Collective Entrepreneurship in Family Firms: The Influence of Leader Attitudes and Behaviors

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Collective entrepreneurship is the synergism that emerges from a collective and that propels it beyond the current state by seizing opportunities without regard to resources under its control (Stevenson and Jarrillo 1990). This study provides a conceptual model of collective entrepreneurship and its relationship with leadership and team dynamics in the context of a small family business. It proposes two types of prerequisites for collective entrepreneurship: attitudinal and behavioral. The attitudinal prerequisite is family business members’ commitment to the family business. The behavioral prerequisite includes collaboration and task conflict among family business members. Further, the article argues that leadership behaviors directly affect the attitudinal and behavioral prerequisites, and indirectly affect collective entrepreneurship. Specifically, relations-oriented and participative leadership have positive, indirect effects on collective entrepreneurship. Task-oriented leadership has both positive and negative, indirect effects on collective entrepreneurship. An empirical study of 271 small family businesses in the United States confirmed most of the hypotheses.

A very important concern of family businesses is to sustain entrepreneurial capability (Hoy and Verser 1994). However, practitioners and researchers seem constrained by the following individualistic assumptions about entrepreneurship: The entrepreneurial competence of the firm is equated with that of the owner (Miller 1983; Man, Lau, and Chan 2002), and the owner is the only source of a firm’s entrepreneurial competence (Slevin and Covin 1995; Stoner 1987).

An individualistic view of entrepreneurship (Reich 1987; Tiessen 1997) fails to recognize that in many cases entrepreneurship is a collective effort. Missing from most literature is the important role of collective entrepreneurship—the collective entrepreneurial capability to innovate and create (Reich 1987; Stewart 1989). Collective entrepreneurship may be especially important to sustain the continuity and growth of family firms. Owners who develop a culture that promotes collective entrepreneurship may instill an entrepreneurial spirit that enables them to achieve the hope for a firm that lasts for generations.

This study examines the contribution of owners’ leadership to the collective entrepreneurial capability of small family firms. Here, we view owners as being potential “organizing geniuses” (Bennis and Biederman 1998) who transform their family firms into “great teams” that are highly and collectively entrepreneurial.

Entrepreneurship is a process in which entrepreneurs pursue opportunities without regard to resource currently under control (Stevenson and Jarrillo 1990). Two core components of this process are recognition/identification of opportunities and getting use of the resources needed to exploit these opportunities (Block and MacMillan 1993; Kilby 1971; Stevenson and Gumpert 1985). Recognition of opportunities includes such activities as scanning both external and internal environments for new markets, unmet needs, existing problems in work process, and new product ideas (Sandberg 1991; Sayles and Stewart 1995). Obtaining resources includes such activities as leveraging resources through “running hot,” creating collective synergism, fostering and using collective creativity (Stewart 1989), borrowing or coopting resources (Jarrilo 1988, 1989), designing and implementing strategies (Stevenson and Jarrilo 1990; Tiessen 1997).

Here, we define collective entrepreneurship as synergism that emerges from a collective and that propels it beyond the current state by seizing opportunities without regard to resources under its control (Stevenson and Jarrilo 1990); the collective capability of both identifying and responding to opportunities are important components of collective entrepreneurship. Collective entrepreneurship may exist in teams (Reich 1987; Stewart 1989), organizations in the form organization-wide “Kaizen” (continuous improvement involving all members of an organization; Imai 1986), and networks of organizations (Nonaka 1988; Mourdoukoutas 1999).

The focus of this study is small family businesses, which have made great contributions to the U.S. economy (e.g., Duman 1992; Kets de Vries 1993; Hershon 1975). However, relatively little research attention has been given to the nature and function of these family firms (McCann, Leon-Guerrero, and Haley 2001; Morris, Williams, and Avila 1997).

Hoy and Verser (1994) viewed leadership as the number one issue for future research in the interaction between family business and entrepreneurship. However, leader-
ship research has given disproportionate focus to the role of the founder/entrepreneur in the process of transition or succession (Handler 1994). Some researchers have addressed the impact of owner leadership styles on both family-related and business-related outcomes (e.g., Dyer 1986; Sorenson 2000), but almost no attempt has been made to study the relationship between the owner’s leadership styles and family firm’s entrepreneurial capability.

Hoy and Verser (1994) advocate studying the implications of team leadership in family business. Moreover, studies indicate that small family businesses function like work teams (Riordan and Riordan 1993). An advantage of treating small family firms as work teams is that much research attention has already been given to teams (Cohn and Bailey 1997). For example, Stewart (1989) studied entrepreneurship in a work team environment, which he called “team entrepreneurship” and which we refer to here as collective entrepreneurship. Researchers suggest that collective entrepreneurship is a source of competitive advantage not only for teams (Reich 1987; Slevin and Covin 1992) but also for other types of organizations (Imai 1986; Jelinek and Litterer 1995; Nonaka 1988; Mourdoukoutas 1999).

Based on previous research in small family businesses, work teams, collective entrepreneurship, and leadership, we propose and test a model of collective entrepreneurship for small family businesses, businesses that are family-owned and that have no more than 20 employees. Such firms are likely to function like a work team (Cohn and Bailey 1997; Riordan and Riordan 1993) and potentially to engage in collective entrepreneurship.

Collective Entrepreneurship and Small Family Business

Today more and more successful organizations draw their competitive advantages not from the major initiatives of CEOs and mavericks but from continuous, incremental innovation and refinement of ideas by teams in the form of collective entrepreneurship (Reich 1987). Collective entrepreneurship draws on everyone’s talent, creativity (Stewart 1989), knowledge, and experience, which is diffused throughout the team, to create a whole that is greater than the sum of individual contributions (Reich 1987, p. 78). The entrepreneurship in small family firms likely results from countless small innovative ideas that help members to “stretch past their previous abilities” to meet the demands of customers, which Stewart (1989) calls “running hot.”

Below, based on previous studies (Haskins et al. 1998, Slevin and Covin 1992, and Stewart 1989 provide an extensive discussion), we propose (1) an attitudinal followed by (2) a behavioral prerequisite for collective entrepreneurship (see Figure 1). The attitude prerequisite provides the energy, and the behavior prerequisite transfers the energy into synergistic outcomes (Hackman 1987); like the engine, transmission, and wheels for a car, attitude and behavior are the “energy” and “essential mechanisms” that result in collective entrepreneurship. We argue that both of these prerequisites are influenced by the nature of leadership in the family firm.

![Figure 1. Leadership, “Energy,” and “Mechanisms” Underlying Collective Entrepreneurship](image)

An Essential Attitudinal Prerequisite for Collective Entrepreneurship: Organizational Commitment

Organizational commitment is a collection of feelings and beliefs within organizational members (Mowday, Porter, and Steers 1982) that consists of belief in the organization, a sense of pride, and a feeling of loyalty that provides a sense of conscientiousness and stewardship (Haskins et al. 1998). Committed organizational members are likely to act above and beyond the call of duty and are less likely to quit (Mathieu and Zajac 1990). As a result, they should devote effort to detecting and diagnosing organizational problems, identifying defects and weaknesses in current work, and searching for better ways to do their work and to serve the organization. We argue that family business members’ commitment to the family business is an essential attitudinal prerequisite to the collective entrepreneurship of a small family business. To test the effect of collective entrepreneurship, we offer the following hypothesis.
Hypothesis 1: Family business members’ commitment to the family business is positively associated with its collective entrepreneurship.

Essential Behavioral Prerequisites for Collective Entrepreneurship: Collaboration and Conflict Management

In collective entrepreneurship, skills, intelligence, and experiences of individual family business members are integrated, forming a strong collective capacity to create and innovate. Over time, as family business members work through various problems, they learn how to help one another perform, what each can contribute, how best to take advantage of other’s experience, and when and how to make mutual adjustments. However, we believe that, without effective collaboration and conflict management, collective synergy will not occur.

Collaboration Among Family Business Members

Collaboration is an internal process that is positively related to business performance and effectiveness (e.g., Sorenson 1999, 2000). We believe that collaboration may be the most important mechanism that transfers the “energy” of attitude into interaction that produces collective synergy. Collaboration is most extensively studied in conflict management research (e.g., Sorenson, Moore, and Savage 1999) as a process that fully satisfies the concerns of involved parties and creates integrative solutions (Eiseman 1977). Effective collaboration reflects the ability of people to work together for their mutual benefit (Scott 1999). In collaboration, individuals strive to understand the talents, thoughts, and emotions of one another; such interpersonal understanding is the wellspring of the creation, preservation, and enhancement of collective excellence (Haskins et al. 1998). Stewart (1989) uses the analogy of soccer team members working together to score to explain the importance of mutual understanding and collaboration among team members to produce collective outcomes. Similarly, we argue that collaboration enables family businesses to engage in collective entrepreneurship. Thus, we offer the following hypothesis.

Hypothesis 2a: Collaboration among family business members is positively associated with the collective entrepreneurship of the family business.

Conflict Among Family Business Members

Conflict management has long been an important research subject in organizational studies (e.g., Sorenson 1999; Thomas 1992; Wall and Callister 1995). How conflicts are managed directly impacts organizational performance and outcomes (Amason 1996; Jehn 1995). Appropriate conflict management can help to reduce unnecessary consumption of resources, increase synergy, and build relational resources (Stevenson and Gumpert 1985). Family firms should effectively manage two types of conflict. The first is task or functional conflict, which consists of disagreement among organizational members about task content; the second is relationship or dysfunctional conflict, which refers to interpersonal incompatibilities, tension, animosity, and annoyance (e.g., Amason 1996; Jehn 1995; Priem and Price 1991).

Studies show that task conflicts are beneficial to organizational and team performance, adding to creativity and decision quality (Amason 1996; Jehn 1995). Task conflict contributes to an organization’s cognitive diversity, which has been found to be related to innovativeness and ability to solve complex and nonroutine problems (Bantel and Jackson 1989; Murry 1989).

However, relationship conflicts are divisive and detrimental to performance (Amason 1996; Jehn 1995), resulting in poor relationships, limiting synergy, and if not solved, destroying collective entrepreneurship (Stewart 1989). Thus, we argue that task conflict should promote and relationship conflict should hinder collective entrepreneurship.

Hypothesis 2b: Task conflict among family business members is positively associated with the collective entrepreneurship of the family business.

Hypothesis 2c: Relationship conflict among family business members is negatively associated with the collective entrepreneurship of the family business.

Essential Leadership Characteristics Underlying Team Entrepreneurship: The Effect of Leadership on Attitude and Behavior

Collective entrepreneurship does not eliminate the need for leadership in family business. Leaders help cultivate both the attitudes and behaviors that create a favorable context for collective entrepreneurship.

To illustrate the potential impact of leader influence, we discuss three types of leadership styles (Bryman 1996) or behaviors (Likert 1961, 1967) and their impact on the attitudes and behaviors of family business members. In this article, we use leadership styles and behaviors interchangeably. The three leadership styles are (1) relations-oriented, (2) participative, and (3) task-oriented (Bass 1990; Yukl 1998).
Relations-Oriented Leadership

Studies show that relations-oriented leaders (e.g., Bowers and Seashore 1966; Likert 1961, 1967; Sorenson 2000) are concerned about people and relationships, which tends to increase collaboration, teamwork, and subordinate identification with the organization or team. Key component behaviors of relations-oriented leadership include supporting, developing, recognizing, and consulting with individuals (Yukl 1998).

By showing consideration, acceptance, and concern for the needs and feelings of their subordinates, family business leaders help build and maintain effective interpersonal relationships and help subordinates reduce and cope with stress, which can help to reduce unnecessary interpersonal conflicts, especially relationship conflicts that may damage collective entrepreneurship (Amason 1996; Jehn 1995). In addition, subordinates may imitate their leaders’ supportive behaviors (Weiss 1977) to further support positive interaction and working relationships, very likely leading to creative collaboration (Haskins et al. 1998).

The tendency of relations-oriented leaders to develop, recognize, and reward subordinates increases the likelihood that subordinates will be committed to the family business. Therefore, we offer the following hypotheses.

Hypothesis 3a: Relations-oriented leadership is positively associated with family business members’ commitment to the family business.

Hypothesis 3b: Relations-oriented leadership is positively associated with the collaboration among family business members.

Hypothesis 3c: Relations-oriented leadership is negatively associated with relationship conflict among family business members.

Thus, in our model, relations-oriented leadership should have indirect positive impact on the collective entrepreneurship of a small family business.

Task-Oriented Leadership

Studies show that task-oriented leaders do not spend time working with their subordinates. Instead, they concentrate on task-oriented functions such as planning and scheduling work, coordinating subordinate activities, and providing supplies, equipment, and technical assistance. Task-oriented leaders define and structure their own roles and the roles of their subordinates. They closely supervise subordinates in setting and achieving formal performance goals (e.g., Likert 1961, 1967). This helps to reduce task conflicts among subordinates.

Task-oriented leaders coordinate the activities of their subordinates instead of helping subordinates to coordinate among themselves. Task-oriented leaders can help subordinates collaborate by designing work, coordinating, and managing interaction. However, collective entrepreneurship will be limited to those interactions directed by the leader, resulting in minimal synergy.

Based on the previous discussion, we offer the following hypotheses.

Hypothesis 4a: Task-oriented leadership is positively associated with the collaboration among family business members.

Hypothesis 4b: Task-oriented leadership is negatively associated with the task conflict among family business members.

Because task-oriented leadership potentially has both a positive and negative influence, we suggested that the total effect of task-oriented leadership on collective entrepreneurship is at best indeterminate.

Participative Leadership

Participative leaders encourage and facilitate involvement of subordinates in making decisions. Involving subordinates promotes approval and commitment. The highest level of participative leadership is delegation of decision-making or encouraging subordinates to assume responsibility for their own work. Thus, participative leadership includes power sharing, empowerment, and reciprocal influence processes (e.g., Vroom and Yetton 1973).

Participative leaders increase interpersonal interaction, mutual obligation, and accountability, making the family firm more “groupy” (McGrath 1984). In meetings, participative leaders encourage diverse ideas and opinions from team members, which may promote task conflict.

We assume that, similar to relations-oriented leaders, participative leaders will influence family business members to be open to one another’s opinion, ideas, and suggestions (Wiess 1977). A family business leader who opens the domain of decision authority to the entire family business team may also encourage them to open their domain of work to others, making the entire business more integrated and holistic. Similarly, power sharing by a leader may also encourage team members to share power (Leavitt 1975; McGrath 1984). Participative leaders clearly have the potential to positively influence family business
members to have constructive attitudes toward their job, the family business, and their leaders. Thus, we suggest the following relationships:

Hypothesis 5a: Participative leadership is positively associated with family business members’ commitment to the family business.

Hypothesis 5b: Participative leadership is positively associated with the collaboration among family business members.

Hypothesis 5c: Participative leadership is positively associated with the task conflict among family business members.

Hypothesis 5d: Participative leadership is negatively associated with the relationship conflict among family business members.

Similar to relations-oriented leaders, participative leaders should have a positive impact on building cooperative interpersonal and working relationships, which will help collective entrepreneurship to grow in a small family business.

Methodology

Data Collection
To examine the collective entrepreneurship of small family firms, we use secondary data from the “Survey of Family Business,” collected by the Center for Entrepreneurship and Family Business at a Southwestern University between 1997 and 1999. The “Survey of Family Business” is a 199-item questionnaire, which asks respondents about a wide variety of activities, practices, and values/policies in family businesses. All of the respondents were members of the owning family. Since all of these businesses had 20 or fewer employees and most business decisions were kept in the family, family members exerted considerable influence. Most of the respondents (77%) listed themselves as the owner, CEO, president, or administrator of the business. Some (17%) indicated they were vice presidents or managers. Others (6%) listed a variety of roles, the predominant of which was secretary/treasurer.

Riordan and Riordan (1993) found that small family businesses with 20 or fewer employees function like workgroups or teams. Thus, we treat each small family business as an independent work team. This study limited the sample to businesses with from 3 to 20 employees, resulting in a sample size of 271 family firms.

Responses to the “Survey of Family Business” questionnaire were gathered in two ways. First, a national sample was obtained by identifying the Chambers of Commerce in various communities in the United States from their sites on the Internet. Membership directories were accessed and businesses were randomly selected to be a part of the study. Owners of those businesses selected were called and asked if their company was a family business and, if so, whether they were willing to participate in the study. Of the questionnaires that were sent, 20 percent were completed and returned (n = 158). Second, students at Texas Tech University were invited to ask family business owners to complete surveys. These surveys primarily were obtained from businesses in Texas (n = 113). The response rate for this data collection was more than 70 percent. Background characteristics of selected small family businesses used in this study are summarized in Table 1. Multivariate analysis showed that there was no significant difference between samples.

Table 1
Numbers of Small Family Businesses Located in Different Regions in the United States

<table>
<thead>
<tr>
<th>Region</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
<th>VI</th>
<th>VII</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>26</td>
<td>34</td>
<td>18</td>
<td>69</td>
<td>44</td>
<td>48</td>
<td>24</td>
</tr>
</tbody>
</table>

Notes:
1. I: WA, OR, ID, MT, WY
2. II: CA, NV, UT, AZ
3. III: ND, SD, MN, CO, NE, KA, OK, MO, IA, IL, WI
4. IV: West TX, NM
5. V: East TX
6. VI: MI, IN, KT, OH, PA, WV, VA, NY, MD, MA, ME, NY
7. VII: AR, LA, TN, MS, AL, GA, NC, SC, FL
8. The regions of 8 companies are not identifiable.

Measures

Task-oriented Leadership Style (TL). The measure for this construct consisted of three items measured on a scale from 1 (strongly disagree) to 7 (strongly agree). The items were “Top-level leadership in our organization...” (1) “maintains clear control over the business,” (2) “is very directive,” and (3) “retains the authority to make almost all decisions.”

Relations-oriented Leadership Style (RL). This construct was measured on a scale from 1 (strongly disagree) to 7 (strongly agree) by two items that were reverse scored. These items were “Top-level leadership in our organization...” (1) “sometimes strongly persuades/manipulates employees” and (2) “is very dominating.”
**Participative Leadership Style (PL).** Four items were used to measure this construct. The scale ranged from 1 (strongly disagree) to 7 (strongly agree); the items were adapted from the Michigan Organizational Assessment Questionnaire (Camman, et al. 1983). These items were “Top-level leadership in our organization...” (1) “encourages subordinates to participate in important decisions,” (2) “keeps informed about the way subordinates think and feel about things,” (3) “encourages subordinates to speak up when they disagree with a decision,” and (4) “provides goals and gives employees freedom to achieve them.”

**Organizational Commitment (OC).** The three items for the measure of team commitment were adapted from Camman, et al. (1983) and were answered on a scale of 1 (strongly disagree) to 7 (strongly agree). The items were “In general, employees in this business...” (1) “like working here,” (2) “feel like they are really a part of this business,” and (3) “are satisfied with their role in the business.”

**Collaboration (CL).** Five items were used to assess collaboration. Possible responses varied from (1) strongly disagree to (5) strongly agree. Three of the items were from a conflict measure developed by Rahim (1983). The items read as follows: (1) “We try to bring all our concerns out in the open so that the issues can be resolved in the best possible way,” (2) “We try to exchange accurate information to solve the problem together,” (3) “We try to ensure that all the employees have access to more information than the minimum required to perform their job,” (4) “We try to work with one another for a proper understanding of the problem,” and (5) “We try to meet the expectations of one another.”

**Task Conflict (TC).** Task conflict was measured with three items on different scales: (1) “How many different solutions do members of your organization consider when making decisions” was measured on a scale from 1 (none) to 5 (a great deal); (2) “We encourage diversity in people and ideas within our organization” was measured on a scale from 0 (not at all) to 5 (very great extent); and (3) “The following statements describe types of operating philosophies and beliefs which may or may not exist in your business...participation, open discussion” was measured on a scale from 1 (minimally valued and used) to 7 (extensively valued and used).

**Relationship Conflict (RC).** This measure used three items developed by Amason (1996), and they were measured on a scale from 1 (none) to 5 (a great deal): (1) “How much tension is there over different ideas in your business?” (2) “How much anger is there in your business during disagreements?” and (3) “How much personal friction is there between members of your organization during disagreements?”

**Collective Entrepreneurship (CE).** Three items were used to measure collective entrepreneurship, and they were measured on a scale from 0 (not at all) to 5 (very great extent). However, due to the constraint of the available data in this study, we could measure only one of the most important aspects of collective entrepreneurship—the collective capability in identifying external opportunities and internal working and processes for improvement. Opportunity identification (Christensen, Masden, and Peterson 1989; Hills and Shrader 1997; Long and McMullan 1984) is considered one of the most important entrepreneurial activities and capabilities. The items used to measure collective entrepreneurship were: (1) “We are good at scanning the external environment for opportunities and potential problems”; (2) “We are good at scanning the internal workings and processes of this organization for areas which may be improved upon”; and (3) “We try to uncover and communicate all relevant facts, not just those that are politically acceptable.”

**Analysis and Results**

Structural equation modeling (SEM) was used for analyses. SEM was appropriate for this study because multiple and interrelated dependence relationships involving unobservable concepts were simultaneously investigated.

The model was assessed with several statistics to examine its fit with the data. First, a c^2 test was used to assess the goodness-of-fit between the reproduced and observed covariance matrices, an index that measures the absolute fit of the overall model. As sample size increases, this measure has a greater tendency to indicate significant differences for equivalent models. However, when the ratio of the c^2 value to degree of freedom is smaller than 2, the model is considered to have an acceptable fit. Another index that attempted to correct for the tendency of the c^2 statistic to reject any specified model with a sufficiently large sample was the root mean square error of approximation (RMSEA). Two other indices, which compare the proposed model to a baseline model, often referred to as the null model, which in most cases is a single-construct model with all indicators perfectly measuring the construct, were also used. Two such indices were the adjusted goodness-of-fit index (AGFI) and the comparative fit index (CFI).

The initial model included 25 items intended to measure 8 variables. The c^2 statistic was 499.13 with a degree of freedom of 271 (p = 0.00). The ratio is smaller than 2.0. RMSEA was 0.056. AGFI was 0.85, and CFI was 0.92. Thus, the measurement model had an acceptable fit. The composite reliabilities of each variable are shown in the diagonal of Table 2. All values were above 0.60, which reflected an acceptable degree of construct reliability.
Convergent and discriminant validity were examined with the significance of loadings to each variable (Table 3) and the correlations among included variables (Table 2). All the loadings were significant statistically and no correlation was above 0.80. The model had achieved an acceptable degree of convergent and discriminant validity (Hair et al. 1998). The means, standard deviations, and skewness are reported in Table 4.

The same sets of goodness-of-fit indices used to evaluate the structural model were also used to assess the measurement model. The $\chi^2$ statistic was 523.07 with a degree of freedom of 279 ($p = 0.00$). The ratio of the $\chi^2$ value to the degree of freedom was less than 2.0. RMSEA was 0.057, within the range of acceptance. CFI was 0.92, above the suggested acceptable level; and AGFI was 0.85, which was considered acceptable. In general, the model showed acceptable fit to the data.

The standardized path coefficients for each hypothesized relationship in the theoretical structural model are displayed in Figure 2. The first hypothesis (hypothesis 1) was not supported. Family business members’ commitment to the family business (OC) was not significantly related to the family business’s collective entrepreneurship (CE) ($\beta = -0.03$, $t = -0.38$). Hypothesis 2a was supported. Collaboration (CL) was positively and significantly related to collective entrepreneurship ($\beta = 0.24$, $t = 2.53$). Hypotheses 2b and 2c were also supported. Results showed that positive and significant relationships existed between task conflict (TC) and collective entrepreneurship ($\beta = 0.49$, $t = 4.85$), and a negative and significant relationship existed between relationship conflict (RC) and collective entrepreneurship ($\beta = -0.17$, $t = -2.62$).

Regarding leadership styles and family business members’ commitment and interactive behaviors (CL, TC, and RC), most hypotheses were supported. Participative leadership style (PL) was found to be positively and significantly related to family business members’ commitment ($\beta = 0.77$, $t = 8.16$), to collaboration ($\beta = 0.38$, $t = 3.66$), and to task conflict ($\beta = 0.79$, $t = 7.21$).

### Table 2

<table>
<thead>
<tr>
<th></th>
<th>TC</th>
<th>RC</th>
<th>CE</th>
<th>CL</th>
<th>PL</th>
<th>TL</th>
<th>RL</th>
<th>OC</th>
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<tbody>
<tr>
<td>TC</td>
<td>(.68)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RC</td>
<td>-.14</td>
<td>(.86)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CE</td>
<td>.71**</td>
<td>-.34**</td>
<td>(.80)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>CL</td>
<td>.58**</td>
<td>-.37**</td>
<td>.57**</td>
<td>(.82)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PL</td>
<td>.76**</td>
<td>-.32**</td>
<td>.47**</td>
<td>.60**</td>
<td>(.74)</td>
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<tr>
<td>TL</td>
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<td>-.12</td>
<td>.30**</td>
<td>.48**</td>
<td>.32**</td>
<td>(.63)</td>
<td></td>
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<tr>
<td>RL</td>
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<td>-.29**</td>
<td>.07</td>
<td>.18*</td>
<td>.16</td>
<td>-.52**</td>
<td>(.64)</td>
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<td>.75**</td>
<td>.32**</td>
<td>.06</td>
<td>(.92)</td>
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</tbody>
</table>

TC = Task Conflict, RC = Relationship Conflict, CE = Collective Entrepreneurship, OC = Organizational Commitment, PL = Participative Leadership, TL = Task-oriented Leadership, RL = Relations-oriented Leadership, CL = Collaboration.

*.05 level of significance
**.01 level of significance
### Table 3

**Properties of the Measurement Model**

<table>
<thead>
<tr>
<th>Constructs and Indicators</th>
<th>Standardized Loading</th>
<th>t-value(^a)</th>
<th>Reliability Estimate</th>
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<tr>
<td><strong>Task Conflict (TC)</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>(1)(^c)</td>
<td>0.48</td>
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<td>(2)</td>
<td>0.72</td>
<td>12.37</td>
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<tr>
<td>(3)</td>
<td>0.72</td>
<td>12.44</td>
<td>0.52</td>
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<tr>
<td><strong>Relationship Conflict (RC)</strong></td>
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</tr>
<tr>
<td>(1)</td>
<td>0.82</td>
<td>15.50</td>
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<td>(2)</td>
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<td>0.64</td>
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<tr>
<td>(3)</td>
<td>0.85</td>
<td>16.08</td>
<td>0.72</td>
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<tr>
<td><strong>Collective Entrepreneurship (CE)</strong></td>
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<td></td>
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<tr>
<td>(1)</td>
<td>0.67</td>
<td>11.52</td>
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<td>(2)</td>
<td>0.85</td>
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<td>0.75</td>
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<tr>
<td>(1)</td>
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\(^a\) All t-tests were significant at p <.001.

\(^b\) Denotes composite reliability.

\(^c\) The numbers for each item correspond with item numbers provided in the text.
### Table 4
#### Means, Standard Deviations, and Skewness

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<th>Constructs and Indicators</th>
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<th>S.D.</th>
<th>Skewness</th>
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<td>1.91</td>
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</table>

*a The numbers for each item correspond with item numbers provided in the text.*
A negative and significant relationship was also found between participative leadership style and relationship conflict \((\text{Beta} = -0.27, t = -3.56)\). Thus, hypotheses 5a, 5b, 5c, and 5d were supported.

Task-oriented leadership style (TL) was found to be positively and significantly related to collaboration \((\text{Beta} = .49, t = 3.51)\); thus hypothesis 4a was supported. The relationship between task-oriented leadership style and task conflict was negative and significant as was hypothesized \((\text{Beta} = -.18, t = -2.17)\). Therefore hypothesis 4b was also supported.

The relations-oriented leadership style (RL) was found to be positively and significantly related to collaboration \((\text{Beta} = .33, t = 3.10)\), so hypothesis 3b was supported. A negative and significant relationship was also found between relations-oriented leadership style and relationship conflict \((\text{Beta} = -.21, t = -2.83)\), thus hypothesis 3c was supported. However, no significant relationship was found between relations-oriented leadership style and family business members’ commitment \((\text{Beta} = -.07, t = -0.95)\). Thus, hypothesis 3a was not supported.

**Discussion**

Overall, the proposed model of relationships among leadership, attitude, behavior, and collective entrepreneurship was supported.

**Contribution of Attitude and Behaviors to Collective Entrepreneurship**

All the “mechanisms” (collaboration, task conflict, and relationship conflict) tested in this study were found to contribute to the collective entrepreneurship of small family businesses. Collaboration was a very important contributor to collective entrepreneurship. This finding confirms the arguments of researchers (e.g., Haskins et al. 1998; Bennins and Beirderman 1998) that collaboration contributes greatly to group creativity, collective excellence, and organizational success.

Task conflict positively impacted collective entrepreneurship. Task conflicts promote diverse opinions and ideas regarding a work team’s tasks (Amazon 1996; Jehn 1995; Thomas 1992). Importantly, task conflicts also contribute to expression of group or organizational cognitive diversity (Amazon 1996).

Relationship conflict was significantly and negatively related to collective entrepreneurship. Thus, just as it has been found to negatively affect team’s decision-making quality, affective acceptance among team members (Amazon 1996), and team performance (Jehn 1995), relationship conflict can damage the collective entrepreneurship of a small family business.

The study failed to find a significant relationship between family business members’ commitment and collective entrepreneurship. Results indicated that organizational commitment did not directly contribute to the collective entrepreneurship, even though a positive and significant correlation existed between them \((r = .47, p < .01)\). This finding is not consistent with the views of other researchers (Bennis and Beirderman 1998; Stewart 1989).

One possible explanation is that organizational commitment does not directly contribute to collective entrepreneurship. Mediating factors may exist between family business members’ commitment and collective entrepreneurship. As previously discussed, commitment was found to lead to organizational citizenship behaviors (George and Brief 1992), which may contribute directly to collective entrepreneurship.

Our results indicated that a positive and significant correlation existed between commitment and collaboration \((r = .63, p < .01)\) and between commitment and task conflict \((r = .57, p < .01)\) and that a negative and significant correlation existed between commitment and relationship conflict \((r = -.38, p < .01)\). These findings suggest that commitment may directly and positively affect task conflict and collaboration among family business members, directly reduce relationship conflicts among them, and then indirectly contribute to a small family business’s collective entrepreneurial capability. Moreover, without the behavioral “mechanisms” of collaboration and task conflict, the “energy” of commitment alone will not promote the collective synergistic entrepreneurial capability.

**Contributions of Leadership to Collective Entrepreneurship**

Almost all hypotheses about leadership styles were supported. Participative leadership positively affected collaboration among family business members, had a positive impact on their commitment, promoted task conflict, and reduced relationship conflicts.

Results indicate that participative leadership helps foster collective entrepreneurship through at least three channels—high collaboration, high task conflict, and low relationship conflict. Participative leadership had the highest joint and indirect effect on collective entrepreneurship \((\text{Beta} = .51, t = 5.60)\).

Task-oriented leadership contributed to collective entrepreneurship through its positive impact on collaboration. However, such collaboration may be highly dependent on the leader’s coordination and initiation. Haskins and associates (1998) call this type of collaboration “transactional collaboration” because it is not voluntary nor initiated by team members but is initiated, directed, and con-
trolled by the leader. In contrast, relational collaboration, which is initiated by family business members and embedded in the culture of the family firm, is not dependent on a leader’s task-oriented behaviors (Haskins, et al. 1998).

Overall results also indicated that the joint and indirect impact of task-oriented leadership on collective entrepreneurship was insignificant (Beta = .03, t = .44). Considering its indirect negative impact on collective entrepreneurship, high levels of task-oriented leadership, especially without accompanying relational leadership, is not a good choice for leaders who want to create collectively entrepreneurial family firms. Results revealed that relations-oriented leadership promotes collaboration and reduces relationship conflicts. Its joint and indirect effect on collective entrepreneurship is positive and significant (Beta = .12, t = 2.60) but weaker than that of participative leadership. Like participative leadership, relations-oriented leadership is likely to promote “relational collaboration” among family business members instead of “transactional collaboration” (Haskins, et al. 1998), contributing to the family firm’s collective entrepreneurial capability.

Inconsistent with the findings of other studies (Bass 1990; Yukl 1998), relations-oriented leaders were not found to positively influence organizational commitment. The measure used in this study may explain these findings. The measurement of relations-oriented leadership, which was based on the reverse scaling of leadership manipulation and domination, failed to reflect such important aspects of this leadership style as developing, rewarding, and recognizing (Yukl 1998), which are often found to be positively related to subordinates’ attitudes (Bass 1990).

However, the measure of relations-oriented leadership used here also has its own unique contribution in that it captured a major characteristic of entrepreneurs. As indicated above, the measure was the reverse scaling of the degree to which a leader maintains dominance and manipulates employees. Researchers have found individual entrepreneurs to be dominating and manipulative (e.g., Hornaday and Aboud 1971; Mitton 1989), especially with subordinates and successors (e.g., Handler 1994). This study shows that entrepreneurs with such characteristics, even though they may personally contribute to the business (e.g., Miller 1983), may ultimately hurt the entire organization’s collective entrepreneurial capability (Reich 1987). Thus it may be difficult for a family business leader to maintain a high degree of individual entrepreneurship and, at the same time, for the entire family business to maintain a high degree of collective entrepreneurship.

Limitations

The static nature of the data made this research at best a snapshot study of a very complex and dynamic multilevel phenomenon. Plans for future studies of collective entrepreneurship should include longitudinal field and systematic studies. Research methods could include experimental and computer simulations that could help better understand the pattern of the development of collective entrepreneurship and its interaction with lower- and higher-level dynamics.

Reliance on a single self-reporting source for each measure in this study could lead to two possible problems. The first is the “key informant” (Mitchell 1994) methodology used in this research. However, efforts were made to minimize negative effects by obtaining respondents who held similar or identical positions in small family business, which helped to reduce problems associated with lack of standardization. A second problem is a possible percept-percept inflation due to the single self-reporting source for each measure. In this research, factor analyses revealed variables prone to the impact of percept-percept impact—commitment and some leadership behaviors—did not load on the same factor, which suggests that the common method was not a serious problem in this study (Podsakoff and Organ 1986).

The tendency of respondents to provide socially desirable answers could contaminate the data for this study, which may suppress and obscure relationships among variables and produce artificial relationships among independent and dependent variables (King and Bruner 2000). In future studies, statistical control techniques should be included in the questionnaire design to reduce the effects of social-desirability bias.

Caution should be taken when generalizing the results to organizations other than small family businesses. We studied family businesses with no more than 20 members, which have unique characteristics (Sorensen, 1999; 2000). Furthermore, due to the constraints of the data, we tested only the collective capability of a small family business to identify opportunities, not to act on them.

Conclusions and Implications

This study provides evidence that family business leaders have an indirect impact on the collective entrepreneurship of small family businesses. Different from other studies that focused mainly on interfirm or interinstitutional relationships (Nonaka 1988; Mouriourkoutas 1999), this study reveals the complexity of the concept and the mechanism underlying its formation and accumulation inside small family firms. Many individual and collective factors play a role in the formation of collective entrepreneurship. The
study also reveals that three behavioral factors, or “mechanisms”—collaboration, task conflict, and relationship conflict—all have positive influence on the collective entrepreneurial capability of small family businesses.

Because it positively impacts family business members' attitudes, collaborative behaviors, and task conflicts, participative leadership is the most effective of the styles in promoting collective entrepreneurship. Relations-oriented leadership also contributes to collective entrepreneurship. However, task-oriented leadership does not significantly contribute to collective entrepreneurship and is the least recommended to practitioners among the three types of leadership.

Another important implication of this study is that in some respects there seems to be irreconcilable conflict between individual entrepreneurship and collective entrepreneurship. This is because individual entrepreneurs are often identified with characteristics (Hornaday and Aboud 1971; Mitton 1989) that may not help to build, and may even destroy, a favorable environment for collective entrepreneurship.

Unlike individual entrepreneurship that emerges from a single “maverick,” collective entrepreneurship may possess more staying power since it does not rely on a single person. This is especially important to researchers and practitioners of family businesses because most family businesses rely on the entrepreneurship of founders for their success (e.g., Hoy and Verser, 1994; Miller 1983).

Two directions for future research are very important to a holistic understanding of this collective phenomenon. First, we suggest a systemic approach to study collective entrepreneurship in which collective entrepreneurship is viewed as a system-level or global property that emerges from the dynamic operation (often involving nonlinear interactions) of microlevel variables (McGrath 1997). This study addresses some of those dynamics, such as attitudes, leadership, and interactive behaviors, within the business system. Future research may consider more global and microlevel factors from the family system, such as power sharing, affection, and conflict among family members on a microlevel, and types of family systems on a global level (Constantine 1986; Kantor and Lehr 1975). The interaction between the “family system” and the “business system” (Davis and Tagiuri 1981; Hoy and Verser 1994; Riordan and Riordan 1992) should also be considered to better understand the dynamics and underlying mechanisms of family business’s collective entrepreneurial capability.

Second, we suggest more longitudinal studies to examine the effect of collective entrepreneurship on the durability of firms. In addition, longitudinal studies may reveal the difference between the role of family business leaders as individualistic entrepreneurs and as “organizing geniuses” (Bennis and Bierdman 1998) in that they promote enduring collective entrepreneurship within the family firm.

References


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