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KNOWLEDGE SHARING IN SMALL FAMILY FIRMS: A LEADERSHIP PERSPECTIVE

Abstract:

Knowledge sharing is considered critical in the development of a knowledge resource to contribute to the strategic development of the firm. However, how this key organisational activity takes place in small family firms is unknown, as much of the surrounding literature focuses on large, nonfamily-oriented firms. This mixed-methods article investigates the nature of knowledge sharing in small family firms, and explores the role of the influence of family in knowledge resource development. Quantitative findings (n=110) acknowledge heterogeneity of leadership style in small family firms and identify two distinct ways in which knowledge sharing activities are approached; while qualitative data (n=26) examine implications for individual knowledge sharing and the role that family plays. This article contributes to both the family business and knowledge sharing literature and outlines implications for the way in which small family firms view the development of their knowledge resource.

Keywords: family firms, knowledge sharing, path-goal theory, mixed-methods, factor analysis

1 Introduction

Knowledge sharing has received a lot of attention within the extant knowledge management literature due to strong links with performance (Geiger & Schreyögg, 2012; Huang *et al.*, 2013). However, its application to small family firms remains underrepresented, as most studies focus on larger non-family organizations (Wong & Aspinwall, 2004). A review of the studies that consider knowledge sharing within large family firms highlights at least two divergent trends:

one which looks positively on the altruistic nature of familial influence (Karra *et al.*, 2006; Zahra *et al.*, 2007) and another which implies more problematic behavioural issues impeding knowledge sharing in family firms (Poza *et al.*, 2004; Le Breton-Miller & Miller, 2006). This divergence of thought highlights not only a range of perspectives which can be taken on socio-cultural knowledge practices, but also echoes other works which have found considerable variation in the way family firms approach the management of their resources (Le Breton-Miller *et al.*, 2015).

It can be argued that in small family firms knowledge initiatives represent a particularly key resource (Dotsika & Patrick, 2013). However, when focusing on smaller organisations, the capacity for knowledge sharing is often found to be characterised by managerial awareness and the intentions of the individual or small group of individuals in leadership positions of the organisation (Durst & Edvardsson, 2012). This is said to create an adhocracy in the way many small firms manage their knowledge resources, over which the presence of family can have great cultural influence (Duh *et al.*, 2010). The main research questions driving this work are thus two-fold: firstly, to investigate the impact of leadership styles on knowledge sharing behaviours in small family firms; and second, to gain a better understanding of the role family influence plays in fostering knowledge sharing behaviours.

This exploratory article follows calls for a more holistic view of the family firm by looking at the interaction of leadership approach and family influence, and exploring how this impacts on the knowledge sharing behaviour of both family and non-family members (Sharma *et al.* 2014). Path-goal leadership theory (House & Mitchell, 1974; House, 1996) is adopted as a theoretical framework to examine the various leadership approaches found in small family firms, while the

interaction of these approaches with the influence of family is investigated in terms of its impact on knowledge sharing activity.

Mixed methods are used in a staged-approach designed to engage with the multidimensional aspects of small family firms. Sequentially, quantitative survey data ($n=110$) from small family firms are employed to establish intended leadership approaches within the firm; while qualitative interview data ($n=26$) from all organisational levels and family statuses expose various perceptions and inform an understanding of the individualised impact on knowledge sharing. The findings of this article not only further academic discussion on the development of a critical knowledge resource, but also greater define the complexities of behaviour within these contextually-sensitive and emotionally-laden firms.

This article now considers the literature surrounding knowledge sharing in small family firms with a view to developing a set of research propositions from which the aims of the study can be addressed.

2 Background

2.1 Knowledge sharing in small family firms

It is argued that knowledge initiatives form the single key resource for small firms (DeSouza & Awazu, 2006). However, while larger organisations now have a long established tradition in implementing the knowledge control and measurement systems put forward by Nonaka and Takeuchi (1995) and Davenport *et al.* (1998), among others, Nunes *et al.* (2006) find less attention focused on knowledge sharing in smaller firms. It is suggested that this may be an issue of organisational size, as smaller firms are more informally structured and operate with more

socially-based relationships than their larger counterparts (Dotsika & Patrick, 2013). Restrictions on resources across the board also mean that small firms tend to deal with knowledge and knowledge sharing on an *ad hoc* basis, if at all; particularly in relation to more tacit forms of knowledge, such as know-how and experiential wisdom (Durst & Edvardsson, 2012).

However, under the resource-based view, small firms have much to gain by extending their capabilities through the recombining and development of their current knowledge base (Carnes & Ireland, 2013). In particular, small family firms are found to have rich knowledge sources held by individuals within the organisation, which when combined can enrich the knowledge base and ultimate competitive advantage of the firm (Sirmon & Hitt, 2003). In order to activate this knowledge, the sharing of resources through interaction is critical in reinforcing or transforming existing organisational knowledge (Sanchez-Famoso & Maseda, 2014); however, for this to take place, individuals must share their knowledge with each other (Patel & Fiet, 2011; Carrasco-Hernández & Jiménez- Jiménez, 2013). In this sense, family firms have the benefit of an enhanced relational flow between organisational members (Sanchez-Famoso & Maseda, 2014); which is particularly relevant for tacit-to-tacit knowledge transfer. In this respect, Lin (2013) found that family firms demonstrate low preference for incentivised knowledge sharing systems; preferring instead to rely on sharing networks where the intention to share is based on a reciprocal and multi-directional flow for the benefit of the entire organisation. This follows Pieper and Klein's (2007) systems approach to family firms, which sees each individual in the organisation able to influence the business system; also satisfying Siebels and zu Knyphausen-Aufseß's (2012) judgement that the many relational complexities of the family firm require an open approach to the study of the individual within the business unit. In accordance with this view, knowledge sharing is considered by this article to be the process of transferring the

wisdom, skills, and technologies of individuals to generate a greater knowledge resource (Tsai, 2002). Knowledge sharing in this sense should not seek to build a static resource stock, but should enable knowledge mobilisation in reciprocal and meaningful exchanges.

Anecdotally, family firms could be considered to have a unique advantage over their non-family counterparts in the application of fluid socio-cultural knowledge practices (Zahra *et al.*, 2007; Seaman *et al.*, 2010). The existence of altruism, particularly in the early stages of enterprise development (Chua *et al.*, 2009), implies that both knowledge and objectives should be effectively aligned between owners and other members of the firm (Zahra & Filatotchev, 2004). Therefore an element of internal trust, over agency, eases the intra-firm transfer of knowledge, particularly between family members (Karra *et al.*, 2006; Treviño-Rodríguez & Tapies, 2006).

The key role of trust is considered critical in the dyadic transfer of knowledge (Edmondson, 2002; Gubbins & MacCurtain, 2008). Here, family influence is found to have the ability to transcend the transactional ties found in nonfamily organisational structures (Zahra & Filatotchev, 2004; Klein *et al.*, 2005; Cliff & Jennings, 2005; Sonfield & Lussier, 2009). Furthering this, Pearson *et al.* (2008) also consider the abundant history of interaction and interdependence existing in family ties to theoretically enable the creation of enhanced social capital. Arregle *et al.* (2007, p.77) suggest that the strength of familial social capital directly impacts organisational social capital through membership stability, interaction & interdependence, creating “*one of the most enduring and powerful forms of social capital*”. Once developed, Danes *et al.* (2009) see a strong social capital which can be relied upon to uphold the norms and reciprocal nature of structures in family firms, thus directly enhancing the notion of knowledge sharing.

However, in contrast to this notion, a concurrent train of thought in the family firm literature suggests a problematic centralization of knowledge heightened by the presence of family influence (Le Breton-Miller & Miller, 2006). Keenly, Poza *et al.*'s (2004) depiction of 'separate realities' between top-level management and 'everyone else in the firm' reflects the issue of an under-informed centre, which in turn echoes views on the problem of pluralism in organizational culture (Clegg *et al.*, 2006). Dupuy (2004) places blame for a shielded centralisation on a lack of knowledge communication affecting withdrawal from 'reality' and subsequently bringing about strategic conservatism, mirroring many of the more critical ideas resonant in family business research (Habbershon, 2006; Pukall & Calabró, 2014).

For their part, Chirico and Salvato (2008) also suggest that a dominant family presence causes many conflicts to emerge which hamper vital knowledge integration, with fractured interpersonal relationships being the most prominent cause for concern (Kellermanns & Eddleston, 2004). The unique intersection of the family and business systems makes family firms sensitive to relational discord, rivalries, and conflict avoidance as opposed to resolution (Sorenson, 1999). Consequently, decisions on knowledge-based resources can be skewed, which at its worst can risk a lessening of knowledge sharing as value judgements become based on the potential for conflict rather than appropriateness (Picard, 2004). This implies that family systems may become so strong that they "*negate or minimize the influence of "non-familiness"*" (Sonfield & Lussier, 2009, p.205), with the needs of familial harmony taking priority, thus placing artificial merit on family-held knowledge over non-family. Moreover, noted problems of controlling autonomy and nepotism has led to the emergence of theories on a family-induced 'group think' (Ensley & Pearson, 2005). In order to circumvent these issues, Zahra *et al.* (2007) suggest that many family

firms seek to formalise their knowledge sharing processes; which in turn may cause the sharing of tacit knowledge to be less fluid than it could be.

2.2 Heterogeneity in family firms

Family influence can have multiple effects on the capacity for knowledge sharing activities in the firm. For this reason, Sorenson (2000) places great importance on strong leadership in managing the behavioural intricacies of family firms. Instinctively, paternalistic leadership styles come to the fore as being predominant in collective cultures such as family firms (Mussolino & Calabró, 2014). This may go some way to explaining the closed and centralised culture found in family firms, which can lead to protective inertia with regards to the knowledge resource (Chirico & Nordqvist, 2010). However, other studies have referred to the role of relational authenticity in family firm leadership (Milton, 2008). Caspersz and Thomas (2015) suggest that authenticity fosters, in turn, a positivity that encourages knowledge contribution and appreciation from across the organisation. Further still, participative approaches are also quoted as a way in which knowledge sharing is encouraged and the knowledge resource diversified in family firms (Chirico & Baù, 2014). Participation is found to offer a coordinating mechanism to mitigate the risks of conflict by maintaining co-alignment amongst individuals, whilst constructively building a diverse yet complementary knowledge base (Chirico *et al.*, 2011). Such coordination of knowledge is viewed by Sorenson *et al.* (2009) as being a key enabler for the integration of the ‘family point of view’ in business systems.

One of the main criticisms raised in relation to this research refers to the inappropriate treatment of family firms as a homogenous group (Chrisman *et al.*, 2005); with an array of contrasting leadership approaches posited as panaceas to the treatment of the knowledge resource. Both the

difficulties stated with a dominant family presence and the benefits attributed to particular leadership styles vary greatly depending on the composition of the family firm and the situational distinctions of their environment. For instance, Jaskiewicz *et al.* (2013) find nepotism in family firms to be beneficial in terms of knowledge sharing when it is reciprocal in nature but harmful when it is based on entitlement; with organisations demonstrating each of these characteristics in varied degrees. Salvato *et al.* (2010) also identify great variance in family firms' want for continuity over enthusiasm to change, while Eddleston *et al.* (2008) argues that the success of a participative approach in dealing with conflict is itself sensitive to the generational make-up of the firm, subsequently affecting its ability to foster knowledge sharing (Spriggs *et al.*, 2013).

The question of whether the familial aspects of a firm hamper or facilitate the sharing of knowledge is important, as this can affect the way in which all organisational decisions and strategic capabilities are viewed. Studies examining the state of knowledge sharing in family firms must take into account the extent of heterogeneity in organisational approach before it can comment confidently on the drivers of, or barriers to, knowledge sharing activity. Such complications provide some reason as to why, despite the importance of knowledge in today's organisational environment, very little is known on how it is gained, maintained and distributed in small family firms (Zahra *et al.*, 2007).

2.3 Path-goal theory

Path-goal theory is here used as a theoretical framework from which the heterogeneity of leadership approach in small family firms can be gauged, as it covers most of the potential leadership approaches which can be adopted. The theory examines how the contextually sensitive aspects of a leader's behaviour influence a follower's individual motivation to perform and their

particularised satisfaction (Yukl, 2011; Billing *et al.*, 2013; Carmeli *et al.*, 2013; Northouse, 2016). Originally, path-goal theory distinguished between two behavioural categories of leadership style: supportive and instrumental (Evans, 1970; House, 1971). However, upon theoretical revisiting and numerous empirical applications, the theory has gradually expanded and complexified (House & Mitchell, 1974; House, 1996; Clegg *et al.*, 2011). For this reason, many empirical studies now apply a simplified or even bespoke structure of path-goal leadership. For instance, in Harris and Ogbonna (2001) a three-branched conceptualisation of the theory is employed, involving *participative*; *instrumental*; and *supportive* behaviours only. Northouse (2016) finds that the difficulties associated with the use of path-goal theory in research are seen in the interpretation of results. However, Dixon and Hart (2010) posit that, when used as a framework for understanding the array of leadership approaches evidenced in organisations, as done here, path-goal styles and measurements provide a useful understanding of leadership behaviour. Vecchio *et al.* (2008) also suggest that when the use of path-goal styles is established, it is then possible to investigate which of these styles are most compatible with other environmental factors, such as the influence of family and knowledge sharing activity in this article.

The ultimate goal of a leader adopting a path-goal leadership approach is to appropriately structure the leader-follower relationship in such a way that it enhances follower self-efficacy and ability to contribute to an organisational resource such as knowledge (Sosik & Jung, 2010). Although there are other contingency leadership approaches based on similar notions (Achua & Lussier, 2010), House's (1971) path-goal theory is considered particularly relevant to the small family firm setting as it acknowledges the various motivations and role expectations which influence choices in leadership approach (Memili *et al.*, 2013).

3 Research propositions

The following research propositions explore the various intended leadership approaches in small family firms and assess subsequent impact on knowledge sharing activity. First, approaches to leadership have been found to be critical in the development of a firm's knowledge resource (Sorenson, 2000). However, the broader family firm literature outlines a wide-ranging variety of leadership approaches to exist across these diverse organisations (Milton, 2008; Chirico & Baù, 2014; Mussolino & Calabró, 2014). As a further complexity, the enhanced role of individual owner-managers in small family firms means the application of any approaches to management is incongruent (Westhead & Howorth, 2007). Indeed, diversity in leadership approach is likely to be heightened in small family firms, where the importance of a prominent individual is felt.

Proposition 1: The nature of leadership approaches used in small family firms will vary and thus have varied effects on knowledge sharing activity

Contextually sensitive path-goal styles are characterised by their devotion to and complementation of follower needs and ability (Monzani *et al.*, 2015). It is understood that the participative form of these styles in particular provides a collaborative platform from which knowledge sharing activity can take place, via the creation of a flowing organisational infrastructure (Gagné, 2009; von Krogh *et al.*, 2012). From a family firm perspective, such participation may be enhanced by increased trust between members and open reciprocal structures in the firm (Arregle *et al.*, 2007; Pearson *et al.* 2008). Thus the influence of family here can be seen as providing a platform for participation.

Proposition 2: Small family firms demonstrating more participative approaches to leadership will exhibit more open knowledge sharing activity.

Although familial relationships may instinctively result in greater knowledge flow between individuals, there has been evidence of undesirable consequences in heightened centrality and judgement distortion, generating a dominant family presence inhibiting the lucid passing of knowledge from one individual to another (Picard, 2004; Ensley & Pearson, 2005; Chirico & Salvato, 2008). As a reaction to these potentially problematic relational issues, a formalised and protectionist form of knowledge sharing is often considered a solution by family firms (Zahra *et al.*, 2007; Sonfield & Lussier, 2009). Indeed, those small family firms with a dominant familial influence may seek to control knowledge sharing through the application of less open and more instructional form of leadership.

Proposition 3: Small family firms characterised by more instructional forms of leadership will exhibit a dominant influence of family resulting in limited knowledge sharing activity.

In instances of a dominant family influence, evidence of knowledge centralisation is found to induce a pluralistic culture with regards to knowledge sharing activity (Poza *et al.*, 2004). Specifically, the dichotomised characteristic of family status is found to inform how individual knowledge contributions are treated (Sonfield & Lussier, 2009). Not only is the treatment of knowledge contribution found to differ based on family status, but the individual perceptions of management behaviour are found to contrast greatly between family and non-family organisational members (Barnett & Kellermanns, 2006). This has important implications for the way leadership is individually experienced in the firm and how knowledge sharing is viewed.

Proposition 4: Family and non-family members will differ in their experiences of knowledge sharing in small family firms.

4 Method

This article uses a convergent mixed methods design to investigate the research propositions, offering complementary data on the same research topics (Creswell & Plano Clark, 2007). Quantitative survey data collected from owner-managers ($n = 110$) of small family firms are used to measure heterogeneity in intended leadership approach. Subsequently, qualitative interview data ($n = 26$) explore perceptions within the firm from both family and non-family members. The staged-mixture of these methods affords this work the two-fold benefit of the facilitation of stratified qualitative sampling from quantitative results, and the ability of qualitative findings to provide contextual understanding to the broad structures uncovered through quantitative analysis, following the conceptualisation of enhanced credibility of findings offered by Harrison (2013). More specifically, exploratory factor analysis (EFA) is used to quantifiably establish the leadership approaches evident in the small family firm sample. With distinct approaches uncovered, qualitative data is then grouped according to the dominant leadership approach of the participant firms, thus allowing the analysis to greater explore how each distinct leadership approach impacts on knowledge sharing in the organisation. In such a way, the EFA is used to prepare the ground for more meaningful qualitative data analysis, allowing greater depth of meaning and implication than would be achieved by a single-method approach. The resulting discussion and findings rely primarily on qualitative data analysis; however, such analysis would not be possible without the preparatory EFA, thus following what Creswell and Plano Clark (2007) refer to as a 'quant-QUAL' data emphasis.

4.1 Quantitative Measures

The survey instrument used to establish leadership approach is taken from Harris and Ogbonna's (2001) 13-item scale to gauge the distinct behavioural styles from path-goal leadership theory evident in the sample. This particular scale is highly esteemed in the leadership literature due to its faithful loyalty to the original theories of House and Mitchell (1974) and has been widely accepted (Taormina, 2008; Kasemsap, 2013). Although the use of this instrument has produced successful and valid measurement scales, for instance, in Harris and Ogbonna (2001) where three distinct leadership styles were identified, its greatest power is its ability to uncover a range of leadership styles present in a contextually sensitive situation. In order to do this, the items of the scale must be subjected to an exploratory form of dimension reduction.

4.2 Qualitative Measures

While the quantitative measures of this article address the intentions of leadership approach, the use of semi-structured interviews uncovers the key themes relating to perceptions of leadership approach and how knowledge sharing is viewed from both family and non-family members. This second-stage of the research investigates how different perspectives within the firm are affected by the various approaches to leadership and what impact this might have on knowledge sharing, also considering to what extent being in a familial relationship alters these perceptions. To do this a qualitative sample is purposefully stratified in terms of intended leadership approach in the firm (ascertained from the first, quantitative, stage of the research), followed by family or non-family status (following the stratification structure of Palinkas *et al.*, 2015 and Robinson, 2014). Through the analysis of this qualitative data, a greater understanding is formed on the nature of

knowledge sharing in the social construction of the small family firm (Easterby-Smith *et al.*, 2008), with the interviews ($n = 26$) on average 40 minutes in length.

4.3 Participants

Participants were selected from small family firms located in knowledge-intensive sectors across Scotland. These sectors included: legal/financial services; education provision; property services; events management; and design. Delimiting the sample in such a way, the study follows Alvesson (2004), by focusing on only those firms where a knowledge resource plays the critical role in competitive differentiation. Snowball sampling was adopted to identify suitable small firms (5-49 employees) for inclusion (Easterby-Smith *et al.*, 2008). The presence of family is determined through a process of self-depiction, whereby the firm is actively described as family dominated (following Westhead & Cowling, 1999); from this, the inclusion criteria of at least one familial relationship within organisational structure is applied (Sharma *et al.*, 1997). Multiple 'sampling centres' are used to increase the geographical spread across Scotland, using known business groups and databases. An initial sampling frame of 204 firms was identified. 24 of these firms either did not meet inclusion criteria or were unwilling to participate. From those remaining, usable survey responses were received from a total of 110 small family firms resulting in a return rate of 53.9%; while 16 of these firms granted access to conduct qualitative interviews. Steps were also taken to ensure that non-response bias was not a persuasive threat to the validity of our findings (Simatupang & Sridharan, 2005) and it can be confidently claimed that the sample achieved is representative of the wider population.

5 Results and Analyses

5.1 Quantitative

Initially, Harris and Ogbonna's (2001) leadership approach measurement was subjected to PCA in order to either confirm the existence of the three theorised dimensions (participative style; supportive style; and instrumental style) or create more meaningful indices (Sekaran & Bougie, 2009). As Bryman and Cramer (1997) advise, the extraction of characteristics which go together from the 13 items is done using a combination of the *Kaiser criterion* (Kaiser, 1958) and Cattell's (1966) *scree test*.

Table 1: Principal components analysis (PCA) of leadership approach measures

Factor Loading¹

Item	Participative Approach	Supportive Approach
Before making decisions I consider what employees have to say	0.863	
I listen to employees advice on which work to advance	0.823	
I ask employees for their suggestions	0.818	
Employees decide what and how things shall be done	0.696	
I treat all organizational members as equals	0.650	0.376
When faced with a problem I consult with all organizational members	0.596	
I take action before consulting with employees (reverse coding)	0.460	
I help people make working on their tasks more pleasant		0.778
I schedule the work to be done		0.744
I maintain definite standards of performance		0.729
I explain the way tasks should be carried out		0.697
I do little things to make things pleasant		0.655
I look out for the personal welfare of organizational members	0.456	0.525
Eigenvalues	4.339	2.550
Percentage variance explained	33.37	19.62
Cumulative percentage variance explained	33.37	52.99

¹ Principle components analysis with varimax rotation converged in 5 iterations, loadings less than 0.3 suppressed.

From the PCA, two clear factors emerged to describe the leadership approaches evident. The first factor labelled “*Participative Approach*” loaded heavily onto a component producing an eigenvalue of 4.339 and explaining 33.37% of total variance. All criteria for extraction were met with this factor, with all items deemed to be conceptually consistent. The second factor labelled “*Supportive Approach*” loaded onto a component producing an eigenvalue of 2.550 and explaining 19.62% of total variance. The items of this factor are once again conceptually consistent. Although path-goal theory anticipates three leadership styles, finding two distinct factors adduces sufficient evidence to support claims of diversity within the sample. Therefore, from these results, one aspect of the first research proposition can be addressed, that leadership approaches do indeed vary in the sample obtained, with a distinction between supportive and participative styles demonstrated. While the purpose of this result is not to draw any direct conclusions *per se*, it does effectively set the context and provide stratification criteria for qualitative data analysis to provide a deeper exploration of each of these approaches and investigate the implications for knowledge sharing.

5.1.1 Validity and reliability

The Kaiser-Meyer-Olkin (KMO) test for sampling adequacy found a value of 0.646 for the leadership items, thus well above the 0.50 considered acceptable for analysis (Norusis, 2001), and is characterised by Kaiser (1974) as being of a meritorious level. Bartlett’s test for sphericity also proved significant on the strength of relationships. Thus, both tests provide a strong indication of the adequacy of the sample size for the analysis conducted (Tabachnick & Fidell, 2001).

The Cronbach Alpha (α) coefficient (Cronbach, 1951) was used to test the reliability of each construct. The *Participative Approach* factor shows a coefficient of 0.830; while the *Supportive*

Approach factor shows 0.786, therefore presenting clear evidence of strong internal reliability (Sekaran & Bougie, 2009). Moreover, a high range and positive direction of inter-item correlations was found within each construct to demonstrate convergent validity (Campbell & Fiske, 1959). There is some concern over two items with cross-loadings exceeding the 0.3 loading criteria (Tabachnick & Fidell, 2001). While “*I treat all organisational members as equals*”, is less of a concern due to strong loading on factor one, “*I look out for the personal welfare of organisational members*” is more evenly split between the two factors. However, given the primary concern of leadership constructs is to establish conceptual validity (Yukl *et al.*, 2002), and numerous empirical studies have placed issues of welfare and well-being firmly within the supportive leadership construct (Harris & Ogbonna, 2001; Rafferty & Griffin, 2006; Schyns *et al.*, 2009; Jiang, 2012), the retention of this item in factor two (supportive approach) is justified through face validity (Pett *et al.*, 2003). That said, caution should be taken in interpreting this particular item, as cross-loading suggests that leaders demonstrating participative approaches will also consider personal welfare of organisational members to some extent.

Although discriminant validity is mostly implied by the use of PCA (Diamantopoulos & Winklhofer, 2001), further testing strengthens validity discussions. To do this, a procedure is used from Gaski and Nevin (1985), where discriminant validity of reflective scales is indicated by the correlation between two unrelated measurement scales being less than the Cronbach’s α of each (Rajamma *et al.*, 2009). Pearson’s correlation coefficient for the *Participative Approach* factor against *Supportive Approach* is 0.251; therefore showing this inter-scale correlation coefficient is not close to being as high as either corresponding Cronbach’s α score, thus demonstrating discriminant validity.

To gauge the nature of the data, the standardised figure for each scale was used (Carifo & Perla, 2008). Tests for normality show moderate evidence of Skewness and Kurtosis. This is to be expected with data based initially on Likert observations and following West *et al.*'s (1995) recommendations provides no cause for concern, the respective results of $H < 1.1$ and $H < 1.6$ being deemed acceptable (Wang & Ahmed, 2004). Further tests on the normality of the dataset demonstrated confidence that it satisfied criteria for normality (Leung *et al.*, 2000; Sirkin, 2006).

5.2 Qualitative

The qualitative investigation in this article considers how leadership approach is viewed from various perspectives within the firm, and also, how leadership impacts on day-to-day knowledge sharing activity. In order to achieve this, qualitative data are approached from a social constructionist standpoint. Firstly, the qualitative sample is stratified into two groups: those from firms where supportive approaches are demonstrated ($N = 14$) and those from firms where participative approaches are demonstrated ($N = 12$) (based on the constructs of leadership approach established through quantitative analysis). Second, the data within these groups are further split according to the familial status of the data source (family: in supportive firms $N = 10$; participative firms $N = 9$, or non-family: in supportive firms $N = 4$; participative firms $N = 3$)¹. From this starting point, the article's joint foci of investigation, images of leadership approach and how knowledge sharing activity takes place, can be investigated. Open thematic coding is used to allow the emergence of the most pertinent themes related to these phenomena. Figure 1 provides a visual representation of the data structure from those firms demonstrating supportive approaches, while Figure 2 provides the same data structure for those showing

¹ From this point the letters "FM" denote "Family Member" whereas the letters "NE" stand for "Non-family Employee"

participative approaches. These figures are adapted from the data structures used by Strike (2013) and also show the themes found from within the data groups, and the aggregated dimensions on the state of knowledge sharing (KS) resulting from these themes. In structuring the data in such a way, the study attempts to answer Hair and Sarstedt's (2014) call for more analytical and transparent qualitative approaches. Each of these dimensions is now reviewed from within the article's leadership framework, separating those based on supportive and participative leadership approaches, with further explanatory evidence presented from the data.

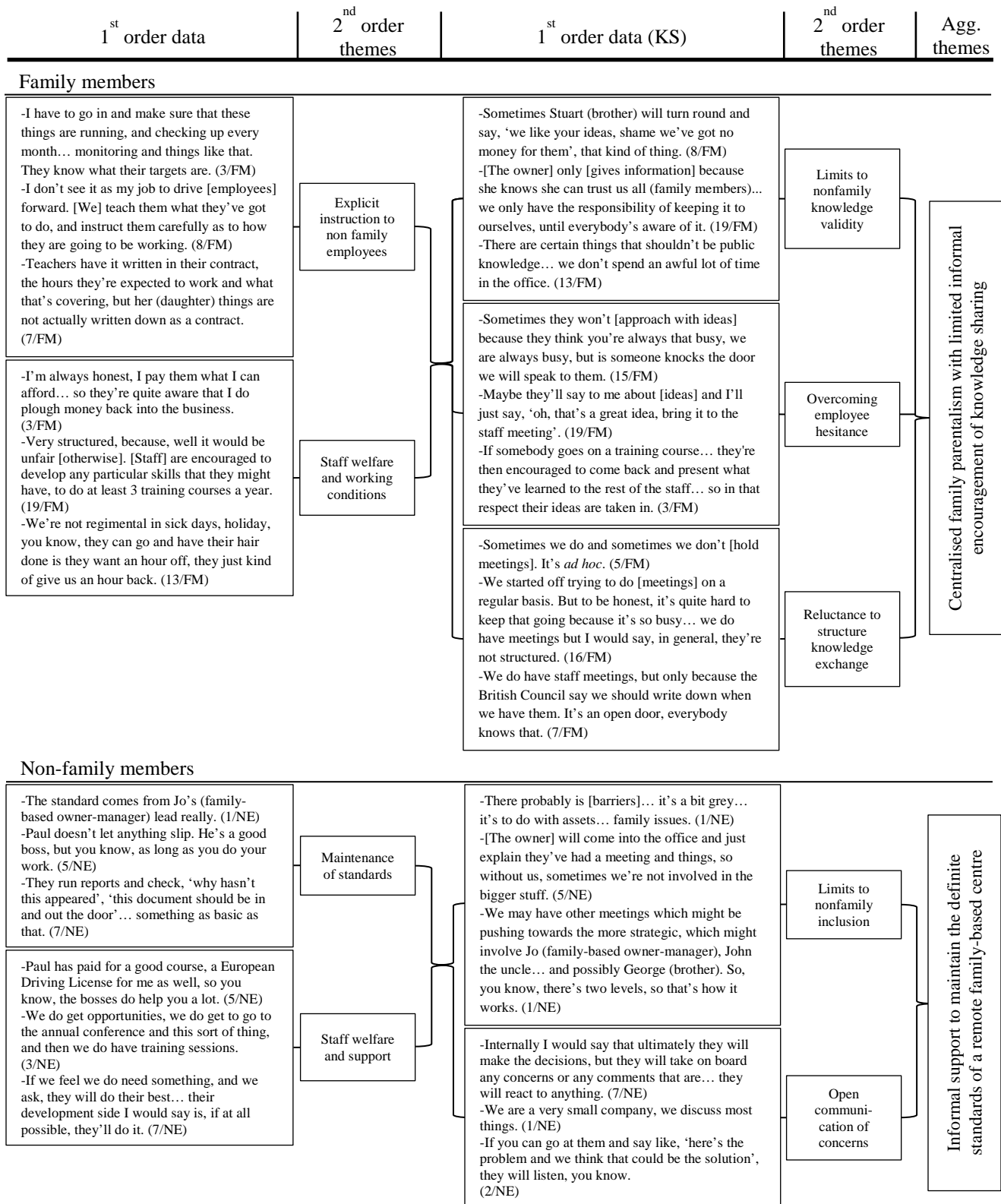


Figure 1: Data structure for firms showing supportive approaches

5.2.1 Knowledge sharing under a supportive approach

A centralised parentalism is found to emanate from a strong sense of responsibility felt by family members on the provision of just staff welfare and empathetic working conditions. In particular, family members are keen to highlight their reaction to work and process problems brought forward by employees and their willingness to invest in the business to improve conditions. This is exemplified in excerpt 1 and is also mirrors findings from non-family employees.

Excerpt 1:

I mean, at the end of the day, if the girls have a problem, then I say, 'what do you need to resolve it', 'how would you like to do it', 'what do you need', you know, 'do you need another member of staff', that sort of thing. (13/FM)

This concern for working conditions is also found to manifest itself in an environment where personal development is appropriately structured so as to assure parity of working conditions for all employees alongside sufficient flexibility to account for pressures in the employee's private life. However, this empathetic approach is accompanied by explicit instructions given to non-family staff, with a specific focus on standards. A common theme in the data suggests a concentrated effort in maintaining firm service standards set by the family, with consequences for those not reaching the expected threshold. This is illustrated by the following quote, "*if someone is not performing, it's soon highlighted right away, and whatever action needs to be taken to change, that is done*" (9/FM). Excerpt 2 provides an example of how this process takes place.

Excerpt 2:

We go through the manual... it's very intensive. Perhaps the standards that we've managed to maintain have been pretty good... We have a recent experience and I'm not convinced that the people were actually working as hard as they perhaps should have been, as hard as we would have, certainly... [so] everyone learns their roles, you know, they have their roles. (10/FM)

The standards applied to staff are not consistently identical. Excerpt 3 provides an illustration of a common situation, where non-family employees are subjected higher standards than family members.

Excerpt 3:

[Other employees] have it written in their contract, the hours they're expected to work and what that's covering, but her (daughter) things are not actually written down as a contract. (7/FM)

Findings from non-family members confirm the existence and importance placed on firm service standards while family members do not appear subject to such controls. Concern for employee welfare and support is also reported from non-family respondents. This takes the form of professional development and also provision of the tools required to perform their roles.

In terms of knowledge sharing activity, a common theme raised by both family and nonfamily members relates to the decision-making authority of nonfamily members. In response to knowledge contributions from nonfamily members, one family-based manager replies, “*we'll stop them at the end and say, 'right well, we'll just make the decisions and we'll just enforce*

them', they won't specifically be involved in decision making" (13/FM). Often this situation is viewed as a direct consequence of the family influence on the business, where the response to new ideas raised by non-family members is, "*no, we've always done it this way*" (1/NE). The following excerpts offer some insight in relation to this predicament from both a family and nonfamily perspective, respectively.

Excerpt 4:

It might be difficult for another person to come in because you have this track record, there's a history of working together... would their [nonfamily] views be as valued as much as someone within the inner circle, this tight inner circle of the family unit? If they weren't shareholders, directors or something, I don't know. (10/FM)

Excerpt 5:

I think it's probably another consequence of it being a sort of family thing, we don't do meetings particularly right [sic], because they just do it round the breakfast table... that's not necessarily a good thing. (5/NE)

However, despite these limitations, most family and nonfamily participants from firms showing supportive leadership approaches opt for an open communication channel with all employees. This is evidenced from employees who can, "*chop the door at any time*" (7/NE) to share concerns, and managers who wish to create a "*forum where people can speak freely*" (19/FM) and overcome any employee hesitance.

Interpretation of the themes emerging from supportive-based firms fosters an image of a centralised family unit with a paternalistic concern for employee welfare. There is an informal encouragement of nonfamily knowledge contribution; however, boundaries are set on the extent of information nonfamily members have access to, and the types of decisions they can contribute to. The centralised nature of family manifests itself in the setting of service standards expected from those out with the family, which goes some way to addressing proposition three; in that these more supportive and instructional forms of leadership contain a more dominant family presence, limiting the extent of knowledge sharing. From a nonfamily perspective, there is also a perceived remoteness attached to the family unit decision-making, which reinforces the limitations set for knowledge contribution.

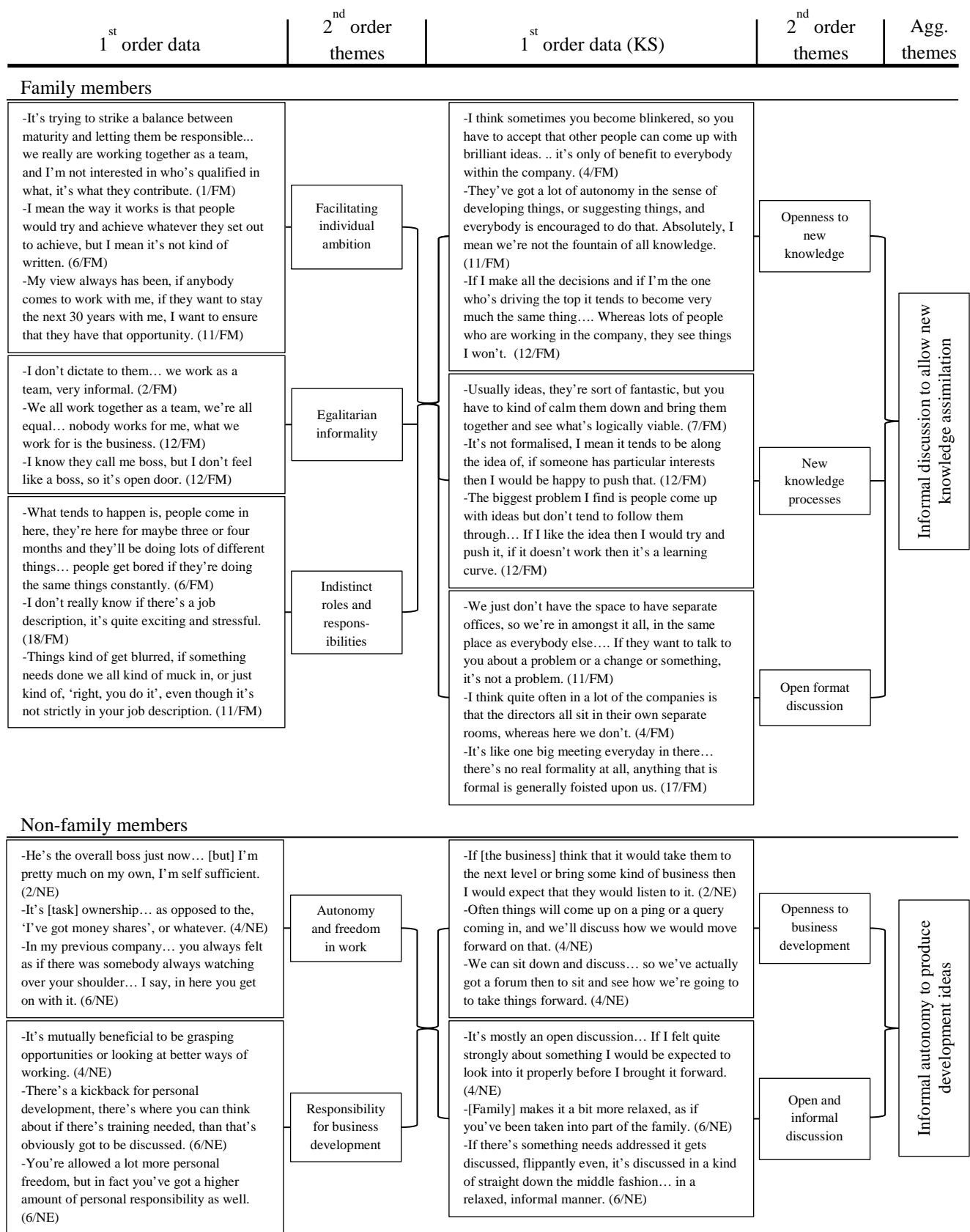


Figure 2: Data structure for firms showing participative approaches

5.2.2 Knowledge sharing under a participative approach

Firms demonstrating a participative approach to leadership are found to be characterised by an egalitarian informality, typified by indistinct roles and responsibilities. This blurring of positional functions is born from a philosophy of individual development being inexorably linked to the development of the business. This is evidenced in the following excerpt from a family-based manager.

Excerpt 6:

Anybody coming to work for us will grow with the business, hopefully, but will also be able to satisfy their particular aspirations of what they want to do in the future. Even at a particular level, you might be involved in strategic issues. You can be creative with structure. (11/FM)

The reasoning for such an approach in participative-based firms is to gather experiences and base the direction of the business on a team model, rather than being prescriptive in nature. The following excerpt typifies what is found when individual knowledge contributions are made.

Excerpt 7:

If they've [nonfamily] got a better idea of how something should be done, then fair enough... you have to give employees a certain amount more freedom than perhaps they would have in other [non participative] environments. (4/FM)

This manifests itself in a focus on facilitating individual ambition within the firm; where employee welfare is considered to the extent that it allows staff to develop with the firm and “*stay the next 30 years*” (11/FM). Nonfamily participants also acknowledge such an approach. This is expressed in relation to work autonomy, where one employee stated, “*it’s [task] ownership... as opposed to the, ‘I’ve got money shares’ or whatever*” (4/NE). The responsibility which comes with such freedom is also noted; however this is only discussed in the positive realm as opposed to being a burden of expectation.

In terms of knowledge sharing activity, firms evidencing a participative-based approach to leadership are found to be open to new knowledge. Familiarity is highlighted as a characteristic which facilitates openness to knowledge, along with the opportunity to criticise, as indicated in the following excerpt:

Excerpt 8:

They’ll [nonfamily] say, ‘I don’t think that’s a good idea’, and I suppose that’s another advantage of the familiarity. They can speak like that, whereas if you were a bit more aloof and they were a stranger, they might be a bit nervous about speaking their mind.

(1/FM)

The inclusion of all firm members in decision-making and strategic discussion is stated as a deliberate act, where challenges to the business direction, however uncomfortable are embraced; with one family manager suggesting that he would “*be equally as angry if [he] wasn’t challenged*” (17/FM) than he would were his ideas to be confronted. When considering

challenges to their own authority on strategic direction, the reaction from family members in participative-based firms is conveyed in the following excerpt.

Excerpt 9:

It's not my ball; every idea doesn't need to come from me. You know, I'm not proprietary at all about it. If somebody comes, obviously it's sometimes better to get a fresh pair of eyes on it, so no, that's not an issue. (2/FM)

The process for knowledge assimilation across the organisation is found to be both informal and immediate. Immediate in the sense that, as one family-based manager notes, “*it doesn't matter how long somebody's been with us, if they've got ideas then we'll take those ideas*” (4/FM); and informal, as another family-based manager explains, “*we're all in the same room, we all have a chat about it, we would never sit down and have a formal meeting*” (18/FM). Such a situation appears to happen frequently in firms demonstrating participative approaches, for instance, as one manager puts it, “*on a daily, weekly basis, they have an idea, we'd put it into practice... if it's a good idea and it works, we're up for it*” (12/FM).

The informality expounded by family-based managers is also felt by nonfamily members, who find themselves in a relaxed environment where strategic discussion can happen instantaneously and often bluntly. The following excerpt typifies the sentiment which is found.

Excerpt 10:

The banter's flowing, there's not [sic] really any boundaries as to where you want to go with your conversation, even on and off topic, business-wise. (5/NE)

Firms evidencing participative-based approaches are found to utilise the informality of the environment in order to garner idea-generating discussion from across the organisation. Knowledge contributions from nonfamily members appear not only listened to, but also acted upon and integrated into the overall business strategy. This is in turn found to manifest itself in an autonomy and responsibility for all in the organisation to become involved in the development of the business.

6 Discussion

6.1 Heterogeneity of approach

An analysis of leadership behaviour reveals at least two distinct ways in which small family firms approach the management of their knowledge resource; broadly supporting views on heterogeneity in small family firms (Chrisman *et al.*, 2005). Although fewer approaches are found than theoretically anticipated by the path-goal framework, the existence of two dissimilar styles has strong implications for both knowledge sharing and engagement with the influence of family. The findings support the view from Vecchio *et al.* (2008) on the sensitivity of path-goal leadership styles to the surrounding organizational environment and on the distinctiveness of leadership within small family firms.

First, the merging of supportive and instructional leadership behaviours suggests that small family firm leaders displaying such styles view support and guided instruction as part of the one function. From the qualitative data analysed, this impact translates to a very specific form of knowledge sharing which is characterised by a central familial element, retaining control and maintaining a strict standard against which all nonfamily members of the organisation are

measured. The knowledge sharing found to take place under such systems focuses on the resolution of specific concerns from nonfamily and task instructions. From here it is easy to see how the familial element of the firm can become a distant and protective body, potentially contributing much of the strategic inertia noted by Chirico and Nordqvist (2010). When family commits itself to the role of standard bearer and instructor it erects an artificial barrier to outside contribution and engagement. This is found to be particularly true when critical decisions are made away from the workplace, thus making small family firms reliant on only those within the family element. On top of this, the responsibility taken for staff welfare and employment conditions places pressure on a small number of individuals to provide successful business development solutions, thus running the risk of problematic nepotism and the devaluing of nonfamily contribution (Ensley & Pearson, 2005; Sonfield & Lussier, 2009).

The second leadership style found in small family firms takes on a participative flavour, which Salvato *et al.* (2010) suggests are the firms more open to change than continuity. From the qualitative findings, the influence of family is seen to function as a facilitator of informality and an open environment, through which participation is encouraged. Familiarity of family members is extended to nonfamily, at which point the influence of family ceases. The instantaneous nature of contribution and the lack of role distinction encourage autonomy for each organisational member. This brings with it an organisation-wide responsibility for business development, where the role of the founding family is to provide a platform for development and the realisation of individual ambition. In this way, the uptake of participative styles lessens the responsibility on family, but also reduces the amount of control they have over the firm. It may be claimed that such approaches seek to minimise the impact of family, as discussed in Stewart and Hitt (2012),

but from the qualitative findings of this study this would be to disservice the critical function that family here provides in providing intimacy and camaraderie.

Uncovering two divergent ways in which small family firms approach leadership and utilise family influence supports the view of Westhead and Howorth (2007), that family firms differ on the most basic terms of their self-selected intentions, and this has clear implications for how these organisations are treated. From this study it cannot be claimed that these are the only two forms existing in small family firms, but the role of leadership approach is highlighted in determining how family is understood in organisational context. Although the influence of family is key to each of the styles found, one approach appears to focus on family control as a *raison d'être*, which brings with it all the problems associated with centralisation; while the other views family as the foundation of an organisational culture based on openness and contribution, which then in itself may act as a precursor to a dilution of family influence in the long-term.

6.2 Knowledge sharing

The nature of knowledge sharing activity and levels of contribution differ considerably across the two leadership approaches. For instance, while firms demonstrating participative approaches are open to contributions from all elements of the firms, family and nonfamily (as theoretically expected by Wenger, 2004), firms utilising supportive approaches create certain boundaries. This can be clearly seen in the limitations found in relation to nonfamily inclusion in decision-making and in matters of 'private' interest to the family. Such obstacles automatically reduce the validity of nonfamily knowledge in the firm; therefore, regardless of the amount of knowledge activity performed, knowledge contributions remain focused on those emanating from the family element, an idea which supports the more negative connotations of familial priority by Picard (2004).

This situation amongst firms demonstrating supportive approaches also goes some way to explaining resistance to knowledge contribution, by non-family members. As greater limits on autonomy are felt, and access to critical information is denied, nonfamily members are likely to become less inclined to volunteer ideas and contributions. As a consequence, remoteness is created which serves only to reinforce distance between those in the *inner circle* of the family and other organisational members, echoing Poza *et al.*'s (2004) warning on the development of 'separate realities'. Although this mode of approach allows the firm to maintain a family control, it risks neglecting the knowledge resource by embedding a two-tier system of knowledge. Moreover, it may be then claimed that knowledge sharing activity and mechanisms, within supportively-led small family firms, look to ensure the maintenance of conditions and enforce a strategic conservatism, which many family business observers note (Miller & Le Bretton-Miller, 2003; Zahra, 2005; Naldi *et al.*, 2007).

Those firms displaying participative approaches, however, encounter a different problem to that of knowledge limitation. The acceptance of contributions from all in the firm combined with the lack of formalised processes, mean that much of the owner-manager's time is taken up with the translation of ideas into practice. However, the nature of the open format discussion, characteristic of such firms, allows many of the viable ideas to be identified in an immediate fashion. In this sense, knowledge sharing activity can be seen to seek a socially-constructed development of the business agenda. Responsibility for this is found to be shared across all employees in the firm, which leads to a further consideration of this approach, given the heightened responsibility felt by nonfamily members to contribute to strategic discussion. Although many see the inclusion of their views as a positive aspect of the environment, path-goal

theory suggests that this situation will not suit all individuals (Sosik & Jung, 2010). To this end, the leadership of small family firms must carefully consider whether participative styles are appropriate, considering the cognitions of nonfamily members, so as to avoid social friction in misaligned expectations (Mitchell *et al.*, 2003).

From the findings of this study, it can be suggested that firms undertaking a participative approach to knowledge sharing activity have made either a conscious or subconscious decision regarding whether the family element should possess exclusive control over the strategic direction of the firm. The enhanced relational flow driven forward by the influence of family can be seen to be a starting point, on which the open and informal knowledge culture of the organisation is based. This shows that family firms are not, in fact, consigned to a binary choice of professionalization against ‘familiness’, as advocated by Stewart and Hitt (2012), but instead can use the nature of family influence to enhance their professional knowledge sharing processes. However, in doing so, such firms face a loss of control over the direction of business development.

7 Conclusions

This study addresses the issue of heterogeneity in small family firms in terms of knowledge sharing approach. Leadership style has been identified as a critical factor in determining how small family firms engage with knowledge sharing activity. The variation in approach evident in firms has been empirically explored, with implications for the nature of knowledge sharing examined. Results have been discussed in view of the theoretical propositions put forward, with the intention of advancing the current body of knowledge on how small family firms take advantage of their critical knowledge resource.

The main findings regarding variation in leadership approach show evidence of two divergent styles in small family firms (P_1). Firstly, a supportive and instructional style is found to integrate with the influence of family and create a centralised family unit which seeks to maintain standards and control over the direction of the firm. One implication of this is the limits set on contribution to the knowledge resource (P_3), in particular, the experience of nonfamily members find them to be restricted in terms of their own knowledge validity and consequently their contribution to the firm (P_4). Second, a participative approach is found, based on open and organisation-wide contribution to knowledge (P_2). Nonfamily members take on some responsibility here, where there is an expectation that they will impact on the firm's business development through the openness and informality instilled by the presence of family (P_4).

Theoretical contributions are made to the family firm literature, in furthering understanding of the variation in leadership approaches of small family firms and some of the implications that these choices in leadership approach can have for family and nonfamily members. The findings correspond with extant literature on the heterogeneity of approaches found in family firm management (Westhead & Howorth, 2007; Chua *et al.*, 2012). By avoiding the pitfall of assuming all family firms follow similar governance paths (Chrisman *et al.*, 2005), this article shows that such heterogeneity in small family firms is at least partially a consequence of choices in leadership approach. For example, findings demonstrate that while some firms are found to embrace participation as a leadership approach, building cooperation in their strategic decision-making (Chirico *et al.*, 2011); others choose to lead in a manner which acknowledges and reinforces the role of status and structure, conveying a responsibility for employee satisfaction (Judge *et al.*, 2004). This choice appears to be determined by how the leader views the role of

employees, in particular nonfamily employees. On the one hand, some view nonfamily employees as an integral part of the strategic development of the firm, while others maintain an instructional relationship with nonfamily.

Furthermore, by linking leadership approach to knowledge sharing activity, this article extends understanding on the implications of leadership choice and has highlighted some important consequences for the role of family in the firm. In particular, those firms demonstrating supportive leadership approaches show high degrees of centralisation, which enhances the role of the leader in knowledge creation and evaluation (following broader findings by von Krogh *et al.*, 2012). In addition to this, such centralisation is seen to act as a limiting factor to knowledge emanating from outside the family unit, thus connecting supportive choices in leadership to the family-protectionist notions raised by many in the family business literature (Chirico & Nordqvist, 2010; Gomez-Mejia *et al.*, 2011; Classen *et al.*, 2012). In contrast, those small family firms choosing a participative approach are seen to follow a cooperative path, as suggested by Chirico *et al.* (2011), which this article has found to involve openness to knowledge contributions on business development activity. In such a way these firms are able to benefit from a broader pool of resource, with which to form social capital (Salvato *et al.*, 2010; Stewart & Hitt, 2012; Chua *et al.*, 2012), something the more centralised and protectionist firms may be lacking.

These findings mirror notions in mainstream leadership literature that suggest a participative and cooperative form of leadership challenges many of the assumptions around the role a conventional central leader (Drath *et al.*, 2008; Spillane *et al.*, 2004). Such a challenge may have implications for the influence of family in the long-term, implying a move towards a more professionalised nonfamily entity (Stewart & Hitt, 2012). However, this study instead finds that

nonfamily, under participative approaches, are greater able to contribute specifically due to the informality brought by the influence of family, and therefore advocates the view of Hall and Nordqvist (2008), that family in this sense provides a cultural frame, within which nonfamily can align themselves.

This article offers important insights for the practices of owners and managers in small family firms. Under the resource-based view of firm strategy (Wernerfelt, 1984; Barney *et al.*, 2001), small family firms in particular have much to gain from the development of an inimitable knowledge resource (Sirmon & Hitt, 2003; DeSouza & Awazu, 2006; Carnes & Ireland, 2013). The discussion presented here helps to provide a clearer understanding of the consequences choices in leadership approach can have, for both knowledge sharing and for the role of family in the firm. The findings of this article highlight in particular that small family firm leaders should consider the implications of their chosen leadership approach for the role of nonfamily. This often crucial organisational resource is greatly overlooked from both a practical and theoretical perspective (Mitchell *et al.*, 2003; Sharma *et al.*, 2014), and represents a resource which family-based leaders may have particular difficulty in comprehending (Chrisman *et al.*, 2013).

8 Limitations and further research

Some important limitations must be considered when interpreting the findings presented in this article. Firstly, this is a very specific study, which it would be inappropriate to generalise from outside of the population investigated. Geographically, all participant organisations operate in the same nation state, Scotland, although effort has been made to ensure the sample represents a diverse mix of rural and urban locations. Also, the study focuses specifically on those small family firms from knowledge-intensive sectors. While there is sound theoretical justification for

this focus (Alvesson, 2004), it does mean that findings may not be applicable to firms out with these sectors. Future studies may apply a broader sampling frame to explore any regional or sectorial differences between firms.

Second, in part due to the carefully defined sample parameters, the achieved sample of the study is relatively small. While this is less of an issue for such an exploratory mixed-method study, caution is advised in making any generalizable statements from the findings presented here. This is particularly important for the quantitative findings on leadership approach. Although this study found two distinct approaches to leadership within small family firms, it cannot be claimed that these two approaches account for all influence over knowledge sharing activities; there may be other theoretical explanations to variation knowledge sharing. In particular, qualitative findings imply that some nonfamily employees are hesitant to contribute to the knowledge resource, while others feel an added responsibility attached to such a role. From this, it can be implied that knowledge sharing may be dependent on the motivations of the individual employees, a concept worthy of further investigation. Future studies may focus on the types of individuals attracted to nonfamily employee roles and also the criteria used when selecting such individuals.

Third, there is possible bias in the self-determination of family influenced firms. However, attempts have been made to circumvent this by applying strict inclusion criteria to ensure a sufficient level of family input to justify investigation as a family-influenced firm. Also, although the mixed approach is purposefully designed to overcome limitations of common method concerns (Podsakoff *et al.*, 2003); the quantitative measurement of leadership behaviour scales relies exclusively on self-reporting from the business leaders. Future studies may wish to apply a

more objective measurement system of leadership approach, which encapsulates also the perspective of followers.

Finally, the current study has been cross-sectional in nature; future work could investigate whether knowledge sharing behaviour in small family firms changes over time and in particular across family generations. Although some significant work has been done on the evolution of entrepreneurialism and innovation across generational life-cycles (Cruz & Nordqvist, 2012; Kellermans *et al.*, 2012; Zellweger *et al.*, 2012), relatively little is known about how approaches to management change as the family business develops.

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