

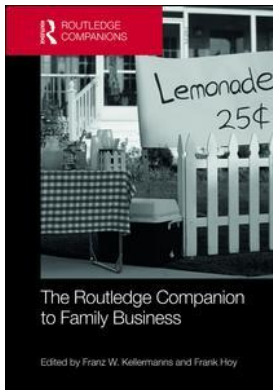
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Uncovering the ‘Missing Variable’

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UNCOVERING THE ‘MISSING VARIABLE’

The Family in Family Business Research

Thomas Rieg and Sabine Rau

Introduction

While the family is undoubtedly the variable that distinguishes family firms from other organizational forms, surprisingly little scholarly attention has been paid to the examination of business-owning families (Dyer 2003). Consequently, scholars have recently called for a greater focus on the family, and accordingly on variables related to the family system, to better understand the behavior and performance of family firms (e.g., Craig and Salvato 2012; Dyer and Dyer 2009; Sharma, Chrisman, and Gersick 2012; Sharma, Melin, and Nordqvist 2014; Yu et al. 2012). To the point is Bertrand and Schoar’s (2006; 95) assertion “that much can be learned by taking serious the ‘family’ part of ‘family firms.’” For example, recent studies demonstrate that different family configurations and characteristics are associated with varying levels of entrepreneurial activity in family firms (e.g., Alsos, Carter, and Ljunggren 2014; Jaskiewicz, Combs, and Rau 2015; Michael-Tsabari, Labaki, and Zachary 2014). However, such family related research endeavors require ways to conceptualize and measure the family variable (Dyer and Dyer 2009; Pearson, Holt, and Carr 2014; Sharma, Melin, and Nordqvist 2014). Thus, to pave the way for more family related research in the future, it is essential to synthesize, consolidate, and assess existing knowledge on how to operationalize the family in empirical research and to identify blind spots where new measures need to be developed. Accordingly, the central research question of this paper is: *Which options are available to operationalize ‘family’ as a variable, and what are avenues for future research?*

To answer this research question, we conduct a structured literature review of articles published in leading outlets for family business research. The remainder of this paper is structured as follows: First, we outline the methodological aspects of the literature selection and analysis. Second, we present an integrative framework to classify different family measures. Third, in the main section of this paper, we analyze the literature and consolidate the findings using the framework. The psychometric quality of the measures employed, a topic of increasing relevance for family business researchers, will also be assessed in this part. The following discussion section will sum up the main findings, discuss research gaps, and provide directions for future research.

This paper offers several contributions: First, we provide family business researchers with an overview and classification of available constructs and measures that can serve

as a starting point for studies incorporating the family as a unit of analysis and provide reference points on how to capture the heterogeneity of business-owning families. Second, this paper identifies promising areas for the development of new measures to capture the “striking diversity of family structures, values and interaction patterns” (James, Jennings, and Breitzkreuz 2012; 94), as advocated by several leading scholars (e.g., Dyer and Dyer 2009; Sharma, Melin, and Nordqvist 2014; Pearson, Holt, and Carr 2014). Third, by assessing and discussing the psychometric quality of the existing measures, we follow Pearson and Lumpkin’s (2011; 288) call to “pay greater attention to measurement issues if the field is to make scientific progress.”

Methodology and Literature Selection

This chapter follows the general approach employed by David and Han (2004) for an objective and systematic literature review. A structured literature review employs a transparent and replicable process through which existing knowledge can be identified and evaluated (Mulrow 1994). We focus exclusively on articles published in journals that require a systematic peer review process to ensure a certain quality level and scientific rigor (Light and Pillemer 1984). Although neighboring fields such as psychology and sociology could provide interesting insights on the family variable, we concentrate on articles written in a family business context. We believe that each field merits a separate review regarding how it conceptualizes and operationalizes “family;” the results of which could later be used to draw comparisons across fields. The *Academic Journal Quality Guide* (The Association of Business Schools 2010) serves as a baseline to identify relevant journals. Among the different sub-fields of business and management cataloged by the guide, journals listed in *Economics*, *Entrepreneurship and Small Business Management*, *Finance*, *General Management*, *Organization Studies*, and *Strategic Management* are selected as likely outlets for relevant studies. The Association of Business Schools ranks journal quality using four categories, with grade 1 being the lowest and grade 4 the highest (The Association of Business Schools 2010). Only journals ranked as grade four are included in the list of relevant scientific journals for this review, except for *Entrepreneurship and Small Business Management*, where journals from grades two and three are included to incorporate relevant outlets such as *Family Business Review* or *Journal of Small Business Management*.

In total, this yields 46 journals.¹ We then selected keywords to identify relevant studies. To ensure that no important article is left out, we decided to use initially broad keywords to identify all studies that deal with family firms, and only in subsequent steps to limit the search to articles that focus on the business-owning family. Hence, we used the following keywords to search abstracts, title, and author supplied keywords:

“family firm” OR “family business” OR “family company” OR “family enterprise”
OR “family-controlled” OR “family-managed” OR “family-owned” OR “founding
family” OR “privately held firm”

Similar to David and Han (2004), variations of the ending of the words are permitted. Given the abundance of studies focusing on family firms published in *Family Business Review*, all articles published in the relevant timeframe are included in the initial pool of articles. Our review of high-quality peer-reviewed studies is limited to the volumes starting in 1998, thereby connecting to Rothausen’s 1999 review on the “family in organizational research.” The search was carried out using the bibliographic database Scopus. The articles published

in *Family Business Review* plus the articles identified through the keywords yielded an initial sample of 908 articles.

As a third step, we develop criteria for the inclusion or exclusion of specific studies. First, as the goal of this paper is to identify ways to operationalize the business-owning family, we focus on the family sub-system within the family business system (Pieper and Klein 2007). Hence, we exclude studies that concentrate exclusively on the business system, or that assess the family solely based on ownership or involvement in the top management team of the firm (e.g., Anderson and Reeb 2003; Schulze, Lubatkin, and Dino 2003; Villalonga and Amit 2006). Second, due to the fact that a family consists of a “group of people” (Rothausen 1999; 819), we also exclude studies that focus on the characteristics and attitudes of individuals (e.g., Parker and van Praag 2012; Marshall et al. 2006; Zellweger, Sieger, and Halter 2011). Third, we decided to consider conceptual papers only if they go beyond anecdotal evidence and case illustrations (e.g., Abetti and Phan 2004).

Following the process suggested by David and Han (2004), we read the abstracts of the initial 908 articles identified using the keywords to select those that meet the inclusion criteria above. This step drastically reduced the number of articles to a more manageable pool of 135 articles. This is hardly surprising given that the field “is now dominated by topics and theoretical perspectives associated with the business system” (Sharma, Chrisman, and Gersick 2012; 10). The remaining 135 articles were retrieved and read in their entirety. Information including the bibliographic information, the theoretical background, and the independent and dependent variables was extracted from these articles. A closer analysis of the articles revealed that another 67 studies did not meet the inclusion requirements; these were removed from the article pool. The final list consisted of 68 papers in respected journals that focus on or include the business-owning family as a variable. The list of journals, their impact factor, and the number of articles obtained from each journal are summarized in Table 22.1.

Developing a Framework to Categorize Family Measures

An essential aspect in classifying and synthesizing existing research in a systematic manner is a clear conceptual framework. Such a framework allows for the organization and localization of constructs, variables, and findings in a coherent and comprehensive manner. Furthermore, a conceptual framework facilitates the identification of gaps in the literature and accordingly avenues for future research. For this literature review, constructs and measures used for business-owning families were classified in a matrix along two dimensions: a unit of analysis and a type of measure.

Unit of Analysis

On a general level, a family can be defined as a “unit of interacting personalities” (Burgess 1926). As such, it requires several individuals that “cohere in an ongoing structure that are both sustained and altered through interaction” (Handel 1965; 21). However, within each family system, several substructures exist that represent different units of analysis. Common levels of analysis for family assessment are the individual, dyadic, and whole system levels of the family (Jacob and Tennenbaum 1988; Skinner, Steinhauer, and Sitarenios 2000). Given that sociologists treat the dyad as the smallest social group, and given that research related to individual characteristics and their impact on business outcomes represents a different

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Table 22.1 Journals and Articles Reviewed for the Literature Review

ABS Journal Categories	Journal	2013 Impact Factor	Number of initial articles through keywords	Number of articles after abstract scan	Number of final articles
Economics	<i>American Economic Review</i>	3.305	2	0	0
	<i>Quarterly Journal of Economics</i>	5.966	2	1	1
	<i>Review of Economics and Statistics</i>	2.718	1	0	0
	<i>Journal of the European Economic Association</i>	3.356	3	0	0
Entrepreneurship and Small Business Management	<i>Journal of Business Venturing</i>	3.265	35	5	5
	<i>Entrepreneurship Theory and Practice</i>	2.598	115	32	11
	<i>International Small Business Journal</i>	1.397	20	4	0
	<i>Entrepreneurship and Regional Development</i>	1.000	12	2	1
	<i>Small Business Economics</i>	1.641	46	6	2
	<i>Journal of Small Business Management</i>	1.361	48	8	4
	<i>Strategic Entrepreneurship Journal</i>	1,744	6	0	0
	<i>Journal of Small Business and Enterprise Development</i>	0.289	20	2	1
	<i>International Journal of Entrepreneurial Behavior and Research</i>	0.545	18	1	0
	<i>International Journal of Entrepreneurship and Innovation</i>	0.592	3	0	0
General Management	<i>Family Business Review</i>	4.243	480	61	38
	<i>Academy of Management Review</i>	7.817	2	0	0
	<i>Academy of Management Journal</i>	4.974	3	1	0
	<i>Administrative Science Quarterly</i>	2.394	3	0	0
	<i>Journal of Management</i>	6.862	3	0	0
	<i>Journal of Management Studies</i>	3.277	18	5	2
	<i>Harvard Business Review</i>	1.831	7	0	0
Organization Studies	<i>British Journal of Management</i>	1.909	3	0	0
	<i>Organization Science</i>	3.807	8	2	0
	<i>Organization Studies</i>	2.504	7	1	0
	<i>Leadership Quarterly</i>	2.006	1	1	1
Strategic Management	<i>Human Relations</i>	1.867	1	1	0
	<i>Strategic Management Journal</i>	2.993	10	1	0
Finance	<i>Journal of Finance</i>	6.033	6	0	0
	<i>Review of Financial Studies</i>	3.532	7	0	0
	<i>Journal of Financial and Quantitative Analysis</i>	1.877	3	1	1
	<i>Journal of Financial Economics</i>	3.769	15	1	1
		Ø 3.154	908	135	68

(Note: Journals that produced no results after the keyword search, such as *Econometrica*, are not included in the list above.)

Source: Own

research stream, we exclusively focus on the dyad and the whole family unit of analysis for this review.

In a family firms context, dyads can refer to different combinations of family member pairs, such as siblings, couples, father–daughter pairs, etc., that are shaped by certain characteristics such as trust, marital status, or age relationships. In contrast, the whole family level refers to the family in its entirety. Family business scholars often use expansive definitions of family that goes beyond the nuclear conceptualization prevalent in other social science fields (Anderson, Jack, and Dodd 2005; Distelberg and Blow 2011). Whole families as a group or a network can develop special dynamics, such as cohesion and conflict, that set them apart from other families.

Type of Measure

Measures for family assessment can be separated into two distinct categories: structural–quantitative and psychodynamic measures (Rothausen 1999). Structural measures refer to the biological and legal ties that bind the family together as a social group (Brannon, Wiklund, and Haynie 2013). This approach is closely related to the genograms used in many social science disciplines to describe the family unit in a structured and standardized way. Common variables include the number of children and siblings as well as gender and age spacing that allow the construction of a family tree over multiple generations (Nicholson 2008). Psychodynamic measures, on the other hand, do not refer to the structural dimensions of the family but rather to the internal dynamics and the functioning of the family unit. Over time, family systems develop certain internal cultures and dynamics that are key to understanding why some families function better than others under certain circumstances (Dyer and Dyer 2009). For example, Zahra (2012) finds that the level of family cohesiveness has an influence on organizational learning in family firms while Salvato and Melin (2008) highlight the importance of family cohesion for the development of family social capital.

Figure 22.1 summarizes the two orthogonal dimensions – unit of analysis and type of measure with their binary subcategories – that will be used to classify and consolidate measures to assess the business–owning family.

		TYPE OF MEASURE	
		Assessment of Family Structure	Assessment of Family Dynamics and Functioning
UNIT OF ANALYSIS	Dyad	Dyad Structure	Dyad Dynamics and Functioning
	Whole Family	Whole Family Structure	Whole Family Dynamics and Functioning

Figure 22.1 Analytical Framework for the Literature Review
Source: Own

Literature Analysis and Results

Descriptive Results

Methodologies Applied

The studies identified for this literature review employ a multiplicity of research methodologies. Surprisingly, nearly 31 percent of the studies use a case study approach to collect information on family firms. This is more than twice as many as the average number of papers published using qualitative research methods in the field's major outlet, the *Family Business Review* (Reay 2014). A possible explanation might be that family-related research usually requires a trust-based relationship, which is easier to establish in personal interviews than with mail or online surveys (Eddleston and Kidwell 2012). However, half of the analyzed papers are based on large-scale surveys that were collected via questionnaires or telephone interviews. This mirrors Dawson and Hjorth's (2012) ascertainment that large-scale surveys remain the predominant method of research in the family business field. Furthermore, several studies in the sample are based on the same survey. For example, the papers by Danes and Olson (2003), Danes et al. (2009) and Muske and Fitzgerald (2006) are all based on the National Family Business Survey (NFBS) conducted between 1997 and 2000.

Studies concentrating on conceptual development (10 percent of the studies) or which are based on secondary data (7 percent) are rather scarce. However, several studies have used interesting and noteworthy sources to collect secondary data on the family. For example, Bertrand et al. (2008) as well as Bunkanwanicha, Fan, and Wiwattanakantang (2013) use cremation booklets that detail the deceased's family history to reconstruct the family trees of business-owning families (in Thailand, such books are traditionally distributed as gifts to funeral guests). The distribution of methodologies employed by the studies in this sample is summarized in figure 22.2 below.

Theories Applied

Strong and adequate theoretical foundation is the cornerstone of organizational research and key to understanding the systematic reason for a specific phenomenon (Corley and Gioia 2011; Reay and Whetten 2011; Sutton and Staw 1995). A lack of adequate theory encourages

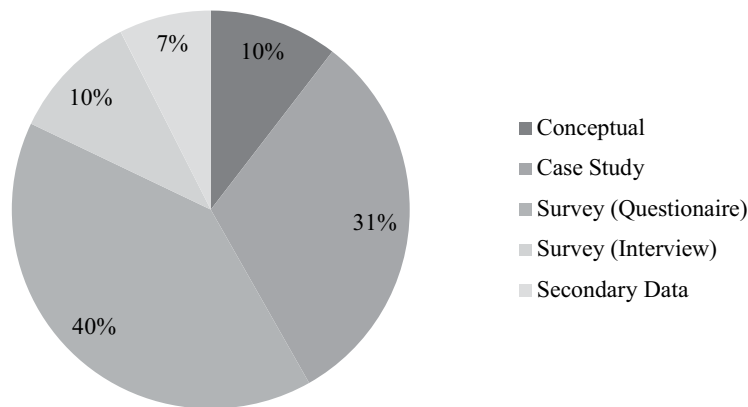


Figure 22.2 Methodologies Employed
Source: Own

the fragmentation of research findings and prohibits the generalization of insights into family business processes and outcomes. This problem is especially apparent for the studies reviewed in this paper – 50 percent of the studies lack an identifiable theoretical foundation. Many studies discuss and list various variables and constructs and connect them based on previous findings documented in the literature, but lack a coherent theory that explains *why* these variables are selected and *how* they influence each other.

Among the studies that have a clear theoretical foundation, nearly half use established family business theories such as agency theory (e.g., Karra, Tracey, and Phillips 2006), social capital theory (e.g., Sorenson et al. 2009), systems theory (e.g., Distelberg and Blow 2011), conflict theory (e.g., Davis and Harveston 2001) or social identity theory (e.g., Brannon, Wiklund, and Haynie 2013). Some papers borrow from related fields. For example, some borrow from psychology: Treviño-Rodríguez and Bontis (2010) use Cultural-Historical Activity Theory (Vygotsky 1978). Others borrow from family science: Kwan, Lau, and Au (2012) employ Conservation of Resource Theory (Hobfoll 1989); Haberman and Danes (2007) build upon Fundamental Interpersonal Relations Orientation Theory (Schutz 1958); and Penney and Combs (2013) use the Circumplex Model (Olson, Sprenkle, and Russell 1979). Additionally, several papers use theories that have been developed specifically for family firm research, such as the Sustainable Family Business Theory (e.g., Danes et al. 2009) developed by Stafford et al. (1999). Only a handful studies (e.g., Shepherd 2009) engage in theory building to develop new theoretical foundations for use in family firm research.

Journals

The majority of articles identified for this paper (55 percent) were published in the *Family Business Review*, a premier journal for family firm research. The second major journal for family-related research is *Entrepreneurship Theory and Practice*, with 16 percent, followed by the *Journal of Business Venturing* with 7 percent and *Journal of Small Business Management* with 6 percent of the papers in this sample. Generally, the majority of papers fall into the ABS journal category “Entrepreneurship and Small Business Management,” while only a few papers that include the family as a variable were published in journals that belong to fields such as “Economics” (2 percent) or “Finance” (3 percent).

Options for the Assessment of Family Structure

This review of ways to conceptualize and operationalize the business-owning family as a variable will start by classifying and discussing measures that belong to the family structure category in the framework presented in the previous section. As a first step, we examine the structural dimension of the family at the dyad level, followed by the whole family level.

Dyad Structure

Only a very small number of studies have examined the structural dimensions of family dyads in a family firm context. Variables include the *gender* and *age relationship* of dyad members as well as whether they are *romantically linked* or *biologically linked* or *divorced*. For example, Brannon, Wiklund, and Haynie (2013) study dyadic entrepreneurial teams that are either *biologically linked* (e.g., father-son or brother-sister) or *romantically linked* (couples) to examine which is more likely to achieve first sales. By analyzing 295 teams, they find that couples are more successful in terms of first sales than biologically linked entrepreneurial family dyads. The authors

also examine the *age relationship* (i.e. age gap) present within the dyads but find no significant effect. While Brannon, Wiklund, and Haynie (2013) do not examine the *gender* of the dyad members, Haberman and Danes (2007), Vera and Dean (2005), and Bunkanwanicha, Fan, and Wiwattanakantang (2013) do. Haberman and Danes (2007) compare two family dyad decision teams in two family firms based on their gender configuration to shed light on the power structures and interactions within the family during succession. Using FIRO theory (Schutz 1958) as a theoretical base, they find that female family members who are not active in the business experience exclusion, high levels of conflict, and low levels of integration in the father-son dyad succession, while such women experience feelings of inclusion and integration from family members in the father-daughter configuration. In a similar study, Vera and Dean (2005) compare ten father-daughter and mother-daughter successions. They find that the mother-daughter dyad is associated with higher levels of conflict compared to the father-daughter dyad. Bunkanwanicha, Fan, and Wiwattanakantang (2013) examine the effect of dyads that are newly formed through marriage on the cumulative abnormal returns of family firms in Thailand. They find that both a son of founder-new spouse and a daughter of founder-new spouse dyads lead to abnormal returns when the new spouse comes from an influential family.

The previous studies examine the case of dyad formation or analyze existing dyads. However, dyads can also disintegrate – mainly through *divorce*. Galbraith (2003) examines the effect of marital dissolution on the short-term financial performance of 52 family firms. He finds that the majority of firms report a decline in revenue and profit in the post-separation year. The author's results also indicate that the financial loss is more severe when the female member of the marriage dyad remains in the business compared to the male member. However, a divorce must not always be associated with a negative impact on the business. For example, Cole and Johnson (2007) examine successful post-divorce “copreneurs,” i.e. couples that have joint ownership and responsibility for a business. They find that the breakup of one dyad (i.e. marriage) can potentially lead to the strengthening of another dyad (i.e. successful business team). For instance, they report that divorce enabled the female dyad member to participate more effectively in the business relationship by shifting the balance of power in her favor. While the study of dyad structure and dyad dissolution in family firms is still in its infancy, many interesting research opportunities arise that will be discussed in later parts of this chapter.

Whole Family Structure

Studies on the structural dimension of business-owning families as a whole are quite numerous compared to papers on dyad family structure. Nearly 20 studies in the sample concentrate on aspects related to whole family structure. Major variables include the *family size*, *birth order*, *marriage*, *divorce*, *death*, and *social status* of the family as a whole.

An essential element of a family's structural configuration is its *size*. For example, Bertrand et al. (2008) find that family size is strongly correlated with the number of family members active in the business. Furthermore, the authors find that business groups run by larger families, especially with many sons, tend to exhibit lower performance. In a similar vein, Bennedsen et al. (2007) use a unique dataset from Denmark to demonstrate that the size of the business-owning family, measured by the number of children and specifically the number of sons, is negatively related to profitability around succession. On the other hand, the authors find that family size has a positive impact on intra-family succession. Wiklund et al. (2013) shed further light on this finding by demonstrating that family size has an impact on the probability of internal succession, but that the children's life stage plays an important role. Wiklund et al. (2013) find that the larger the number of adult heirs, the less likely an internal transition of ownership becomes. On the

other hand, a larger number of young children seems to increase the probability of internal ownership transition, indicating that the age levels of family members can have an important influence on family business outcomes. Danes et al. (2009) show that family size is positively related to gross revenue, but do not elaborate on whether or not they control for the age of the firm. Using the same dataset with different dependent variables, Olson et al. (2003) demonstrate that family size can also have a negative impact on the family. They find that family size is strongly negatively correlated with the functional integrity of the business-owning family. Additionally, Michael-Tsabari, Labaki, and Zachary (2014) accentuate the importance of family size by demonstrating in a qualitative setting that the growth of the family in size can trigger entrepreneurial behavior in family firms. On a conceptual level, Arregle et al. (2007) discuss the negative impact that family size can have on the closure and density of the family network and therefore on the level of family social capital (FSC). These results show that family size is an important variable that has the potential to influence family business outcomes in a negative as well as a positive way, depending on the variable of interest.

However, studies have shown that not only the size of the family but also the composition of the family tree, can have a profound influence on family and organizational outcomes. Among the most important variables in this context is the *birth order* of children in the business-owning family. Bennedsen et al. (2007) show that an internal succession is more likely when the first-born child is male. This finding is supported by qualitative case-studies conducted in Brazil by Curimbaba (2002). The author discovers that female members of business-owning families were less likely to be chosen as the successor when older brothers are present. Female family members at the end of the birth order termed 'invisible heiresses,' were not prepared from youth to become professionals in the family business. Firstborn daughters, on the other hand, were accustomed to the family business from a young age (Curimbaba 2002). The results from Vera and Dean (2005) partly support this finding by demonstrating that there is a general preference for the firstborn child as a successor, but that female firstborn children have to work harder to prove themselves. In a different setting, Bunkanwanicha, Fan, and Wiwattanakantang (2013) find that the marriage of sons and daughters of the current CEO to members of well-connected families in Thailand leads to abnormal returns irrespective of birth order.

The above mentioned study by Bunkanwanicha, Fan, and Wiwattanakantang (2013) leads to another important structural variable for business-owning families – *marriage*. Marriage between two individuals is a key structural bond within the family system in most societies. Hence, the marriage of members of business-owning families can have a profound impact on the business as well as the family. On the one hand, individuals who become part of a business-owning family through marriage may bring valuable resources, such as financial assets, family contacts, or managerial knowledge, into the family firm. On the other hand, marriage can disrupt the existing family structure and lead to conflict. In a study of Philippine in-laws, Santiago (2011) found that the inclusion of in-laws is conditional to several factors. For example, the author finds that daughters-in-law were generally more welcome in family firms regardless of their educational level and experience; sons-in-law, in comparison, were only included after they demonstrated their managerial ability. Bunkanwanicha, Fan, and Wiwattanakantang (2013) demonstrate that not only the qualification of an in-law but also the social status and level of influence of the in-law's family can impact the firm. The authors find that a marriage between a member of a business-owning family and a member of another business or political family leads to abnormal stock price increases in the days after the marriage announcement. The marriage status of members of business-owning families not only impacts business outcomes but also impacts family and individual variables. For example, Kwan, Lau, and Au (2012) find that marriage contributes positively to the level of job satisfaction of family business owners. These studies demonstrate that

marriage is an important structural variable for business-owning families. Marriage increases the size of the family and provides an opportunity to bind valuable tangible and intangible resources to the family and ultimately the family business. However, the increased complexity of the family system resulting from a marriage can also constitute a challenging change for the family as well as the business system (Stafford et al. 1998; Santiago 2011).

While birth and marriage contribute to the size and resource endowment of the family, *divorce* and *death* curtail the family system. The divorce process within a family usually generates conflict and mistrust, factors that tend to be associated with negative outcomes in family firms. This assumption is supported by an empirical study by Rutherford, Muse, and Oswald (2006) who find that divorce within the business-owning family is associated with lower sales in family firms. In a similar study, Galbraith (2003) examines 52 cases of divorce and its impact on family business performance. He finds that a divorce event in the family system is associated with a decrease in revenue, profitability, and equity. A qualitative study by Santiago (2011) provides a possible explanation for these findings by showing that the termination of a family relationship through a divorce will usually also lead to the cessation of the business relationship regardless of qualification and talent. The resulting conflict and presumably financial settlement can strain the business and result in a dwindling performance. The *death* of a family member is another source of major structural upheaval for the business-owning family (James, Jennings, and Breitreuz 2012). Michael-Tsabari, Labaki, and Zachary (2014) demonstrate in a qualitative setting that the death of a family member can trigger ownership and management succession in family firms. Bennedsen et al. (2007) use the death of a family CEO as an instrumental variable to determine the effect of intra-family succession on the performance of family firms. Despite the potentially severe impact that the death of a family member can have on the family and the business, no other published studies other than the two above mentioned were identified in the reviewed literature. However, an unpublished paper by Bennedsen, Perez-Gonzalez, and Wolfenzon (2010) using the same dataset from Denmark as Bennedsen et al. (2007) finds that the death of the CEO or another member of the family is strongly related to a decline in firm profitability and sales growth. These findings underscore that disruptions in the family's structure are an important antecedent of family and family business outcomes that merit further research.

Options for the Assessment of Family Dynamics and Functioning

Besides the structural dimension of family assessment detailed in the previous section, business-owning families can also be analyzed by examining the unique dynamics within the family and the functioning of the family unit. Such latent psychodynamic constructs are usually measured using survey-based measures and scales that are designed to capture individuals' perceptions of the family as a group. Alternatively, psychodynamic constructs may be assessed in a qualitative case study approach. Again, the unit of analysis can be divided into dyadic and whole family levels.

Dyad Dynamics and Functioning

Several studies have examined the dynamics and the functioning of dyadic pairs within business-owning families. Variables that have been assessed include the levels of *conflict*, *trust*, *communication* and *emotional connection*. Furthermore, two studies have examined the *overall relationship quality*. Given that family businesses are "fertile fields for conflict" (Harvey and Evans 1994; 331), *conflict* is an important variable on a family level as well as a dyadic level. Aspects such as sibling rivalry or incumbent-successor conflict can have a profound impact on both

the family and the business system. In their conceptual paper, De Massis, Chua, and Chrisman (2008) highlight the importance of sibling and parent-child conflict as a major relational factor that prevents succession in family firms. Vera and Dean (2005) observe the role of dyadic conflict in succession. The authors study the succession of 10 female family business owners and find that conflict between the mother and the successor, as well as between the siblings and the successor, can have an impact on the succession process. In one case this culminated in the disbursement of a sibling to keep the business in family hands. The studies identified in the literature all use a conceptual or qualitative approach to study conflict in family business dyads. Hence, no scales or measure could be identified that measure the level of conflict in such dyadic relationships.

While conflict is generally associated with negative outcomes in a succession process, *trust* is antithetic. In a study of 332 South African family firm successions, Venter, Boshoff, and Maas (2005) find that high levels of trust between the owner-manager and the family successor are associated with the successor's increased willingness to take over, ultimately culminating in a successful succession process. This relationship is substantiated by the study of Dawson and Hjorth (2012) who employ narrative analysis to an owner-manager's autobiography to demonstrate that a lack of trust in the incumbent-successor dyad relationship can jeopardize the succession process and lead to its failure. However, trust is critical not only in parent-child dyads but also in couples. Cole and Johnson's (2007) study of successful post-divorce copreneurial couples finds that trust was an important factor that allowed individuals to continue working together effectively even after their marriage disintegrated. The authors also identify another important construct for dyad functioning – *emotional connection*. Economic considerations played only a marginal role in the decision to stay together while the emotional connection was one of the main reasons for continued cooperation post-divorce. Individuals who have shared values and a shared history form a unique emotional tie that allows them to work together effectively even in a difficult environment.

Closely related to the previous constructs is *communication* within the family dyad. Communication is an essential aspect for individuals working together and is especially important when these individuals are in the process of ownership and/or management succession. In their qualitative study, Dawson and Hjorth (2012) clearly identify the role played by a lack of communication in a failed succession process.

The final construct – *overall relationship quality* – is a meta-level construct that combines the constructs previously discussed. Venter, Boshoff, and Maas (2005) measure the relationship quality between the incumbent and the successor based on items from a scale developed by Lansberg and Astrachan (1994). They find that an overall positive relationship quality of the incumbent-successor dyad has significant influence on the satisfaction of the succession process and the profitability of the family business. This finding is underpinned by Cater and Justis' (2009) study on succession in small family firms. Employing a case study approach, they find that a positive parent-child relationship is important for a successful succession and enhances the development of successor leadership.

As the studies discussed above demonstrate family business literature has in recent years introduced and employed several interesting constructs for dyad dynamics and functioning. The nature and quality of dyadic family relationships become especially relevant prior to and during the succession process in family firms, which is highlighted by the large number of studies that focus on succession. Also noteworthy is the fact that the majority of studies that examine business-owning families on the dyadic level employ a case study approach, while only a few collected data using surveys. This results in a particularity small number of scales available for the assessment of dyad dynamics and functioning in a family business context, suggesting a promising avenue for future research.

Whole Family Dynamics and Functioning

Acknowledging that “the family is an organized whole and cannot be understood from the combined characteristics of its members” (Shepard 2009; 84), scholars have investigated the functioning and the dynamics within the business-owning family in its totality. Analogous to the dyadic level, construct measurement can be obtained via self-reported survey procedures, in-depth interviews, content coding of secondary documents, or observed interactions of family members (Jacob and Tennenbaum 1988). Assessed constructs include the level of *conflict*, *cohesion*, *communication*, *trust*, *altruism*, *social capital*, *adaptability*, and *functional integrity present* in the family system.

Among these constructs that reflect the inherent dynamics within the business-owning family, *conflict* stands out as the variable that has received the most scholarly attention to date. This is hardly surprising, given that “family firms are often plagued by substantial conflict” (Kellermanns and Eddleston 2004; 209). Conflict is a prime example of family dysfunction and is traditionally associated with negative outcomes for the family firm (Harvey and Evans 1994; Levinson 1971). However, recent research reveals that different types of conflict – namely task, process, and relationship conflict – exist. While relationship conflict is usually associated with negative outcomes, task, and process conflict can be beneficial up to a certain level (Kellermanns and Eddleston 2004). Eddleston and Kellermanns (2007) survey 60 family firms using an adapted form of the relationship conflict scale developed by Jehn (1997) and Jehn and Mannix (2001) to demonstrate that relationship conflict within the business-owning family does indeed have a negative influence on family firm performance. Using the same scale, Chirico and Salvato (forthcoming) find that relationship conflict in family firms negatively impacts product development by reducing knowledge internalization among family members. The negative influence of relationship conflict on knowledge integration is further studied on a conceptual level in Chirico and Salvato’s (2008) paper. The potential negative impact of interpersonal conflict is additionally emphasized by the qualitative studies by Ainsworth and Cox (2003) and Cabrera-Suárez (2005). The authors compare several family firms and find that conflict can prevent intra-family succession, for example by forcing the potential successor out of the firm. Regarding the antecedents of interpersonal conflict, Davis and Harveston (1999) employ a North American sample to find that conflict across generations is influenced by the generation of ownership and the presence of a generational shadow. Eddleston, Otondo, and Kellermanns (2008) study the effect of participative decision-making and generational ownership dispersion on the relationship and cognitive (i.e. task and process conflict) conflict. Using the same scale as Eddleston and Kellermanns (2007) and Chirico and Salvato (forthcoming), they find that participative decision-making is positively related to relationship and cognitive conflict when ownership is dispersed and negatively related when ownership is concentrated.

High levels of conflict in family firms are likely to impact negatively the *functional integrity* of the business-owning family. The integrity of the family as a whole has been examined in several studies. Using Family APGAR, a scale prominent in the medical field to measure overall family health and functioning by examining an individual’s satisfaction with family relationships (Smilkstein 1978), Olson et al. (2003) find that the number of children and level of conflict in the family have a negative impact on its functional integrity, while a negotiating family culture has a positive impact. In a similar study, Danes and Olson (2003) also find that conflict is associated with lower levels of functional integrity. Interestingly, Danes et al. (2009) find no relationship between family integrity measured using the APGAR scale and the perceived success of the family firm, indicating that problematic family dynamics do not necessarily spill over into the business sphere.

The level of *cohesion* within the business-owning family has also been a major variable of interest for family business researchers. Its importance for business-owning families is highlighted by Davis and Herrera (1998; 255), who consider “the cohesiveness of the family shareholder group (...) (as) perhaps the most fundamental measure of its effectiveness.” This conclusion receives support from Zahra’s (2012) study on the effect of family cohesion on organizational learning. The author finds that cohesion amplifies the positive effect of family ownership on the breadth and speed of organizational learning in family firms. Contrarily, Lee (2006) employs a sample of ethnic Chinese in Singapore and finds no support for the hypothesized relationship between family cohesion and organizational commitment, job satisfaction, or propensity to leave. The two previous authors have adapted different items from the literature to construct scales to measure family cohesion, albeit without going through the psychometric steps for scale development. Björnberg and Nicholson (2007) overcome this problem by developing specific scales for emotional and cognitive cohesion as part of their Family Climate Scales (FCS). Cabrera-Suárez, Déniz-Déniz, and Martín-Santana (2015) employ the cognitive and emotional cohesion items from the FCS to measure the cognitive and structural dimension of family social capital.

While Cabrera-Suárez, Déniz-Déniz, and Martín-Santana (2015) equate social capital and cohesion in their study, Salvato and Melin (2008) find that family cohesion is an important antecedent for the development of family social capital by comparing four family firms in the Italian wine and spirits industry. On a conceptual level, this finding is supported by Arregle et al. (2007), who propose that closure, a construct related to cohesion, strengthens family social capital. However, the importance of family cohesion is recognized not only among family business scholars but also in neighboring fields such as family science. Penney and Combs (2013) use an established theoretical model from family science, the Circumplex Model (Olson, Sprenkle, and Russell 1979), to explain why some families are more innovative than others. They argue that cohesion, one of the two central dimensions of the model, plays a central role in explaining innovation in family firms. A small number of authors, such as Salvato and Melin (2008), have additionally discussed the possibility that an excessive level of cohesion can have a negative influence by exacerbating existing agency problems in family firms.

Cohesion is not the only factor associated with positive outcomes in family firms; aspects such as *harmony*, *trust*, *altruism*, and *reciprocity* are important as well. Using a scale developed by Sharma (1997), Venter, Boshoff, and Maas (2005) we find that more *harmonious* relationships among all members of the family system correspond to a better relationship between the incumbent and the successor. Farrington, Venter, and Boshoff (2012) hypothesize that family harmony is positively related to perceived financial success, but find no statistically significant relationship. However, they find that clear strategic leadership and skill diversity within the family’s top management team has a positive impact on the level of family harmony. Closely related to harmony is the level of *trust* present in the business-owning family. A qualitative study by Salvato and Melin (2008) demonstrates that trust is an important antecedent for the development of family cohesion and family social capital. In a similar study, Steier (2001) finds that family trust plays an important role in the governance of family firms. Trust can significantly reduce transaction costs, hence providing an important source of competitive advantage. However, the author also finds that trust slowly erodes as family firms and business-owning families evolve and grow, necessitating an investment into trust-building activities to maintain a healthy level of trust.

Complementary to trust is the concept of *altruism*. Altruism is defined as a trait that links the welfare of an individual to the welfare of others (such as family members) (Kellermans and Eddleston 2004). Employing a scale developed by Becker and Vance (1993), Eddleston, Kellermans, and Sarathy (2007) find that altruism within the business-owning family is positively associated with family firm performance. Using the same scale, Eddleston and Kellermans

(2007) offer a more detailed perspective by demonstrating that altruism increases participative strategy processes and decreases relationship conflict, which affects organizational performance accordingly. The negative relationship between altruism and harmful relationship conflict is further discussed on a conceptual level in a paper by Kellermanns and Eddleston (2004). And, in an in-depth case study of a Turkish family firm, Karra, Tracey, and Phillips (2006) find that altruism reduces agency costs and serves as a driver for business growth in the early stages of the firm's development. However, the authors also find that if the welfare of the family is prioritized above the firm's well-being – a case of too much altruism – the firm's development can be hampered. A closely related but distinct concept is family member *reciprocity*. Reciprocity refers to the degree to which family members assist each other and share responsibilities to accomplish organizational tasks. As such, reciprocity facilitates stewardship behavior and serves as a way to channel altruism towards the family firm (Kellermanns et al. 2012). In their empirical study of 70 family firms located in Northeastern USA, Kellermanns et al. (2012) find that reciprocity within the business-owning family has a positive impact on the performance of family firms.

The family-related constructs discussed above all require *communication* and are associated with different levels of *social interaction* within the business-owning family. Björnberg and Nicholson (2007) developed a scale to measure the level of open communication within the business-owning family as part of the FCS. Cabrera-Suárez, Déniz-Déniz, and Martín-Santana (2015) use this scale as a component to develop a family social capital construct and find that this is positively related to the level of trust present in the business-owning family. Distelberg and Blow (2011) use qualitative data and social network analysis to construct communication networks in family firms. They find that too much communication exclusively within the business-owning family can result in the development in further isolated networks, which in turn has the potential to have a negative impact on the family business. *Social interaction* within the family, such as family meetings, facilitates communication between family members active in the business and passive shareholders. Mahto et al. (2010) hypothesize that families that interact a lot with each other will exhibit greater satisfaction with firm performance due to the fact that they are better informed and hence better understand the reasons for a potential deterioration of family firm performance. Their analysis of 2,224 family firms supports this hypothesis, hence emphasizing the importance of communication and social interaction to business-owning families and family firms.

Complex systems such as business-owning families also require a certain level of *adaptability* and *willingness to change* to cope successfully with challenges. Business-owning families that are able and willing to adapt to situational changes are more likely to survive environmental shifts and to pursue beneficial entrepreneurial activities (Kellermanns and Eddleston 2006). Families that lack the capacity to change, however, impair the long-term survival of the family firm. The importance of adaptability to systems has long been recognized by system theorists such as von Bertalanffy (1968), who asserted, "system sickness is system rigidity." Several of the reviewed studies support this assertion. Kellermanns and Eddleston (2006) study 74 family firms and find that families who are more willing to change, have a positive impact on corporate entrepreneurship. Lee (2006) examines 88 family firms in Singapore and finds that family adaptability is positively related to organizational commitment and negatively related to the propensity to leave the family business. The negative impact of low adaptability and an overly strong focus on tradition is underscored by an exploratory inductive study by Miller, Steier, and Le Breton-Miller (2003). The authors find that an excessive attachment to the past has a negative impact on strategy, organization, and governance in family firms and can ultimately culminate in a decline in performance. On a conceptual level, Penney and Combs (2013) and Distelberg and Sorenson (2009) discuss the impact of adaptability. Penney and Combs (2013) employ the Circumplex

Model (Olson, Sprenkle and Russell 1979), an established family science concept, to determine the extent to which the level of adaptability within the family system can impact innovation. The model predicts that balanced levels of adaptability are most beneficial while too much change can be associated with negative outcomes. This accentuates that dynamics within the business-owning family can also be related to family business outcomes in a curvilinear manner.

Among the variables that characterize and differentiate business-owning families, the level of *family social capital* (FSC) plays a special role, given that “the family is a source, builder and user of social capital” (Bubolz 2001; 130). On a conceptual level, Arregle et al. (2007) discuss the importance of FSC to the development of organizational social capital (OSC) and investigate mechanisms that link the spheres of social capital. By adapting a scale by Tsai and Ghoshal (1998), Chirico and Salvato (forthcoming) find that family social capital has a positive impact on the internalization of knowledge among family members, which in turn has a positive impact on the level of product development in family firms. The conceptual relationship between FSC and knowledge integration among family members is examined further in an early paper by Chirico and Salvato (2008). In a recent study, Cabrera-Suárez, Déniz-Déniz, and Martín-Santana (2015) find that family social capital is a determining factor in the establishment of corporate goals related to the interests and needs of key stakeholders. Further insight into how specific components of FSC, namely structural and relational social capital, influence strategic processes and outcomes in family firms is provided by a qualitative study of wine estates by Salvato and Melin (2008). Carr et al. (2011) add a third social capital dimension – cognitive social capital. In the course of their paper, Carr et al. (2011) develop a reliable and valid scale that measures the level of structural, relational, and cognitive social capital present among family members active in the firm, thereby contributing to the current trend towards more accurate construct measurement (Pearson and Lumpkin 2011).

While the constructs discussed above represent the ones that have attracted most attention by family business scholars, several other interesting and relevant family dynamics and functioning variables have been reported and examined in the literature. These include, among others, the level of *intergenerational attention* (e.g., Cabrera-Suárez, Déniz-Déniz, and Martín-Santana 2015; Björnberg and Nicholson 2007), *participative decision making* (e.g., Eddleston et al. 2008), *affective commitment to goals* (e.g., Chirico and Salvato, forthcoming), and *knowledge integration* among family members (e.g., Chirico and Salvato 2008). These are not discussed in further detail in the course of this paper; however, the complete list of options available for the assessment of family functioning and family dynamics can be found at the end of this paper.

Psychometric Quality of Measures

Among the studies that focus on the functioning and dynamics within family dyads and the whole business-owning family, the majority uses scales to measure the construct under examination. The psychometric quality of scales used in family business studies has recently attracted considerable debate among scholars. Pearson and Lumpkin (2011; 287) observe that “valid and reliable measurement is essential to the development of the ‘normal science’ of family firms” and urge scholars to pay more attention to accurate construct measurement. Scholars should hence only employ scales that demonstrate sufficient validity (Does the scale measure what it pretends to measure?) and reliability (Does the scale measure the construct accurately?). Validity can be assessed *inter alia* by conducting exploratory and confirmatory factor analyses while reliability can be gauged using Cronbach’s alpha (Hinkin 1995). Papers that use newly developed scales or adapt existing scales should hence contain, among others, a clear construct definition grounded in theory, item sources/item generation procedure, a construct validity assessment,

and a reliability assessment (Pearson and Lumpkin 2011). The scales and measures employed by the articles reviewed for this paper are compared against these criteria to assess their psychometric quality.

While most studies report the scales' reliability, mainly by computing Cronbach's alpha, only a handful of studies assess the scales' validity through exploratory or confirmatory factor analyses. Many studies state that "items were adapted from the literature" or "the construct was measured using the following items," without going into detail where the items come from or what factor structure underlies them. This is especially predominant among studies published in the late-1990's and early to mid-2000's. More than half of the reviewed studies adapt items from existing scales. However, only a few of the adapted measurement instruments meet the criteria laid out by Pearson and Lumpkin (2011). A noteworthy example is the paper by Cabrera-Suárez, Déniz-Déniz, and Martín-Santana (2015), who conduct an exploratory and confirmatory factor analysis to demonstrate the validity of their adapted measures. A small number of authors have engaged in the development of new family related measures. Examples are Björnberg and Nicholson (2007), Carr et al. (2011), Chirico and Salvato (forthcoming) and Zellweger, Nason, and Nordqvist (2012). This mirrors Pearson, Holt, and Carr's (2014; 567) conclusion that "a limited number of measures have been developed for specific use in family firms studies." Although there are some promising developments, the psychometric quality of the scales and measures used in the reviewed studies does not always meet the standards expected in contemporary peer-reviewed research. Scholars should accordingly be careful employing previously used measures before ensuring their validity and reliability.

Discussion

The main purpose of this paper was to synthesize and assess the options available to operationalize the business-owning family in family business research. In the past, scholars have used several interesting constructs and measures to assess the business-owning family's structure as well as its internal dynamics and functioning. These studies provide valuable findings that help scholars to better understand family business outcomes and their antecedents. To a large extent, however, the business-owning family still remains a "missing variable in organizational research" (Dyer 2003), and one that lacks a clear definition and requires further scholarly attention in order for the field to progress (Sharma, Chrisman, and Gersick 2012; Sharma, Melin, and Nordqvist 2014).

This chapter contributes to the literature in several ways. First, we provide a systematic and replicable review that structures and consolidates family measures and constructs in a transparent and logical framework. The paper at hand can consequently serve scholars as a valuable resource to identify a suitable and interesting family construct and measurement tool, hence laying the groundwork for more family-related research. Second, we identify blind spots in the scope of options available to capture family heterogeneity and in this context provide references to avenues for promising future research. Third, the assessment of the psychometric quality of existing measures contributes to the emerging debate on accurate construct measurement in the family business field (e.g., Pearson and Lumpkin 2011; Pearson, Holt, and Carr 2014).

Based on these findings, we highlight starting points for future research and discuss possible options to overcome shortcomings prevalent in the family related constructs and measures currently available. A primary observation in this regard is that the majority of studies are poorly grounded theoretically. As indicated in the previous part, nearly fifty percent of the reviewed studies lack a clear theoretical foundation. This theory deficiency is a possible explanation for the fragmentation and apparent contradictions of research findings. While we would not go as far as Mintzberg (2005; 361) - "no theory, no insight. And if no insight, why do research?" - it is

evident that family-related studies in the family business realm require a stronger theoretical base to fully leverage research findings. This conclusion is supported by Dyer and Dyer (2009; 218), who emphasize: “to measure family effectiveness researchers must get at the underlying family processes. This requires the researcher to have a theory of what constitutes effective family functioning.” While such theories are not readily available in the management and organization research field, neighboring disciplines such as family science provide rich grazing grounds for theoretical models on family functioning (Dyer & Dyer 2009; James, Jennings, and Breitzkreuz 2012; Litz, Pearson, and Litchfield 2012; Sharma, Melin, and Nordqvist 2014). The lack of widespread application of family science theories in family business research is likely attributable to the fact that quite often “substantial theory-building efforts are necessary to bridge the gap between family science and outcomes that interest family business researchers” (Penney and Combs 2013; 1422). In order to enhance the theoretical grounding of family-related studies, future research should accordingly engage in more such theory building and theory transfer to further integrate theoretical models from family science. Penney and Combs (2013) provide an interesting demonstration of such theory transfer by adapting the Circumplex Model (Olson Sprenkle and Russell 1979), a well-established family science model, to discuss how families that differ along the model’s two dimensions – cohesion and adaptability – are associated with varying innovation outcomes in family firms. Such studies, well grounded in theory, promise to advance our understanding of business-owning families and their impact on business outcomes. Hence, we urge scholars to devote efforts to embed future family-related studies deeper in theories from organizational and management studies as well as family science.

Furthermore, most studies overlook an important variable – the institutional, cultural, and social contexts (Welter 2011). “Family” can mean something very different depending on the context (Szapocznik and Kurtines 1993). Some family dynamics, such as conflict or low levels of cohesion, might be associated with low family functioning and a negative impact on business outcomes in a certain context, while not posing a problem in another. As such, different findings regarding the role of family cohesion in the studies conducted by Lee (2006) compared to Zahra (2012) and Cabrera-Suárez, Déniz-Déniz, and Martín-Santana (2015) might be attributable to different social and cultural contexts. Lee (2006) examines ethnic Chinese in Singapore while Zahra (2012) uses a North American and Cabrera-Suárez, Déniz-Déniz, and Martín-Santana (2015) a Spanish sample. China has a different attitude towards family and work than Western societies, which could explain the different research findings (Yang et al. 2000). Furthermore, scholars should take into the account whether a nuclear system or an extended, kinship-based family system is the prevalent family institution in a certain context before assessing the business-owning family (Gorall and Olson 1995). Accordingly, we follow Welter’s (2011) call that urges scholars to employ a “context lens” when examining family business processes and outcomes.

Another important observation apparent from the reviewed articles is that accurate and reliable construct measurement has not received the level of scholarly attention that it merits. While there are notable exceptions, many scholars adapt existing scales without reporting the information necessary to assess their validity. Even fewer scales were developed specifically to measure family related variables in family business research. This is congruent with Pearson, Holt, and Carr’s (2014) assertion that measurement issues are one of the field’s greatest challenges. Accordingly, we agree with Sharma, Melin, and Nordqvist (2014; 8) that “great promise lies in devoting efforts to (...) define and develop valid and reliable measures for the family variable.” However, the development of valid and reliable scales requires a clear construct definition grounded in theory and a strong theoretical foundation (Hinkin, 1998; Pearson and Lumpkin 2011). Hence, scholars that set out to develop new measurement instruments to assess the functioning and dynamics within business-owning families need

to find or develop theories that provide a clear reference point for such scales. As discussed in the previous part, family science offers interesting theoretical concepts that can enrich family business research. While scales exist for most family science theories, they are mostly geared towards the nuclear family and clinical applications and hence not directly applicable to family business research (Björnberg and Nicholson 2007). The development of new scales or adaptation of existing scales according to the psychometric standards laid out by leading scholars (e.g., Hinkin 1995; MacKenzie, Podsakoff, and Podsakoff 2011) to enable the empirical application of family science models in family firm research is hence a promising research endeavor.

While the reviewed studies have predominantly explored the effect of the family structure or family dynamics and functioning on family business outcomes, few have combined the psychodynamic and structural types of measures in one study. Splicing together both approaches is likely to produce valuable insights into family business behavior and outcomes. In their conceptual work on the development of organizational social capital, Arregle et al. (2007; 89) ask the following question: "When the FSC/OSC balance suddenly changes, due to family events (divorce, scandal, etc.) (...) can the OSC be sustained?" Developing this thought further, many research questions remain unexplored that would link alterations in the business-owning family's structure to changes in family dynamics and functioning, which in turn have the potential to impact business outcomes. Studies that examine the effect of profound changes in the family's structure, such as the death of an important family member, are still in their infancy. None of the reviewed studies explore how such a structural upheaval impacts family dynamics like cohesion, conflict, social capital, or trust. Hence, interesting research opportunities arise for studies that examine this interplay between family structure, family dynamics, and functioning, as well as family business variables.

The overwhelming number of studies reviewed for this paper have examined the business-owning family as an independent variable and business outcomes as the dependent variable. However, few studies examine the antecedents of the business-owning family's structure and functioning. For example, how do families maintain adequate levels of cohesion and trust? These family variables have the potential to harm or benefit the family business, but how can the family ensure that they do not reach harmful levels? Take, for instance, the study by Eddleston and Kellermanns (2007) that finds that relationship conflict has a negative impact on family firm performance – what mechanisms can prevent such harmful relationship conflicts? Several scholars have suggested that family governance mechanisms, such as a family constitution or regular family meetings, could have a positive impact on the functioning of business-owning families (e.g., Distelberg and Sorenson 2009). While the impact of family governance mechanisms on business outcomes has been examined by a handful of studies (e.g., Berent-Braun and Uhlaner 2012), research on the impact of such governance mechanisms on the family itself is virtually nonexistent, indicating fertile ground for further research. As also recommended by Dyer and Dyer (2009), future studies should subsequently focus on the business-owning family as a dependent variable and examine the antecedents of important constructs that characterize business-owning families.

This systematic literature review is also associated with some limitations. First, some interesting articles may have been omitted due to the methodology employed. Some articles might examine variables related to the business-owning family without any indication in the articles' abstracts, title, or keywords. We try to mitigate this problem by analyzing the papers cited by the reviewed articles to find papers omitted in the main literature selection process; however, this does not completely assure that all relevant research is captured by this review. Second, by focusing exclusively on studies published in highly ranked journals, we ensure that the studies meet high-quality standards. On the other hand, this might exclude research findings that provide

interesting constructs and measures that could be used to assess the business-owning family. Finally, we limited our review to journals that predominantly publish management, organization, strategy, and economics research. As indicated above, promising family related constructs and measures could exist in neighboring fields such as psychology or sociology – these are not captured by the review at hand. Nevertheless, we believe that by following the guidelines for a systematic literature review, we have captured the majority of relevant research for the research question at hand.

Conclusion

In their editorial for the 25th anniversary of the *Family Business Review*, Sharma, Chrisman, and Gersick (2012; 86) argue that it is important to “deepen our knowledge of variables related to the family system so we will better understand why, when, and how its characteristics attributes are likely to influence the behaviors and performance of family firms.” Through a systematic and replicable review of constructs and measures to assess the family system, we have laid the groundwork for such family related research to flourish in the future. Our review consolidates and assesses existing constructs and measures and identifies blind spots, which in turn can serve as starting points for prospective research endeavors.

Table 22.2 Classification and Summary of Reviewed Articles

<i>Reviewed Articles on Dyad Structure</i>	† = empirical ** = case study/qualitative * = conceptual
<ul style="list-style-type: none"> • Age Relationship Brannon et al. (2013) † • Divorce Cole & Johnson (2007)**, Galbraith (2003) † • Gender of Dyad Members Bunkanwanicha et al. (2013) †, Haberman & Danes (2007) †, Vera & Dean (2005)** • Romantically or Biologically Linked Brannon et al. (2013) † 	
<i>Reviewed Articles on Whole Family Structure</i>	† = empirical ** = case study/qualitative * = conceptual
<ul style="list-style-type: none"> • Adoption Bertrand et al. (2008) † • Birth Order Bennedsen et al. (2007) †, Bertrand et al. (2008) †, Bunkanwanicha et al. (2013) †, Curimbaba (2002)**, Howorth & Ali (2001)**, Michael-Tsabari et al. (2014)**, Stavrou (1999) †, Vera & Dean (2005)** • Death Bennedsen et al. (2007) †, Michael-Tsabari et al. (2014)** • Divorce Bennedsen et al. (2007) †, Cabrera-Suárez (2005)**, Galbraith (2003) †, Kwan et al. (2012)**, Michael-Tsabari et al. (2014)**, Rutherford et al. (2006) †, Santiago (2011) ** 	

- **Family Size** (total number, number of spouses, children, siblings, etc.)
Arregle et al. (2007)*, Bennedson et al. (2007)†, Bertrand et al. (2008)†, Bunkanwanicha et al. (2013)†, Curimbaba (2002)***, Danes et al. (2009)†, Howorth & Ali (2001)***, Jaskiewicz et al. (2015)***, Kwan et al. (2012)***, Marchisio et al. (2010)***, Michael-Tsabari et al. (2014)***, Muske & Fitzgerald (2006)†, Olson et al. (2003)†, Rowe & Hong (2000)†, Thomas (2002)†, Vera & Dean (2005)***, Wiklund et al. (2013)†
 - **Marriage**
Bunkanwanicha et al. (2013)†, Danes et al. (2009)†, Kwan et al. (2012)***, Michael-Tsabari et al. (2014)***, Santiago (2011)***
 - **Social Status of Family**
Bunkanwanicha et al. (2013)†
-

Reviewed Articles on Dyad Dynamics and Functioning

† = empirical

** = case study/qualitative

* = conceptual

- **Communication**

Dawson & Hjorth (2012)**

- **Conflict**

Dawson & Hjorth (2012)***, De Massis et al. (2008)*, Vera & Dean (2005)**

- **Emotional Connection**

Cole & Johnson (2007)**

- **Overall Relationship Quality and Strength**

Eddleston & Kidwell (2012)*, Cater & Justis (2009)***, Venter et al. (2005)†

- **Trust**

Cole & Johnson (2007)***, Dawson & Hjorth (2012)***, Gagné et al. (2011)†, Venter et al. (2005)†

Reviewed Articles on Whole Family Dynamics and Functioning

† = empirical

** = case study/qualitative

* = conceptual

- **Adaptability and Willingness to Change**

Björnberg & Nicholson (2007)†, Distelberg & Sorenson (2009)*, Kellermanns & Eddleston (2006)†, Lee (2006)†, Miller et al. (2003), Penney & Combs (2013)*

- **Affective Commitment to Goals**

Chirico & Salvato (2008)*, Chirico & Salvato (forthcoming)†

- **Altruism**

Eddleston et al. (2007)†, Eddleston et al. (2008)†, Eddleston & Kellermanns (2007)†, Eddleston & Kidwell (2012)*, Karra et al. (2006)***, Kellermanns & Eddleston (2004)*

- **Cohesion**

Ainsworth & Cox (2003)***, Arregle et al. (2007)*, Björnberg & Nicholson (2007)†, Cabrera-Suárez et al. (2015)†, Distelberg & Sorenson (2009)*, Jaskiewicz et al. (2015)***, Lee (2006)†, Marchisio et al. (2010)***, Penney & Combs (2013)*, Salvato & Melin (2008)***, Smyrnios et al. (2003)†, Zahra (2012)†

- **Communication**

Björnberg & Nicholson (2007)†, Cabrera-Suárez et al. (2015)†, Distelberg & Blow (2011)**

(Continued)

Reviewed Articles on Whole Family Dynamics and Functioning † = empirical
★★ = case study/qualitative
* = conceptual

- **Conflict and Family Tensions**

Ainsworth & Cox (2003)★★, Cabrera-Suárez (2005)★★, Chirico & Salvato (2008)*, Chirico & Salvato (forthcoming)†, Danes & Olson (2003)†, De Massis et al. (2008)*, Davis & Harveston (1999)†, Davis & Harveston (2001)†, Eddleston & Kellermanns (2007)†, Eddleston et al. (2008)†, Kellermanns & Eddleston (2004)*, Nam & Herbert (1999)†, Olson et al. (2003)★★, Perricone et al. (2001)★★, Santiago (2011)★★, Treviño-Rodríguez & Bontis (2010)★★

- **Emotional Capability**

Shepherd (2009)*

- **Family Entrepreneurial Orientation / Entrepreneurial Legacy**

Jaskiewicz et al. (2015)★★, Zellweger et al. (2012)†

- **Family Functional Integrity**

Danes et al. (2009)†, Danes & Olson (2003)†, Muske & Fitzgerald (2006)†, Olson et al. (2003)†

- **Family Harmony**

Farrington et al. (2012)†, Nam & Herbert (1999)†, Poza et al. (2004)†, Venter et al. (2005)†

- **Family Reciprocity**

Kellermanns et al. (2012)†

- **Family Relationship Style**

Olson et al. (2003)†

- **Family Social Capital**

Arregle et al. (2007)*, Cabrera-Suárez et al. (2015)†, Carr et al. (2011)†, Chirico & Salvato (2008)*, Chirico & Salvato (forthcoming)†, Salvato & Melin (2008)★★, Sorenson et al. (2009)*

- **Family Values**

Koiranen (2002)†, Santiago (2011)★★

- **Intergenerational Attention**

Björnberg & Nicholson (2007)†, Cabrera-Suárez et al. (2015)†

- **Intergenerational Authority**

Björnberg & Nicholson (2007)†

- **Knowledge Integration among Family Members**

Chirico & Salvato (2008)*

- **Participative Decision Making**

Eddleston et al. (2008)†

- **Strength of Family Ties**

Cabrera-Suárez (2005)★★

- **Social Interaction within the Family**

Davis & Harveston (2001)†, Mahto et al. (2010)†, Nam & Herbert (1999)†, Poza et al. (2004)†, Treviño-Rodríguez & Bontis (2010)★★

- **Tolerance of Difference**

Poza et al. (2004)†

- **Trust**

Cabrera-Suárez (2005)★★, Pagliarussi & Rapozo (2011)★★, Salvato & Melin (2008)★★, Steier (2001)★★

Source: Own

Note

- 1 Journals include: *Econometrica*, *Journal of Political Economy*, *American Economic Review*, *Quarterly Journal of Economics*, *Review of Economic Studies*, *Journal of Economic Literature*, *Journal Econometrics*, *Journal of Monetary Economics*, *Journal of Economic Theory*, *Review of Economic and Statistics*, *International Economic Review*, *Journal of Economic Perspectives*, *Economic Journal*, *Journal of Environmental Economics and Management*, *Games and Economic Behavior*, *Journal of Risk and Uncertainty*, *Journal of the European Economic Association*, *Journal of Business Venturing*, *Entrepreneurship Theory and Practice*, *International Small Business Journal*, *Entrepreneurship and Regional Development*, *Small Business Economics*, *Journal of Small Business Management*, *Strategic Entrepreneurship Journal*, *Journal of Small Business and Enterprise Development*, *International Journal of Entrepreneurial Behavior and Research*, *Venture Capital: An International Journal of Entrepreneurial Finance*, *International Journal of Entrepreneurship and Innovation*, *Family Business Review*, *Academy of Management Review*, *Academy of Management Journal*, *Administrative Science Quarterly*, *Journal of Management*, *Journal of Management Studies*, *Harvard Business Review*, *British Journal of Management*, *Organization Science*, *Organization Studies*, *Leadership Quarterly*, *Human Relations*, *Strategic Management Journal*, *Journal of Finance*, *Review of Financial Studies*, *Journal of Financial and Quantitative Analysis*, *Journal of Financial Economics*, *Journal of Money, Credit and Banking*.

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