Spousal Capital as a Resource for Couples Starting a Business

This longitudinal study finds that spousal capital is an important resource for entrepreneurs starting a business because it has implications for business sustainability and couple relationship quality. Structural equation modeling supported a process whereby gender had an impact on spousal involvement in the business, which was positively associated with dedication to the business, leading to shorter break-even times, and higher couple relationship quality. Male entrepreneurs were more likely to have a spouse involved in the business compared to female entrepreneurs, which in part, may contribute to the gender gap in the success of new businesses. Study findings have implications for couples seeking to start a business as well as family educators working with such couples.

This study is the first to empirically examine how entrepreneurs’ spousal capital affects the mutual sustainability of the business and couple relationship over time. It incorporates the spousal capital definition used by Danes, Stafford, Haynes, and Amarapurkar (2008), which is the total human, social, and financial resources available to entrepreneurs via spouses. An example of spousal capital in the form of human capital is when spouses contribute their professional expertise to help operate the firm.

An example of spousal social capital is when spouses agree to accept a greater proportion of child-care responsibilities compared to the entrepreneurial spouses so that the entrepreneurs can spend more time working in the firm to expand their clientele base. Spousal financial capital can be direct or indirect; an example of direct financial capital is when spouses lend the entrepreneurial spouses part of their parental inheritance to expand the firm. An example of indirect financial spousal capital is when spouses work outside the home to provide stable income and medical benefits until a new business venture is profitable.

In this study, we focus primarily on the social capital component of spousal capital; spousal social capital is defined as resilience that evolves from the fabric of social relations of the couple through resource and interpersonal transactions (Danes, Lee, Stafford, & Heck, 2008). Previous research has found that spousal capital indicators such as marital status and family social support are crucial during the launch of new firms (Davidsson & Honig, 2003). Comparatively little is, however, known about spousal social capital and whether this capital contributes to new firm and couple relationship sustainability (Cramton, 1993; Liang, 2002).

The couple relationship is a form of social capital for entrepreneurs because transactions between spouses can act as an accumulation of resources that entrepreneurs can draw upon to help achieve family and business goals (Danes, Lee, et al., 2008). Spousal social capital transactions may include resource transactions such as time and effort contributed to the

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Key Words: family-owned business, firm emergence, gender, social capital, spousal capital, structural equation modeling.
business or interpersonal transactions such as development of affective ties and guidelines about acceptable and unacceptable behaviors of family members related to the business (Coleman, 1990; Wright, Cullen, & Miller, 2001). Relationship transactions are based on contextual values, beliefs, and norms that come from the couple culture (Zuiker, Katras, Montalto, & Olson, 2003) and ultimately exacerbate or reduce stress for an entrepreneur (Van Auken & Werbel, 2006). Such social norms often differ by gender roles and childcare demands of entrepreneurs and their spouses (Aldrich & Cliff, 2003; Carter & Cannon, 1992).

Spousal social capital is more inclusive than when spouses provide emotional support for the entrepreneur. Spousal social capital includes such components as moral and calculative commitment, transference of resources across family/business boundaries during hectic times in the firm, spousal perception of entrepreneur’s business efficacy, sharing in firm decision-making processes, as well as assisting in representing the family firm in the community.

Chell and Baines (1998) have suggested that a gender bias exists in the literature on business growth and development because productivity outcomes have been preferred more often by men. Previous literature has tended to incorporate deficit language such as the “female underperformance” hypothesis, which suggests that businesses started by female entrepreneurs were less productive and successful than businesses started by male entrepreneurs (Boden & Nucci, 2000; Du Reitz & Henrekson, 2000; Rosa, Carter, & Hamilton, 1996). This bias has largely failed to consider gender-based contexts (Bird & Brush, 2002) that may amount to differences in business outcomes. We begin to address the gender bias by examining the impact of gender roles and childcare demands on spousal social capital available to entrepreneurs starting a business.

The purpose of this study was to examine the impact of spousal capital on the mutual sustainability of the business and couple relationship. This study contributes to the literature by (a) incorporating a theoretical framework exploring the interface between family and business contexts, processes, and outcomes; (b) using longitudinal data that are nonretrospective, and (c) examining the impact of spousal capital on the business and couple relationship over time.

Sustainable Family Business Theory II

Alesch, Holly, Mittler, and Nagy (2001) indicated that a behavioral systems theory is needed to address the complexities of business sustainability. This study focuses on spousal social capital during the high demands of starting a business, and the impact that processes of using spousal capital have on the mutual sustainability of business and family. The Sustainable Family Business Theory II (SFBT II; Danes, Lee, et al., 2008), as described by Alesch and colleagues, guided this study (see Figure 1).

SFBT II draws from family systems theory and behavioral theories of business management, giving equal recognition to family and business and to their interplay in achieving mutual sustainability (see Figure 1). In contrast to traditional models of entrepreneurial success, SFBT II locates entrepreneurship within the social context of family. In SFBT II, business viability is related to business and family dynamics. Family members are expected to influence business performance. The theory recognizes that spousal capital plays a role at the family/business interface. It is at this interface that spousal capital resources are utilized through resource and interpersonal transactions to support the new business.

Two central tenets of SFBT II (Danes, Lee, et al., 2008) address the current study’s purpose. First, family business sustainability is related to couple functioning and business success (Stafford, Duncan, Danes, & Winter, 1999). As previously indicated, we utilized the definition of spousal social capital proposed by Danes and colleagues who defined spousal social capital as the resilience that evolves from the fabric of social relations of the couple (through resource and interpersonal transactions), and they recognized that spousal social capital can be mobilized to facilitate action. Spousal capital resource transactions take place when specific resources such as time and energy are exchanged between the spouse and the business; the process involving these transactions can affect commitment to the new business by the entrepreneur’s spouse, emotional support for the new business given by the spouse and received by the entrepreneur, and satisfying communication about the business between the entrepreneur and spouse (Van Auken & Werbel, 2006). Processes of mobilizing spousal capital occur at the family/business interface by creating resilience that contributes to business success. Spousal capital can also,
FIGURE 1. SUSTAINABLE FAMILY BUSINESS THEORY II.

Resources
- Social Capital
- Human Capital
- Financial Capital

Structure
- Roles
- Rules

Constraints
- Sociocultural
- Legal
- Economic
- Technical

Disruptions
- Normative
- Non normative

Processes
- Times of Stability
  - Interpersonal Transactions
  - Resource Transactions

Achievements
- Functional Integrity
- Human Capital Growth
- Financial Soundness
- Structural Integrity

Times of Change
- Interpersonal Transactions
- Resource Transactions

Short-Term
- Family Business Viability

Long-term
- Family Business Sustainability

FUNCTIONAL INTEGRITY
- Human Capital Growth
- Financial Soundness
- Structural Integrity

Note: * p < .05. ** p < .01. *** p < .001.
however, be an obstacle, especially when these are of poor quality or are absent (Dimov, 2007). Therefore, spousal capital has potentially both enabling and constraining characteristics. The use of spousal social capital depends on how the quality, content, and structure of social relationships affect the transmission of these resources from the family system to the business system (Coleman, 1990; Wright et al., 2001).

The second SFBT II tenet addressing the study purpose is that spousal capital is embedded within a gendered structure of roles and rules. For example, family members of different generations may hold varied expectations for male and female entrepreneurs, such as more family responsibilities for women (Carter & Cannon, 1992). Family roles and rules clarify who and how members manage family resources and restrict effects of constraints; they further designate how couples assign responsibilities, how members are bonded, how decision authority is distributed, and how businesses define themselves in relation to the outside world (Danes, Haberman, & McTavish, 2005; Danes & Morgan, 2004). Some roles and rules are outwardly evident; others are deeply ingrained and used subconsciously.

Spousal Social Capital: Resource and Interpersonal Transactions

Spousal social capital has generally been underrepresented in literature on individuals and couples starting businesses. Some researchers have theorized about family capital during the business start-up phase (Aldrich & Cliff, 2003; Van Auken & Werbel, 2006), whereas others have empirically examined how general social capital (i.e., business networks) affects business start-ups (Boden & Nucci, 2000; Gupta & York, 2008; Renzulli, Aldrich, & Moody, 2000). Only a handful of studies have examined the impact of the family business on the marital relationship (Miller, Fitzgerald, Winter, & Paul, 1999; Poza & Messer, 2001). In this study, we are interested in how spousal social capital (resource and interpersonal transactions) influences the mutual sustainability of business and couple relationships over time.

Spousal Resource Transactions

Spousal resource transactions are the level of spousal involvement in the business. Spousal involvement may include a spouse’s direct involvement in business operations, or spousal resource transactions may include indirect involvement in the business with marketplace work bringing family income stability during the business emergence stage (Danes & Olson, 2003; Liang, 2002; Rowe & Hong, 2000). The most common sources of direct involvement in the new business consists of whether or not the spouse works in the business, the extent to which they work in the business, and the types of tasks spouses complete (Liang). In addition to marketplace income, other common external spousal capital resource transactions include benefits such as medical and disability insurance.

Couples with spouses directly involved in the business have been referred to as copreneurs because of the spouses’ high level of involvement and decision-making power in the firm as well as higher commitment and shared management responsibilities (Fitzgerald & Muske, 2002; Muske & Fitzgerald, 2006). Liang (2002) has suggested that couples in which spouses are directly involved in the firm may have more challenges and risks than couples with spouses who are indirectly involved in the business. Balancing family and business was found to be crucial to having a healthy marital and working relationship for couples with directly involved spouses. More tension between spouses has also been found among couples in which the spouse works in the firm (Danes & Lee, 2004; Danes & Olson, 2003). Copreneurs may experience a need to renegotiate roles and expectations for the firm and couple relationship that couples with spouses not involved in the firm may not experience; these challenges contribute to copreneurs being less financially successful and reporting lower ratings of success (Fitzgerald & Muske). This study focuses on direct spousal involvement in the business to better understand how this involvement is related to mutual sustainability of the business and couple relationship.

Spousal Interpersonal Transactions

Spousal interpersonal transactions can have enabling or constraining characteristics. Commitment to the emerging business is thought to be an enabling resource to entrepreneurs. In this study, commitment to the business is conceptually defined as identification with the new business characterized by acceptance of and identification with new business goals (Penley
Family Relations & Gould, 1998). Strong spousal commitment for the new business can be advantageous and facilitate business success (De Carolis & Saparito, 2006). Having a strong, committed marital relationship is a resource that reduces this liability of newness experienced during business formation (De Carolis & Saparito; Hall, 2005).

An important part of the business creation process is the social context that entrepreneurs use in discussing business ideas (Dimov, 2007). Satisfying communication about the business with spouses during the start-up process may help to assess whether the entrepreneur values spousal input and finds it to be a resource protecting against other resource losses (Gudmunson, Danes, Werbel, & Loy, 2009). Stewart and Danes (2001) found that satisfactory business communication created a shared meaning between spouses that extended into a sense of legitimacy for continued resource investments into the new business.

Emotional support from a spouse can be an important aspect for ensuring new business viability (Cramton, 1993). Emotional support has generally been defined as the extent to which an individual believes that the spouses’ needs for support are being met such as informational or feedback needs (Procidano & Heller, 1983). Spousal emotional support may be enabling or constraining when a spouse’s positive or negative emotions crossover to the entrepreneur and increase or decrease available resources (Westman & Etzion, 1995). Entrepreneurs with a lack of spousal support may experience diminished temporal and psychological resources devoted to business operations (Rowe & Bentley, 1992).

**Mutual Sustainability: Business and Couple Relationship**

According to SFBT II, an understanding of business and couple relationship outcomes are needed to ensure the mutual sustainability of both domains. Most research on business start-ups has, however, focused solely on outcome measures of business productivity, growth, and development (Boden & Nucci, 2000); few studies have examined the impact of starting a business on the couple relationship (Danes & Olson, 2003; Liang, 2002). This has occurred despite the finding that entrepreneurs with spouses must attend to both firm and family issues and that one of those domains may be compromised for the guaranteed success of the other (Danes & Morgan, 2004; Liang). This study specifically examines the mutual sustainability of the business and couple relationship for entrepreneurs 1 year later, taking into account the multiple dimensions of success that challenge business owning couples, which previous research has yet to fully examine (Danes, Lee, et al., 2008; Danes, Stafford, et al., 2008).

**Hypotheses**

Using SFBT II, we first hypothesized that gender-based family roles would underlie involvement in business roles. Greater family responsibilities could mean less opportunity to enter the role of entrepreneur but more likely means that business involvement will take place in a supporting role. Because parenting roles are disproportionately assumed by women, we hypothesized that female spouses would offer greater levels of involvement via supporting business roles. Male spouses may be less willing to function in a supportive business role due to the relative absence of heavy child-care demands, allowing them to self-select into the role of entrepreneur or seek traditional employment. Therefore, we predicted that male entrepreneurs would be more likely to have spouses involved in the business and entrepreneurs with more preschool-age children would be less likely to have spouses involved in the business.

Second, we hypothesized that spousal involvement in the firm would predict spousal dedication to the firm with higher levels of involvement predicting more dedication. Spousal involvement in the firm is a form of spousal resource transaction and spousal dedication to the firm is a form of spousal interpersonal transaction in the SFBT II. Third, we hypothesized that spousal dedication to the firm would predict the number of months to break even. We predicted that the relationship between dedication and months to break even would be negative; entrepreneurs with more dedicated spouses would be more productive and have the resources to break even sooner. Finally, we hypothesized that there would be a positive relationship between dedication and relationship quality; entrepreneurs with more dedicated spouses would have higher quality couple relationships. The months to break even, a firm
outcome, and relationship quality, a family outcome, comprise the elements needed to assess mutual sustainability of the family firm system. By including both outcomes we are able to determine whether processes involving spousal capital are effective at simultaneously supporting both the family and the business.

**METHOD**

**Sample**

Researchers partnered with Small Business Development Center (SBDC) directors to obtain a sample of firms in the business formation phase in two Midwestern states from 2004 to 2006. Each SBDC drew a sample from their prebusiness counseling clients having received five or more hours of counseling. To abide by their code of client confidentiality, surveys were distributed and collected by the SBDCs. Surveys were sent to entrepreneurs and their spouses. Two eligibility questions (businesses operating less than 12 months and having a spouse) were asked of the entrepreneur early in the questionnaire to determine if they met study eligibility requirements. There was a 42% return rate in Time 1. Returned questionnaires had very little missing information. Entrepreneurs were queried one year later to obtain follow-up data about firm performance. These questionnaires were sent to all businesses where we had sent previously both entrepreneur and spouse questionnaires in Time 1. There was an 86% return rate in the second year.

The sample for the current study ($N = 109$) consisted of 61 male entrepreneurs (56%) and 48 female entrepreneurs (44%). Female entrepreneurs averaged 42 years of age. A majority of female entrepreneurs had some college education (48%), whereas others had an undergraduate degree (31%), a graduate degree (15%), or high school education or less (6%). Female entrepreneurs had approximately 20 years, on average, of full-time work experience ($SD = 10.2$) and 7.3 years, on average, of work experience in the industry of the new firm ($SD = 8.4$).

**Measures**

Because all the couples in our sample were married to heterosexual partners, with one member of the couple representing the entrepreneur, we focused on both the gender of the entrepreneur and the number of preschool children present in the home. The gender of the entrepreneur was coded 0 (male) and 1 (female), thus positive effects of this variable on spousal business involvement (spousal resource transactions) would indicate that female entrepreneurs had a male partner who was more involved than the partners of male entrepreneurs. A negative relationship would indicate that male spouses had more involved partners.

Parenting roles could affect the spouse’s ability to be involved in the business. Yet it is well known from previous research that when there are young children in the home, mothers are more likely than fathers to be the major caretaker, regardless of previous employment arrangements (Aldrich & Cliff, 2003; Coltrane, 2000). To get an estimate of the gendered nature of childcare arrangements, we tested for the effects of gender and number of preschool children. Simultaneous effects of both variables would suggest that family roles have a larger impact on spousal business involvement; on the contrary, if the number of children does not have an impact on spousal involvement in the business but gender does, then this would be an indication that business and gender roles are more likely to structure spousal participation. The number of preschool children was a count of all children ages 0 – 5 years in the household. These measures were reported from the first year of the study.

**Spousal resource transactions.** To operationalize spousal resource transactions from SFBT II, we relied on objective measures of spousal involvement in the firm. This was a latent variable with two indicators. The first was a count of the number of hours per week that the spouse worked in the business. This tally included both hours worked for pay and hours worked without pay by the spouse. The second indicator was a tally of work functions performed by the
spouse in the business. This information was collected via an open-ended question in the survey. Respondents were asked to describe the business activities that they performed for the business. Coders read the descriptions and formed four basic task categories: accounting, marketing, production, and computer (record-keeping). There were three coders who interpreted the open-ended answers and coded those answers into the four task categories. Then, through a process of intercoder reliability, final codes were determined. The variable was calculated as a sum of the number of business functions performed with a range from 0 to 4. Confirmatory factor analysis confirmed that the two indicators loaded strongly on a single function. The correlation between the items was $r = .59$. These measures were computed from the first year of the study.

**Spousal interpersonal transactions.** We defined spousal interpersonal transactions from SFBT II as quality interaction with spouses in matters related to the intersection of family and firm. We operationalized this construct as spousal dedication to the firm, which was incorporated in the model as a latent variable. Each of the three indicators for this variable was based on a distinct set of questions developed in previous research; the indicators were spousal commitment to the business (Penley & Gould, 1998), satisfying communication about the business (Harcourt, Richerson, & Wattier, 1991), and emotional support for the business (Procidano & Heller, 1983). Responses to these questions were obtained in the first year of the study. The three indices were constructed using exploratory factor analysis with varimax rotation.

First, entrepreneurs were asked about spousal levels of commitment to the business. The index was based on an average of four items, worded as follows: (a) my spouse gives me the moral support I need to succeed in my business, (b) my spouse enjoys hearing me talk about my business, (c) I rely on my spouse for emotional support, (d) I could go to my spouse if I were feeling down about my business without feeling funny about it later, (e) my spouse and I are very open about what we think about the business, (f) my spouse is sensitive to my personal needs associated with running a business, (g) my spouse is good at helping me solve work-related problems, and (h) after sharing work-related concerns with my spouse, I feel better. The response scale for these items ranged from 1 (strongly disagree) to 5 (strongly agree). The reliability of these items was high, $\alpha = .92$.

**Mutual sustainability.** In SFBT II, emphasis is given to the mutual sustainability of the family and business. Thus, mutual sustainability requires simultaneous assessment of business and family outcomes rather than success of one at the expense of the other, or success of one while ignoring the other. The two dependent variables conceptually representing business and couple sustainability in the study were measured in the second year of the study. A key measure of firm sustainability for new firms is the amount of time that it takes for the firm to break even. We asked entrepreneurs how many months since the inception of the firm it took to break even. The variable is a count of the time in months until the break-even point is achieved. As a consequence, smaller numbers indicate less worker productivity because longer break-even points indicated delayed success per amount of time worked in the firm.
As a family-related outcome, we considered the relationship quality of the entrepreneur and spouse as indicated by the business owner. This item was measured on a scale from 1 (strongly disagree) to 5 (strongly agree) (Procidano & Heller, 1983). The wording of the item was ‘‘I have a deep sharing relationship with my spouse.’’ Conceptually, relationship quality is distinct from forms of spousal dedication because relationship quality pertains to the couple relationship in general (not specifically pertaining to the entrepreneurs in their business role); in addition, the outcome variables were assessed a year later.

**Analyses**

Our analyses were partly descriptive and partly predictive. Our formal hypotheses pertained to the predictive elements of the analyses, but this is preceded by a descriptive investigation into the meaning of gender in our sample. More specifically, we first assessed whether gender is truly an indicator of differences in spousal capacity to make a difference in family and firm outcomes. To do this, we compared levels of spousal human capital because these may underlie the effectiveness of spousal social capital (involvement and dedication) in the firm. We compared spouses of male and female entrepreneurs on age, education, full-time work experience, industry-related work experience, market income, whether they provided health insurance to the family via market work, and whether they worked in the new firm. Previous research on gender and start-up firms indicated that different gender-based patterns of internal and external support exist among spouses of entrepreneurs starting a firm (Danes, Matzek, & Werbel, in press).

For the second part of our analyses, we implemented a structural equation model to test the hypotheses of our study. As discussed later and shown in Figure 2, we included pathways from the gender of the entrepreneur and the number of preschool children to a latent variable measuring spousal involvement in the firm. The model contains a third pathway from spousal involvement in the firm to spousal dedication to the firm, which in turn, we link to the outcome of mutual sustainability (months to breakeven and relationship quality). In post-hoc tests, direct pathways from the role structure variables (gender and number of children) to the outcomes (months to breakeven and relationship quality) were also tested to examine whether the latent variables in our model mediated the effects of these variables on the outcomes. Significant
Table 1. Differences in Spousal Capital by the Gender of the Entrepreneur

<table>
<thead>
<tr>
<th>Spousal Capital Variables</th>
<th>Spouses of Male Entrepreneurs</th>
<th>Spouses of Female Entrepreneurs</th>
<th>t Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>40.28 (10.79)</td>
<td>44.30 (10.81)</td>
<td>−1.92</td>
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<tr>
<td>Education</td>
<td>2.48 (1.08)</td>
<td>2.19 (0.96)</td>
<td>1.48</td>
</tr>
<tr>
<td>Full-time work experience</td>
<td>13.99 (9.51)</td>
<td>22.84 (11.36)</td>
<td>−4.37***</td>
</tr>
<tr>
<td>Industry work experience</td>
<td>2.62 (5.27)</td>
<td>6.65 (12.32)</td>
<td>−2.20*</td>
</tr>
<tr>
<td>Market income</td>
<td>9,752.98 (13,759.23)</td>
<td>38,083.33 (39,145.03)</td>
<td>−5.26***</td>
</tr>
<tr>
<td>Provides health insurance a</td>
<td>0.23 (0.42)</td>
<td>0.60 (0.49)</td>
<td>−4.26***</td>
</tr>
<tr>
<td>Works in business a</td>
<td>0.67 (0.47)</td>
<td>0.41 (0.50)</td>
<td>2.73**</td>
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</table>

Dichotomous variable (1 = yes).

*p < .05. **p < .01. ***p < .001.

pathways discovered in these post-hoc tests were retained in the final estimation of the results. As background statistics for the structural model, we included the related correlations, means, standard deviations, and ranges for all observed variables.

Findings

Table 1 compares spousal contributions of male and female entrepreneurs on mean levels of selected spousal human capital variables. There were some unique differences by spouse gender (all were part of a married heterosexual union). We first noted that there were, however, no differences in terms of age (40.28 vs. 44.30) or education (2.48 vs. 2.19) between female and male spouses of entrepreneurs, p < .05. Yet male spouses had more general full-time work experience (22.84 years vs. 13.99 years, p < .05) and more industry-related work experience (6.65 years vs. 2.62 years, p < .05), compared to female spouses. Male spouses also provided substantially more market income ($38,083 vs. $9,753) from market jobs (outside the new firm), and more often these jobs were a source of family health insurance (60% vs. 23%). On the other hand, female spouses were more likely to be working in the firm of the entrepreneur. These findings highlight the investment of spousal human capital in two different modes, either by working outside or within the firm to obtain resources for the family.

Table 2 shows the correlations, means, standard deviations, and ranges for the variables in the structural equation model. Correlations greater than r = .18 in magnitude were significant, p < .05. Gender of the entrepreneur

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<tbody>
<tr>
<td>1. Gender of entrepreneur</td>
<td>−.06</td>
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<td>2. Number of preschool children</td>
<td>−.24</td>
<td>−.10</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3. Spousal work hours</td>
<td>−.25</td>
<td>−.05</td>
<td>.59</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>4. Spousal work functions</td>
<td>−.08</td>
<td>.15</td>
<td>.45</td>
<td>.40</td>
<td></td>
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<td>5. Commitment to business</td>
<td>−.01</td>
<td>−.04</td>
<td>.37</td>
<td>.34</td>
<td>.54</td>
<td></td>
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<tr>
<td>6. Satisfying communication about business</td>
<td>−.07</td>
<td>.06</td>
<td>.13</td>
<td>.18</td>
<td>.51</td>
<td>.42</td>
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<td>7. Emotional support for business concerns</td>
<td>.09</td>
<td>−.30</td>
<td>−.04</td>
<td>−.24</td>
<td>−.37</td>
<td>−.25</td>
<td>−.30</td>
<td></td>
<td></td>
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<tr>
<td>8. Months to breakeven</td>
<td>−.08</td>
<td>.02</td>
<td>−.03</td>
<td>−.03</td>
<td>.22</td>
<td>.24</td>
<td>.75</td>
<td>−.16</td>
<td></td>
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<tr>
<td>9. Relationship quality</td>
<td>.44</td>
<td>.34</td>
<td>13.91</td>
<td>.98</td>
<td>4.03</td>
<td>3.66</td>
<td>3.93</td>
<td>19.02</td>
<td>3.99</td>
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M

SD

Note: Correlations with a magnitude greater than .18 are significant (p < .05).
was negatively correlated with the indicators of spousal involvement in the business; \( r = -0.24 \) for spousal work hours, and \( r = -0.25 \) for spousal work functions, meaning that female spouses were more involved in the business. The number of preschool children was only significantly associated with the number of months to break even, \( r = -0.30 \). This was an unexpected finding because we expected families with more children to take longer to break even. As noted previously, the intercorrelations for the indicators of the latent variables were highly correlated, with correlations ranging from \( r = 0.42 \) to \( r = 0.59 \). More moderate, but mostly significant, were the correlations between the indicators across the latent constructs (spousal involvement in the business and spousal dedication to the business), which ranged from \( r = 0.13 \) to \( r = 0.45 \); these correlations suggest that a positive relationship exists between these constructs. Months to break even was negatively correlated with the indicators of spousal dedication to the business with correlations ranging from \( r = -0.25 \) to \( r = -0.37 \). Relationship quality was positively correlated with the indicators of spousal involvement in the business, with correlations ranging from \( r = 0.22 \) to \( r = 0.75 \).

Figure 2 contains the results of structural equations testing our hypotheses. The chi-square for the model was 37.82 with \( df = 23 \) (\( p = 0.27 \)). Overall the model was acceptable, fitting the data moderately well, CFI = .92, RMSEA = .077. The error variables and correlations between the exogenous variables and final outcomes are not shown in Figure 2. We, however, report the correlations here: The correlation between gender of the entrepreneur and the number of preschool children was \( r = -0.06 \), and the correlation between the months to break even and relationship quality was \( r = 0.04 \); neither correlation was significant. We did not permit correlated errors for any of the indicators in this model.

Most of our hypotheses were supported in the findings. The hypothesized link between gender and spousal involvement in the business was supported, \( \beta = -0.30 \), \( p < .01 \), indicating that male spouses (spouses of female entrepreneurs) were less likely to be directly involved in the new business—contributing fewer work hours and performing fewer work functions than female spouses. In contrast, there was no significant link between the number of preschool children and spousal involvement in the business, \( \beta = 0.09 \), ns. This finding was unexpected; it was thought that a greater number of children would cause a decrease in spousal business involvement. There may be at least two possible explanations: (a) It is possible that the role of caring for children was so strongly tied to gender in our sample (gender roles for entrepreneurs may be even more traditional than for the general population) that the main effect of gender accounted for most of the variation, and (b) it is possible that we lacked power to detect differences given restricted variation in our measure of the number of children which had a mean score of .34 on a 4-point range—however, we discuss later how the number of children was significantly associated with one of the main outcome variables in the model (months to break even).

We hypothesized that spousal involvement in the business would positively predict spousal dedication to the business; support was found for this hypothesis and the association was large, \( \beta = 0.57 \), \( p < .001 \). Spouses who were more involved in the business, by working more hours and performing a greater range of functions, were more likely to have a higher commitment to the business, to engage in conversation about the business that was more satisfying, and to show more emotional support for the entrepreneur’s business-related concerns. This strong link indicated that business participation was a critical component for building dedication to the business, accounting for a third of the total variation in spousal dedication to the business.

Our final hypotheses suggested that spousal firm dedication would have a beneficial effect on the mutual sustainability of the family and firm. Support was found for each of these hypotheses; spousal dedication to the firm resulted in earlier break-even times, \( \beta = -0.41 \), \( p < .01 \), and in higher relationship quality, \( \beta = 0.44 \), \( p < .001 \). We note that the effect of spousal dedication to the firm affected both outcomes very similarly as noted by the comparable \( \beta \) coefficients. Although our original hypotheses suggested that the effect of gender and the number of preschool children on the outcomes would be transferred indirectly via spousal involvement and dedication in the firm, we later decided to test four additional pathways for significance. These were pathways between gender and months to break even, gender and relationship quality, number of preschool children and months to break even, and number of preschool children.
and relationship quality. As shown in Figure 2, we retained one of these pathways because it was significant; this was the path between the number of preschool children to months to break even, $\beta = -0.29$, $p < .05$. This finding was unexpected because families with more preschool-aged children broke even faster.

**DISCUSSION**

Utilizing the SFBT II, we offer in this study a comprehensive description of spousal social capital and found significant relationships with the mutual sustainability of the firm and couple relationship. All study hypotheses were supported except for the effect of having preschool children on spousal involvement in the business. Our findings provide an understanding of the spousal capital processes under which family businesses are created and the types of spousal social capital that are available to male and female entrepreneurs as a result. Gender had an influence on whether a spouse was involved with the business in the first year of the business launch with male entrepreneurs experiencing more spousal involvement than female entrepreneurs. Additionally, we found that spouses who work more in the business were more dedicated to the business and that dedication simultaneously affected both business productivity and couple relationship quality one year after starting the business.

This study contributes to family firm literature by illustrating how spousal social capital differs for male and female entrepreneurs. Findings indicate that male entrepreneurs have more spousal resource transactions during the first year of firm creation compared to female entrepreneurs; this spousal social capital is related to increased levels of spousal interpersonal transactions and ultimately firm sustainability and relationship quality. By having spouses work in the firm to a greater degree, male entrepreneurs had spouses who exhibited more firm dedication, which ultimately led to fewer months to break even and higher relationship quality. Therefore, female entrepreneurs may not be underperforming due to a lack of motivation to expand their firms as previous research has suggested (Boden & Nucci, 2000), because female entrepreneurs have less spousal social capital invested than male entrepreneurs. Findings confirm the gender-based context in which firms are created (Bird & Brush, 2002) and reveal that female entrepreneurs have less involved spouses during firm creation; fewer spousal resources for female entrepreneurs appear to be detrimental to firm sustainability.

Another contribution of this study is the conceptualization and empirical investigation of spousal social capital at the time of starting a family business. In support of the SFBT II, we found that spousal resource and interpersonal transactions must be available and used for entrepreneurs to benefit from spousal social capital (Danes, Lee, et al., 2008). Simply having a spouse does not contribute to the mutual sustainability of the business and couple relationship (Davidsson & Honig, 2003). Spousal resource transactions in this study included the number of hours a spouse worked in the business as well as the number of work functions performed by the spouse. Study findings suggest that entrepreneurs benefit from having a spouse work in the business because this is related to the level of spousal interpersonal transactions that are available for the entrepreneur to utilize. Spousal interpersonal transactions in this study included spousal commitment to the business, satisfying communication about the business, and emotional support for the entrepreneur and were significant predictors of business and couple relationship success. Spouses who provide more resources through work hours and work functions are more committed to the business, have more satisfying communication about the business with the entrepreneur, and provide more emotional support to the entrepreneur.

Although previous research has suggested that business-owning couples experienced more tension and stress when the spouse worked in the business (Danes & Lee, 2004; Danes & Olson, 2003; Fitzgerald & Muske, 2002), this study suggests that time and effort afforded to the business predicts spousal dedication to the business as well as the mutual sustainability of the business and couple relationship. Perhaps some level of tension is bringing about needed change, especially if the spouse is dedicated to the newly formed business, as suggested by Danes (2006).

This study is the first to empirically examine the mutual sustainability of the business and couple relationship. We found that spousal social capital is important for both business
productivity as well as the quality of the couple relationship, which supports SFBT II (Danes, Lee, et al., 2008; Danes, Stafford, et al., 2008). Entrepreneurs who have more spousal social capital available to use and actually access have more successful businesses as well as higher quality relationships with their spouses 1 year after starting the business. Therefore, not only is the business affected by the spousal social capital utilized by entrepreneurs (Boden & Nucci, 2000) but the couple relationship is also influenced by the use of this capital.

Interestingly, we found that entrepreneurs who have more preschool-age children were able to break even in fewer months compared to entrepreneurs with fewer preschool-age children. We hypothesize that the demands of having young children may be motivation for entrepreneurs to have successful firms, especially if the family is depending on the firm for income and both spouses are working in the firm. It is also possible that couples adjust their family development plans to their work prospects with work-successful couples being more willing to initiate parenthood. Thus, the number of preschool children could have operated as a selection factor. Clearly, more research is needed to understand this relationship and the implications of life stage on the mutual sustainability of firm and couple relationship among couples starting new firms.

Implications

Findings have implications for family researchers as well as family educators and therapists working directly with couples. Researchers are encouraged to utilize the theoretical framework presented in this study, the SFBT II, to continue to empirically examine the interface between business and family contexts, processes, and outcomes (Danes, Stafford, et al., 2008). There may be additional approaches to measuring the impact of spousal capital on the mutual sustainability of business and couple relationships. For example, research is needed to understand how financial components of spousal capital are related to business and family outcomes such as business profitability and family functioning. Larger, more representative samples of entrepreneurs are also needed to improve statistical power and generalizability of the findings.

Family researchers are encouraged to further understand the gendered context of starting a firm and how gendered context contributes to spousal social capital. The gendered nature of marital relationships may affect the spousal social capital available to entrepreneurs as well as the viability of firm and couple relationship. For example, marital division of labor and relational power among couples starting a firm may differ by gender of entrepreneur. We were unable to examine these concepts owing to the lack of information available in the data set we analyzed. Researchers should seek to include more family- or couple-level processes at the firm and family interface that may ultimately impact the mutual sustainability of the firm and couple relationship. Future research should also examine characteristics and processes unique to copreneurs and how dynamics between spouses in these couples affect firm and couple relationship outcomes. Conceptualizing copreneurs by level of involvement and dedication to the entrepreneur may be a useful method by which to study entrepreneurs and their highly involved spouses.

Family educators can work to inform lending agencies and SBDCs about the benefits of spousal involvement and spousal dedication to the business. All involved parties should be sensitive to underlying gender biases when working with male and female entrepreneurs. SBDCs and lending agencies should be informed of the importance of spousal involvement in the business and its impact on commitment, communication, and emotional support that spouses provide to entrepreneurs during the first year of a business. SBDCs should feel comfortable talking with entrepreneurs about spousal involvement in the business and its potential effects on business and family outcomes. Lending agencies should be encouraged to look beyond monetary resources for providing loans to both male and female entrepreneurs. It may be beneficial to develop educational programs to help entrepreneurs and their spouses increase spousal social capital, especially during the first year.

Finally, family therapists should be cognizant of the unique challenges experienced by married couples starting a business. Couple issues specific to starting a business may not be the reason the couple is seeking counseling, but it is most likely affecting the quality of the couple relationship. In particular, female entrepreneurs may be frustrated with the minimal spousal social capital they have available to start their
business. Therapists may discuss with couples the costs and benefits of having a spouse work in the business. They can work with couples to increase spousal commitment to the business, satisfying communication about the business, and emotional support given to the entrepreneur, regardless of gender. The benefits of spousal social capital on business and couple success should be explained to couples starting a business and goals should be set to work toward the mutual sustainability of both business and family realms.

NOTE
Supported, in part, through the Family Owned Business Institute Research Scholar Award, Seidman School of Business, Grand Valley State University and the University of Minnesota Agricultural Experiment Station Hatch Project No.4709. Minnesota and Iowa Small Business Development Centers provided support through sampling and data collection. The authors would like to thank James D. Werbel for reading an earlier version of this manuscript and offering suggestions for its improvement.

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