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The Ties That Bind:

Exploring relationship-oriented values in family firms from employees' perspective

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Abstract

The importance of a family firm's specific culture has been widely discussed in family business research. The interplay between family and business gives rise to values that underlie the culture of such firms. Although family business research is centrally concerned with these values, the ensuing analysis is often limited to the perspective of founders or family members and ignores the employees' views. Thus, this paper enlarges existing family business research by examining characteristic, albeit under-investigated, element of a firm's culture: its relationship-oriented values from an employees' perspective. To this end, the study considered a sample of 312 employees from 15 family firms in Germany. Using factor analyses, the paper examined and confirmed that, from an employee's perspective, relationship-oriented values serve as a discrete and crucial value dimension for characterizing a family firm's culture. To ensure predictive validity, the study utilized multiple regression analysis to measure effects on two performance criteria: affective commitment and trust in management. The results confirm a strong effect of relationship-oriented values on said criteria. These findings underline the positive impact that relationship-oriented values exert on family firms' performance. The paper also provides a differentiated four-factor value inventory for analyzing a family firm's culture.

Key words: Values, Family Firms, Trust, Organizational Culture, Social Capital

1 Introduction

Family business research widely acknowledges that family firms achieve distinctive resources from the interplay of family and business (Danes, Stafford, Haynes & Amarapurkar, 2009; Habbershon, Williams & MacMillan, 2003; Sirmon & Hitt, 2003). In order to explore and understand this interplay, scholars have paid special attention to these firms' organizational culture.

Organizational culture is defined as "a pattern of shared basic assumptions learned by a group as it solves it problems of external adaption and internal integration […]" (Schein, 1985). This paper focuses on values as the core of organizational culture. To this end, the study follows the value concept stipulated by Schwartz (1994) - itself influenced by Kluckhohn (1951) and Rokeach (1973) - that understand values as "desirable transsituational goals, varying in importance, that serve as guiding principles in the life of a person or other social entity" (Schwartz, 1994). Values are the core element of a firm's culture and an essential part of understanding and changing organizational culture, as values influence the behaviors of and interactions between organizational members (Denison, Nieminen & Kotrba, 2014; Meglino & Ravlin 1998; O'Reilly, Chatman & Caldwell, 1991; Schein, 1985; Sorensen, 2014). Put differently, values make organizational members' behaviors predictable, which helps to foster trust between members (Staber, 2003; Ramezan, 2016). As a collective phenomenon, values encompass the perceptions of all organizational members who create and shape cultural practices every day (Denison et al., 2014; Schein, 1985). Family business scholars agree that studying values as cultural elements strongly contributes to a holistic understanding of family firms (Fletcher, Melin & Gimeno, 2012).

In family firms, the members' moral and social foci are socialized into the business as value priorities (Koiranen, 2002; Payne, Brigham, Broberg, Moss & Short, 2011; Tapies & Ward, 2008). Archetypical families strive for solidarity, altruism and unconditional support, which are the dominant mechanisms for creating long-term, reliable and trustful relations between family members (Eddleston & Morgan, 2014; Erdem & Atsan, 2015; Sundaramurthy, 2008). As a result, family firms can possess unique relational resources that can translate into relationship-oriented values that define behavioral expectations (Sorenson, 2013). In short, family ties provide a blueprint for the development of trust-based relationships, which are then socialized into the firm as relationship-oriented values (Adler & Kwon, 2002; Cabrera-Suarez, Déniz-Déniz & Martín-Santana, 2015; Hoffman, Hoelscher & Sorenson, 2006; Pearson, Carr & Shaw, 2008; Zwack, Kraiczny, von Schlippe & Hack, 2016).

Due to this spillover from family to business, scholars assume that relationship-oriented values become intertwined with a family firm's culture (Pötschke, 2018). However, to measure values appropriately, scholarship needs to integrate a plurality of organizational perspectives - including those of employees. The aim of this paper, then, is to examine if employees perceive such relationship-oriented values as characteristic of their firms' culture.

Thus, this paper extends existing value research in family firms in four ways. First, it illustrates that relationship-oriented values are a discrete dimension of a family firm's culture, which facilitated the creation of a suitable measurement inventory for value research. Second, employee's perception is accentuated in the analysis of value research in family firms. Third, the study underlines the positive effects on organizational performance by analyzing the effect of relationship-oriented values on employees' affective commitment and trust in management. Finally, these findings contribute to the discussion about family firms' specific cultural characteristics and the influence of family on business.

The rest of this paper is organized as follows: The next section offers a brief review of the current state of value research in family firms. The following section identifies the research gaps and outlines the hypotheses used to address these gaps. The last section describes the study's methodological approach, results, and broader implications.

2 Review on value research in family firms

The previous literature stresses that values are a strategically important resource for family businesses (Klein, Astrachan & Smyrnios, 2005; Parada & Viladas, 2010; Sorenson, 2014; Zwack et al., 2016). Because values underlie the firm's organizational culture (Sorenson, 2013), they are critical for understanding the interplay of family and business (Sorenson, 2014) that produces the firm's organizational practices and processes (Schein, 1985). Beyond reflecting the patterns and norms of the family itself (Fletcher et al., 2012), values influence entrepreneurial decisions (Fletcher et al., 2012), leadership behavior (Hall & Nordqvist, 2008), succession planning (Garcia-Alvarez & Lopes-Sintas, 2001) and other strategic decisions (Tapies & Ward, 2008).

In recent years, several studies have taken various approaches to analyzing values in family firms. One line of research generally measured the importance of a firm's culture, as well as the alignment between family and business (Astrachan, Klein & Smyrnios, 2002; Klein et al., 2005) without focusing on value dimensions. Other studies delineated single values that characterize family firms, such as entrepreneurialism, hard work, quality, honesty and loyalty (Tapies & Moya; Payne et al., 2011; Vallejo-Martos, 2011). In this latter vein, scholars have indicated that moral values - namely honesty, altruism and credibility - are of specific importance in family businesses (Koiranen, 2002; Payne et al., 2011; Zahra, Hayton, Neubaum, Dibrell & Craig, 2008). Garcia-Alvarez and Lopes-Sintas (2001) not only confirmed that founders place importance on moral values, but also developed a value list that is more specific to family firms. Moreover, scholars have found that specific performance indicators in family firms that stem from their values, as evidenced by the positive relationships between commitment, harmony, and long-term orientation (Jimenez, Martos & Jimenez, 2015; Vallejo-Martos, 2011).

In sum, pervious research has underlined the importance of moral values in family firms, but still faces some gaps. The lists of family firm-specific values have been developed qualitatively, but not yet tested quantitatively (Sorenson, 2014). As a result, even though scholars generally agree that values work as a guiding mechanism, the field still lacks holistic instruments for value measurement (Simon, Marquès, Bikfalvi & Muñoz, 2012). Relatedly, the value lists that exist have not yet systematically assigned single values to overarching dimensions. Instead, existing value research has strongly focused on single dimensions such as harmony (Jimenez et al., 2015). In comparison, other domains of organizational culture research have designed myriad value measurement instruments (Denison et al., 2014;

Sackmann, 2011); however, these instruments do not sufficiently account for the relational dimension that is integral to family firms, and thus they are less useful for measuring relationship-oriented values. Moreover, prior analyses were mostly limited to family executives or founders (Astrachan et al., 2002; Garcia-Alvarez & Lopes-Sintas, 2001; Koiranen, 2002; Parada & Viladas, 2010; Zahra et al., 2008) and did not encompass employees' perspectives. However, we know from organizational culture research that analyzing culture holistically requires an integration of multiple perspectives (Denison et al., 2014).

3 Hypothesis development

Thanks to their longevity, traditions, and consistent values, family firms have natural advantages in terms of developing and retaining trust-based relationships (Eddleston & Morgan, 2014). In non-family firms, trusting relationships mostly arise for transactional reasons and have to be built from scratch; thus, they may take longer to emerge and be less resilient (Sundaramurthy, 2008). In family firms, the family itself can serve as a resource of support and goodwill for the founder(s), and these positive kinship experiences can form the basis of a trustful climate (Sundaramurthy, 2008; Eddleston, Chrisman, Steier & Chua, 2010). Over time, the family's social manners and expectations crystallize into relationship-oriented values that guide employees' behavior (Schein, 1985; Sorensen & Bierman, 2009). Moreover, a family firm's local anchoring and long-term orientation can facilitate sustainable and trustful relationships with external partners (Sorenson, 2013). Buoyed by the reliability that derives from long-term family relationships, (Duh, Belak & Milfelner, 2010), external partners or employees may be more willing to take 'leaps of faith' with the business, whether in terms of financial or labor support (Sequeira, Mueller & McGee, 2007). In sum, the values of the family highly influence the culture of a family firm (Duh et al., 2010; Parada & Dawson, 2017; Sorenson, 2013, 2014; Zwack et al., 2016), and the trust-based relationships that arise from said culture are a distinctive feature of such firms.

This paper hypothesizes, in short, that relationship-oriented values - which reflect principles of reliability, loyalty and honesty - create a culture of trust in the family firm. One real litmus test for these relationship-oriented values is whether the employees of family firms (who are often not part of the family system) perceive the values as cultural elements. In addressing these points, the present paper answers calls for a holistic value measurement instrument in family business research (Simon et al., 2012) by integrating relationship-oriented values into cultural assessments. This effort lays the foundation for a family firm-specific inventory that measures relationship-oriented values as a discrete cultural dimension. Formally expressed:

H1a: Relationship-oriented values are a discrete dimension of a family firm's organizational culture.

H1b: There is homogeneity between employees in family firms in terms of the importance of relationship-oriented values.

Most studies analyzing values in family firms focus on the value assessments of managers or founders (Garcia-Alvarez & Lopes-Sintas, 2001; Koiranen, 2002; De Massis, Kotlar, Campopiano & Cassia, 2013; Simon et al., 2012). However, organizational culture is built and developed by all organizational members (Schein, 1985); in this sense, existing approaches often lack employees' perceptions. While family members strongly shape the firm's value system and thereby its culture, the employees who experience and create cultural artifacts every day are useful sources who may substantiate or contradict prevailing narratives. Therefore, this paper aims to enlarge existing value analyzes of family firms by considering employees' views about the firm's values. To do so, the paper relies on four value dimensions that arise from previous research on values in family businesses and organizational value studies in general: relationship, performance, security, and change (Denison et al., 2014; Garcia-Alvarez & Lopes-Sintas, 2001; Jimenez et al., 2015; Koiranen, 2002; Zahra, 2004; Tapies & Moya, 2012; Vallejo-Martos, 2011). Therefore, it is hypothesized that:

H2: A four factor structure of the family firm-specific value inventory will be confirmed from an employees' perspective.

Organizational value research underlines that the firm's culture influences its performance (Denison et al., 2014; Gordon & DiTomaso, 1992; Sackmann, 2011). For instance, the literature has empirically demonstrated a positive relationship between organizational culture and affective commitment (Riketta, 2008; Meyer, Becker & Van Dick, 2006; Meyer & Herscovitch, 2001; Ashfort & Mael, 1989), the latter of which is widely accepted as an indicator of employees' performance and a facilitator of organizational performance (Lavelle et al.,2009; Vandenberghe, Bentein & Stinglhamber, 2004). Affective commitment implies an emotional attachment to the firm, including a feeling of identifying with and belonging to the organization (Allen & Meyer, 1990). Finegan (2000) indicated that values describing a humanity dimension have a particularly high influence on affective commitment. On this basis, this paper specifically analyzes relationship-oriented values as an antecedent of affective commitment:

H3a: There is a positive relationship between relationship-oriented values and employees' affective commitment.

In line with theoretical considerations, "trust in top management" was integrated as another performance criterion. The literature highlights that trust in management positively influences employees' work behavior and thereby has a positive effect on organizational performance (Davis, Schoorman, Mayer & Tan, 2000; Dirks & Ferrin, 2002; Fulmer & Gelfand, 2012; Jung & Avolio, 2000; Mayer & Gavin, 2005). By fostering cooperative relations, trust mitigates the need for formal regulation (Arregle, Hitt, Sirmon & Very, 2007; Dess & Shaw, 2001) and can help employees perceive top management as reliable and worthy of their efforts. This process is especially apparent in family firms, as their members' family roots can provide a deep sense of trust that managers may then role model as firm values (Eddleston & Kellermanns, 2007; Sharma, 2004; Zwack et al., 2016). Thus, it is assumed that:

H3b: There is a positive relationship between relationship-oriented values and trust in management.

4 Methods

Sampling and Data Collection

A purposive sampling strategy was used due to the fact that values are highly influenced by contextual factors (Onwuegbuzie & Collins, 2007; Vallejo-Martos & Puentes-Poyatos, 2014; Zwack et al., 2016). The participating firms were chosen based on family influence, firm size, industry and location. In line with previous family business research, family influence was defined in terms of family ownership and management (Anglin, Reid, Short, Zachary & Rutherford, 2017; Chua, Chrisman & Sharma, 1999; Zwack et al., 2016). Hence, family firms employing between 20 and 200 employees, where the family held more than 50% of the shares and at least one family member was part of the top management team, were included. To minimize the influence of industry and environment, the sample was limited to the logistics and manufacturing sector in northern Germany, which features a high proportion of family firms (Gottschalk et al.,2014). To locate firms that met these sampling criteria, business databases were used and firms were approached via mailings and telephone calls.

Eventually, 15 family-run small to medium enterprises (SMEs) from the logistics and manufacturing industry agreed to participate in the online survey. The data collection occurred between January 2016 and September 2016. Unlike most studies on family firms, which use a key informant approach (Kellermanns, Eddleston, Barnett & Pearson, 2008; Pearson, Holt & Carr, 2014), a multi-informant approach was employed and data from at least 10 employees in each firm was collected.

Measures

Values

An item pool of 29 values was developed based on a previous mixed-method study with 16 CEOs in 10 family firms (Pötschke, 2018). In this previous study value statements were derived from two sources: first source was a content-analysis of interviews with CEOs and second source were value patterns resulting from CEOs' sorting of value statements, the latter of which were derived theoretically from value research, both in general and on family firms in particular

(Denison et al., 2014; Garcia-Alvarez & Lopes-Sintas, 2001; Jimenez et al., 2015; Sackmann, 2011). Results from the previous study were compared to eliminate value items that were redundant or less comprehensible. These efforts reduced the item pool from 52 to 29 items.

The current study tested those 29 items (shown in Tab. 1 below) on a sample of 312 employees from 15 different family firms. For each item, participants indicated the extent to which each value is characteristic of the firm's culture.

Affective Commitment

Affective Commitment was operationalized with six items from Felfe and Franke (2012). Cronbach's alpha was 0.86. The items are: 1) "I would be very glad to be able to spend my future working life in this company"; 2) "I do not feel emotionally attached to this company"; 3) "I am proud to be part of this company"; 4) "I feel a strong sense of belonging to my company"; 5) "I think that my values fit with those of the company".

Trust in Management

Trust in management was measured with one item ("Altogether, the top management is trustworthy") adapted from the interpersonal trust at work scale from Cook and Wall (1980). All items were measured on a five-point Likert scale ranging from 1 ("does not apply at all") to 5 ("applies completely").

Control Variables

Our control variables included tenure, gender, age and position. Tenure with the company was measured with a single item ("how long have you been employed at this company") in terms of years. Age was also measured in years. Gender and position were both measured as dichotomous variables (Gender = "male"/ "female"; Position = "manager"/ "employee").

Data Analysis

The analysis proceeded in three steps. First, the structure of the value items was examined to uncover their overall dimensions and reduce the number of items. To this end, an exploratory factor analysis (EFA) with the statistical package SPSS 24 was conducted to discover a structure in data and to reduce items. Initial testing of the normal distribution resulted in a KMO value of 0.9, confirming that the data were suitable for factor analytical procedures. Therefore, a principal component analysis (PCA) with promax rotation as an oblique rotation technique was employed as it was assumed that values correlate with each other in reality. Oblique rotation techniques are more appropriate for psychological questions than orthogonal rotation techniques (Fabrigar, Wegener, MacCallum & Strahan, 1999; Preacher & MacCallum, 2003). To deal with missing values in the data set list wise deletion of missing values was selected. In the following it was to decide for the appropriate number of factors. Therefore a parallel analysis was ran (Bühner, 2011; Horn, 1965) as the Kaiser-Gutman-Criterion (Kaiser, 1958) and the Scree-Test (Cattell, 1966) often produces no clear factor solution and tend to increase the number of factors (Peres-Neto, Jackson & Somers, 2005).

In an additional step the 29 value variables were classified into groups according to their similarities. To this end, a hierarchical cluster analysis was employed based on ward's method, using Pearson's correlation coefficient to measure the distance between variable.

As second step, interrater agreement (IRA) and intraclass correlation agreement (ICC) were used to analyze consistency—and thereby homogeneity—among respondents' ratings (Biemann, Cole & Voepel, 2012). To calculate interrater agreement, a slight skew distribution was chosen to account for any possible tendency towards socially desirable responses that are common to value research (Schwartz & Bardi, 2001). By demonstrating that respondents from different firms are homogenous in their value assessments, we were better able to perform data aggregation and hypothesis testing (Biemann et al., 2012).

As a third step, a confirmatory factor analysis (CFA) with the statistical program AMOS 24 was conducted to validate how well the data fit the postulated factor structure. Reliability was measured by computing Cronbach's alpha. To evaluate convergent validity composite reliability (CR) and average variance extracted (AVE) were calculated for all factors. Moreover, maximum shared variance (MSV) was calculated to ensure that the constructs had discriminant validity (Hair, Black, Babin & Anderson, 2010; Fornell & Larcker, 1981).

Moreover, predictive validity was ensured by integrating affective commitment and trust in management as external criteria in the analysis and using multiple regression analysis to examine the direct effects.

5 Results

Discovering structure with Exploratory Factor Analysis (EFA)

The parallel analysis resulted in a four-factor solution, namely: Relation, Performance, Accuracy, and Autonomy. After considering the pattern matrix, items that did not load clearly on one of the factors were eliminated. After eliminating 13 items because they loaded on two or more factors simultaneously, a final factor solution consisting of 16 items that loaded on four factors and explained 63% of the total variance (Tab. 1) was arrived.

	Relation (Factor 1)	Performance (Factor 2)	Accuracy (Factor 3)	Autonomy (Factor 4)
Stability				
Reliability				
Support				
Honesty	,778			
Loyalty	,619			
Tolerance	,861			
Being socially responsible	,740			
Being competitive		,837		
Performance orientation		,617		
Results orientation		,690		
Being highly organized		,673		
Enthusiasm for the job				
Taking individual responsibility				
Decisiveness				
Being quick to take advantages of opportunities				
Risk taking				,818
Not being constraint by many rules				,528
Autonomy				,888
Informality				,504
Flexibility				
Being innovative				
Rules orientation			,587	
Attention to detail			,915	
Being analytical			,768	
Focus on quality			,535	
Discipline				
Opportunities for professional growth				
Being calm				
Developing friends at work				
Variance	**37,98**	**11,38**	**7,25**	**6,5**

Extraction method: Principal Component Analysis
Rotation method: Promax, 7 iterations

Table 1: Pattern matrix (EFA)

As a next step, results were checked for uni-dimensionality of the four factors and Cronbach's alpha was calculated to measure the reliability of each scale. The uni-dimensionality of each factor was confirmed and a Cronbach's alpha above or close to 0.8 was achieved, which indicates that the solution is reliable, (Tab. 2). Among all four factors, the factor Relation indicated the best reliability and variance explanation. The results support the first hypothesis (H1a), confirming that relationship-oriented values are a discrete dimension of organizational culture in a family firm.

Factor 1 (Relation)		**Factor 2 (Performance)**	
Honesty	0.836	Being competitive	0.755
Loyalty	0.804	Performance orientation	0.812
Tolerance	0.804	Results orientation	0.776
Being socially responsible	0.784	Being highly organized	0.785
KMO	0.785	KMO	0.768
Variance	66.15	Variance	61.212
Cronbach's Alpha	0.822	Cronbach's Alpha	0.787

Factor 3 (Accuracy)		**Factor 4 (Autonomy)**	
Rules orientation	0.735	Risk taking	0.745
Attention to detail	0.817	Not being constraint by many rules	0.720
Being analytical	0.765	Autonomy	0.815
Focus on quality	0.702	Informality	0.768
KMO	0.761	KMO	0.747
Variance	57.132	Variance	58.209
Cronbach's Alpha	0.749	Cronbach's Alpha	0.759

Table 2: Analysis of dimensionality and reliability of each factor; values are based on the component matrix of each factor

Additionally, interrater agreement (IRA) and intraclass correlations (ICCs) were measured in order to examine the agreement among employees from participating firms and, thus, indicating the amount of variance which is attributed to firm membership (Tab. 3). For all for factors interrater agreement mean values are between 0.77 and 0.85, indicating high levels of homogeneity between employees from different firms. IRA values above 0.7 indicate a high interrater agreement (Bliese, 1998). ICC (1) values are low indicating that only a low proportion of variance in ratings is attributable to firm membership (Biermann et al., 2012).

	rWG (j)	ICC 1	ICC 2	P - value
Factor Relation	0.81	0.03	0.38	0.07
Factor Performance	0.85	0.12	0.74	0.00
Factor Accuracy	0.81	0.04	0.42	0.05
Factor Autonomy	0.77	0.06	0.55	0.00

Table 3: Analysis of interrater agreement (IRA) and intraclass correlation (ICC); Interrater agreement (IRA) is measured in terms of rWG-indices for multiple item measures

Thus, the findings confirm the second hypothesis (H1b) - that employees are quite homogenous about the importance of relationship-oriented values.

Confirming factor structure with Confirmatory Factor Analysis (CFA)

To analyze the properties of the factor structure a CFA on the same sample was conducted and a measurement model based on the pattern matrix from EFA (Tab. 1) was developed. The four factors were also addressed for common method bias, which occurs if there is a systematic source of measurement error (Podsakoff et. al., 2003). To this end, the Harman's single factor test was used to determine if the majority of the variance can be explained by a single factor. In the postulated model, the variance of a single factor was 37%, which is below the 50% threshold. Thus, common method bias can be reasonably ruled out.

The model fit results indicate that the four-factor structure has good fit with the data ($\chi2$ = 260,737; df = 98; CFI = 0,9; IFI= 0,9; RMSEA = 0.07), which further substantiates H2. The standardized regression weights of CFA (Tab. 4) underline that all coefficients achieved values above 0.5. All the coefficients of the factor Relation exhibited values close to or above

0.7, indicating a strong reflection of the latent variable. The item “honesty” explains the largest proportion of variance among all analyzed items ($R^2 = 0.603$).

Item	Factor	Standardized Regression Weight	R^2	Error Variance	P
Being socially responsible	Relation	0.686	0.471	0.438	***
Tolerance	Relation	0.718	0.516	0.393	***
Loyalty	Relation	0.747	0.558	0.392	***
Honesty	Relation	0.777	0.603	0.345	***
	Factor Relation			0.389	***
Being competitive	Performance	0.615	0.378	0.435	***
Being highly organized	Performance	0.705	0.497	0.528	***
Performance orientation	Performance	0.767	0.588	0.376	***
Results orientation	Performance	0.688	0.473	0.385	***
	Factor Performance			0.264	***
Rules orientation	Accuracy	0.632	0.400	0.487	***
Being analytical	Accuracy	0.692	0.479	0.379	***
Attention to detail	Accuracy	0.684	0.468	0.424	***
Focus on quality	Accuracy	0.591	0.349	0.468	***
	Factor Accuracy			0.325	***
Risk taking	Autonomy	0.596	0.355	0.709	***
Not being constraint by many rules	Autonomy	0.679	0.461	0.568	***
Autonomy	Autonomy	0.640	0.410	0.570	***
Informality	Autonomy	0.739	0.546	0.363	***
	Factor Autonomy			0.390	***

Table 4: Standardized regression weights, R squared coefficient and error variances of latent constructs and single items

The estimation results were analyzed on the indicator level: All indicator variables showed positive parameter estimates. The p-values illustrate that variables achieved high significance. Additionally, the error variances for the four factors as latent constructs as well as for single items were low and mostly below 0.5.

Next, the constructs’ convergent and discriminant validity were measured. The composite reliability (CR) for all latent variables was above 0.7. (Tab. 5). Meanwhile, to meet the suggested theoretical threshold of convergent validity, the Average Variance Extracted (AVE) should be greater than 0.5 (Hair, Black, Babin & Anderson, 2010). In this sample, the

Factor Relation was above this threshold, while the AVE for the other three factors was acceptably close to 0.5. Fornell and Larcker (1981) argue that an AVE of less than 0.5 is acceptable if composite reliability is higher than 0.6. Since this was the case for all factors (Tab. 6), the constructs' convergent validity can still be affirmed (Fornell & Larcker, 1981). Lastly, to ensure discriminant validity, the maximum shared variance (MSV) has to be below the average shared variance (AVE); the findings support discriminant validity solely for the factor Relation.

	Factor Relation	**Factor Performance**	**Factor Accuracy**	**Factor Autonomy**
AVE	0.537	0.484	0.424	0.443
CR	0.822	0.789	0.746	0.760
MSV	0.516	0.637	0.637	0.516

Table 5: Average variance Extracted (AVE), composite reliability (CR) and maximum shared variance (MSV)

Finally, predictive validity was examined by evaluating whether the four factors represent value orientations that predict organizational performance outcomes. The correlation matrix (Tab. 6) indicated statistically significant positive relationships between all four factors and the outcome variables (affective commitment and trust in management). The factor Relation had the strongest positive relationships with affective commitment ($r = 0.490$) and trust in management ($r = 0.551$).

A regression analysis was also conducted to test the correlations in detail (Tab. 7). The stepwise multiple regression indicated that the factor Relation has the strongest explanatory power for affective commitment ($R^2 = 0.25$) and trust in management ($R^2 = 0.33$). Including the other factors (Performance, Accuracy and Autonomy) did not provide any further variance explanation for affective commitment. For trust in management, only the factor Performance provided additional, albeit small, variance explanation ($R^2 = 0.02$).

Additionally, we examined the outcome variables in light of the control variables (tenure, age, position and gender). Tenure, age and position were included in the model, but only provided small additional variance explanation (Tab. 7).

	Factor Relation	Factor Autonomy	Factor Accuracy	Factor Performance	Trust in Management	Affective Commitment
Factor Relation	1	,553**	,513**	,497**	,551**	,490**
Factor Autonomy	,553**	1	,417**	,394**	,311**	,347**
Factor Accuracy	,513**	,417**	1	,599**	,259**	,229**
Factor Performance	,497**	,394**	,599**	1	,329**	,221**
Trust in Management	,551**	,311**	,259**	,329**	1	,644**
Affective Commitment	,490**	,347**	,229**	,221**	,644**	1

** p < 0.01 (two sides)

Table 6: Correlation table

	Affective Commitment		**Trust in Management**	
	ß	**R²**	**ß**	**R²**
Factor Relation	0.505 ***	0.25	0.052 ***	0.33
Factor Performance	-0.003		0.141 *	0.02
Factor Autonomy	0.043		0.004	
Factor Accuracy	0.013		-0.079	
Age	-0.175 *	0.03	-0.086	
Tenure	0.278 ***	0.05	0.024	
Gender	-0.085		-0.126	
Position	0.130 *	0.01	0.118 *	0.01
R² total		0.34		0.36

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 7: Regression analysis: standardized beta weights and change in R^2 are shown

The results from multiple regression analysis highlighted significant relationships between the factor Relation and affective commitment and trust in management. The existence of relationship-oriented values in the firm (factor Relation) explained 25% and 33% of the overall variance of affective commitment and trust in management, respectively. The effect sizes of 0.57 (affective commitment) and 0.70 (trust in management) suggest strong direct effects (Cohen, 1992). Thus, the findings confirm the hypothesis of a positive relationship between relationship-oriented values and employees' affective commitment (H3a) and trust in management (H3b). In short, the results illustrate the predictive validity of the factor Relation.

6 Discussion

The aim of this study was to examine relationship-oriented values as a discrete dimension of family firms' culture from the perspective of employees. The results confirmed that relationship-oriented values (reflected in the factor Relation) serve as a discrete and important factor for holistically measuring values, and therefore culture, in a family firm. This paper not only ensured the factor's convergent, discriminant and predictive validity, but also captured its particular importance through its high variance explanation (37%) in EFA. These findings underline that relationship-oriented values are a crucial dimension for describing a family firm's organizational culture from an employee's perspective (H1a). Furthermore, the findings highlight a consensus about the importance of relationship-oriented values, even among respondents from different family firms (H1b). Moreover, the results demonstrate that relationship-oriented values exert a strong effect on employees' affective commitment and on their perceptions of management's trustworthiness (H3a/ H3b). Both findings underscore the positive impact of relationship-oriented values on performance, which adds support to previous research (Finegan, 2000; Jin & Drozdenko, 2010; Salamon & Robinson, 2008). Finally, the results confirmed a postulated four-factor structure of value orientations (H2).

All together, the results offer several contributions to the literature on value research in family firms. Firstly, the findings support the assumption that family firms generally possess a collectivist culture (Chrisman, Chua & Litz, 2004; Miller & Breton-Miller, 2006; Davis et al., 2010). In line with Schwartz's (1994) theory of basic human values, the identified relationship-oriented values – honesty, loyalty, tolerance and social responsibility – can be assigned to the dimension "self-transcendence", which represents values geared toward cooperation instead of competition.

Secondly, the results shed new light on the interplay between family and business life in a family firm by confirming that relationship-oriented values serve as a discrete value dimension for employees and family members alike. Thus, the results support the stewardship perspective in family business research, which argues that family members transfer their positive emotional experiences about trustful family relationships to their business and thereby establish an organizational culture based on trust, loyalty and mutual support (Davis, Schoorman & Donaldson 1997; Eddleston & Kellermanns, 2007; Eddleston, Kellermanns & Zellweger, 2012).

Thirdly, the findings enlarge recent research on values as a “performance driver” of family firms (Jimenez et al., 2015; Fulmer & Gelfand, 2012) by indicating their positive effect on affective commitment and trust. This research thus contributes to a broader discussion about servant leadership, which generally finds that servanthood and humility positively influence performance criteria (Farrington & Venter, 2016). Furthermore, this paper heeds the call for a broader perspective on culture in family business research by examining culture beyond the perspective of the founder or CEO (Fletcher et al., 2012). While the founder or CEO is an important starting point in that discussion, such a singular focus ignores the dynamic and relational character of culture. To help rectify this matter, this paper enhanced the discussion by adding employees’ perspectives.

Finally, the findings lay the groundwork for a differentiated instrument that can measure value orientations in a family firm. This study constructed and validated a value inventory consisting of four dimensions – Relation, Performance, Accuracy and Autonomy – that could be used to describe value orientations in a family firm. These four factors represent two main dimensions: relationship orientation (in contrast to performance orientation) and rules orientation (as opposed to flexible orientation). These two main dimensions overlap the two dimensions of human value orientations from Schwartz’s (1994) theory of basic human values. Moreover, the findings substantiate qualitative studies about family businesses, which have identified a business and social dimension in founders’ value orientations (Garcia-Alvarez & Lopes-Sintas, 2001; Payne et al., 2011; Tapies & Moya, 2012). Compared to measurement instruments geared toward non-family firms (Ashkanasy et al., 2000; Cable & Judge, 1997; Denison et al., 2014; O'Reilly et al., 1991), the identified value inventory better accounts for the interpersonal aspects of organizational culture. This is imperative for family firms, where interpersonal relations are inevitable, but the inventory also has interesting implications for non-family firms, where employees' mutual trust is an important binding factor. This attempt to refine a value inventory specifically for family firms aligns with calls to further develop the family business research domain with finer-grained measurement instruments (Pearson et al., 2014). Additionally, the inventory ultimately corroborates existing value research by confirming that employees see values as characteristic for the family firm.

From a theoretical perspective, the results contribute to the social capital perspective in family firms. In family firm research, social capital is a valuable resource that promotes organizational success by enabling cohesion and cooperation (Arregle et al., 2007; Leana & van Buren, 1999; Pearson et al., 2008). Findings indicate that relationship-oriented values—reflecting principles of reliability, loyalty and honesty—represent the basis for social capital within family firms, mainly by fostering trustful relations. As "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another" (Rousseau, Sitkin, Burt & Camerer, 1998). Relationship-oriented values create organizational trust (Ramezan, 2016), which is a precondition for developing social capital—and thus an important organizing principle for family firms (Eddleston et al., 2010).

In short, relationship-oriented values build the basis for trust and thereby foster organizational social capital in a family firm. These findings align with previous research in the field, which states that social and ethical value orientations increase social capital (Ramezan, 2016). To build up social capital, individuals generally have to follow socially oriented values as "guiding principles" (Schwartz, 1994). For family firms, these principles take the form of relationship-oriented values.

The strong positive effect of relationship-oriented values on employees' affective commitment and trust in management supports the importance of social capital as a competitive advantage for family firms (De Massis et al., 2013; Pearson et al., 2008). To develop this social capital, family firms need to propagate relationship-oriented values and create trustful relations (Adler & Kwon, 2002; Cabrera-Suarez et al., 2015; Hoffman et al., 2006; Pearson et al., 2008).

7 Limitations and future research

This research contributes to a holistic understanding of value orientations in a family firm. However, some limitations have to be considered. First, our study developed a new inventory for analyzing values in family firms, but we only applied it to employees. Thus, future research should apply the same inventory to the founders/family members of various firms to understand the impact of their value orientations

Second, the data was collected from SMEs with a regional focus in northern Germany. In order to extend the findings' external validity, future research should include a wider regional scope, other sectors, and/or a larger sample size.

Third, there is a risk that our results suffered from single source bias, as our dependent and independent variables (affective commitment and trust in management) were collected by the same respondents (Podsakoff & Organ, 1986). However, the Harman's single factor test resulted in a single factor variance below 50%, so we expect the impact of method bias to be small.

Fourth, the study did not examine other indirect effects. Therefore, scholars should examine these relationships with potential indirect effects (e.g. leadership style, personality characteristics) in more detail (Farndale, Van Ruiten, Kelliher & Hope-Hailey, 2011).Lastly, the present study found a meaningful amount of homogeneity between the sampled firms and their value orientations. However, there is an open question about how heterogeneity presents in family firms. Future research could explore this topic by explicitly comparing the value orientations of different family types (e.g. government structure, control commitee).

References

Adler, P. S., & Kwon, S. W. (2002). Social capital: Prospects for a new concept. Academy of management review, 27 (1), 17-40.

Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. Journal of occupational psychology, 63 (1), 1-18.

Anglin, A. H., Reid, S. W., Short, J. C., Zachary, M. A., & Rutherford, M. W. (2017). An archival approach to measuring family influence: An organizational identity perspective. Family Business Review, 30 (1), 19-36.

Arregle, J. L, Hitt, M. A, Sirmon, D. G. , & Very, P. (2007). The development of organizational social capital: Attributes of family firms', Journal of Management Studies, 44 (1), 73-95.

Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. Academy of management review, 14 (1), 20-39.

Ashkanasy, N. M., Broadfood, L. E., & Falkus, S. A. (2000). Questionnaire measures of organizational culture. In Ashkanasy, N., Wilderom, C. P. M & Peterson, M. F. (Eds.), Handbook of Organizational Culture and Climate (pp. 131-145). Thousand Oaks, CA: Sage.

Astrachan, J. H., Klein, S. B., & Smyrnios, K. X. (2002). The F□PEC scale of family influence: a proposal for solving the family business definition problem. Family Business Review, 15 (1), 45-58.

Baron, R. A. (2008). The role of affect in the entrepreneurial process. Academy of management Review, 33 (2), 328-340.

Biemann, T., Cole, M. S., & Voelpel, S. (2012). Within-group agreement: On the use (and misuse) of rWG and rWG (J) in leadership research and some best practice guidelines. The Leadership Quarterly, 23 (1), 66-80.

Bliese, P. D. (1998). Group size, ICC values, and group-level correlations: A simulation. Organizational Research Methods, 1, 355–373.

Bühner, M. (2011). Einführung in die Test-und Fragebogenkonstruktion. Pearson Deutschland GmbH.

Cable, D. M., & Judge, T. A. (1997). Interviewers' perceptions of person–organization fit and organizational selection decisions. Journal of Applied psychology, 82 (4), 546-561.

Cabrera-Suárez, M. K., Déniz-Déniz, M. C., & Martín-Santana, J. D. (2015). Family social capital, trust within the TMT, and the establishment of corporate goals related to nonfamily stakeholders. Family Business Review, 28 (2), 145-162.

Cattell, R. B. (1966). The scree test for the number of factors. Multivariate behavioral research, 1 (2), 245-276.

Chrisman, J. J., Chua, J. H., & Litz, R. A. (2004). Comparing the agency costs of family and non□family firms: Conceptual issues and exploratory evidence. Entrepreneurship Theory and practice, 28 (4), 335-354.

Cohen, J. (1992). A power primer. Psychological bulletin, 112 (1), 155-159.

Cook, J., & Wall, T. (1980). New work attitude measures of trust, organizational commitment and personal need non-fulfilment. Journal of occupational psychology, 53 (1), 39-52.

Chua, J. H., Chrisman, J. J., & Sharma, P. (1999). Defining the family business by behavior. Entrepreneurship Theory and Practice, 23 (4), 19-39.

Danes, S. M., Stafford, K., Haynes, G., & Amarapurkar, S. S. (2009). Family capital of family firms: Bridging human, social, and financial capital. Family Business Review, 22 (3), 199-215.

Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. Academy of Management Review, 22 (1), 20-47.

Davis, J. H., Schoorman, F. D., Mayer, R. C., & Tan, H. H. (2000). The trusted general manager and business unit performance: Empirical evidence of a competitive advantage. Strategic management journal, 21 (5), 563-576.

Davis, J. H., Allen, M. R., & Hayes, H. D. (2010). Is blood thicker than water? A study of stewardship perceptions in family business. Entrepreneurship Theory and Practice, 34 (6), 1093-1116.

Denison, D., Nieminen, L., & Kotrba, L. (2014). Diagnosing organizational cultures: A conceptual and empirical review of culture effectiveness surveys. European Journal of Work and Organizational Psychology, 23 (1), 145-161.

Dess, G. G., & Shaw, J. D. (2001). Voluntary turnover, social capital, and organizational performance. Academy of management review, 26 (3), 446-456.

De Massis, A., Kotlar, J., Campopiano, G., & Cassia, L. (2013). Dispersion of family ownership and the performance of small-to-medium size private family firms. Journal of Family Business Strategy, 4 (3), 166-175.

Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: meta-analytic findings and implications for research and practice. Journal of applied psychology, 87(4), 611-628.

Duh, M., Belak, J., & Milfelner, B. (2010). Core values, culture and ethical climate as constitutional elements of ethical behaviour: exploring differences between family and non-family enterprises. Journal of Business Ethics, 97 (3), 473-489.

Eddleston, K. A., Chrisman, J. J., Steier, L. P., & Chua, J. H. (2010). Governance and trust in family firms: An introduction. Entrepreneurship Theory and Practice, 34 (6), 1043-1056.

Eddleston, K. A., & Kellermanns, F. W. (2007). Destructive and productive family relationships: A stewardship theory perspective, Journal of Business Venturing, 22 (4), 545-565.

Eddleston, K. A., Kellermanns, F. W., & Zellweger, T. M. (2012). Exploring the entrepreneurial behavior of family firms: does the stewardship perspective explain differences?. Entrepreneurship Theory and Practice, 36 (2), 347-367.

Eddleston, K. A., & Morgan, R. M. (2014). Trust, commitment and relationships in family business: Challenging conventional wisdom, Journal of Family Business Strategy, 5 (3), 213-216.

Erdem, F., & Atsan, N. (2015). Trust based relationships between family members and long-term employees of family-owned SMEs. International Business Research, 8 (4), 223-232.

Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. Psychological methods, 4 (3), 272.

Farndale, E., Van Ruiten, J., Kelliher, C., & Hope-Hailey, V. (2011). The influence of perceived employee voice on organizational commitment: An exchange perspective. Human Resource Management, 50 (1), 113-129.

Farrington, S. M., & Venter, E. (2016). Investigating value-laden leadership styles among family business owners. South African Journal of Business Management, 47 (4), 35-46.

Felfe, J., & Franke, F. (2012). Commit: Commitment-Skalen: Fragebogen zur Erfassung von Commitment gegenüber Organisation, Beruf, Tätigkeit, Team, Führungskraft und Beschäftigungsform; deutschsprachige Adaptation und Weiterentwicklung der Organizational commitment scale von Meyer und Allen. Huber.

Finegan, J. E. (2000). The impact of person and organizational values on organizational commitment. Journal of Occupational & Organizational Psychology, 73 (2), 149-70.

Fletcher, D., Melin, L., & Gimeno, A. (2012). Culture and values in family business-A review and suggestions for future research. Journal of Family Business Strategy, 3 (3), 127-131.

Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. Journal of marketing research, 382-388.

Fulmer, C. A., & Gelfand, M. J. (2012). At what level (and in whom) we trust: Trust across multiple organizational levels. Journal of Management, 38 (4), 1167-1230.

Fukuyama, F. (1997). Social capital and the modern capitalist economy: Creating a high trust workplace. Stern Business Magazine, 4(1), 1-16.

García Álvarez, E., & López Sintas, J. (2001). A taxonomy of founders based on values: The root of family business heterogeneity. Family business review, 14 (3), 209-230.

Gordon, G. G., & DiTomaso, N. (1992). Predicting corporate performance from organizational culture. Journal of management studies, 29 (6), 783-798.

Gottschalk, S., Niefert, M., Licht, G., Wagner, S., Hauer, A., Keese, D., & Woywode, M. (2014). Die volkswirtschaftliche Bedeutung der Familienunternehmen: Aktualisierung 2014. Stiftung Familienunternehmen.

Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. The leadership quarterly, 6 (2), 219-247.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate data analysis, 7th. Edition, Pearson Education: New York.

Habbershon, T. G., Williams, M., & MacMillan, I. C. (2003). A unified systems perspective of family firm performance. Journal of business venturing, 18 (4), 451-465.

Hoffman, J., Hoelscher, M., & Sorenson, R. (2006). Achieving sustained competitive advantage: A family capital theory. Family business review, 19 (2), 135-145.

Horn, J. L. (1965). A rationale and test for the number of factors in factor analysis. Psychometrika, 30 (2), 179-185.

Jin, K. G., & Drozdenko, R. G. (2010). Relationships among perceived organizational core values, corporate social responsibility, ethics, and organizational performance outcomes: An empirical study of information technology professionals. Journal of Business Ethics, 92 (3), 341-359.

Jiménez, M. C. R., Martos, M. C. V., & Jiménez, R. M. (2015). Organisational harmony as a value in family businesses and its influence on performance. Journal of Business Ethics, 126 (2), 259-272.

Jung, D. I., & Avolio, B. J. (2000). Opening the black box: An experimental investigation of the mediating effects of trust and value congruence on transformational and transactional leadership. Journal of organizational Behavior, 21 (8), 949-964.

Kaiser, H. F. (1958). The varimax criterion for analytic rotation in factor analysis. Psychometrika, 23 (3), 187-200.

Kellermanns, F. W., Eddleston, K. A., Barnett, T., & Pearson, A. (2008). An exploratory study of family member characteristics and involvement: Effects on entrepreneurial behavior in the family firm. Family Business Review, 21 (1), 1-14.

Klein, S. B., Astrachan, J. H., & Smyrnios, K. X. (2005). The F–PEC scale of family influence: construction, validation, and further implication for theory. Entrepreneurship theory and practice, 29 (3), 321-339.

Kluckhohn, C. (1951). Values and value-orientations in the theory of action: An exploration in definition and classification. In Parsons, T. & Shils, E. (Eds.), Toward a general theory of action (pp. 388-433). Cambridge, MA: Harvard University Press.

Koiranen, M. (2002). Over 100 years of age but still entrepreneurially active in business: Exploring the values and family characteristics of old Finnish family firms. Family Business Review, 15 (3), 175-187.

Lavelle, J. J., Brockner, J., Konovsky, M. A., Price, K. H., Henley, A. B., Taneja, A., & Vinekar, V. (2009). Commitment, procedural fairness, and organizational citizenship behavior: A multifoci analysis. Journal of Organizational Behavior: The International

Journal of Industrial, Occupational and Organizational Psychology and Behavior, 30 (3), 337-357.

Leana, C. R., & Van Buren, H. J. (1999). Organizational social capital and employment practices. Academy of management review, 24 (3), 538-555.

Meglino, B. M., & Ravlin, E. C. (1998). Individual values in organizations: Concepts, controversies, and research. Journal of management, 24 (3), 351-389.

Mayer, R. C., & Gavin, M. B. (2005). Trust in management and performance: Who minds the shop while the employees watch the boss?. Academy of Management Journal, 48 (5), 874-888.

Meyer, J. P., Becker, T. E., & Van Dick, R. (2006). Social identities and commitments at work: Toward an integrative model. Journal of organizational behavior, 27 (5), 665-683.

Meyer, J. P., & Herscovitch, L. (2001). Commitment in the workplace: Toward a general model. Human resource management review, 11 (3), 299-326.

Miller, D., & Breton□Miller, L. (2006). Family governance and firm performance: Agency, stewardship, and capabilities. Family business review, 19 (1), 73-87.

Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. Academy of management review, 23 (2), 242-266.

Onwuegbuzie, A. J., & Collins, K. M. (2007). A typology of mixed methods sampling designs in social science research. The Qualitative Report, 12 (2), 281-316. Retrieved from http://nsuworks.nova.edu/tqr/vol12/iss2/9

O'Reilly, C. A., Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. Academy of management journal, 34 (3), 487-516.

Parada, M. J., & Viladás, H. (2010), Narratives: a powerful device for values transmission in family businesses. Journal of Organizational Change Management, 23 (2), 166-172.

Parada, M. J., & Dawson, A. (2017). Building family business identity through transgenerational narratives. Journal of Organizational Change Management, 30 (3), 344-356.

Payne, G. T., Brigham, K. H., Broberg, J. C., Moss, T. W., & Short, J. C. (2011). Organizational virtue orientation and family firms. Business ethics quarterly, 21 (2), 257-285.

Pearson, A. W., Carr, J. C., & Shaw, J. C. (2008). Toward a theory of familiness: A social capital perspective. Entrepreneurship Theory and Practice, 32 (6), 949-969.

Pearson, A. W., Holt, T. D., & Carr, J. C. (2014). Scales in family business studies. In L. Melin, M. Nordqvist, & P. Sharma (Eds.), SAGE handbook of family business (pp. 551–572).London: Sage.

Peres-Neto, P. R., Jackson, D. A., & Somers, K. M. (2005). How many principal components? Stopping rules for determining the number of non-trivial axes revisited. Computational Statistics & Data Analysis, 49 (4), 974-997.

Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. Journal of management, 12 (4), 531-544.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. Journal of applied psychology, 88 (5), 879.

Pötschke, I. (2018). Supplementing Q-method with narratives: Contextualizing CEOs' values for family firms. Journal of Management & Organization, 1-25.

Preacher, K. J., & MacCallum, R. C. (2003). Repairing Tom Swift's electric factor analysis machine. Understanding statistics: Statistical issues in psychology, education, and the social sciences, 2 (1), 13-43.

Ramezan, M. (2016). Examining the impact of organizational culture on social capital in a research based organizations", VINE Journal of Information and Knowledge Management Systems, 46 (3), 411-426.

Riketta, M. (2008). The causal relation between job attitudes and performance: A meta-analysis of panel studies. Journal of Applied Psychology, 93 (2), 472-481.

Rokeach, M. (1973). The nature of human values. New York: Free Press.

Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. Academy of management review, 23 (3), 393-404.

Sackmann, S. A. (2011). Culture and Performance. In Ashkanasy, N., Wilderom, C. P. M. & Peterson, M. F. (Eds.), Handbook of Organizational Culture and Climate (pp. 188-224). Thousand Oaks, CA: Sage.

Salamon, S. D., & Robinson, S. L. (2008). Trust that binds: the impact of collective felt trust on organizational performance. Journal of Applied Psychology, 93 (3), 593.

Sharma, P. (2004). An overview of the field of family business studies: Current status and directions for the future. Family Business Review, 17 (1), 1-36.

Sequeira, J., Mueller, S. L., & McGee, J. E. (2007). The influence of social ties and self-efficacy in forming entrepreneurial intentions and motivating nascent behavior. Journal of Developmental Entrepreneurship, 12 (3), 275-293.

Schein, E. H. (1985). Organizational culture and leadership: A dynamic view. San Francisco.

Schwartz, S. H. (1994). Are there universal aspects in the structure and contents of human values?. Journal of social issues, 50 (4), 19-45.

Schwartz, S.H.,& Bardi, A. (2001).Value Hierarchies across Cultures: Taking a Similarities Perspective. Journal of Cross Cultural Psychology, 32, 268-290.

Sirmon, D. G., & Hitt, M. A. (2003). Managing resources: Linking unique resources, management, and wealth creation in family firms. Entrepreneurship theory and practice, 27 (4), 339-358.

Simon, A., Marquès, P., Bikfalvi, A., & Dolors Muñoz, M. (2012). Exploring value differences across family firms: The influence of choosing and managing complexity. Journal of Family Business Strategy, 3 (3), 132–146.

Sorenson, R. L., & Bierman, L. (2009). Family capital, family business, and free enterprise. Family Business Review, 22 (3), 193-195.

Sorenson, R. L. (2013). How moral and social values become embedded in family firms. Journal of Management, Spirituality & Religion, 10 (2), 116-137.

Sorenson, R. L. (2014). Values in family business. In Melin, L., Nordqvist, M., & Sharma, P. (Eds.), The SAGE handbook of family business (pp. 463-479). Thousand Oaks, CA: Sage.

Staber, U. (2003). Social capital or strong culture?. Human resource development international, 6 (3), 413-420.

Sundaramurthy, C. (2008). Sustaining trust within family businesses. Family Business Review, 21 (1), 89-102.

Tàpies, J., & Ward, J. (Eds.). (2008). Family values and value creation: The fostering of enduring values within family-owned businesses. Palgrave: New York.

Tàpies, J., & Fernández Moya, M. (2012). Values and longevity in family business: Evidence from a cross-cultural analysis. Journal of Family Business Management, 2 (2), 130-146.

Tzafrir, S. S. (2005). The relationship between trust, HRM practices and firm performance. The International Journal of Human Resource Management, 16 (9), 1600-1622.

Vallejo-Martos, M. C. (2011). The organizational culture of family firms as a key factor of competitiveness, Journal of Business Economics and Management 12 (3), 451–48.

Vallejo-Martos, M. C., & Puentes-Poyatos, R. (2014). Family firms as incubators for ethical behavior: An exploratory study from the perspective of stewardship theory. Journal of Management & Organization, 20 (6), 784-807.

Vandenberghe, C., Bentein, K., & Stinglhamber, F. (2004). Affective commitment to the organization, supervisor, and work group: Antecedents and outcomes. Journal of vocational behavior, 64 (1), 47-71.

Zahra, S. A., Hayton, J. C., & Salvato, C. (2004). Entrepreneurship in family vs. Non-Family firms: A Resource-Based analysis of the effect of organizational culture. Entrepreneurship theory and Practice, 28 (4), 363-381.

Zahra, S. A., Hayton, J. C., Neubaum, D. O., Dibrell, C., & Craig, J. (2008). Culture of family commitment and strategic flexibility: The moderating effect of stewardship. Entrepreneurship theory and practice, 32 (6), 1035-1054.

Zwack, M., Kraiczy, N. D., von Schlippe, A., & Hack, A. (2016). Storytelling and cultural family value transmission: Value perception of stories in family firms. Management Learning, 47 (5), 590-614.

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