Do Family Firms Learn? A Relational View

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LEARNING IN FAMILY FIRMS

Abstract

Though theoretical contributions have enriched organizational learning literature for over five

decades, it is surprising to find that organizational learning has rarely been studied for family

firms. When two out of every three enterprises in the world are either managed or owned by

families, and only 30% of family firms make it to the second generation, the lackadaisical

approach towards organizational learning in the case of family firms is questionable. Using

social network analysis, this study examines the subprocesses of organizational learning in

family firms in greater detail. This study contributes to the literature on organizational learning

and family firms by proposing network measures for each of the subprocesses of organizational

learning and taking the first step in developing a relational view of organizational learning that is

long due for family firms.

Keywords: Family firm, organizational learning, social network analysis

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Do Family Firms Learn? A Relational View

The learning environment in family businesses have undergone considerable changes during the recent past, and organizational learning has been recognized as one of the most powerful enablers in this transition for firms poised for a competitive advantage (Flores, Zheng, Rau & Thomas, 2012). There are plethora of studies that have empirically proved that organizational learning is the key towards organizational success in future (Alegre & Chiva, 2008). Still, organizational learning for family firms is very much abstruse as evident in Moore's (2009) words, "The manner in which units interact with each other from a learning theoretical perspective in the context of the business family domain is still very much in a nascent stage of understanding... less has been done here with respect to family businesses." (p.176). Similarly, Zahra (2012) points out that the relationship between family ownership and organizational learning in a family firm is still unexplored. Despite the vast literature on the organizational learning process operating in a firm, few studies have tried to analyze them for family firms (Basly, 2007). Pretending that there is no difference between organizational learning processes taking place in a family and non-family firm would be a gross underestimation of the influence of the 'family' in business (Patel & Fiet, 2011). The presence of 'noneconomic goals' and 'socio-cognitive bonds' that are unique to family firms and developed through 'family' interactions make us believe that the learning occurring in family businesses is different.

The significance of this study becomes evident when we realize that two out of every three enterprises in the world are either managed or owned by families (Gersick, Davis, McCollon & Lansberg, 1997). According to Kets de Vries, Carlock and Florent-Treacy (2007), family firms

account for 95% of all firms in Asia and the Middle East. The CII¹ (Confederation of Indian Industry) data shows 95% of registered firms in India are family businesses and together contribute 60-70% of Indian GDP. When studies have established that a firm's competitiveness and future success is highly dependent on organizational learning (see Alegre & Chiva, 2008), it is quite unfortunate that family firms, hailed as "the backbone of corporate life, across nations" (Poutziouris, Smyrnios & Klein, 2006, p.1), hasn't yet found its foothold on unfolding organizational learning.

To understand this irony, it is equally important to understand the dynamics under which a family firm operates. The 'family' in the family firm interacts with both 'family' system and 'business' system and these two systems are not necessarily compatible. Their dual membership in the overlapping systems becomes problematic because of the inherent struggle between 'stability and 'continuity' espoused by the 'family' system and 'change' and 'adaptation' central to the 'business' system (Nordqvist & Melin, 2010; Smith & Lewis, 2011). Most often, the family's socio-emotional factors (cf. Gomez-Mejia, Haynes & Nunez-Nickel et al., 2007) overrides the learning needs of the 'business' system and as a result, the 'business' system suffers. Zahra (2012) discusses some of the inhibitors of organizational learning in family firms. He finds that the domination of family members in decision making processes often leaves out the non-family members from core activities of the firm. This adversely affects the information flow in the firm that is critical to organizational learning, as non-family members may find it difficult to express their views. Sibling rivalries may also hamper knowledge sharing in family firms. Zahra (2012) also reports that the excessive cohesion among family members might restrain some of them from dissenting or putting up a counter view.

¹http://www.cii.in/CII_FBN_India_Chapter.aspx

Research Propositions

Huber (1991) adopted a cognitive view that organizational learning is composed of multiple and distinct sub-processes occurring at different levels of the organization. According to him, organizational learning begins with some form of information acquisition. The information gets distributed across the organization. Interpretation and integration of the information typically follow. During information interpretation process, people make sense of the information that they received and try to reach a shared understanding during the information integration process. The process concludes as information gets stored in organizational memory. In this study, our objective is to understand the organizational learning subprocesses for a family firm from a relational view. The relational aspect becomes important because a significant part of a member's information and knowledge environment revolves round the relationships or ties he/she can tap at times of need. Cross and Parker (2004) talked about the value of social networks that are essential for making the process of learning more effective. The network perspective assumes that relationships are important because they provide access to and control of informational resources.

Information Acquisition:

According to the behavioral theory of the firm, it can be postulated that family firms put a cap on their search capabilities in the long run (Cyert & March, 1963). It is also known that the family firms tend to become inward focused as they gain experience and information acquisition gets limited to internal search i.e., within the firm. The inward withdrawal symptoms have been much more pronounced in the case of family businesses (Zahra, 2012). Studies have also shown that the family firms tend to lose their entrepreneurial zeal and start laying emphasis on 'continuity'

and 'stability' the sooner they get established. The family firms become more inclined towards conservative strategies to keep themselves afloat rather than sink their head in innovation and growth opportunities (Shepherd & Zahra, 2003). The family firm's stiff resistance to change and strong inward focus, breeds inertia that may turn out to be fatal for the family firm's learning capabilities (Zahra, 2008). It has also been found that the family members are prone to keep outsiders away from decision making and thereby limits the learning opportunities that could have happened through the involvement of non-family members (Zahra, 2012).

The non-family members turn out to be passive employees when there are constant disagreements with the family firm owners. The non-family managers then resort to 'strategic simplicity', which is defined as "a pathological cognitive condition that causes some managers to overuse ready-made solutions without probing the assumptions underlying the decisions they make" (Zahra, 2005, p.26) and the net result is that the "routines that worked well in the past are used again and again regardless of the strategic challenges facing the family firm" (p.24). If the managers in a family firm take pride in 'strategic simplicity', it would severely limit the family firm's learning processes.

The high cohesion that exists between family members is a precursor to the increased loyalty that demands conformity to the consensual view of the family. This in turn puts a cap on the ability of family members to come up with diverse views, thereby limiting the information acquisition process (Zahra, 2012). The information acquisition would also be low in family firms because of their high proclivity towards conserving wealth for future generations and tendency to avoid risks (Miller & LeBreton-Miller, 2006). The risk aversion predominant in family firms has beeb attributed to their apathy towards exploratory learning as defined in March (1991), "The essence of exploration is experimentation with new alternatives. Its returns are uncertain, distant and

often negative" (p.85). As seen earlier, the family firms limit themselves to exploiting their existing knowledge resources than exploration. The reason why family firms engage in exploitative learning has been aptly put across in March (1991) as "The essence of exploitation is the refinement and extension of existing competences, technologies, and paradigms. Its returns are positive, proximate and predictable" (p.85). Ensley (2006) comment that family firms stick on to a specific strategy for a longer period of time strongly supports March's (1991) view on exploitative learning. It has also been found that as tenure of family firm CEO increases, "their source of information become increasingly narrow and restricted, and the information is more finely filtered and distilled" (Finkelstein & Hambrick, 1996, p.82).

The arguments above point to the fact that the presence of strong ties between family members has a strong impact on the organizational learning in the case of family firms. The 'strength of tie' has been defined by Granovetter (1973) as "combination of the amount of time, the emotional intensity, the intimacy (mutual confiding) and the reciprocal services which characterize that tie" (p.61). Consistent with Granovetter's (1973) definition, scholars who have studied tie strength between family members found evidence for higher levels of trust and affect, increase in the frequency of interactions and a greater sense of reciprocity and obligations among family members (Leana & Van Buren, 1999). It also needs to be emphasized that strong ties between family members may incur in them the need to have similar views, beliefs and mental maps. As a result, the family members may be constrained in their ability to come up with different viewpoints when faced with a problem. The over dependence on family members may also hamper the prospects of looking at other resources from which the firm can seek a wide range of complementary information (Greve & Salaff, 2003). It has also been noted that family firm members limit the quality of human capital through their forced interventions, only to

promote nepotism. In support of this argument, Covin (1994) found that qualified managers avoided family firms and Sirmon and Hitt (2003) found that it was the habit of family members to undervalue managers considered well trained by most standards.

It is important that the members of the organization who are involved in the process of acquiring information has a positive evaluation of the skills and knowledge set of the people from who they intend to obtain information. Esteem and reputation issues become dominant in information seeking, as people try to maintain positive self-images and hence, seek out information only from others who confirm a positive sense of self (Lee, 1997). In a study conducted by O'Reilly (1982), he observed that people looked into the source quality while tapping information from their co-workers.

It has been noted that there are costs involved in process of acquiring information (Borgatti & Cross, 2003) for family and non-family firms. The costs may be in the form of interpersonal risks or obligations incurred. The interpersonal risk an individual accrues in seeking information from others is by admitting his/her ignorance on the topic he is seeking information. Esteem and reputation of the person is at stake when he/she admits his/her ignorance. Also, the norms of reciprocity may place the individual who is seeking information in debt because the other person can always come back to the individual for information in future.

The family firms have been found to work even after long working hours to build new ties and maintain the existing ones (Pearson, Carr & Shaw, 2008). The motivation for doing so can be attributed to what Tsai and Ghoshal (1998) says: "frequent and close social interactions permit actors to share important information" (p.465). We also found that family firms maintain a strong relationship with their clients (Lyman, 1991) for being privy to the unique information that that

their client possesses and gain competitive advantage out of it. Studies have also shown that family members seek information from external agents like professional organizations, community groups, religious organizational members (Jack, 2005).

Proposition 1:

Information acquisition in a family firm is influenced by the strength of relationship between its members, the expertise of the person from whom information is sought, the cost incurred in gaining information and how many people the information provider is connected to.

Information Distribution:

As defined earlier, information distribution is the subprocess of organizational learning that allows for dissemination of information across the family firm. The information distribution is found to be efficient when there are frequent, repeated, and significant interactions between family and non-family members (Ghoshal & Bartlett, 1990) of the family firm. The strong sense of identity, socio-emotional wealth, informality and 'familiness' in a family firm (Habbershon, Williams & MacMillan, 2003; Denison, Lief & Ward, 2004) expedite the dissemination of information (Miller & Le Breton-Miller, 2006).

The information distribution process is contingent upon the type of tie that exists between its members. The social tie can be only instrumental, or only expressive, or a combination of both (Ibarra, 1995). Instrumental ties originate in the workplace and develop in the context of formal work relationships (Manev & Stevenson, 2001). We argue that the instrumental ties between family and non-family members would be subject to the extent of inclusivity offered to non-family members. The non-family members have little incentive to share information within the family firm because, any time a non-family member takes a decision that has an overall impact

on the firm, he/she has to justify his/her decision to the family members (Kang, 1998). As a result, some of the non-family managers remain defensive when it comes to decision-making and adopt 'strategic simplicity' explained earlier. The non-family managers' indifference towards information distribution process may also be attributed to the lack of trust between family and non-family members. We borrow Zand's (1972) 'spiral reinforcement model of the dynamics of trust' to explain this anomaly. According to this model, when two individuals decide to share information, there exists an initial trust expectation between them. The sharing of information reinforces the initial trust and the resultant trust so developed leads to further sharing of information. Thus, a spiral of trust gets built up and information sharing increases with higher levels of trust. However, if the initial expectation itself is of mistrust, the spiral deteriorates into one of reduced information flow and declining trust. Since the non-family members do not share blood or married relation to family members in the firm, the development of initial trust itself would be difficult. When there is no initial trust, we know that information sharing becomes extremely difficult and the spiral of trust further weakens.

Expressive ties exist between individuals who have high need for being cared, require constant assurance of social support and a sense of belongingness (Manev & Stevenson, 2001). Studies have shown that family members employed in a family firm have greater opportunities for interactions outside of work (eg. family get-together) than non-family members (Mustakallio, Autio & Zahra, 2002). Also, the boundary between work and family are blurred in the case of family members that give them access to information not available to non-family members. It can also be argued that when non-family managers get access to information that they think would either give them an added advantage or tarnish their image, there are chances that they would withhold it for the predilection of being indispensible or fear of being vulnerable. On the

other hand, family members possessing such information would cross structural boundaries and hierarchies to reach the information to individuals or groups that they believe can potentially use or benefit from them. Such altruistic behavior among family members can lead to the formation of an efficient information distribution system within the family firm.

The existence of family rivalries may sometimes act as a deterrent for information sharing (Lansberg, 1999). Jealousy, owing to the desire to occupy someone else's position, has been common among members of the family firm. The jealousies found in family firms can become a hindrance for efficient information distribution (Grote, 2004). In family firms, the information flow gets affected if there are certain family members who either lack interest in doing business or do not have the propensity to learn (Le Breton-Miller, Miller & Steier, 2004). A common critique about family firms is that the most valuable knowledge in the firm gets concentrated on a single individual or a group of individuals in the family, i.e., owner or his/her family (Zahra, Neubaum & Larraneta, 2007) and that can act as barrier for flow of information.

Proposition 2:

The information distribution in a family firm is influenced by the instrumental and expressive ties between members of the firm.

Information Interpretation:

Studies have shown that the members of an organization who belong to structurally equivalent positions in a network find themselves in comparable or substitutable positions (Ho & Levesque, 2005). Two individuals are said to be structurally equivalent if they send ties to the same third parties and receive ties from the same third parties. They do not have to be directly connected to be equivalent (Borgatti, Everett & Johnson, 2013). It follows that structural equivalents share

similar evaluations, perceptions and attitudes. While studying structural equivalence in fast-food restaurants, Krackhardt and Porter (1986) found that employees who left the restaurant for better prospects left cues to those in structural equivalent positions in the restaurant that opportunities were available outside and many employees followed them. In another study, it was found that doctors who were structurally equivalent took similar decisions while prescribing new medicines (Burt, 1987).

In the case of family firms, studies have shown that members of the same family develop a stable mental schema owing to the similarity in their cognitive skills (Arregle, Hitt, Sirmon & Very, 2007). This similarity breeds out of the habit among family members to involve their wards in business processes at a very early stage. The early involvement helps the younger generation to learn directly from the experienced family members (eg. founders), accrue social capital at an early age and it also exposes them to the complexities of deciphering firm specific tacit knowledge at an early age. Their loyalty towards the principles and values upheld by the family inculcates in them a shared responsibility towards decision making. The norms and traditions followed in a family firm plays a significant role in the development of shared interpretation and common understanding (Bettenhausent & Murnighan, 1991).

Proposition 3:

Irrespective of the hierarchical levels a family member holds within a family firm, members who are at structurally equivalent positions would interpret information similarly.

Information Integration

The information integration process in a family firm refers to the development of shared interpretations and understandings among individuals (Crossan et. al., 1999) that further leads to

a common language and coordinated action among them (Brown & Duguid, 1991). Organizational learning is distinguished from individual-level learning through these shared insights, knowledge and mental models. The information integration process is aided by the development of relational capital in a family firm. The relational capital refers to the nature and quality of the linkages between members of a firm (Nahapiet & Ghoshal, 1998). A review of the literature found relational capital consisting mainly of four sub-dimensions - trust, norms, obligations and identification, (Nahapiet & Ghoshal 1998; Wasko & Faraj, 2005).

It has been found that people collaborate and participate actively in groups if they trust each other (Davenport & Prusak, 1998). Studies have also shown that trust increases the amount and types of information shared (Dirks & Ferrin, 2002; Andrew & Delahaye, 2000) between individuals in a group and thereby, we can argue that trust plays an important role in the information integration process. In a family firm, Arregle et al. (2007) showed that the frequent interactions and dependence on each other generates trust that is essential for information exchange. Robert, Dennis and Ahuja (2008) define norms as "shared standards or rules that govern the behavior and perceptions of members" (p.320). Some of the norms found in family firms are equality, groupness and synergy due to the overlap of family and business (Lansberg, 1999). What is interesting is that each of these norms contribute to the building up of relational capital that is necessary for effective information integration to happen in family firms. The "feelings of mutual responsibility" (Robert, Dennis & Ahuja, 2008, p.320) that exists among group members is defined as obligations. Family members who have high obligations towards others share more information without social loafing and withholding information from others. In the case of family firms, obligations have much more significance as family members have obligations towards both family and business (Gersick, Lansberg, Desjardins & Dunn, 1997).

Scott (1997) define identification as "the extent to which members are psychologically identified with a group" (p.120). It suggests that strong identity among family members acts as a catalyst in the process of information sharing. Lansberg (1999) talks about how family firms who sold them off tried to buy them back when they had a late realization of how much their identities were closely tied with the firm.

Proposition 4:

Information integration is positively influenced by relational capital.

Methodology

In developing a social network analysis framework for measuring organizational learning subprocesses, we first review some of the basic terminologies used in social networks. The social network comprises of as a set of actors with relationships amongst themselves (Hanneman & Riddle, 2005). The distinguishing feature of network analysis from other statistical techniques is that the emphasis here is fully on the relationships between actors than the actors themselves. The actors may be individuals, groups, organizations, units within the organization or non-human agents like knowledge repositories (Monge & Contractor, 2003). The link between actors represents their relationship or information flow between them. The actors in the network are represented by nodes and relationship or flow of information by straight lines connecting the nodes. Wasserman and Faust (1994) describe the process of information flow in a network as: "An important consideration is whether information originating with one employee could eventually reach all other employees, and if so, how many line it must traverse in order to get there. One might also consider whether there are multiple routes that a message might take to go

from one employee to another, and whether some of these paths are more or less efficient" (Wasserman & Faust, 1994, p.105). The "length of the shortest path between two nodes" (Knoke & Yang, 2008, p.60) is called geodesic distance and it represents the most efficient route between two nodes. The centrality measures of a network include degree centrality, closeness centrality and betweenness centrality. They are important because they help in identifying the most prominent actors in a network. Knoke and Yang (2008) define actor degree centrality as a measure of "the extent to which a node connects to all other nodes in a social network" (p.63). An actor possessing high centrality would be most visible in the network and have better chances for communication, as it is in direct contact or adjacent to many others in the network. The actor in-degree centrality and out-degree centrality are defined for directed relationships in a network (Monge & Contractor, 2003). The in-degree of a node refers to the total number of links terminating at that particular node. The number of links originating from a node is called its outdegree. The eigenvector centrality is a measure of the network ties of those to whom a focal actor is connected (Bonacich, 1987).

We propose to use a whole-network (socio-centric) approach for network analysis. The exploratory analysis tools and techniques (e.g. UCINET - Borgatti, 2006) would be used in the examination of relational phenomena. The survey administered will have two parts. The first part of the survey would be designed to gather whole network data. The second part of the survey would be used to collect demographic data. To identify the network ties, we give the respondents a roster that includes the names of top management and managers in the firm. We ask them questions to find their relationship with others (Marsden, 1990). We also ask respondents about demographic information like gender, hierarchy and tenure in the family firm.

The network measures would be mostly collected using a single item due to two reasons. The use of multi-item scales is difficult in network research because of time and fatigue related concerns. The response rate may be lower and there could be more errors in data collection, if we use multi-items (Ibarra & Andrews, 1993). The use of single item requires researchers to ask unambiguous, focused questions. To minimize ambiguity, in our survey design, each question is explained in detail.

Five family firms of small to medium size in the same industry will be chosen. To be able to study the organizational learning processes, all members of the top management team and managers at different levels would be included in the study. Network survey questionnaires would be given to all the selected participants.

The items that would be used to develop the questionnaire is given in Annexure A.

Individual indegree centrality defined in Monge and Contractor (2003) would be used to measure information acquisition. The indegree centrality score would give us a measure of the number of people requesting information from a particular node in the information acquisition network. The strength of tie would be measured as the average of the frequency and closeness scores reported on 7-point and 5-point Likert-type scale. Adapted from Borgatti and Cross (2003), we measure expertise and cost using a single item on a Likert scale of 1 to 5. The individual outdegree centrality defined in Monge and Contractor (2003) would be used to measure information distribution. The outdegree centrality is a measure of the extent of information distributed by each actor in the network. To measure instrumental ties, each respondent would be provided a roster of the top management and senior managers in the firm and asked to indicate the coworker with whom the respondent interacts regularly. Similarly expressive ties would be measured by

asking participants about their outside work relationship on a Likert scale of 1 to 5 (Umphress et al., 2003). We measure information interpretation using the four-item version of the organizational learning subprocess scale (Flores et al., 2012). Sample items from the scale include: 'As individuals, I am prepared to rethink decisions when presented with new and relevant information', 'As individuals, I am interested in knowing not only what to do but also why we do things'. Next, each participant's responses to the information interpretation scale would be averaged to create a mean score in which higher scores represented higher levels of interpretation. Next, the degree of dissimilarity would be computed by taking the difference between individual i's mean score and individual j's mean score, where i and j are two individuals in the network. Finally, the difference scores would be used to create a dissimilarity matrix in which smaller numbers represented greater interpersonal similarity in interpretation. Instrumental and expressive structural equivalence scores would be computed in terms of degree with the Pearson product coefficient. A pair of employees with a higher correlation coefficient have a higher level of structural equivalence and thus hold positions in the social structure that are more similar than employees with a lower correlation coefficient (Borgatti et al., 2002). Similarly, information integration would be assessed using the five item scale developed by Flores et al. (2012). Relational capital would be measured at the individual level and aggregated to the team level. Relational capital items measures trust, identification, norms and obligations (Robert, Dennis & Ahuja, 2008). All items use a scale of 1 to 5.

Conclusion:

This research is expected to develop and test an alternative model for measuring organizational learning in family firms using social network analysis. This research is particularly significant as learning is fast becoming a key driver of competitive advantage for family firms. The theoretical

contribution includes a better understanding of the various subprocesses of organizational learning in family firms, which had remained unexplored. We also expect to develop insights on how firms can improve their organizational learning efforts. This study also contributes to the literature on organizational learning and family firms by taking the first step in developing a relational view of organizational learning that is long due for family firms.

References:

- Alegre, J., & Chiva, R. (2008). Assessing the impact of organizational learning capability on product innovation performance: an empirical test. Technovation, 28, 315-326.
- Andrew, K. M., & Delahaye, B. L. (2000). Influences on knowledge processes in organizational learning. Journal of Management Studies, 37, 797-810.
- Arregle, J., 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.
- Basly, S. (2007). The internationalization of family SME: An organizational learning and knowledge development perspective. Baltic Journal of Management, 2(2), 154-180.
- Bettenhausen, K. L., & Murnighan, J. K. (1991). The development of an intragroup norm and the effects of interpersonal and structural challenges. Administrative Science Quarterly, 36, 20-35.
- Bonacich, P. (2007). Some unique properties of eigenvector centrality. Social Networks, 29(4), 555-564.
- Borgatti, S. P., & Cross, R. (2003). A relational view of information seeking and learning in social networks. Management science, 49(4), 432-445.
- Borgatti, S. P., & Cross, R. (2003). A relational view of information seeking and learning in social networks. Management science, 49(4), 432-445.

- Borgatti, S. P., Everett, M. G., & Freeman, L. C. (2002). Ucinet for Windows: Software for social network analysis.
- Borgatti, S. P., Everett, M. G., & Johnson, J. C. (2013). Analyzing Social Networks. SAGE Publications Limited.
- Borgatti, S.P. (2006). Identifying sets of key players in a network. Computational, Mathematical and Organizational Theory, 12(1), 21-34.
- Breton-Miller, I. L., Miller, D., & Steier, L. P. (2004). Toward an integrative model of effective FOB succession. Entrepreneurship Theory and Practice, 28(4), 305-328.
- Brown, J. S., &Duguid, P. (1991). Organizational learning and communities-of-practice: Toward a unified view of working, learning, and innovation. Organization science, 2(1), 40-57.
- Burt, R. S. (1987). Social contagion and innovation: Cohesion versus structural equivalence.

 American journal of Sociology, 1287-1335.
- Covin, T. J. (1994). Profiling Preference for Employment in Family-Owned Firms. Family Business Review, 7(3), 287-296.
- Cross, R., & Parker, A. (2004). The hidden power of social networks: Understanding how work really gets done in organizations. Harvard Business Press.
- Crossan, M., Lane, H., & White, R.E. (1999). An organizational learning framework: from intuition to institution. Academy of Management Review, 24(3), 522-537.

- Cyert, R., & March, J. (1963). A Behavioral Theory of the Firm. Englewood Cliffs, NJ:

 PrenticeHall.
- Davenport, T. H., & Prusak, L. (1998). Working knowledge: Managing what your organization knows. Harvard Business School Press, Boston, MA.
- Denison, D., Lief, C., & Ward, J. L. (2004). Culture in Family-Owned Enterprises: Recognizing and Leveraging Unique Strengths. Family Business Review, 17(1), 61-70.
- Dirks, K. T., &Ferrin, D. L. (2002). Trust in leadership: meta-analytic findings and implications for research and practice. Journal of applied psychology, 87(4), 611.
- Ensley, M. (2006). Family businesses can out-compete: as long as they are willing to question the chosen path. Entrepreneurship Theory and Practice, 30, 747–754.
- Finkelstein, S., & Hambrick, D. C. (1990). Top-management-team tenure andorganizational outcomes: The moderating role of managerial discretion. Administrative Science Quarterly, 35,484-503.
- Flores, L. G., Zheng, W., Rau, D., & Thomas, C. H. 2012. Organizational learning: Subprocess identification, construct validation, and an empirical test of culturalantecedents. Journal of Management, 38(2),640-667.
- Gersick, K.E., Davis, J.A., McCollom-Hampton, M.M.,&Lansberg, I. (1997). Choosing the right ownership structure.InM.Fischetti (Ed.), The family business succession handbook(pp. 7-8). Philadelphis: Family Business Publishing.

- Ghoshal, S., & Bartlett, C. A. (1990). The multinational corporation as an interorganizational network. Academy of management review, 603-625.
- Gómez-mejía, L. R., Haynes, K. T., Núñez-Nickel, M., Jacobson, K. J. L., Moyano-Fuentes, J., Haynes, K. T., &Núñez-Nickel, M. (2007). Socioemotional Wealth and Business Risks in Family-controlled Firms: Evidence from Spanish Olive Oil Mills. Administrative Science Quarterly, 52, 106–137.
- Granovetter, M. (1973). The strength of weak ties. American Journal of Sociology, 78, 1360-1380.
- Greve, A., &Salaff, J. W. (2003). Social networks and entrepreneurship. Entrepreneurship theory and practice, 28(1), 1-22.
- Grote, J. (2004). Conflicting generations: A new theory of family business rivalry. Family Business Review, 16(2), 113-124.
- Habbershon, T. G., & Williams, M. L. (1999). A resource-based framework for assessing thestrategic advantages of family firms. Family Business Review, 12, 1-25.
- Habbershon, T. G., Williams, M., & MacMillan, I. C. (2003). A unified systems perspective of family firm performance. Journal of Business Venturing, 18(4), 451-465.
- Hanneman, R. A.,& Riddle, M. (2005).Introduction to social network methods[Electronic text].

 Retrieved from http://faculty.ucr.edu/~hanneman/nettext/

- Ho, V. T., & Levesque, L. L. (2005). With a little help from my friends (and substitutes): Social referents and influence in psychological contract fulfillment. Organization Science, 16(3), 275-289.
- Huber, G. P. (1991). Organizational learning: The contributing processes and literatures.

 Organization Science, 2, 88-115.
- Ibarra, H. (1995). Race, opportunity, and diversity of social circles in managerial networks.

 Academy of Management Journal, 673-703.
- Ibarra, H., & Andrews, S. B. (1993). Power, social influence, and sense making: Effects of network centrality and proximity on employee perceptions. Administrative Science Quarterly, 277-303.
- Jack, S. (2005). The role, use and activation of strong and weak network ties: a qualitative study.

 Journal of Management Studies, 42, 1233–1259.
- Kang, D. (1998). The impact of ownership type on performance in public corporations: a study of the u.s. textile industry 1983-1992. Working paper, HarvardBusinessSchool.
- Kets de Vries, M. F. R., Carlock, R. S., & Florent-Treacy, E. (2007). Family business on the couch: A psychological perspective. Chichester, England: John Wiley & Sons Publications.
- Knoke, D.,& Yang, S. (2008). Social Network Analysis. Thousand Oaks, CA, USA: Sage Publications.

- Krackhardt, D., & Porter, L. W. (1986). The snowball effect: Turnover embedded in communication networks. Journal of Applied Psychology, 71(1), 50.
- Lansberg, I. (1999). Succeeding generations: Realizing the dream of families in business.

 Harvard Business Press.
- Leana, C. R., & Van Buren, H. J. (1999).Organizational social capital and employment practices. Academy of Management Review, 24, 538-555.
- Lee, F. (1997). When the going gets tough, do the tough ask for help? Help seeking and power motivation in organizations. Organizational Behavior Human Decision Processes,72(3), 336–363.
- Lyman, A.R. (1991). Customer service: Does family ownership make a difference? Family Business Review, 4(3), 303-324.
- Maney, I. M., & Stevenson, W. B. (2001). Nationality, cultural distance, and expatriate status: Effects on the managerial network in a multinational enterprise. Journal of International Business Studies, 285-303.
- March, J. G. (1991). Exploration and Exploitation in Organizational Learning. Organization Science, 2(1), 71–87.
- Marsden, P. V. (1990). Network data and measurement. Annual review of sociology, 435-463.
- Miller, D., & Le Breton-Miller, I. (2006). Family governance and firm performance: Agency, stewardship, and

- Monge, P. R., & Contractor, N. (2003). Theories of communication networks. New York: Oxford UniversityPress.
- Moores, K. (2009). Paradigms and theory building in the domain of business families. Family Business Review, 22,167-180.
- Mustakallio, M., Autio, E., & Zahra, S. A. (2003). Relational and contractual governance in family firms: Effects on strategic decisions making. Family Business Review, 15(3), 205–222.
- Nahapiet, J., &Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. Academy of Management Review, 23, 242-266.
- Nordqvist, M., & Melin, L.(2010). Entrepreneurial families and family firms. Entrepreneurship & Regional Development, 22(3), 1-29.
- O'Reilly, C. A., III. (1991). Organizational behavior: Where we've been, where we're going.

 Annual Review of Psychology, 42, 427-458.
- Patel, P. C., & Fiet, J. O. (2011). Knowledge combination and the potential advantages of family firms in searching for opportunities. Entrepreneurship Theory and Practice, 35(6), 1179-1197.
- Pearson, A., Carr, J.C., & Shaw, J.C. (2008). Toward a theory of familiness: A social capital perspective. Entrepreneurship Theory and Practice, 32(6), 949–969.

- Poutziouris, P.Z., Smyrnios, K., & Klein, S. (2006). Handbook of Research on Family Business.Great Britain: Edward Elgar Publishing.
- Robert, L. P., Dennis, A. R., & Ahuja, M. K. (2008). Social capital and knowledge integration in digitally enabled teams. Information Systems Research, 19(3), 314-334.
- Scott, S. G. (1997). Social identification effects in product and process development teams.

 Journal of Engineering and Technology Management, 14(2), 97-127.
- Shepherd, D., & Zahra, S. (2003). From conservatism to entrepreneurialism: The case of Swedish family firms. Unpublished paper. Boulder, CO: University of Colorado.
- Sirmon, D.G., & Hitt, M.A. (2003). Managing resources: Linking unique resources, management and wealth creation in family firms. Entrepreneurship: Theory & Practice, 27(4), 339-358.
- Tsai, W., & Ghoshal, S. (1998). Social capital and value creation: The role of intrafirm networks.

 Academy of Management Journal, 41, 464-476.
- Umphress, E. E., Labianca, G. J., Brass, D. J., Kass, E. E., & Scholten, L. (2003). The role of instrumental and expressive social ties in employees' perceptions of organizational justice. Organization science, 14(6), 738-753.
- Wasko, M. M., & Faraj, S. (2005). Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. MIS Quarterly, 35-57.

- Wasserman, S.,& Faust, K. (1994).Social Network Analysis: Methods and Applications.Cambridge: Cambridge University Press.
- Zahra, S. (2008). The virtuous cycle of discovery and creation of entrepreneurial opportunities. Strategic Entrepreneurship Journal, 2, 243–257.
- Zahra, S. A. (2005). Entrepreneurial risk taking in family firms. Family Business Review, 18(1), 23–40.
- Zahra, S. A. (2012). Organizational learning and entrepreneurship in family firms: exploring the moderating effect of ownership and cohesion. Small Business Economics, 38, 51–65.
- Zahra, S. A., Neubaum, D. O., &Larraneta, B. (2007). Knowledge sharing and technological capabilities: The moderating role of family involvement. Journal of Business Research, 60(10), 1070-1079.
- Zand, D. E. (1972).Trust and managerial problem solving. Administrative Science Quarterly,17,229-239.

Network Survey Items

Appendix A

Dimension	Questions	Source
Tie Strength	How frequently do you interact with the persons listed below (on average over the past 6 months)? 1 = once a day; 2 = twice a week; 3 = once a week; 4 = twice a month; 5 = once a month; 6 = once every two months; 7 = once every three months; 0 = I do not know this person How close is (was) the relationship between you and the person listed below? 1 = Very close; 2 = Close; 3 = Somewhat close; 4 = Not at all close; 5 = Distant; 0 = I do not know this person.	Hansen (1999)
Value	I understand this person's knowledge and skills. This does not necessarily mean that I have these skills or am knowledgeable in these domains, but that I understand what skills this person has and domains they are knowledgeable in. 1 = Strongly disagree; 5= Strongly agree; 0 = I do not know this person.	Borgatti & Cross (2003)
Cost	Seeking information or advice from other people can be costly. For example, with some people you may not feel comfortable revealing your own lack of knowledge in a given topic. Alternatively, people you ask for information may make you feel excessively indebted to them. In light of such interpersonal risks and obligations, please indicate the extent to which you feel that seeking information from this person is costly. 1 = Strongly disagree; 5= Strongly agree; 0 = I do not know this person.	Borgatti & Cross (2003)
Instrumental Ties	Who are the people from this list whom you approach when you have a work-related problem?	Umphress et al. (2003)

Expressive Ties	Who are the people from this list with whom you are friends, and socialize with them and their family?	Umphress et al. (2003)
Trust	Given my teammates previous performance, I see no reason to doubt his/her competence and preparation for another team task.	Robert, Dennis & Ahuja (2008)
Identification	I find it easy to identify myself with the team.	Robert, Dennis & Ahuja (2008)
Norms	There are teamwork norms in my team.	Robert, Dennis & Ahuja (2008)
Reciprocity	In most cases, the members of my team feel mutually responsible for the team's performance.	Robert, Dennis & Ahuja (2008)