



RESEARCH ARTICLE

# Supplementing Q-method with narratives: Contextualizing CEOs' values for family firms

Ivonne Pötschke\*

Institute of Performance Management, Leuphana University, Lueneburg, Germany

\*Corresponding author. Email: [ivonne.poetschke@gmail.com](mailto:ivonne.poetschke@gmail.com)

(Received 29 September 2017; revised 28 May 2018; accepted 1 July 2018; first published online 28 August 2018)

## Abstract

Values in family firms are influenced by the complex interplay of family and business. Thus, research requires methods that grasp this complexity. This paper presents a fresh methodological approach for family business research with the example of an in-depth analysis of CEOs' value orientations. Benefits of an integrated use of two qualitative methods – Q-sorts and narrative interviews – which were collected and analyzed for 16 CEOs of family firms are illustrated. Q-method was used to build value patterns, whereas narrative interviews were conducted to reveal how values were contextualized and interpreted. This integrated approach builds qualitative richness in different ways: first, by allowing for a deep understanding of individual experience; second, by providing more contextual insight, and third, by capturing the meaning of abstract values. The approach advanced here can be reproduced for other complex organizational dynamics. Thus, this user-friendly approach is particularly suited for organizational research in a managerial environment.

**Keywords:** entrepreneurship; qualitative methods; small- and medium-sized enterprises; research methods; values

## Introduction

Family businesses have special characteristics due to their distinctive blend of business objectivity with familial intimacy (Tagiuri & Davis, 1996; Astrachan, Klein, & Smyrniotis, 2002; Zellweger, Eddleston, & Kellermann, 2010; Sanchez-Famoso, Maseda, & Iturralde, 2017). This confluence of the family's social system with business necessities results in complex social dynamics (Dyer, 2003; Nordqvist, Hall, & Melin, 2009). Hence, family business research can benefit from qualitative assessments that account for the complex dynamics between family and business (Fletcher, De Massis, & Nordqvist, 2016; Hamilton, Cruz, & Jack, 2017).

This paper outlines the use of a novel qualitative approach for the field of family business research: the integrated use of two qualitative methods, namely narrative analysis and Q-method. Narrative analysis is well established in family business research for exploring social dynamics and complexities; it is primarily useful for generating in-depth, contextualized findings (Dawson & Hjorth, 2012). Q-method, which applies statistical analysis to qualitative methods, is used for studying human subjectivity in terms of attitudes or feelings (Ellingsen, Størksen, & Stephens, 2010; Dziopa & Ahern, 2011) and represents a fresh approach to family business research. Hence, this paper focuses on illustrating the benefits of this hybrid approach for analyzing the complexity of family businesses, mainly by assessing CEOs' value orientations.

Analyzing values is methodologically beneficial for two reasons. Defined as 'desirable trans-situational goals, varying in importance, that serve as guiding principles in the life of a person or other social entity' (Schwartz, 1994: 21), values influence emotional and cognitive processes that

ultimately shape attitudes and behavior (Kluckhohn, 1951; Rokeach, 1973). As a result, organizational research is highly interested in analyzing values as management instruments (Meglino & Ravlin, 1998; Stackman, Pinder, & Connor, 2000; Schein, 2010; Sackmann, 2011; Avolio, Sosik, Kahai, & Baker, 2014). However, extracting values effectively remains a challenging task: organizational researchers have designed numerous surveys to measure values (Ashkanasy, Broadfoot, & Falkus, 2000; Sackmann, 2011; Denison, Nieminen, & Kotrba, 2014), but these do not allow participants to reflect on the meanings attributed to values (Rousseau, 1990; Schein, 2010). Thus responses may be subject to different interpretations. Furthermore, the subjective quality of values can produce biases in terms of social desirability or acquiescence (Paulhus, 1991; Patton, 2005). These challenges are especially relevant for family firms, where assessments need to be sensitive to the unique interaction between business and family that shapes value orientations (Fletcher, Melin, & Gimeno, 2012; Fletcher, De Massis, & Nordqvist, 2016; Vaara, Sonenshein, & Boje, 2016).

For family firms, values provide a competitive advantage by acting as a kind of behavioral 'compass' for organizational members that fosters a common identity and purpose (Koiranen, 2002; Parada & Vilad s, 2010; Schein, 2010; Denison, Nieminen, & Kotrba, 2014). For all organizations, such values provide continuity to organizational practices and entrepreneurial decisions, but in family firms, they also serve as a cipher and guide for family patterns and logics (Fletcher, Melin, & Gimeno, 2012). In other words, values are related to two interwoven systems in a family firm – the family itself and the business – and thus have substantial organizational impact. For this reason, research on family businesses must go beyond traditional organizational value research and instead consider the complexities and contextual factors that are unique to these firms (Simon, Marqu s, Bikfalvi, & Mu oz, 2012; Sorenson, 2014).

In such firms, familial experiences often give rise to value orientations that family members then transfer to their business (Duh, Belak, & Milfelner, 2010; Sorenson, 2013; Zwack, Kraiczky, von Schlippe, & Hack, 2016). Family values are often conveyed via traditions and stories about a family member's particular achievements, which then provide a deep and longstanding anchor for family identity. The value orientations that arise from this shared family history and identity may influence the firm for generations as family members assume key positions and model value orientations (Parada & Dawson, 2017). In these roles, family members may focus more on the moral and social values of their business, in line with their family interactions (Koiranen, 2002; Sorenson & Bierman, 2009; Payne, Brigham, Broberg, Moss, & Short, 2011). In this way, such values produce principles that encompass not only business goals but also stable, harmonious, and emotional relationships (Stewart, 2003; Vallejo, 2008; Jim nez, Martos, & Jim nez, 2015).

This research focuses particularly on family members acting as CEOs, given their function as role models and decision-makers (Sharma, 2004; Parada & Dawson, 2017). CEOs are essentially culture-bearers in family firms, embodying a family's value concepts and translating them into organizational principles (Ling, Simsek, Lubatkin, & Veiga, 2008; Vallejo, 2009; O'Reilly, Caldwell, Chatman, & Doerr, 2014). Since CEOs in family firms derive their value orientations from emotional experiences within the family, they employ those values in their role as business leader. Thus, analyzing CEOs' values is a key to understanding how family experiences shape values and how the executive has attributed meaning to values.

Value research in family firms already provides some insights into how family influences the firm (Sorenson, 2014), particularly in underscoring the interplay of the family and business social systems (Astrachan, Klein, & Smyrnios, 2002); however, there are still several questions unanswered. So far there has been little explicit research on how familial relations and experiences influence value orientations. It is also not clear how family experience – as a value-forming contextual factor – specifically affects the attributed meaning, interpretation, and importance of values (Simon et al., 2012; Sorenson, 2013). Moreover, even though scholars agree about the organizational impact of values, the family business literature lacks an appropriate measurement approach that accounts for both relational and contextual details (Simon et al., 2012).

In light of this, this study combines the use of narrative analysis and Q-method to understand CEOs' value orientations in family businesses.

This paper presents a novel approach to uncovering complex social phenomena in family business research – namely the combination of two methodological approaches for their distinct advantages. The first approach, Q-method, prioritizes values and creates value patterns; the second, narrative interviews, reconstructs family experiences and thereby reveals the context and interpretation of values. By merging these methods, this paper outfits the current literature with an innovative approach that can deliver nuance to qualitative family business research by considering complexities and contextual elements. In this way, a better understanding of how the family influences the firm is promoted (Simon et al., 2012; Sorenson, 2014). This study also addresses recent calls for more in-depth qualitative studies and a combined use of qualitative methodological approaches (Reay & Zhang, 2014; Fletcher, De Massis, & Nordqvist, 2016; Reilly & Jones, 2017).

The paper is organized as follows: first, the literature on family businesses is examined and the contributions and limitations of qualitative and narrative analysis are ascertained. Second, the advantages of integrating Q-method and narrative interviews are described. Third, an outline of this research study is offered. Finally, empirical findings are presented and discussed.

## Literature Review

### *Achievements of qualitative methods in family business research*

Researchers have recently called for an increased usage of qualitative methods in family business research (Nordqvist, Hall, & Melin, 2009; De Massis & Kotlar, 2014; Reilly & Jones, 2017). Qualitative methods have been established in other organizational and management research areas (Buchanan & Bryman, 2009; Bansal & Corley, 2011; Vaara, Sonenshein, & Boje, 2016), but quantitative approaches continue to dominate the family business literature (Dawson & Hjorth, 2012; Reay & Zhang, 2014; Evert, Martin, McLeod, & Payne, 2016; Fletcher, De Massis, & Nordqvist, 2016). Because qualitative methods uncover the subjective meaning of individual life experiences, they are better suited to capturing the complexity and dynamics of human relations and social interactions (Leitch, Hill, & Harrison, 2010; Parada & Dawson, 2017). In the context of family businesses, qualitative methods can capture the individual, relational, and contextual aspects of research objects, thereby exposing the tensions, paradoxes, and dualities that arise from the interplay between business and family (Fletcher, De Massis, & Nordqvist, 2016).

In family business studies, researchers have had to cope with specific social complexities that stem from the inherent interpersonal dynamics between the family and business systems (Debicki, Matherne, Kellermanns, & Chrisman, 2009; Reilly & Jones, 2017), the variety of individuals (Dawson & Hjorth, 2012), and the firms' focus on nonfinancial goals (Berrone, Cruz, & Gomez-Mejia, 2012; Zellweger, Nason, Nordqvist, & Brush, 2013). Qualitative approaches turn these issues into a focal point by reconstructing family businesses as highly complex social phenomena (Fletcher, De Massis, & Nordqvist, 2016; Reilly & Jones, 2017).

Thus far, though, qualitative family business research has mainly emphasized individuals and the accompanying issues – for example, succession, the relationship to nonfamily managers, change management, and cultural issues, etc. (Fletcher, De Massis, & Nordqvist, 2016). A review of most-cited recent qualitative articles highlights the prevalence of single and multiple case study designs, and the relative rarity of ethnographic fieldwork, grounded theory, or phenomenology (Reay & Zhang, 2014; Fletcher, De Massis, & Nordqvist, 2016). Because they often compare different firms, multiple case study designs typically lack the in-depth understanding of the phenomena that is possible with a single case study (Reay & Zhang, 2014; Fletcher, De Massis, & Nordqvist, 2016). This study focuses on a particular qualitative method that has demonstrated great utility for uncovering social realities: narrative analysis. This approach highlights individual, sense-making stories in order to probe multifaceted social constructs of family businesses

(Dawson & Hjorth, 2012; Fletcher, De Massis, & Nordqvist, 2016; Zwack et al., 2016). Instead of highlighting single outcomes, narratives emphasize the importance of events, contextual factors, and relational dynamics among the persons involved (Hjorth & Dawson, 2016; Parada & Dawson, 2017). By connecting the relational and emotional aspects of a phenomenon to the broader social mechanisms at work, narratives effectively bring history to bear on the present (Dawson & Hjorth, 2012). Previous narrative studies of family businesses have focused on processes and relations (Dawson & Hjorth, 2012), entrepreneurship and innovation (Larty & Hamilton, 2011; Jaskiewicz, Combs, & Rau, 2015; Kammerlander, Dessi, Bird, Floris, & Murru, 2015), and the role that history plays in succession (e.g., Dalpiaz, Tracey, & Phillips, 2014; Hjorth & Dawson, 2016). More recently, narrative research has tried to uncover the role of the family in members' efforts to establish and manage the business entity (Randerson, Bettinelli, Fayolle, & Anderson, 2015; Hamilton, Cruz, & Jack, 2017). Current narrative studies on family have been closely linked with research on collective identities (Zellweger et al., 2013; Parada & Dawson, 2017) and values transmission (Parada & Vilad as, 2010; Zwack et al., 2016).

In short, the literature illustrates the benefits of narrative analysis for family business research. Understanding a family's history helps to align the family's origin, identity, and continuity with the business' decisions and behavior (Brown, 2006; Fenton & Langley, 2011; Rowlinson, Casey, Hansen, & Mills, 2014). Hence, narratives are able to position the family and its members at the heart of inquiry (Hamilton, Cruz, & Jack, 2017).

#### ***How research on values in family businesses benefits from narrative analysis***

Values are one of the most complex phenomena in family business research: they represent the core of identity, influence individual behavior, and affect firm success (Meglino & Ravlin, 1998; Koiranen, 2002; Parada & Vilad as, 2010). Research on values in family businesses benefits from narrative analysis because sense-making of experiences uncovers how values are evolved and interpreted (Sarbin, 1986; Riessman, 2008). Previous narrative research on values in this context has emphasized that narratives transmit (family) values trans-generationally to shape a common identity and ensure continuity (Parada & Vilad as, 2010; Martin, 2016). Narratives impart values via stories, myths, and legends that convey emotions, foster empathy, and provide orientation (Boyce, 1996). As a result, narratives become a crucial socialization mechanism for anchoring values in the family firm (Hytti, Alsos, Heinonen, & Ljunggren, 2017), as well as a manifestation of family members' individual experiences (Parada & Vilad as, 2010). Hence, narratives communicate values in a natural, comprehensible, memorable, and vivid manner that extends beyond business issues (Fiese & Spagnola, 2005; Roessl, 2005; Zwack et al., 2016). Therefore, narratives are well suited to transporting and translating implicit values within the duality of family and business (Zwack et al., 2016; Hamilton, Cruz, & Jack, 2017).

#### ***Methodological gaps***

The literature has emphasized the benefits of in-depth qualitative approaches in family business research; however, there are still many unanswered questions, especially in terms of the character and complexity of family firms (Chrisman, Kellermanns, Chan, & Liano, 2010; Reay & Zhang, 2014; Fletcher, De Massis, & Nordqvist, 2016). Part of this issue stems from the tendency toward aggregation: Specifically, qualitative studies (and most often, case studies) have often generalized the findings from individual-level studies to the firm level (De Massis & Kotlar, 2014; Fletcher, De Massis, & Nordqvist, 2016). However, this approach neglects the heterogeneity and uniqueness of individual intentions, sense-making, and viewpoints (Sharma, 2004), and thereby causes insufficient consideration of complexity (Fletcher, De Massis, & Nordqvist, 2016; Zwack et al., 2016).

Due to aggregation, the literature lacks an in-depth approach for understanding individual experiences and constructions of reality (Fletcher, De Massis, & Nordqvist, 2016). Even though

the complexity of family business research demands an integrated, mixed methodology to capture multifaceted phenomena, previous studies have made insufficient use of multiple data resources (Reilly & Jones, 2017); consequently, it remains unclear how contextual factors influence individual intentions and interpretations (Fletcher, De Massis, & Nordqvist, 2016). Open-ended approaches, such as ethnographic work or interpretative designs, may be able to fill this gap better than structured methods (Reay & Zhang, 2014). Indeed, even for business research in general, there are more calls for developing a 'hybrid approach' that includes qualitative considerations such as informal interviews (Alam & Bhatti, 2018). This approach can be useful for dealing with the ambiguity of perceiving and interpreting values, and by extension, mitigates the risk of misunderstanding the narrative (Zwack et al., 2016).

Moreover, previous qualitative studies are lacking transparency regarding their analytical steps and science-theoretical grounding (Fletcher, De Massis, & Nordqvist, 2016).

Consequently, previous qualitative have tended to simplify the complexity of family firms. Open-ended approaches can alleviate this problem by allowing researchers to deeply explore the micro-processes of social dynamics (Reay & Zhang, 2014).

### Forming an integrated perspective using narrative interviews and Q-method

To close the research gap mentioned by the five items above, this paper integrated narrative analysis with Q-method as a novel approach in family business research. Although narrative analysis is widely used in family business research, relevant studies using Q-method in family business research were not found in the literature review.

This paper addresses the scarcity of qualitative methods for exploring the complexity of values in family business research by presenting a novel analytical approach. By doing so, this approach responds to recent calls for methodological pluralism (Chamberlain, Cain, Sheridan, & Dupuis, 2011), which entails examining complex viewpoints in a more comprehensive manner (Castro, Kellison, Boyd, & Kopak, 2010; Creswell, 2010; Denzin, 2012; Reilly & Jones, 2017). Specifically, the study combines narrative interviews (Riessman, 2008; Bold, 2011) with Q-method. Q-method is a rank-ordering procedure for evaluating characteristic patterns that occupy a space between qualitative and quantitative methods (Stephenson, 1953; Shemmings, 2006). Although narrative interviews enable contextualization and the exploration of interpretation schemes (Craig, 2009; Vaara, Sonenshein, & Boje, 2016), Q-method categorizes values and investigates different value patterns (Watts & Stenner, 2012).

Researchers' interest in Q-method has grown enormously in recent years (Lazard, Capdevila, & Roberts, 2011; Trafimow, 2014; Eyvindson, Kangas, Hujala, & Leskinen, 2015; Ramlo, 2016) as a response to the long-favored paradigm of statistical significance testing. Hence, Q-method research is increasingly used in social psychology and family research (Ellingsen, Størksen, & Stephens, 2010; Dziopa & Ahern, 2011). As a constructivist approach, Q-method investigates how and why people think the way they do, and identifies the similarities and differences of opinions or values (McKeown & Thomas, 2013). As such, Q-method provides sharper insights into these viewpoints while building patterns based on individuals' similarities (Steelman & Maguire, 1999).

Responding to the limitations of previous qualitative work, this methodological approach makes several contributions to family business research. The approach offers a novel method to integrate and connect individuals' past experiences and present evaluations. Narratives reconstruct past experiences within families and provide insight into how prior experiences are interpreted (Fletcher, De Massis, & Nordqvist, 2016), whereas Q-method captures the present assessment of values (Stenner, 2009). The mixed methodology and use of triangulation lowers the risk of misinterpreting values. Moreover, the paper closes the gap of empathic understanding of individuals in family firms by strictly remaining on the individual level and contributing to a detailed understanding of individual sense-making. This means that the study not only analyzes



individual experience but also reports on findings on individual instead of firm level. This approach differs from most qualitative studies using case study designs by building patterns between different individuals without focusing on firm level. In short, narratives provide insights into the evolution and interpretation of values (Dawson & Hjorth, 2012), whereas Q-method provides an ordered framework for comparing value patterns amidst their complexity (Stenner, 2009).

Therefore, this approach is in line with constructivist tradition, which maintains that subjective interpretation and contextualization are necessary to understand social phenomena (Leitch, Hill, & Harrison, 2010). Instead of focusing on causal explanations based on objective facts, as the positivist tradition argues, this view sees participants' experience as the heart of research (Cope, 2005). Thus, this approach has mixed two methods that emphasize subjectivity: narratives reflect the inner working of individuals and provide insight into identity-building processes (Sarbin, 1986; Cope, 2005; Kourti, 2016), whereas Q-method allows a sorter to order their subjective feelings and experiences (Stenner, 2009). Thus, both methods emphasize subjectivity. Finally, this integrated approach does not only involve the interpretative processes of participants but also of the researcher.

## **Methods**

Based on the literature review on measuring values in family firms, two pilot interviews with former managing partners of two family firms in the logistics and transportation industry were conducted. These pilot interviews provided a basis for crafting the interview guide and modifying the statements for the Q-sort.

### **Sample and data collection**

The sampling strategy followed purposive sampling (Onwuegbuzie & Collins, 2007; Teddlie & Yu, 2007) and chose family firms based on family influence, firm size, industry, and location. Following previous family business studies, family influence was defined in terms of family ownership and management (Chua, Chrisman, & Sharma, 1999; Zwack et al., 2016; Anglin, Reid, Short, Zachary, & Rutherford, 2017). Firms employing between 35 and 200 employees, where the family held more than 50% of firm shares and at least one family member served on the top management team were included.

Next, firm selection was accounted for the fact that values differ due to the influence of firm size (Gordon, 1991; Vallejo-Martos & Puentes-Poyatos, 2014), industries and regions (Chatman & Jehn, 1994; Zwack et al., 2016), and social-cultural conditions (Dess, Ireland, & Hitt, 1990). To reduce the influence of the firm's environment, the sample was limited to the logistics and transportation industry in northern Germany, as family-run businesses are dominant in this field. To reduce the influence of the firm's industry and environment, industry-specific and environmental influences were also limited. Moreover, this sampling aligns with Q-method designs that do not require large numbers of participants (Dziopa & Ahern, 2011), as the main interest is in discerning a participant group's subjective viewpoints rather than establishing causality or generalizability (Ellingsen, Størksen, & Stephens, 2010; Watts & Stenner, 2012). Furthermore, the sampling followed the common purposive sampling practice used in mixed methods studies, which typically include samples with fewer than 30 cases (Onwuegbuzie & Collins, 2007; Teddlie & Yu, 2007). To find family firms meeting the outlined criteria, the business database Hoppenstedt was used.

The selection of participants focused on top managers currently managing a family firm, and not solely on company owners, because managers whose values influence the firm on a daily basis should be included. Previous literature has identified the crucial role of top managers in determining the organizational culture and values of family firms (Sharma, 2004; Eddleston, 2008; Schein, 2010; Zwack et al., 2016). Potential participants were contacted by mail and

telephone. Ultimately, 16 participants took part in the narrative interviews and the Q-sorting process. All participants were members of the top management board and represented different age groups: Four participants were younger than 35 years, six participants were between 35 and 49 years, and six participants were 50 years or older. Participants' tenure with the company varied from 8 months to 41 years. One-half of the participants had completed vocational training, whereas the other half held a university degree.

Data collection occurred between September 2014 and July 2015 at each participant's headquarters.

### ***Narrative interviews***

First, in-depth face-to-face interviews with the CEOs to better understand their value preferences were conducted. These interviews focused on family tradition to understand the antecedents of their values, as well as the takeover story, which represents an important autobiographical event. Autobiographical events importantly convey values and influence cultural role modeling (Dailey & Browning, 2014), and hence they are widely used in narrative studies in family business research (Dawson & Hjorth, 2012).

In line with researchers who argue for using mixed forms (Murray, 2003; Hennink, Hutter, & Bailey, 2010), a modified form of an origin narrative interview was employed. In particular, the interview guide featured open questions, but structured the interview according to different interview topics. The interview guide contained two topics that addressed CEOs' founding/takeover story and their family tradition. Each interview started with an open question about the founding/takeover story: 'Can you tell me the story about your founding/takeover of the firm? What has been especially important for you?' This initial question served as an anchoring point for the narrative interview, triggering a narration about interviewees' value preferences and points-of-view. The researcher also asked about the existence of family tradition(s) to elicit important values in family and gain insights in the attributed meaning: 'Please tell me about practices within your family that influenced you? Which traditions exist?'

The interviews lasted one hour, were audio-recorded, and fully transcribed. Narrative interviews were analyzed via thematic narrative analysis to identify main themes in participants' stories, as the interest was in the content ('what is said') rather than the structure ('how it is said') of stories (Czarniawska, 2004; Riessman, 2008; Bold, 2011).

Each case was analyzed separately to preserve the integrity and sequencing of each narrative. The thematic narrative analysis followed two analytical steps: First, analysis focused on what was said regarding the firm takeover, which provided information about what was important for each CEO (Dawson & Hjorth, 2012). Second, these themes were screened for expressed values and value codes were derived from the themes (Saldana, 2015). These value preferences referred to actual words from the narrators. This analytical presentation allowed to discover variation across cases (narrators). These two analytical steps were repeated to analyze the narratives about family tradition. Finally, a table representing the findings for both exemplary narratives was constructed (Table 4).

### ***Q-study***

After the interview, each interviewee participated in the Q-study. Q-method was used to structure the data because of its ability to construct types of viewpoints, attitudes, and preferences, as well as to discern patterns and configurations (Watts & Stenner, 2005).

Beginning a Q-study requires first defining the Q-set, which is a collection of Q-statements that represent the sum of different opinions on a topic (Bartlett & DeWeese, 2015). The final Q-set consisted of 52 statements, meeting the criteria that a Q-set should contain between 40 and 80 statements (Stainton Rogers, 1995). Following the categorization of McKeown and Thomas

(2013), the Q-set was built from a mixed sample of statements derived from the pilot interviews, along with ready-made statements taken from literature studies and value surveys (Rokeach, 1973; O'Reilly, Chatman, & Caldwell, 1991; Schwartz, 1994; García-Álvarez & López-Sintas, 2001; Vallejo, 2008; Duh, Belak, & Milfelner, 2010).

For the Q-sorting process, participants were asked to sort the provided statements on a scale with nine categories, ranging from 'not important' to 'very important' (Figure 1). The 'forced' distribution followed a normal distribution with the following spaces: 3-4-6-8-10-8-6-4-3 (Watts & Stenner, 2012).

Each participant received the same sorting instruction: 'Please sort the following statements regarding the importance each statement has for you as CEO of your company.' During the sorting process, participants were encouraged to rearrange the cards as necessary and think out loud while doing so. After this procedure, a brief post-sorting interview was conducted to consolidate the sorting results (Watts & Stenner, 2005). Participants were asked to reflect on their choices by explaining what each value meant to them (Gallagher & Pollock, 2010).

The PQ-method program was used to analyze the Q-sorts (Schmolck & Atkinson, 2002). After entering the data, a principal component analysis was proceeded with a varimax rotation to associate participants with one factor, and thereby improve the factor solution. Afterwards, each sort that loaded highly negatively or positively on a factor was flagged manually. This loading of each Q-sort indicates how strongly it correlates with a prototypical Q-factor (Stephenson, 1953; Brown, 1996; Watts & Stenner, 2005). The conducted factor analysis is person-centered in order to group participants with similar viewpoints together (Dziopa & Ahern, 2011). A factor selection is suitable if there is a low number of undedicated sorts and minimal factor correlations. Previous Q-studies point out that at least two participants should load significantly on one factor and confounding participants have to be excluded (McKeown & Thomas, 1988; Dziopa & Ahern, 2011).

After selecting the number of factors, each factor was defined by analyzing the factor arrays, the correlations between sorts, and the distinguishing statements. To better perform the factor interpretation, a crib sheet for each factor was created (Table 1). This crib sheet illustrates characteristic statements and thus allows a systematic factor interpretation (Watts & Stenner, 2012).

The factor interpretation was built on this crib sheet and factor arrays were screened for additional statements that contributed to the meaning of each factor. The entire statement configuration was analyzed to uncover the whole viewpoint of each factor. In addition, demographic information was included in the interpretation process, as it could have influenced participants' viewpoints.

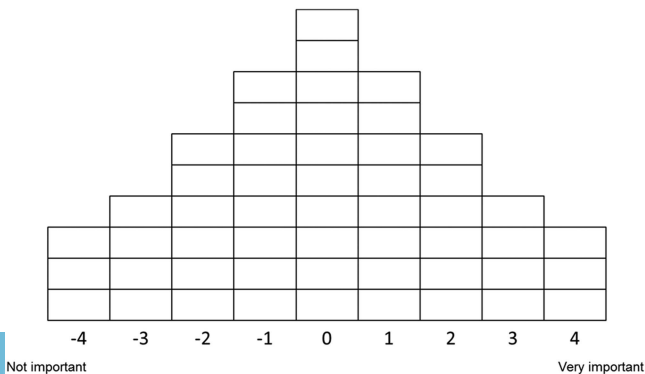


Figure 1. Sort grid



**Table 1.** Crib sheet for systematic Q-factor interpretation (Examples: Q-factor 1 and Q-factor 3)

Example: Crib sheet: Factor 1
Statements ranked at +4
Honesty
Loyalty
Enthusiasm for the job
Statements ranked higher than in any other factor
Being team-oriented
Being quick to take advantage of opportunities
Statements ranked lower than in any other factor
Being distinctive from others
High performance expectations
People orientation
Forgiveness
Statements ranked at -4
Obedience
Working long hours
Adaptability
Example: Crib sheet: Factor 3
Statements ranked at +4
Honesty
Focus on quality
Fairness
Statements ranked higher than in any other factor
Autonomy
Having a clear guiding philosophy
Tolerance
Confronting conflict directly
Praise for good performance
Being people oriented
Statements ranked lower than in any other factor
Enthusiasm for the job
Being calm
Statements ranked at -4
Being highly organized
High performance expectations

### **Integration of findings**

After these analytical steps, the findings from the thematic narrative analysis were integrated into the Q-factor interpretation. The Q-results served as the analytical starting point, and narratives were used to examine how value statements from the Q-sort were construed and contextualized. In sum, narrative sequences were used to work out what participants had in mind when talking about a specific value. Therefore, narrative sequences from those participants who highly loaded on a factor were compared and how these participants framed articulated value themes was worked out. As the aim of this paper was to illustrate the integration of both research methods, those value statements that were sorted as most or least important in the Q-factor were clarified. To this end, both narrative sequences (founding/takeover sequence and family tradition sequence) were considered to identify instances of repeated meaning and experience, and therefore of prominent importance. Hence, the Q-factor interpretation was enriched by contextual and narrative information about family values and tradition.

### **Results**

The following results represent an illustrative case of the implementation of this novel methodological approach. Thus, findings from the Q-study and integrated results from thematic narrative analysis were selected to demonstrate how the use of narrative interviews contributes to a refined Q-factor interpretation and how these insightful findings contribute to family business research.

#### **Findings from Q-sort analysis**

The analysis with PQ-method identified five different factors that explain 69% of the variation. Each factor represents a prototype of a specific value pattern, namely: Enthusiasm, Innovation, Reliability, Determination and Responsibility. These factors were unipolar, as evidenced by the positive factor loadings for all sorts (Table 2).

The results indicate that 15 sorts loaded significantly on one factor. Sort 10 was confounded, loading significantly on two factors. The following exemplary interpretation of two of five Q-factors is based on those sorts that loaded clearly on each factor (Table 3).

#### **Exemplary presentation of defining of Q-factors**

In this section, Q-factors are interpreted and defined. First, the crib sheets of each factor that was built on factor arrays was considered. The crib of Q-factor 1 (The Enthusiast) and Q-factor 3 (The Reliable) was presented to make the analytical procedure transparent and comprehensible (Table 1). Second, demographic information and distinguishing statements were included in the factor interpretation, as outlined in the data analysis section. A brief summary of the three other Q-factors is presented in an overview in the following (Table 6).

#### **Q-factor 1: The Enthusiast**

Factor 1 had an eigenvalue of 5.9 and explained 18% of the study variance. Five male CEOs loaded on this factor. Their average age was 46 years and their average duration with the company was 21 years. Four of the participants finished vocational training; one held a university degree.

For the CEOs loading on this factor, enthusiasm ('enthusiasm', distinguishing statement: +4) for the job was considered the basis for success. These CEOs highly identified with their profession and their firm. Instead of avoiding working long hours, they volunteered extra time when necessary ('working long hours': -4). They considered honesty and loyalty to be a particularly important foundation for business relations ('honesty,' 'loyalty': +4). These CEOs emphasized the collective rather than the individual, as underlined by the high ranking for team orientation

Table 2. Factor arrays from Q-sort

Statement (no.)		Factor arrays				
		Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
1	Sharing information freely	-1	-2	-1	-2	-4
2	Respect	2	2	0	3	-2
3	Obedience	-4	-4	-3	-1	-4
4	Autonomy	-3	-3	0	-1	-4
5	Equality	-3	-2	-3	-2	-4
6	Developing friends at work	-2	-3	-3	2	-3
7	Risk-taking	0	-1	1	2	-4
8	Paying attention to detail	1	-1	-1	0	3
9	Having a clear guiding philosophy	1	-1	2	-3	-2
10	Being innovative	0	4	0	0	-1
11	Honesty	4	4	4	1	-2
12	Tolerance	0	1	2	0	-2
13	Not being constrained by many rules	-1	0	-1	-1	-1
14	Confronting conflict directly	1	-2	2	-1	0
15	Opportunities for professional growth	-1	-2	-1	1	0
16	Informality	-3	-3	-3	0	-2
17	Being calm	1	1	-2	1	0
18	Being results oriented	1	4	0	-1	-1
19	Having a good reputation	3	1	3	0	-1
20	Tradition	1	-4	-1	0	-2
21	Being highly organized	-1	-2	-4	-3	-1
22	Being quick to take advantage of opportunities	2	1	0	0	-1
23	Being reflective	0	2	-1	-2	0
24	Being analytical	-2	-1	-2	-2	0
25	Being distinctive from others	-2	-1	3	4	-1
26	Being team-oriented	3	0	1	2	0
27	Support	-1	0	0	-1	0
28	Rules orientation	0	-4	-2	-4	-1
29	Fairness	2	3	4	3	0
30	Being aggressive	1	-3	2	-4	0
31	High pay for good performance	0	0	-2	-3	0
32	Working long hours	-4	0	-1	-4	0

Table 2. Continued

Statement (no.)	Factor arrays				
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
33 Decisiveness	2	1	1	4	0
34 Achievement orientation	0	2	0	-1	1
35 Loyalty	4	1	3	2	1
36 Praise for good performance	-1	0	2	-2	1
37 Stability	2	1	2	0	2
38 Enthusiasm for the job	4	-1	-2	2	1
39 Courtesy	-2	-2	0	2	1
40 Social justice	0	2	-1	1	1
41 Adaptability	-4	3	-2	3	3
42 High performance expectations	-2	3	-4	-1	2
43 Being people oriented	-2	0	3	2	2
44 Security	0	1	1	-2	2
45 Being cooperative	1	3	1	1	2
46 Being competitive	0	2	0	0	3
47 An emphasis on quality	2	0	4	1	3
48 Forgiveness	-3	-1	-1	-1	2
49 Family security	-1	-1	-1	-3	3
50 Taking individual responsibility	3	0	1	0	4
51 Social responsibility	0	2	0	1	3
52 Sense of duty	3	0	2	4	4

('being team oriented': +3). They ranked adaptability ('adaptability,' distinguishing statement: -4) and obedience ('obedience': -4) as the least important. Thus, these CEOs may be driven more by their passion and intrinsic motivation than by rules or regularities, underlined by their low ranking of obedience. The focal point of this viewpoint is commitment and engagement for the firm. Their low rankings for forgiveness ('forgiveness': -3) and people orientation ('being people orientated,' distinguishing statement: -2) underscore their focus on passion for their job rather than people.

### Q-factor 3: The Reliable

Factor 3 had an eigenvalue of 1.1 and explained 15% of the study variance. Three male CEOs and one female CEO loaded on this factor. Three of the CEOs had an average age of 35; the average age of all four participants was 43. Their duration in the company ranged between 3 and 40 years, with an average duration of 17 years. The two participants in their early 30s held a university degree and had experience outside the family firm. The other two had finished their vocational training and had not worked outside the firm.

**Table 3.** Loading of Q-sorts (case numeration is adjusted to narrative interview cases, Table 4)

Case/sort	F1	F2	F3	F4	F5
1			0.62		
2	0.67				
3			0.68		
4					0.83
5		0.75			
6		0.73			
7	0.63				
8				0.63	
9	0.61				
10	0.54			0.42	
11	0.84				
12			0.74		
13					0.62
14				0.86	
15	0.53				
16		0.58			
Eigenvalue	5.91	1.84	1.14	1.08	0.99
Variance in %	18	13	15	10	13

These CEOs focused on fairness and on the quality of products and processes ('fairness'; 'an emphasis on quality': +4). For them, relevant tasks had to be done carefully and conscientiously, but they placed minor importance on remaining calm ('being calm': -2). In their viewpoint, people needed to be treated fairly ('honesty': +4; 'being people orientated': +3). These CEOs placed relatively greater importance on obligation, as reflected in their desire to address conflicts directly ('confronting conflict directly': +2) and ensure a sense of reciprocity through praise, fairness, and trust ('honesty': +4; 'loyalty': +3). In contrast, these CEOs placed less emphasis on high performance and organization ('being highly organized; 'high performance expectations,' distinguishing statement: -4). They abided by a guiding philosophy ('having a clear guiding philosophy': +2) of being fair and consistent in their interactions, whereas enthusiasm was of little importance ('enthusiasm for the job': -4).

#### *Refining Q-factors by integrating findings from narrative analysis*

Finally, findings from the thematic narrative analysis were applied to interpret and differentiate the Q-factors more accurately. Owing to the volume of results generated by both studies, narrative sequences that helped to refine two of the five Q-factors were selected. Two Q-factors were chosen because the values 'honesty' and 'loyalty' were ranked as important in both viewpoints. This paper focused on an exemplary presentation of narrative sequences from CEOs who loaded highly on each factor, because these CEOs exemplify the quality of the Q-factor. Besides illustrating narrative analysis on two examples in more detail, narratives from other participants



**Table 4.** Overview of results from thematic narrative analysis for narrative examples of case 3 and 11

Case	Main theme	Founding/takeover (value preferences)	Family tradition
3	Working together like a family	Loyalty	Parents lived a strong identification with the firm
		Support	Blending of family and business
		Reliability	Father as role model for identification and trustful relationships between employees and management
		Honesty (within the firm)	'Leading by example' was also learnt from his father
11	Passion for the customer	Courage	Father proved courage and endurance in founding phase
		Enthusiasm/passion	Strong passion for the customer
		Customer orientation	Overcoming problems/standing up again
		Honesty (toward the customer)	

loading on the presented Q-factors were analyzed to verify that all participants who were loading on the same Q-factor interpreted value statements similarly. As this paper can only present a small portion of all results, it focused on illustrating how differently the value 'honesty' was interpreted in narrative cases loading on one of the two illustrated Q-factors (Table 5).

### **Narrative example for refining interpretation of Q-factor 1 (The Enthusiast)**

#### *Case 11's story: Passion for the customer*

The takeover story of case 11 – a CEO in his 40s – introduced courage and a strong customer orientation – typical entrepreneurial characteristics. He illustrated enthusiasm and strives for motivating his customers. He associated honesty with courage, enthusiasm, and a strong customer focus. In his narrative, he had no doubts about engaging in the family firm and underlined that inspiring customers with passion is his strongest impulse:

*[...] From childhood it was clear that I am entering the parental enterprise. For me it was always there. I always had little hobbies and was always with the company. That was clear from the beginning that I enter into these footsteps. My focus is the customer, customer orientation, which is still the same. Of course, the times change, it is now very fast-moving. If you see the whole thing on the price, then we cannot keep up – if you see honesty and everything, then this is just a bit more expensive [...] The enthusiasm of the satisfied customer. That has already driven me. [...] Our vision is clear: being a service leader. (Narrative part about takeover)*

He admired his father's attitude: Standing up again after difficult years in the firm and showing courage with the decision to be self-employed.

*We learned this from our father, being positive. In the beginning everyone around us was very negative and critical, but our father was very courageous and then his career took a few hits, and he remained positive. I believe that this had quite a big impact on who I am today [...] This is a thing our father has taught us: What does the customer want? What serves him well? Actually nothing much has changed in this regard. I share my father's enthusiasm. This has been passed on to me from the generation that founded this business. We are entrepreneurs. We are positive by nature. We have to be fighters, and we have to say that we will go on, and we must not lose the values of honesty and enthusiasm. I live this honesty, not by manipulating*

**Table 5.** Results from thematic narrative analysis for further cases loading either on Q-factor 1 or Q-factor 3

Q-factor	Case	Main theme	Founding/takeover (value preferences)	Family tradition	
3	1	'Tit for tat'	Honesty (within the firm)	Father was a role model in supporting employees	
			Reliability	Grandfather accentuated goal and performance orientation	
			Reciprocity	Being reliable was a central principle in whole family	
			Performance orientation		
12	Who my employee is to whom I stand		Honesty (within the firm)	Father put great emphasis on endurance -	
			Reliability	He distinguishes himself from this tradition by focusing on a stronger employee orientation	
			Loyalty		
			Support		
1	2	The firm comes first	Endurance	Company was build up with high personal effort	
			Being independent		
			Passion		
			Honesty (toward the customer)		
	7			Honesty (toward the customer)	His grandfather influenced him with his self-made-man attitude as someone who took his opportunity and built up the firm
				Customer orientation	Straightforwardness, effort and endurance were exemplified
				Passion	
	9			Courage	Admiration for the father is expressed for showing courage and overcoming problems/standing up again
				Customer orientation	
				Passion	
Endurance					
15			Honesty (toward the customer)		
			Passion	Influenced by family members in Eastern and Western Germany; showing great endurance to live freely	
			Continuation		
			Freedom		
			Honesty (toward the customer)		

**Table 6.** Brief description of other Q-factors that were not detailed illustrated

Q-factor	Q-factor 2: The Innovator	Q-factor 4: The Determined	Q-factor 5: The Responsible
Eigenvalue	1.8	1.0	0.9
Variance (%)	13%	10%	13%
Number of participants loading on the factor	3	2	2
Demographic information	Three male CEOs	Two male CEOs	Two male CEOs
	Average age: 45 years	Average age: 59 years	Average age: 41 years
	Average duration with the company: 13 years	One participant held a university degree and had worked for several years outside the family firm; while the other had the longest company duration of all participants	Average duration with the company: 12 years (lowest of all factors)
	Two of them held a university degree and experience outside the family firm in privately held firms		Both participants held a university degree; one of them gained experience outside the family firm
Factor description: key elements of each viewpoint	Strongly focused on innovation and results orientation	Represented a determined view, stressing the aim of being distinctive and decisive	Focus on responsibility for oneself and others
	Rejection of rules and obedience, favoring reflexivity and performance	Great sense of duty and great importance in professional growth opportunities	High importance of individual responsibility as well as social responsibility and people orientation
	Tradition is perceived as obedience and a rules orientation as barriers to innovation		Minor importance of risk-taking behavior
	Emphasize willingness to change and freedom		

*something or by doing anything else. What is always best and most effective is people driven by passion.* (Narrative part about family tradition)

### **Contributions to the interpretation of Q-factor 1 (The Enthusiast)**

This narrative underlines the enthusiastic character of Q-factor 1 and provides detailed information about the interpretation of the abstract value statement ‘enthusiasm for the job.’ The narrative sequence about family tradition emphasizes that the CEO’s father exemplified courage and a positive, enthusiastic entrepreneurial attitude, which then became family values.

Other cases loading on Factor 1 largely agreed, emphasizing the need for a customer orientation alongside typical entrepreneurial characteristics, such as courage and a positive attitude. For them, honesty is fundamental to entrepreneurial activity: They highlighted the importance of dealing honestly with customers and identifying strongly with the company. For cases loading on

Q-factor 1, 'honesty' is contextualized with business concerns through frankness and customer-centrism. The narrative example emphasized the entrepreneurial character of Q-factor 1 toward a 'passionate entrepreneur.'

### **Narrative example for refining interpretation of Q-factor 3 (The Reliable)**

*Case 3's story: Working together like a family*

Case 3 – a CEO in his early 30s – highlighted the importance of loyalty within the firm, which meant a strong sense of identification with the firm's goals. In drawing an analogy between employee relations and familial support, his narrative emphasized values of honesty, loyalty, support, and reliability. He explained that he had to bear sudden responsibility for the firm and expressed gratitude for the support from employees. He considered this support and loyalty to be success factors in his takeover period:

*I had a pretty shitty start. I was still studying when my father was diagnosed and died few months later. It all happened very suddenly [...] I eventually ended up managing the business while I was writing my thesis, and I was completely on my own. This brings me to the central theme of values. Without this team, without this level of loyalty to the business, with this connection to the business, what we like to call family, none of this would have happened. Every employee came to me and said: We are supporting you. We are there for you. This was a very, very tough time [...] On the other hand they paid me back. The employees came to me, and they said that we are all working towards the same goals. (Narrative part about takeover)*

In his childhood, the firm was always part of their private life. He further described the role model behavior that he learned from his father, who demonstrated unlimited commitment and loyalty to his employees. Regarding family tradition, he explained that honesty, loyalty, and a sense of reliability built the basis for trust and togetherness:

*I grew up like that. [...] The company is the family. So you can actually say it. Trust, commitment - it's just like that. It was always the same at home. [...] It was always giving and taking. And that is the same in the family. [...] (Narrative part about family tradition)*  
*On the other hand, I have given a lot. This is who I am, and it is a value that my father taught me. [...] You cannot join the business straight from university and be the boss who knows everything better. I myself hold all of the driving licenses required [...] I do everything. And I believe that this is key to leading by example: Okay, if the worst comes to the worst, I work just like any other employee. [...] – and my father was no different – I expect let me call this 100% loyalty to the business. I need to know that my guys are 100% loyal and honest, because I need to be able to trust them 100%. When an employee asks me which direction we are taking, and I give them an answer, I have to bear the consequences and stand to my words. [...] (Narrative part about family tradition)*

### **Contributions to the interpretation of Q-factor 3 (The Reliable)**

In this narrative, the importance of a trusting and fair relationship is illustrated by case 11. This sense of trust and loyalty as well as 'leading by example' is something the narrator learned from his father. This underlines the importance of fairness as expressed by Q-factor 3.

For cases loading on Factor 3, honesty and loyalty are based on reliability and reciprocity. Honesty was contextualized as the 'predictability' of interpersonal relations within the family firm. In their view, the trust that arises from honesty produces a sense of predictability. Thus, the standards of a 'reliable and reputable merchant' need to be upheld for Q-factor 3 (Tables 4–6).

### **Novel insights for family business research**

Answering the call for a more in-depth use of qualitative methods (Reay & Zhang, 2014), this approach truly emphasizes a deep immersion in individual family socialization and its impact on CEOs' current value orientations. By investigating how family experiences influence CEOs' interpretation and prioritization of values, the analysis demonstrated that values are rooted in family's tradition and role models.

Moreover, because the approach combined narrative interviews with Q-sort, links between family experiences/history and the content-related meaning of single values could be established. Indeed, the multiple interpretations and narratives that resulted from the Q-sort allowed to refine the Q-factor interpretation. Thereby, this approach deviates from traditional qualitative methods by abstaining from 'one single truth' (Fletcher, De Massis, & Nordqvist, 2016). Hence, deeper insights into the dualistic character of a family firm were gained (Fletcher, De Massis, & Nordqvist, 2016).

Moreover, the study applies methodological triangulation by systematically linking two methodological approaches in order to maximize the validity of the results (Denzin, 2012). Narrative interviews contextualized the value statements 'honesty' and 'loyalty' gleaned from Q-sort, and helped to mitigate misinterpretations of the value patterns. In short, this combined methodology allowed not only to enrich the understanding of the meaning and origin of CEOs' values but also to minimize misinterpretations and thereby increase the quality of the results. Also, the triangulation of both methods allowed to cross-verify the results, thereby improving validity and reliability. Thus, this novel approach contributes to the recent calls for a broader application of mixed-method designs (Reilly & Jones, 2017).

### **Discussion**

In this paper, a methodological approach that enriches a Q-sort study with contextual information gained from narrative interviews is described. Such an approach contributes to a more comprehensive and tangible understanding of the typical value orientations of CEOs in family firms. This discussion will focus on the value of the integrated methodological approach and delay discussing content-related findings until a subsequent paper.

First, Q-method was applied as a novel approach in family business research. The findings from the Q-sort illustrated five Q-factors that express subjective viewpoints on value preferences and hence CEOs' typical value orientations: the Enthusiast, the Innovator, the Reliable, the Determined, and the Responsible. Thus, Q-method proved to be a useful approach for grouping single statements into value patterns (Watts & Stenner, 2005; Eyvindson et al., 2015) that reflected the subjectivity of different viewpoints.

Secondly, narratives from CEOs' founding period and family experience were integrated to portray Q-factor 1 (Enthusiast) and Q-factor 3 (Reliable) in more detail. These two Q-factors were refined with narratives because they showed the strongest similarity among all factors. The Q-sort results indicated a strong overlap between Q-factor 1 (Enthusiast) and Q-factor 3 (Reliable) due to a shared emphasis on honesty and loyalty. The narratives indicated a different understanding and contextualization of both values: in the view of Q-factor 1, honesty is related foremost to business, encompassing a passion for one's work and attention to one's customers. In the view of Q-factor 3, however, honesty applies to the relationship with employees, encompassing issues like reliability and reciprocity.

By integrating findings from the thematic narrative analysis with the Q-sort, nuances in how honesty and loyalty are contextualized differently across viewpoints were identified. This integration of narratives revealed the entrepreneurial focus of Q-factor 1 and the binding manner of Q-factor 3. Thus, the integration of findings from narrative analysis in the interpretation of Q-factors contributed to the differentiation of both Q-factors. This strengthens the expression of subjective viewpoints through Q-sort. Hence, this approach helps to address the methodological



concern that the same value statements might be interpreted differently by different participants (Lundmann & Villadsen, 2016). Besides gaining a better understanding of the relevant values for both Q-factors, considering the narratives helped to make the CEOs' viewpoints tangible and to empathize with the viewpoints represented by the Q-factors. The narratives illustrated abstract value statements with personal experience and conveyed an overall message and emotions (Kourti, 2016; Zwack et al., 2016).

The findings thus contribute to two central questions in qualitative family business research: Which contextual factors influence the social processes and dynamics in a family firm? And how do individuals make sense of their experiences? (Fletcher, De Massis, & Nordqvist, 2016).

Regarding the importance of context, this approach sought to integrate contextual information to a high degree. Family socialization was identified as an important contextual variable. Specifically, family values – contained in family myths and traditions – highly influence the value preferences of CEOs and work to shape organizational values and behavior (Lumpkin, Martin, & Vaughn, 2008; Sorenson, 2013). Therefore, this integrated approach responds to recent calls for more contextual consideration in family business research (Fletcher, De Massis, & Nordqvist, 2016; Reilly & Jones, 2017). In this way, this methodological approach specifies why and how variation between organizations exists (Härtel & O'Connor, 2014) and illuminates the heterogeneity of family businesses (Chua, Chrisman, Steier, & Rau, 2012).

With regard to value research, findings indicate that family experience directly influences CEOs' value orientations and interpretation, thereby addressing the question about the influence of family experience on values (Simon et al., 2012; Sorenson, 2014). Moreover, the systematic integration of family socialization as a context factor underscores the importance of considering processes and history instead of more static variables (Dawson & Hjorth, 2012). Using contextual information about family socialization clarified how CEOs construe values and the extent to which individual experience causes variation in value interpretation. In this regard, this paper contributes to the debate on the alignment between family and firm identity (Zellweger et al., 2013; Anglin et al., 2017) by analyzing family identity and core values on a more complex and relational level, accounting for the context of family experiences and its influence on values (Fletcher, Melin, & Gimeno, 2012; Simon et al., 2012). Generally, the integration of contextual variables contributes to further theory development in the family business field, whereas the richness of in-depth contextual knowledge provides new conceptual insight (Hjorth & Dawson, 2016; Hamilton, Cruz, & Jack, 2017). Such insights benefit research on topics such as social capital (Arregle, Hitt, Sirmon, & Very, 2007; Sorenson, 2013) and stewardship (Vallejo-Martos & Puentes-Poyatos, 2014), and may have ramifications for research on organizational values.

This novel approach also considered individual sense-making and interpretation. Narrative data were used to comprehensively interpret and refine the Q-factors' meanings to enrich understanding of values and minimize misinterpretations. Ultimately, narratives illuminate how narrators interpret values and how family experiences influence value preferences. This is in line with research showing that values are the core of personal identity and are shaped by socialization (Ashforth & Mael, 1989; Hitlin, 2003). Multiple influencing factors form the attributed meaning of values, and this mechanism is useful for exploring how family traditions strongly influence value orientations (Sorenson, 2013). The integration of narratives enabled a reconstruction of individual experiences, identities, and relationships, thus developing an in-depth perspective of individual actors in family businesses (Fletcher, De Massis, & Nordqvist, 2016). Thereby, the applied approach answers the call for the use of truly open-ended qualitative methods (Reay & Zhang, 2014).

Finally, in the debate on qualitative versus quantitative approaches, these results support the notion that contextualization and understanding are necessary for increasing the content validity of the measured statements. For example, narrative reflections shed light on the individualized meaning that participants associate with single-value statements. In this vein, the combined methodology supports further quantitative research by allowing scholars to explore the meanings

that participants attribute to values. From a scientific-theoretical perspective, the use of narratives strengthens the capacity of Q-method to identify, reconstruct, and understand subjective viewpoints. Therefore, this study is in line with the constructivist research paradigm and phenomenological approaches in that meaning is derived from subjective interpretation and becomes context-dependent (Härtel & O'Connor 2014). The chosen research design proved suitable for an in-depth exploration of context-specific social phenomena such as values and their meanings: Q-sort provided structure for the data through the use of value statements and the exploration of subjective value viewpoints, while integrating the thematic narratives allowed to better analyze the results and discover congruencies. Thus, this approach has methodological implications.

This novel approach is exemplified by the analysis of CEOs' values in family firms, which represent a complex organizational environment where the firm is strongly influenced by the family. Thus, the approach advanced here may be applied for other organizational forms and research topics.

### **Limitations**

First, the two methods used in this study both involve high word counts (Bold, 2011; Watts & Stenner, 2012), which limited the ability to present the full results.

Second, the sample size was somewhat small. Although Q-sort can accommodate small samples, future research should aim to validate the illustrated findings with extended sample sizes. The Q-study did, in fairness, meet the criteria that at least two participants load significantly on a Q-factor (Dziopa & Ahern, 2011), but including more participants would still be beneficial for the interpretation.

Third, this study focused specifically on CEOs in the logistics industry in order to mitigate industry influence. It would be valuable to compare viewpoints across different industries and assess the heterogeneity among family businesses (Chua et al., 2012). Scholars could also map out differences rooted in demographics (e.g., women vs. men, educational backgrounds, different age groups, etc.). Indeed, there has been recent scholarly interest in the role of women as managers of family firms (Meroño-Cerdán & López-Nicolás, 2017).

Fourth, this study derived the value statements for the Q-sort from a mixed collection – some from interviews and others from previous studies (McKeown & Thomas, 2013). Future studies could instead use original anecdotes or quotes for sorting. Finally, researchers could reach beyond family socialization to explore how other socialization events (e.g., friendships, love relationships, or customer experiences) may influence CEOs' interpretation of values.

### **Implications for Management Practice**

This illustrated approach contributes to both organizational development and communication. Regarding the former, the approach encourages reflection, addresses the challenge of recruiting participants, and adds to the discussion on user-friendly methods. Owing to the approach's haptic nature and reflection process, the participants became enthusiastic over Q-sort. Because Q-sort allows organizational members to actively participate in data collection, it has the potential to mobilize members in a process of organizational reflection and change. Moreover, a method that participants regard as valuable facilitates their acceptance of it, which may provide practitioners with a useful supplement to statistical analysis. This corresponds with current trends in research that aim to generate greater involvement among study participants and thereby achieve a better understanding and implementation of research findings.

Regarding value communication, this approach helped the CEOs to articulate their organization's values and thereby render them more vivid and tangible. Imbuing said values with personal and emotional anecdotes adds substance to abstraction and helps employees identify with the firm. With the capacity to connect with employees on a personal and emotional level, these 'tangible viewpoints' become useful for organizational practice.

**Acknowledgement.** The author would like to thank the anonymous reviewers as well as the associate editor for their highly constructive feedback and encouragement during the review process.

## References

- Alam, M. A., & Bhatti, O. K. (2018). Curtailing data biases in business research: Introducing a hybrid approach. *Journal of Management & Organization*, 1–15. <https://doi.org/10.1017/jmo.2018.7>
- 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. <https://doi.org/10.1177/0894486516669254>
- 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. <https://doi.org/10.1111/j.1467-6486.2007.00665.x>
- Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review*, 14(1), 20–39. <https://doi.org/10.5465/AMR.1989.4278999>
- Ashkanasy, N. M., Broadfoot, L. E., & Falkus, S. A. (2000). Questionnaire measures of organizational culture. In N. Ashkanasy, C. P. M. Wilderom, & M. F. Peterson (Eds.), *Handbook of Organizational Culture and Climate* (pp. 131–145). Thousand Oaks, CA: Sage.
- Astrachan, J. H., Klein, S. B., & Smyrniotis, 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. <https://doi.org/10.1111/j.1741-6248.2002.00045.x>
- Avolio, B. J., Sosik, J. J., Kahai, S. S., & Baker, B. (2014). E-leadership: Re-examining transformations in leadership source and transmission. *The Leadership Quarterly*, 25(1), 105–131. <https://doi.org/10.1016/j.leaqua.2013.11.003>
- Bansal, P. T., & Corley, K. (2011). From the editors: The coming of age for qualitative research: Embracing the diversity of qualitative methods. *The Academy of Management Journal*, 54(2), 233–237. Retrieved from <http://www.jstor.org/stable/23045078>
- Bartlett, J. E., & DeWeese, B. (2015). Using the Q methodology approach in human resource development research. *Advances in Developing Human Resources*, 17(1), 72–87.
- Berrone, P., Cruz, C., & Gomez-Mejia, L. R. (2012). Socioemotional wealth in family firms: Theoretical dimensions, assessment approaches, and agenda for future research. *Family Business Review*, 25(3), 258–279.
- Bold, C. (2011). *Using narrative in research*. London: Sage.
- Boyce, M. E. (1996). Organizational story and storytelling: a critical review. *Journal of organizational change management*, 9(5), 5–26.
- Brown, A. D. (2006). A narrative approach to collective identities. *Journal of Management Studies*, 43(4), 731–753. <https://doi.org/10.1111/j.1467-6486.2006.00609.x>
- Brown, S. R. (1996). Q methodology and qualitative research. *Qualitative Health Research*, 6(4), 561–567. <https://doi.org/10.1177/104973239600600408>
- Buchanan, D., & Bryman, A. (Eds.). (2009). *The Sage handbook of organizational research methods*. London: Sage.
- Castro, F. G., Kellison, J. G., Boyd, S. J., & Kopak, A. (2010). A methodology for conducting integrative mixed methods research and data analyses. *Journal of Mixed Methods Research*, 4(4), 342–360. <https://doi.org/10.1177/1558689810382916>
- Chamberlain, K., Cain, T., Sheridan, J., & Dupuis, A. (2011). Pluralisms in qualitative research: From multiple methods to integrated methods. *Qualitative Research in Psychology*, 8(2), 151–169. <https://doi.org/10.1080/14780887.2011.572730>
- Chatman, J. A., & Jehn, K. A. (1994). Assessing the relationship between industry characteristics and organizational culture: how different can you be? *Academy of management journal*, 37(3), 522–553.
- Chrisman, J. J., Kellermanns, F. W., Chan, K. C., & Liano, K. (2010). Intellectual foundations of current research in family business: An identification and review of 25 influential articles. *Family Business Review*, 23(1), 9–26.
- Chua, J. H., Chrisman, J. J., & Sharma, P. (1999). Defining the family business by behavior. *Entrepreneurship Theory and Practice*, 23(4), 19–39. <https://doi.org/10.1177/104225879902300402>
- Chua, J. H., Chrisman, J. J., Steier, L. P., & Rau, S. B. (2012). Sources of heterogeneity in family firms: An introduction. *Entrepreneurship Theory and Practice*, 36(6), 1103–1113. <https://doi.org/10.1111/j.1540-6520.2012.00540.x>
- Cope, J. (2005). Researching entrepreneurship through phenomenological inquiry: Philosophical and methodological issues. *International Small Business Journal*, 23(2), 163–189.
- Craig, C. J. (2009). Learning about reflection through exploring narrative inquiry. *Reflective Practice*, 10(1), 105–116. <https://doi.org/10.1080/14623940802652920>
- Creswell, J. W. (2010). Mapping the field of mixed methods research. In A. Tashakkori, & C. Teddlie (Eds.), *Handbook of Mixed Methods in Social & Behavioral Research* (2nd ed. pp. 45–68). Thousand Oaks, CA: Sage.
- Czarniawska, B. (2004). *Narratives in social science research*. London: Sage.
- Dailey, S. L., & Browning, L. (2014). Retelling stories in organizations: Understanding the functions of narrative repetition. *Academy of Management Review*, 39(1), 22–43. <https://doi.org/10.5465/amr.2011.0329>
- Dalpiaz, E., Tracey, P., & Phillips, N. (2014). Succession narratives in family business: The case of Alessi. *Entrepreneurship Theory and Practice*, 38(6), 1375–1394. <https://doi.org/10.1111/etap.12129>
- Dawson, A., & Hjorth, D. (2012). Advancing family business research through narrative analysis. *Family Business Review*, 25(3), 339–355. <https://doi.org/10.1177/0894486511421487>

- Debicki, B. J., Matherne, C. F. III, Kellermanns, F. W., & Chrisman, J. J. (2009). Family business research in the new millennium: An overview of the who, the where, the what, and the why. *Family Business Review*, 22(2), 151–166. <https://doi.org/10.1177/0894486509333598>
- De Massis, A., & Kotlar, J. (2014). The case study method in family business research: Guidelines for qualitative scholarship. *Journal of Family Business Strategy*, 5(1), 15–29. <https://doi.org/10.1016/j.jfbs.2014.01.007>
- 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. <https://doi.org/10.1080/1359432X.2012.713173>
- Denzin, N. K. (2012). Triangulation 2.0. *Journal of Mixed Methods Research*, 6(2), 80–88.
- Dess, G. G., Ireland, R. D., & Hitt, M. A. (1990). Industry effects and strategic management research. *Journal of Management*, 16(1), 7–27. <https://doi.org/10.1177/014920639001600102>
- 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. <https://doi.org/10.1007/s10551-010-0519-9>
- Dyer, W. G. (2003). The family: The missing variable in organizational research. *Entrepreneurship Theory and Practice*, 27(4), 401–416. <https://doi.org/10.1111/1540-8520.00018>
- Dziopa, F., & Ahern, K. (2011). A systematic literature review of the applications of Q-technique and its methodology. *Methodology: European Journal of Research Methods for the Behavioral and Social Sciences*, 11(7), 39–55. <https://doi.org/10.1027/1614-2241/a000021>
- Eddleston, K. A. (2008). Commentary: The prequel to family firm culture and stewardship: The leadership perspective of the founder. *Entrepreneurship Theory and Practice*, 32(6), 1055–1061.
- Ellingsen, I. T., Storksen, I., & Stephens, P. (2010). Q methodology in social work research. *International Journal of Social Research Methodology*, 13(5), 395–409. <https://doi.org/10.1080/13645570903368286>
- Evert, R. E., Martin, J. A., McLeod, M. S., & Payne, G. T. (2016). Empirics in family business research: Progress, challenges, and the path ahead. *Family Business Review*, 29(1), 17–43. <https://doi.org/10.1177/0894486515593869>
- Eyvindson, K., Kangas, A., Hujala, T., & Leskinen, P. (2015). Likert versus Q-approaches in survey methodologies: Discrepancies in results with same respondents. *Quality & Quantity*, 49(2), 509–522. <https://doi.org/10.1007/s11135-014-0006-y>
- Fenton, C., & Langlely, A. (2011). Strategy as practice and the narrative turn. *Organization Studies*, 32(9), 1171–1196. <https://doi.org/10.1177/0170840611410838>
- Fletcher, D., De Massis, A., & Nordqvist, M. (2016). Qualitative research practices and family business scholarship: A review and future research agenda. *Journal of Family Business Strategy*, 7(1), 8–25. <https://doi.org/10.1016/j.jfbs.2015.08.001>
- 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.
- Fiese, B. H., & Spagnola, M. (2005). Narratives in and about families: An examination of coding schemes and a guide for family researchers. *Journal of Family Psychology*, 19(1), 51–61.
- Gallagher, K., & Pollock, D. (2010). The use of interviews in Q methodology: Card Content Analysis. *Nursing Research*, 59(4), 295–300. <https://doi.org/10.1097/NNR.0b013e3181e4ffff>
- 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. (1991). Industry determinants of organizational culture. *Academy of Management Review*, 16, 396–415. <https://doi.org/10.5465/AMR.1991.4278959>
- Hamilton, E., Cruz, A. D., & Jack, S. (2017). Re-framing the status of narrative in family business research: Towards an understanding of families in business. *Journal of Family Business Strategy*, 8(1), 3–12. <https://doi.org/10.1016/j.jfbs.2016.11.001>
- Härtel, C. E., & O'Connor, J. M. (2014). Contextualizing research: Putting context back into organizational behavior research. *Journal of Management & Organization*, 20(4), 417–422. <https://doi.org/10.1017/jmo.2014.61>
- Hennink, M., Hutter, I., & Bailey, A. (2010). *Qualitative research methods*. London: Sage.
- Hitlin, S. (2003). Values as the core of personal identity: Drawing links between two theories of self. *Social Psychology Quarterly*, 66(2), 118–137. <https://doi.org/10.2307/1519843>
- Hjorth, D., & Dawson, A. (2016). The burden of history in the family business organization. *Organization Studies*, 37(8), 1089–1111. <https://doi.org/10.1177/0170840615613375>
- Hytti, U., Alsos, G. A., Heinonen, J., & Ljunggren, E. (2017). Navigating the family business: A gendered analysis of identity construction of daughters. *International Small Business Journal*, 35(6), 665–686. <https://doi.org/10.1177/0266242616675924>
- Jaskiewicz, P., Combs, J. G., & Rau, S. B. (2015). Entrepreneurial legacy: Toward a theory of how some family firms nurture transgenerational entrepreneurship. *Journal of Business Venturing*, 30(1), 29–49. <https://doi.org/10.1016/j.jbusvent.2014.07.001>
- 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. <https://doi.org/10.1007/s10551-013-1941-6>



- Kammerlander, N., Dessi, C., Bird, M., Floris, M., & Murru, A. (2015). The impact of shared stories on family firm innovation: A multicase study. *Family Business Review*, 28(4), 332–354. <https://doi.org/10.1177/0894486515607777>
- Kluckhohn, C. (1951). Values and value-orientations in the theory of action: An exploration in definition and classification. In T. Parsons, & E. Shils (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. <https://doi.org/10.1111/j.1741-6248.2002.00175.x>
- Kourti, I. (2016). Using personal narratives to explore multiple identities in organisational contexts. *Qualitative Research in Organizations and Management: An International Journal*, 11(3), 169–188. <https://doi.org/10.1108/QROM-02-2015-1274>
- Larty, J., & Hamilton, E. (2011). Structural approaches to narrative analysis in entrepreneurship research: Exemplars from two researchers. *International Small Business Journal*, 29(3), 220–237. <https://doi.org/10.1177/0266242611401796>
- Lazard, L., Capdevila, R., & Roberts, A. (2011). Methodological pluralism in theory and in practice: The case for Q in the community. *Qualitative Research in Psychology*, 8(2), 140–150. <https://doi.org/10.1080/14780887.2011.572749>
- Leitch, C. M., Hill, F. M., & Harrison, R. T. (2010). The philosophy and practice of interpretivist research in entrepreneurship: Quality, validation, and trust. *Organizational Research Methods*, 13(1), 67–84. <https://doi.org/10.1177/1094428109339839>
- Ling, Y., Simsek, Z., Lubatkin, M. H., & Veiga, J. F. (2008). The impact of transformational CEOs on the performance of small-to medium-sized firms: Does organizational context matter? *Journal of Applied Psychology*, 93(4), 923.
- Lumpkin, G. T., Martin, W., & Vaughn, M. (2008). Family orientation: Individual level influences on family firm outcomes. *Family Business Review*, 21(2), 127–138. <https://doi.org/10.1111/j.1741-6248.2008.00120.x>
- Lundmann, L., & Villadsen, J. W. (2016). Qualitative variations in personality inventories: Subjective understandings of items in a personality inventory. *Qualitative Research in Psychology*, 13(2), 166–187. <https://doi.org/10.1080/14780887.2015.1134737>
- Martin, S. R. (2016). Stories about values and valuable stories: A field experiment of the power of narratives to shape newcomers' actions. *Academy of Management Journal*, 59(5), 1707–1724. <https://doi.org/10.5465/amj.2014.0061>
- Meroño-Cerdán, A. L., & López-Nicolás, C. (2017). Women in management: Are family firms somehow special? *Journal of Management & Organization*, 23(12), 224–240. <https://doi.org/10.1017/jmo.2016.67>
- McKeown, B. F., & Thomas, D. B. (1988). *Q methodology*, (Vol. 66). California, US: Sage.
- McKeown, B., & Thomas, D. B. (2013). *Q-methodology*. Los Angeles, CA: Sage.
- Meglino, B. M., & Ravlin, E. C. (1998). Individual values in organizations: Concepts, controversies, and research. *Journal of Management*, 24(3), 351–389. <https://doi.org/10.1177/014920639802400304>
- Murray, M. (2003). Narrative psychology. In J. A. Smith (Ed.), *Qualitative psychology: A practical guide to research methods* (pp. 111–131). Los Angeles, CA: Sage.
- Nordqvist, M., Hall, A., & Melin, L. (2009). Qualitative research on family businesses: The relevance and usefulness of the interpretive approach. *Journal of Management & Organization*, 15(3), 294–308. <https://doi.org/10.1017/S1833367200002637>
- 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. <https://doi.org/10.2307/256404>
- O'Reilly, C. A., Caldwell, D. F., Chatman, J., & Doerr, B. (2014). The promise and problems of organizational culture. *Group & Organization Management*, 39(6), 595–625. <https://doi.org/10.1177/1059601114550713>
- Parada, M. J., & Dawson, A. (2017). Building family business identity through transgenerational narratives. *Journal of Organizational Change Management*, 30(3), 344–356. <https://doi.org/10.1108/JOCM-10-2016-0200>
- Parada, M. J., & Viladés, H. (2010). Narratives: A powerful device for values transmission in family businesses. *Journal of Organizational Change Management*, 23(2), 166–172. <https://doi.org/10.1108/09534811011031346>
- Patton, M. Q. (2005). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage.
- Paulhus, D. L. (1991). Measurement and control of response bias. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), *Measures of personality and social psychological attitudes* (pp. 17–59). San Diego, CA: Academic Press.
- 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.
- Randerson, K., Bettinelli, C., Fayolle, A., & Anderson, A. (2015). Family entrepreneurship as a field of research: Exploring its contours and contents. *Journal of Family Business Strategy*, 6(3), 143–154. <https://doi.org/10.1016/j.jfbs.2015.08.002>
- Riessman, C. K. (2008). *Narrative methods for the human sciences*. Thousand Oaks, CA: Sage.
- Ramlo, S. (2016). Mixed method lessons learned from 80 years of Q methodology. *Journal of Mixed Methods Research*, 10(1), 28–45. <https://doi.org/10.1177/1558689815610998>
- Reay, T., & Zhang, Z. (2014). Qualitative methods in family business research. In L. Melin, M. Nordqvist, & P. Sharma (Eds.), *The SAGE handbook of family business* (pp. 573–593). London: Sage.
- Reilly, T. M., & Jones, R. (2017). Mixed methodology in family business research: Past accomplishments and perspectives for the future. *Journal of Family Business Strategy*, 8(3), 185–195. <https://doi.org/10.1016/j.jfbs.2017.08.003>



- Roessler, D. (2005). Family businesses and interfirm cooperation. *Family Business Review*, 18(3), 203–214. <https://doi.org/10.1111/j.1741-6248.2005.00042.x>
- Rokeach, M. (1973). *The nature of human values*. New York: Free Press.
- Rousseau, D. M. (1990). Assessing organizational culture: The case for multiple methods. In B. Schneider (Ed.), *Organizational climate and culture* (pp. 153–193). San Francisco: Jossey-Bass Publishers.
- Rowlinson, M., Casey, A., Hansen, P. H., & Mills, A. J. (2014). Narratives and memory in organizations. *Organization*, 21(4), 441–446. <https://doi.org/10.1177/1350508414527256>
- Sackmann, S. A. (2011). Culture and performance. In N. Ashkanasy, C. P. M. Wilderom, & M. F. Peterson (Eds.), *Handbook of organizational culture and climate* (pp. 188–224). Thousand Oaks, CA: Sage.
- Saldana, J. (2015). *The coding manual for qualitative researchers*. London: Sage.
- Sanchez-Famoso, V., Maseda, A., & Iturralde, T. (2017). Family involvement in top management team: Impact on relationships between internal social capital and innovation. *Journal of Management & Organization*, 23(1), 136–162. <https://doi.org/10.1017/jmo.2016.2>
- Sarbin, T. R. (1986). *Narrative psychology: The storied nature of human conduct*. New York: Praeger Publishers.
- Schein, E. H. (2010). *Organizational culture and leadership*. Hoboken, NJ: John Wiley & Sons.
- Schmolck, P., & Atkinson, J. (2002). PQMethod (version 2.11) [Computer software]. Retrieved 28 October 2015 from <http://www.rz.unibw-muenchen.de/?p41bsmk/qmethod>.
- Schwartz, S. H. (1994). Are there universal aspects in the structure and contents of human values? *Journal of Social Issues*, 50(4), 19–45. <https://doi.org/10.1111/j.1540-4560.1994.tb01196.x>
- 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. <https://doi.org/10.1111/j.1741-6248.2004.00001.x>
- Shemmings, D. (2006). Quantifying qualitative data: An illustrative example of the use of Q methodology in psychosocial research. *Qualitative Research in Psychology*, 3(2), 147–165. <https://doi.org/10.1191/1478088706qp060oa>
- Simon, A., Marqués, P., Bikfalvi, A., & Muñoz, M. D. (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. (2013). How moral and social values become embedded in family firms. *Journal of Management, Spirituality & Religion*, 10(2), 116–137. <https://doi.org/10.1080/14766086.2012.758050>
- Sorenson, R. L. (2014). Values in family business. In L. Melin, M. Nordqvist, & P. Sharma (Eds.), *The SAGE handbook of family business* (pp. 463–479). Thousand Oaks, CA: Sage.
- Sorenson, R. L., & Bierman, L. (2009). Family capital, family business, and free enterprise. *Family Business Review*, 22(3), 193–195.
- Stackman, R. W., Pinder, C. C., & Connor, P. E. (2000). Values lost: Redirecting research on values in the workplace. In N. Ashkanasy, C. P. M. Wilderom, & M. F. Peterson (Eds.), *Handbook of Organizational Culture and Climate* (pp. 37–54). Thousand Oaks, CA: Sage.
- Stainton Rogers, R. (1995). Q methodology. In J. A. Smith, R. Harré, & L. V. Langenhove (Eds.), *Rethinking Methods in Psychology* (pp. 178–192). Thousand Oaks, CA: Sage.
- Steelman, T. A., & Maguire, L. A. (1999). Understanding participant perspectives: Q-methodology in national forest management. *Journal of Policy Analysis and Management*, 18(3), 361–388. Retrieved from <http://www.jstor.org/stable/3325903>
- Stephenson, W. (1953). *The study of behavior: Q-technique and its methodology*. Chicago: University of Chicago Press.
- Stenner, P. (2009). Q methodology as a constructivist methodology. *Operant Subjectivity: The International Journal of Q Methodology*, 32, 46–69.
- Stewart, A. (2003). Help one another, use one another: Toward an anthropology of family business. *Entrepreneurship Theory and Practice*, 27(4), 383–396. <https://doi.org/10.1111/1540-8520.00016>
- Tagiuri, R., & Davis, J. (1996). Bivalent attributes of the family firm. *Family Business Review*, 9(2), 199–208. <https://doi.org/10.1111/j.1741-6248.1996.00199.x>
- Teddle, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of mixed methods research*, 1(1), 77–100.
- Trafimow, D. (2014). Considering quantitative and qualitative issues together. *Qualitative Research in Psychology*, 11(1), 15–24. <https://doi.org/10.1080/14780887.2012.743202>
- Vaara, E., Sonenshein, S., & Boje, D. (2016). Narratives as sources of stability and change in organizations: Approaches and directions for future research. *The Academy of Management Annals*, 10(1), 495–560. <https://doi.org/10.1080/19416520.2016.1120963>
- Vallejo, M. (2008). Is the culture of family firms really different? A value-based model for its survival through generations. *Journal of Business Ethics*, 81(2), 261–279. <https://doi.org/10.1007/s10551-007-9493-2>
- Vallejo, M. (2009). Analytical model of leadership in family firms under transformational theoretical approach. *Family Business Review*, 22(2), 136–150. <https://doi.org/10.1177/0894486508327892>
- 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. <https://doi.org/10.1017/jmo.2014.55>

- Watts, S. & Stenner, P. (2005). Doing Q methodology: theory, method and interpretation. *Qualitative Research in Psychology*, 2(1), 67–91. <https://doi.org/10.1191/1478088705qp022oa>
- Watts, S. & Stenner, P. (2012). *Doing Q methodological research: Theory, method & interpretation*. Thousand Oaks, CA: Sage.
- Zellweger, T. M., Eddleston, K. A. & Kellermann, F. W. (2010). Exploring the concept of familiness: Introducing family firm identity. *Journal of Family Business Strategy*, 1(1), 54–63. <https://doi.org/10.1016/j.jfbs.2009.12.003>
- Zellweger, T. M., Nason, R. S., Nordqvist, M. & Brush, C. G. (2013). Why do family firms strive for nonfinancial goals? An organizational identity perspective. *Entrepreneurship Theory and Practice*, 37(2), 229–248. <https://doi.org/10.1111/j.1540-6520.2011.00466.x>
- 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. <https://doi.org/10.1177/1350507616659833>

Reproduced with permission of copyright owner. Further reproduction prohibited without permission.