that FSC is

	Cluster name	Instrumental FSC	Indistinguishable FSC	Identifiable FSC
Cluster description	Cluster Identification	Cluster I from 2002 AFBS and Cluster I from 2007 AFBS	Cluster 2 from 2002 AFBS and Cluster 2 from 2007 AFBS	Cluster 3 from 2002 AFBS and Cluster 3 from 2007 AFBS
	Dimensional details	Structural resource: Slightly above-average presence of connectivity Cognitive resource: Highest level of shared values and goals Relational resource: Highest level of attachment and commitment Overall FSC: Relatively high level of resources provides potentially unique benefits of FSC that enhance firm and family nonfinancial outcomes.	Structural resource: Below- average presence of connectivity Cognitive resource: Low level of shared values and goals Relational resource: Low level of attachment and commitment Overall FSC: Low level of FSC resources offer limited nonfinancial benefits but enhance firm financial benefits, nearly indistinguishable from nonfamily firms	Structural resource: Slightly below-average presence of connectivity Cognitive resource: Moderately low level of shared values and goals Relational resource: Moderately low level of attachment and commitment Overall FSC: Moderately low level of FSC resources enhances neither nonfinancial or financial outcomes of the family firm.
Outcomes ^{a,b}	Firm financial	Less firm growth	Enhanced firm growth	
Catcomes	Family financial		Fewer family meetings	
	Firm nonfinancial internal	Enhanced firm optimism	—	_
	Family nonfinancial internal	Enhanced transgenerational succession intentions; enhanced successor experience	_	_
	Family nonfinancial external	—	Less family identify in community	—

Table 7. A Taxonomic Classification of FSC: Cluster Descriptions and Outcomes.

Note. FSC = family social capital; AFBS = American Family Business Survey. These clusters reflect explanations about Figures 2 and 3. Outcome framework based on Holt, Pearson, Carr, and Barnett (2017).

^aFirm nonfinancial external outcome measure not measured; ^bSummary of outcomes offered based on measures used in current study; — indicates no significant observation.

a "double-edge sword," having paradoxical effects on internal firm dynamics and outcomes, and Herrero (2018) recently noted that the time has come to take a more nuanced view of FSC to better understand its effects within the family firm. Thus, to offer a more refined understanding of FSC and advance related theory, we follow the guidance of Whetten (1989) and seek to answer the "what" question that is core to theory building. To this end, we note what factors constitute FSC and identify what configurations of FSC manifest across the landscape of family firms. Specifically, we identify three distinct clusters of family firms based on FSC, examine the configurational differences within each cluster, and note the varied effects of the clusters on outcomes, which grants new insight into the paradoxical effects of FSC.

For the purpose of identifying the configurations of FSC across family firms, we developed a taxonomy of FSC, which allows for the specification of a distinguishable pattern of FSC that can be used to further understanding of FSC in family firms and advance theorizing. Using a cluster analysis approach, a taxonomy of FSC was observed that includes three distinguishable configurations: Family firms with Instrumental, Indistinguishable, and Identifiable FSC. These findings, replicated across two data sets, allow us to conclude that three distinct types of family firms exist with respect to FSC.

The findings demonstrate that firms with Instrumental FSC exhibit the most pronounced FSC of all identified types. This heightened level of FSC is what most scholars likely observe when noting that FSC creates unique behavioral dynamics and culture (Ensley & Pearson, 2005; Tokarczyk, Hansen, Green, & Down, 2007), enables efficient knowledge sharing (Carr et al., 2011), and instills a long-term orientation (Sirmon & Hitt, 2003) among other advantages. Specifically, our results support those researchers who submit that FSC is related to optimism about the company's prospects, the senior generation's desire to transfer control of the firm to future generations, and the need for the leader to have experience outside the family business (key internal outcomes pursued by family firms; Chua et al., 1999; Holt et al., 2017). Interestingly, firms with Instrumental FSC showed positive significance with nonfinancial internal outcomes for both the family and firm, with no significant effect on any family-related financial or nonfinancial external outcome examined. This underscores the effect of FSC on both family and firm-specific internal nonfinancial outcomes, suggesting, perhaps, that the type of FSC uniquely affects such internal outcomes.

Family firms with Indistinguishable FSC, the lowest level of FSC compared to other family firms, are less likely to benefit from the distinctive effects offered by FSC. The family's involvement in the firm has the potential to yield synergistic benefits, yet family firms with the lowest levels of FSC are the least able to leverage such benefits because of the lack of family-specific social resources and, as a result, may experience different consequences. For instance, our findings show that firms with Indistinguishable FSC are likely to have fewer family meetings and consist of family members who identify less with the community. However, unlike firms with Instrumental FSC in Cluster 1 that have a negative association with growth, firms with Indistinguishable FSC in Cluster 2 are positively associated with growth. This finding is interesting and may be evidence that these firms are "trading" noneconomic performance for economic performance. Furthermore, these firms exhibited (negative) significant relationships with family-specific outcomes that were financial and nonfinancial external (i.e., family identity in the community). This, too, notes that firms in this cluster may be more likely to significantly affect family-specific financial and nonfinancial external outcomes rather than family-specific nonfinancial internal outcomes (which were found significantly related to Cluster 1).

The third type of family firm identified consists of firms with Identifiable FSC. Although these firms exhibit FSC, the level of FSC has a lesser influence when compared to the average family firm. The outcomes observed suggest that firms with Identifiable FSC are likely to struggle with creating value from this intermediate level of potentially valuable resources. For instance, given the nonsignificant effects on the observed outcomes, having this level of FSC potentially creates an identity problem wherein the family firm is not fully leveraging the benefits of FSC, yet is not fully leveraging the benefits of being a more professionalized firm. This intermediate level of FSC may be compared to firms struggling with a strategic business-level identity (i.e., "stuck in the middle"): firms that are not clearly cost leaders, not clearly differentiators, and not able to balance the contradictions between the strategies to successfully pursue a valuable strategy.

Advancing FSC Theory and Understanding

In developing a taxonomy of FSC, we attempt to advance the understanding of this unique form of social capital. The topic is increasingly prominent in family firm scholarship, yet researchers continue to struggle with precisely what it is and how it affects the family firm. Thus, to advance theory and understanding related to FSC, we identified what constitutes FSC and what configurations manifest across family firms. The advancement of FSC, however, is not limited to answering this single question; instead, Whetten (1989) suggests that questions related to understanding how, why, who, where, and when are also central to theory building. Accordingly, we provide insight into these questions in attempt to inspire future research of FSC.

How Does FSCAffect the Family Firm? Pearson et al. (2008), for instance, note that how FSC drives competitive advantage is by leveraging family-specific capabilities. Family-specific capabilities refer to the family firm's capacity to deploy and reconfigure resources, like FSC, to perform a function or activity in a generally reliable manner when called on to do so. Pearson et al. (2008), more specifically, suggest that "information access" and "associability" capabilities are enabled when FSC is leveraged, creating a competitive advantage for the firm. Although family-specific capabilities are noted, further study is needed to understand how FSC can be leveraged through other types of capabilities, like firm-level ordinary and dynamic capabilities (Collis, 1994; Teece, Pisano, & Shuen, 1997; Winter, 2000, 2003). Daspit, Long, and Pearson (2018), for instance, offer a conceptualization of how social capital resources create value via the dynamic capability of absorptive capacity, yet more work is needed to understand the variety of means through which FSC affects the family firm. By understanding these questions, and others, we will gain a more robust understanding of how FSC can be leveraged via capabilities, resources, and other mechanisms for the family and firm.

Why Is Examining FSC Worthwhile? The bonded nature of the internal relationships among kin may yield a competitive advantage for the family firm given the unique nature (and strength) of the strong, bonded familial ties. These ties are unique compared to ties among nonfamily given that they are grounded in trust, longevity, similar experiences, and refined communication patterns, for example, which are the underpinnings of the relational and cognitive dimensions of social capital. Herrero (2018) notes that FSC is inimitable and, at best, can only be imperfectly imitated by nonfamily firms. In other words, if well leveraged by the family firm, FSC is a resource that can yield a sustainable competitive advantage. Therefore, rationale for why it is incumbent on scholars to develop prescriptive recommendations for family firm leaders is this vast potential that the FSC resource has for family firms to create value. As one of the most common organizational forms in the world, enabling enhanced value creation has potentially expansive implications for family firms and society at large.

Given that so many family firms exist in the world, research efforts aimed at understanding the heterogeneity among family firms is gaining momentum. Differences in goals (Chrisman, Chua, Pearson, & Barnett, 2012; Kotlar & De Massis, 2013), governance (Le Breton-Miller & Miller, 2006; Miller & Le Breton-Miller, 2006; Steier, Chrisman, & Chua, 2015), and resources (Eddleston, Kellermanns, & Sarathy, 2008; Sirmon & Hitt, 2003) create variation in family firms (Chua et al., 2012), and this study attempts to advance understanding of the variation that exists among FSC resources in the family firm. In particular, we find that that family firms vary in FSC, and as a result of the variation, the firms experience differing internal and external outcomes. This refined understanding of FSC grants insight into the broader understanding of resource heterogeneity in family firms and creates a foundation for the future exploration of FSC effects on the family firm. Specifically, as noted by Daspit, Chrisman, Sharma, Pearson, and Mahto (2018), future studies are encouraged to further investigate how (FSC) resources relate to varied goals and governance configurations, and how these configurations affect family firm dynamics and outcomes. By understanding FSC as a relevant resource across which family firms vary, scholars move toward a more comprehensive understanding of the heterogeneous landscape of family firms and closer to offering more precise prescriptions for these firms, which account for such a large portion of businesses worldwide.

Who, Where, and When: Boundary Conditions of FSC. Understanding the conditions that limit the generalizability of FSC-related findings is another step important to theory building. Pursuing the who question, for example, highlights the family members among whom the FSC is developed. Family members who are part of families with dysfunctional characteristics are likely to exhibit levels of FSC different than those with more functional families. Olson (2000), a scholar of family and martial systems, suggests that functional families have moderate levels of cohesiveness and flexibility whereas dysfunctional families tend to be more extreme with respect to cohesion (e.g., enmeshed or disengaged) and/or more extreme with respect to flexibility (e.g., chaotic or rigid). Such insights from family science have been used to show that family dynamics affect the development of HR practices (Daspit, Madison, Barnett, & Long, 2018) and the climate in the family business (Björnberg & Nicholson, 2007), and taking a similar approach may yield insight into the effects of internal family dynamics on FCS and the firm. Numerous opportunities exist for applying family science scholarship to FSC studies. For example, are similar categorizations of FSC found within business families? If so, do families with Instrumental FSC experience heightened levels of entrepreneurial orientation, or given the heightened presence of structural, cognitive, and relational capital, are such families less likely to have this type of orientation?

Furthermore, FSC varies depending on *where* the family and family firm exist. The current study includes a sample of family firms in the United States; however, the definition of, the expectations of, and the interactions among family vary across contexts. Khayesi, George, and Antonakis (2014) find, in their study conducted in East Africa, that expansive familial networks offer broader access to resources, yet the heightened familial

obligations impose steep costs that adversely affect the firm. The cultural expectations that obligate family members to engage in certain behaviors undoubtedly affects FSC and the firm, and exploring such influences is needed. Also, how FSC is affected when such norms are violated remains an interesting area of study. Put differently, under what conditions do we expect FSC to function as observed herein, and under what conditions do we expect it to function differently? Does a family business located in a more collectivist country, as opposed to one that is more individualist, experience similar outcomes given the respective FSC configuration?

Additionally, FSC should be considered with respect to *when* it is observed. Specifically, over the course of the life cycle of the family firm, the FSC is likely to vary given that at the time of introduction, only a minimal number of family members are involved in the firm, and if fortunate to survive to a later generation, the inclusion of next generation family members alters the structural ties within the network and has great potential to alter the relational and cognitive aspects of FSC as well. However, as proposed by De Clercq and Belausteguigoitia (2015), trust and goal congruence among intergenerational kin involved in the firm can have positive effects for the family firm. The challenge, of course, remains in understanding how to bridge intergenerational divides.

Along this line, a family with numerous members in the generative (later) stage of life is more likely to have a differing manifestation of FSC than a family composed of substantially younger members. Thus, a family firm with less FSC at Time 1 may have greater FSC at Time 2 as family leaders enter later life stages during that span. Similarly, the presence of a living family member two or three generations senior to the incumbent generation may enhance FSC when this more experienced generation encourages the continuance of positive family dynamics. If true, family firms may vary in their FSC configuration over time. In fact, when comparing the 2002 and 2007 data sets, we find that the relative percentage of Instrumental firms (Cluster 1) changes from 38% to 46%, respectively. While the data collection methods do not allow us to assess whether firms themselves evolved and changed over this time, this finding does invite several interesting questions as to when and why their FSC configuration might change and evolve. Would change be natural, or might exogeneous effects (like the economic downturn) influence firms and lead to differing configurations of FSC? Future research is encouraged to use repeated measures

from numerous time periods punctuated by one or more discontinuities to illustrate how alternative specifications of time allows for the examination of relative versus absolute change in clustering solutions (see Bliese & Lang, 2016, for a discussion on discontinuous growth modeling) and to offer insight into significant exogeneous effects.

Limitations

While this study introduces a taxonomy of FSC and offers insights to support further theory development, the investigation is not without limitations. Several of these limitations revolve around our methods. First, the data in both data sets used are cross-sectional. Whether FSC causes the noted variations in outcomes is a question that can be more conclusively answered with longitudinal research designs and additional studies to replicate the findings. Second, the collection of data for both the dependent variables and the independent variables from the same source is a limitation. Third, while we identify three distinct configurations using sound methods (hierarchical and k-means) such that withincluster differences are minimized and between-cluster differences are maximized across family firms, this approach does call for some individual judgment when identifying the number and nature of clusters. Our use of a replicative design, however, ameliorates these concerns, increasing the validity of the findings.

In addition, we do not assess the relationship among the dimensional components of FSC. Within each type of FSC, the social, cognitive, and relational resources are uniquely configured, yielding variations in the FSC configurations that manifest across family organizations. In the clusters identified, interestingly, the relational and cognitive dimensions are generally more salient than the structural dimension. For example, in firms with Instrumental FSC (Cluster 1), although all dimensions exhibited positive values, the relational and cognitive dimensions were the most positive. Similarly, in Clusters 2 and 3 with Indistinguishable FSC and Identifiable FSC, respectively, both exhibited configurations of negative values, but in each cluster, the cognitive and relational dimensions were generally more negative than the structural dimension. This finding underscores the potential importance of the relational and cognitive dimensions of FSC. The bonded nature of the internal relationships among kin is noted to potentially yield a competitive advantage for the family firm

given the unique nature (and strength) of strong, bonded familial ties. These ties are unique given their richness, compared to ties among nonfamily, given that these family-specific bonds are grounded in trust, longevity, similar experiences, and refined communication patterns, for example, which are the underpinnings of the relational and cognitive dimensions of social capital. Thus, opportunities exist for further examining the relationships among the structural, cognitive, and relational dimensions. Given the observed salience of the relational and cognitive dimensions, prior conceptualizations that suggest that structural and cognitive social capital influence relational social capital may require reconsideration when conceptualized as part of FSC.

We also seek to provide initial insight into how FSC relates to specific outcomes. In addition to identifying three distinct clusters and investigating the configurations of each, we assess the relationship of the configurations on financial and nonfinancial outcomes. These outcomes conceptualize the fulfilment of financial and nonfinancial goals for the family and firm (Holt et al., 2017), and by examining their relationships with the identified clusters, we gain additional insight into the broad relationships between FSC and outcomes. This additional step further develops the nomological net of FSC, offering a contribution to epistemology over and above classification (Chrisman, Chua, & Steier, 2005).

Although we examine the relationships with specific outcomes, effects on other outcomes remain to be explored. For instance, investigating how the identified types of FSC affect firm climate (e.g., Zahra, Hayton, Neubaum, Dibrell, & Craig, 2008); innovation (e.g., Duran, Kammerlander, van Essen, & Zellweger, 2016); the pursuit of family-centered, noneconomic goals (Chrisman et al., 2012); and various other economic and noneconomic outcomes (e.g., Yu et al., 2012) offers numerous avenues for future research. Furthermore, while we used the categorization of financial, nonfinancial internal, and nonfinancial external outcomes for the family and firm from Holt et al. (2017), we were not able to test all outcomes from each category. Thus, we look forward to further work that further explores this array of outcomes.

Finally, we examine FSC from the social capital perspective given the ability to observe sociobehavioral resources in the family firm. While this perspective is insightful, other perspectives remain to be examined. For example, Sirmon and Hitt (2003) note that unique combinations of human resources, patient financial resources, and survivability resources exist within family firms. Do these resources yield similar taxonomic classifications as the social capital perspective of FSC? Furthermore, what relationships are observed with outcomes?

Conclusion

Ultimately, the value of any classification rubric lies in its ability to make knowledge more cumulative as well its ability to make distinctions with theoretical or practical implications (Miller, 1996). In an attempt to support the advanced understanding of FSC, we develop a taxonomy that identifies that three unique clusters of family firms exist based on their FSC. Replicating the findings across two data sets, we find that firms with Instrumental FSC have the highest level of FSC emerging from structural, cognitive, and relational resources, whereas family firms with Indistinguishable FSC exhibit the lowest overall levels of FSC. Additionally, family firms with an intermediary level, Identifiable FSC, have an observable manifestation of FSC, yet these resources are slightly below average. Across the clusters of FSC identified, we also find that the configurations demonstrate differing influences on outcomes, which suggests that not all FSC configurations have the same effect. Overall, this investigation identifies three unique types of FSC that exist in family firms and offers a taxonomy useful for advancing the study of family business.

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Notes

- The sample represents an appropriate cross section of the United States; the following regions were represented: Middle Atlantic, Pacific, East North Central, South Atlantic, West North Central, New England, Mountain, West South Central, and East South Central.
- Given that cluster analysis in general (Punj & Stewart, 1983) and the method we adopted (Ward, 1963, discussed subsequently) tend to be sensitive to outliers (Milligan & Hirtle, 2003), two outliers were eliminated from the 2002 AFBS, leaving 845 usable cases, and four outliers were eliminated in the 2007 AFBS, resulting in 646 usable cases.

- 3. It should not be overlooked that the F-PEC (Family Influence on Power, Experience, and Culture) itself largely draws on proxy indicators. Consider the experience dimension of the F-PEC (Astrachan, Klein, & Smyrnios, 2002; Klein et al., 2005): Experience represents the highly specific knowledge that is leveraged by the family firm and is gained because of the access family members have to information as they are involved with the firm at an early age, acquiring tacit knowledge regarding the short-term methods as well as the long-term management strategies of the firm. This experience is measured through items that reflect multigenerational involvement. While a sound measure, it is, nonetheless, an imperfect proxy of experience. For instance, Walmart's CEO, who is a nonfamily member, has nearly 40 years of experience as he began working in the business when in high school. In turn, the CEO of AFLAC may have less experience because he has worked in the business for only 10 years despite being a family member.
- A principal component factor analysis was not conducted on the structural dimension given that this measure is not latent and is directly observed.
- The factors were extracted through principal component analysis and a combination of minimum eigenvalue criterion and scree tests. Using factor loadings greater than or equal to 0.45 but lower than 1.00 as a cutoff (Dess & Davis, 1984; Miller & Friesen, 1978; Robinson & Pearce, 1988).
- 6. The only one of the six outcome categories not assessed was the nonfinancial external outcome for the firm.
- 7. To test the presence of CMV, we empirically compared several methods (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Podsakoff, MacKenzie, & Podsakoff, 2012; Schaller, Patil, & Malhotra, 2015) of detecting the presence of and estimating the level of CMV. These methods include implementations of the marker variable technique that considers theoretically unrelated variables to the phenomena under consideration (Lindell & Whitney, 2001; Williams, Hartman, & Cavazotte, 2010). Essentially, we operationalized the marker variable items in a way that was similar in content, structure, and format to the substantive items. The results show that the marker variable technique provides estimates of CMV (corrected estimates of factor correlations = .56) that are consistent with those produced using the Harmon one-factor test (uncorrected factor correlations = .60). This analysis provides strong confirmatory evidence that the effects of CMV do not alter the substantive inferences of study's results.
- Given that Ward's (1963) algorithm is used, we found that no issues related to scaling were relevant (cf. Milligan & Hirtle, 2003). The values for the cognitive and relational dimensions were standardized.
- Using the cross-validation procedure (Milligan, 1996), 845 usable cases were randomly split into two halves. The *k*-means clustering method was applied to each half (cf.

Homburg et al., 2008). Each case in the second half was then assigned to the cluster with the nearest cluster centroid from the first half (based on the squared Euclidean distance). When comparing the two assignment methods (i.e., *k*-means clustering and manual assignment of observations based on the cluster centroid) for each observation in the second half, nearly 90% coincided.

- 10. Results yielded the same pattern as the full sample (n = 845, Pillais's trace = 0.14, F = 2.92; Wilks's $\Lambda = 0.85$, F = 2.94; Hotelling's trace = 0.16, F = 2.97; and Roy's largest root = 0.13, F = 4.73; all at p < .001).
- 11. Results yielded the same pattern as the full sample $(n = 646, \text{Pillais's trace} = 0.07, F = 4.76; \text{Wilks's } \Lambda = 0.92, F = 4.81; \text{Hotelling's trace} = 0.07, F = 4.86; \text{ and Roy's largest root} = 0.06, F = 8.66; \text{ all at } p < .001).$
- 12. In both Figures 2 and 3, we show a type of bar graph that allows for the display of the three groups of family firms (i.e., Instrumental, Indistinguishable, and Identifiable). Like the typical bar graph, we compare data that pertain to specific categories or attributes (i.e., FSC dimensions) that have been previously centered to their respective means. The clustered FSC dimensions allow the groups of family firms be graphed simultaneously with each common attribute being grouped together. For example, Cluster 1 (Instrumental) indicates that all FSC dimensions are less than 1 standard deviation above their mean of (M = 0), while Cluster 2 (Indistinguishable) is about 2 standard deviations below their mean and cluster three (Identifiable) is less than 1 standard deviation below the mean. In other words, Cluster 1 is high in FSC, while Cluster 2 is the lowest in FSC and Cluster 3 is moderately low in FSC. In addition, the relative percentage of each of the three clusters in both datasets is reported (AFBS 2002: Instrumental = 38%, Indistinguishable = 27%, Identifiable = 35%; AFBS 2007: Instrumental = 46%, Indistinguishable = 34%, Identifiable = 20%). Specifically, this indicates, that in both data sets, Instrumental family firms comprise a larger portion of the firms. From an FSC perspective, this pattern is not surprising given the unique bonds among kin that manifest as FSC in the family firm.
- 13. Tables are available by request.

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