New England Journal of Entrepreneurship, Spring/Fall 2015

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From the Editor
Grace Guo

Refereed Articles

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Yoon G. Lee, Utah State University; Margaret A. Fitzgerald, North Dakota State University; Kenneth R. Bartkus, Utah State University; Myung-Soo Lee, The City University of New York

A Gender Integrative Conceptualization of Entrepreneurship
Susan Clark Muntean, University of North Carolina at Asheville; Banu Özkazanç-Pan, University of Massachusetts Boston

Examining the Age—Performance Relationship for Entrepreneurs: Does the Innovativeness of a Venture Make a Difference?
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New England Journal of Entrepreneurship

Call for Articles and Reviewers
The New England Journal of Entrepreneurship (NEJE) is a double-blind peer-reviewed journal that aims to foster dialogue and innovation in studies of entrepreneurship and small and family-owned business management. The Journal welcomes original work across a broad spectrum of issues and topics related to the study and practice of entrepreneurship. The Journal encourages submission of a wide range of perspectives and is particularly interested in those that challenge conventional wisdom concerning all aspects of entrepreneurship and small and family-owned businesses and their role in society. In doing so, the Journal promotes an ethos that is explicitly theory-driven and supported, global in scope and vision, open, reflective and reflexive, imaginative and critical, interdisciplinary and multidisciplinary, and that facilitates exchange among academic scholars, as well as between academic scholars and practitioners.

Academics and practitioners alike are welcome to submit original articles that advance research in the field of entrepreneurship as well as research notes, book reviews, and original case studies concerning entrepreneurial or small and family-owned business management. Article topics include, but are not limited to:

- Venture creation and entrepreneurial processes in national and international contexts
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- Family-owned businesses management
- Corporate and nonprofit entrepreneurship
- Women entrepreneurship
- Urban entrepreneurship
- Social entrepreneurship
- Gender and minority Issues in entrepreneurship and small and family-owned businesses
- Entrepreneurship education
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Formatting Requirements
Manuscripts submitted to NEJE should be written in Microsoft Word or saved in RTF (rich text format). Note: Do not use tabs, extra spaces, hard returns except for paragraph breaks, or any other formatting within the Word file. Likewise, references should be set with returns only between entries with no extra returns, tabs, or other formatting. Use italics to indicate emphasis, non-English terms, or titles of publications.

Accompanying each manuscript, as separate files, should be (a) an abstract of the article (200 words maximum) and six keywords; (b) a biographical sketch of the author(s); and (c) a title page with manuscript title and the order of authors as well as the primary author's name, mailing address, preferred email, phone and fax numbers. Maps, photos, and similar graphics are welcome, but authors are responsible for providing separate camera-ready files, either as tiffs, jpegs, or PDFs. Sizes of images, tables, and figures must conform to the physical dimensions of the Journal page. Width is 45p (7.5") and depth is 57p (9.5"). In addition:

- The full manuscript must not be longer than 10,000 words including all references and figures.
- The entire submission (including references) must be double-spaced in 12-point or larger font with margins of one inch or more.
- The abstract must be 200 words or less and should precede keywords (maximum six).
- The submission contains few and only necessary footnotes (not endnotes).
- There is nothing in your file that identifies the authors.
- Any hypotheses are explicitly identified as such.
- Constructs and variables are identified in words, not abbreviations.
- Any prior publication of the data featured in the manuscript is explicitly acknowledged either in the manuscript or in the transmittal letter to the editor. Any forthcoming or "in press" articles that use the data should be forwarded to the editor.
- To ensure author anonymity, manuscript "properties" (under FILE in Microsoft Word) should be erased prior to submission.
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New England Journal of Entrepreneurship

Dear Readers,

I am pleased to announce the 2015 regular issue in which you are presented with five research articles and one invited editorial note.

The first article, “Adjustment Strategies and Business Success in Minority-Owned Family Firms,” is authored by Lee, Fitzgerald, Bartkus, and Lee. In this study, the authors examine the extent to which minority business owners differ from nonminority business owners in the use of adjustment strategies as well as the relationship between the use of adjustment strategies and perceived business success. Based on a sample of four ethnic groups (African American, Mexican American, Korean American and white business owners), the authors found significant variations in the use of adjustment strategies across ethnic groups and identified specific adjustment strategies associated with perceived business success. The study reveals potential cultural differences in the use of adjustment strategies. The authors also discuss implications for small family business owners and business consultants.

The second article, “A Gender Integrative Conceptualization of Entrepreneurship,” authored by Muntean and Özkazanç-Pan, critiques existing approaches to the study of women’s entrepreneurship. The authors suggest that understanding the “gender gap” in entrepreneurship requires focus on institutional and structural barriers women entrepreneurs face. To develop an alternative understanding of these issues, the authors deploy a feminist framework and propose a conceptualization of entrepreneurship that examines gender bias and directs attention to the individual, institutional, and structural barriers in the entrepreneurial process. Based on this gender integrative conceptualization of entrepreneurship, the authors propose ways to promote gender equality in entrepreneurial activities.

The third article, “Examining the Age—Performance Relationship for Entrepreneurs: Does the Innovativeness of a Venture Make a Difference?” is authored by Prasad, Ehrhardt, Liu, and Tiwari. In this article, the authors conduct an empirical investigation of the relationship between an entrepreneur’s age and the performance of his or her venture. Based on a large sample of 1,182 nascent entrepreneurs, the authors adopt a contingency approach to explicating the moderating role of a venture’s level of innovativeness. The findings reveal a negative relationship between entrepreneur age and performance for those developing “innovative” ventures and contribute to a refined understanding of how founder and venture characteristics, such as age and innovativeness, are associated with the success of new ventures.

The fourth article, “Out of the Building, into the Fire: An analysis of Cognitive Biases During Entrepreneurial Interviews” by Chen, Simon, Kim, and Poploskie identifies entrepreneurs’ misunderstanding of the product–market fit as the major source of failure for new ventures. In an effort to explore factors that may lead to misunderstanding of the product–market fit, the authors present a conceptual model that visualizes how information search characteristics of entrepreneurial interviews are associated with various cognitive biases, which, in turn, result in entrepreneurs’ inaccurate judgments of the product–market fit. The authors also provide recommendations to overcome these biases.

The fifth article, “An Entrepreneurial Context for the Theory of the Firm: Exploring Assumptions and Consequences,” is an invited paper by Osorio, Donnelly, and Özkazanç-Pan. Here the authors conduct a case study of an artist and artisan cluster in Western Massachusetts to explore how socioeconomic processes shape the socioeconomic environment of communities while serving entrepreneurial individuals. Based on findings of the case study, the authors found that, unlike entrepreneurs with a rationalistic perspective, entrepreneurs with a socioeconomic understanding tend to focus on orchestrating all stakeholders’ interests rather than on managing their ventures as an economic unit. The authors propose a theory of entrepreneurship as a geographically bound relational process resulting from everyday actions of entrepreneurial individuals in their pursuit of personal goals. Implications for theory and practices are also discussed.

The last article in this issue is an invited editorial note. In “Construction of Entrepreneurial Orientation: Dispute, Demand, and Dare,” Gupta challenges the conventional view of entrepreneurial orientation construct and calls for a more holistic conception of entrepreneurial orientation. He also suggests a geometric view of entrepreneurial orientation as a way to push forward the frontier of EO research. (Dr. Gupta is currently coediting the special issue of NEJE on “Entrepreneurial Orientation” with Dr. Dev K. Dutta.)
In addition, I would like to introduce you to NEJE’s new editorial team:
Dr. Vishal K. Gupta, University of Mississippi, Associate Editor
Dr. Crystal X. Jiang, Bryant University, Associate Editor
Dr. Arturo E. Osorio, Rutgers University, Associate Editor
Dr. Banu Özkazanç-Pan, University of Massachusetts Boston, Associate Editor
Dr. Joshua Shuart, Sacred Heart University, Associate Editor

On behalf of the editorial team, I am pleased to share with you several exciting updates about NEJE. We developed a new online journal portal that accepts online submissions, inaugurated the NEJE-EAM Best Paper Award (2015 Recipient: Sandhya Balasubramanian, UMass Lowell) at the 2015 Annual Meetings of the Eastern Academy of Management Annual Meetings (Entrepreneurship track), and became an official sponsor of the Entrepreneurship Division at the Annual Meetings of Academy of Management. NEJE currently has three special issues underway. More information about these special issues can be found here.

I would like to thank my predecessor, Dr. Joshua Shuart, for his leadership in managing NEJE, for mentoring me as the new Editor-in-Chief, and for his continued support as Associate Editor. I would also like to thank John Chalykoff, Dean of the Welch College of Business at Sacred Heart University, whose strong support enables NEJE to continue to grow as a reputable academic journal in the field of entrepreneurship. Last but not least, I would like to thank our readers, anonymous reviewers, contributors, and authors, whose diligent work, commitment and support have made 2015 another successful year for NEJE!

Best regards,

Grace Guo, Ph.D.
Editor-in-Chief
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Adjustment Strategies and Business Success in Minority-Owned Family Firms

Yoon G. Lee
Margaret A. Fitzgerald
Kenneth R. Bartkus
Myung-Soo Lee

With data from the 2003 and 2005 National Minority Business Owners Survey, we examined the extent to which minority business owners differ from nonminority business owners in their reported use of adjustment strategies, and the relationship between the use of adjustment strategies and perceived business success. The sample consisted of 193 African American, 200 Mexican American, 200 Korean American, and 210 white business owners. Mexican American and Korean American business owners reported higher levels of adjustment strategy use than African American and white business owners. The ordinary least squares show that reallocating family resources to meet business needs and reallocating business resources to meet family needs were negatively associated with perceived business success, whereas hiring paid help was positively associated with perceived business success.

Keywords: adjustment strategies; business success; ethnicity; minority-owned family firms; Sustainable Family Business Model

The number of minority-owned firms in the United States has grown significantly in the last decade. Data from the U.S. Census Bureau’s 2007 Survey of Business Owners found that the number of African American-owned businesses increased by 61 percent between 2002 and 2007 (Minority Business Research Agency, 2013). During that same period, Hispanic-owned businesses increased nearly 44 percent and Asian-owned businesses increased 40 percent, while growth in the number of nonminority business grew by only 9 percent. This growth has led, not surprisingly, to an increasingly large body of knowledge that seeks to explain factors that influence success in minority-owned family firms. Thus far, literature pertaining to the success of minority-owned family businesses has addressed the frequent challenge of geographical (i.e., “spatial”) barriers (Dayanim, 2011), the impact of entrepreneurship education (Hussain, Scott, & Matlay, 2010), minorities’ ability to access financial capital (Mijid & Bernasek, 2013), the value of minority business networks (Blount, Smith, & Hill, 2013), and the use of succession planning (Perricone, Earle, & Taplin, 2001).

Minority-owned family firms often face a number of challenges that distinguish them from nonminority-owned family firms (Boissevain, et al., 1990; Danes, Lee, Stafford, & Zachary, 2008; Haynes, Onochie, & Lee, 2008; Shinnar, Cardon, Eisenman, Zuiker, & Lee, 2009). For example, many minorities who own their own businesses (especially those who migrated from another country or whose parents migrated from another country) have a native language other than English. Thus, their hiring pool, their interactions with financial institutions and potential clients, and many other aspects of the day-to-day functioning of the business might be more limited than otherwise. Minority business owners also frequently experience limited financial and human capital (Haynes et al., 2008). Because a large portion of minority-owned family businesses are relatively new, many minority owners have not been in existence long enough to build a source of financial capital sufficient to secure the business’s long-term survival. Further, many minorities (especially ethnic minorities) come from locations where educational opportunities were not as abundant or effective as those experienced by most nonminorities. Because of these and other challenges, minority small business owners are frequently compelled to devise ways to balance the competing demands of work and family.

Minority family business owners might adopt adjustment strategies in ways that differ from their use among nonminority business owners (Puryear, et al., 2008; Sharma, Chrisman, & Chua, 1997). Few studies address the interconnection between the family and business systems and the use of adjustment strategies, especially among minority-owned family businesses (Stafford & Tews, 2009). Further, the link between the use of adjustment strategies and family business success has also received little attention (Puryear et al., 2008). To address the gap in the literature, the main purpose of this research was to explore ethnic differences in the use of adjustment strategies and the impact on business success across four ethnic groups. Specifically, the first objective was to examine the extent to which different classifi-
cations of minority business owners (e.g., Mexican American, Korean American, African American) vary in their use of adjustment strategies and whether these differ from nonminority business owners (i.e., white). The second objective was to examine the relationship between the use of adjustment strategies and the perceived success using data from the 2003 and 2005 National Minority Business Owners Surveys (NMBOS).

This research topic is important because the managerial adjustment strategies used by nonminority or white family firms to balance the demands of work and family have been linked to relevant business outcomes (Olson, et al., 2003). As minority-owned family businesses in the United States increase in number, understanding the interface between the family system and the business system also becomes increasingly important. This is especially true in the context of using adjustment strategies when the family or the business faces unexpected challenges in their management of financial resources, human resources, and recurring needs of time from business and family matters.

This study is guided by Sustainable Family Business (SFB) model. The SFB model stipulates that the long-term sustainability of a family firm is a function of both business and family functionality (Danes, 2013). SFB model focuses on the interplay between the family and business systems, allowing researchers to assess how processes that overlap between the systems predict their respective outcomes. As a means of maintaining a level of well-being for family firms, adjustment strategies are the process of interest in these analyses. Because SFB model suggests that the family and the business are interdependent on one another, it provides a fitting vantage point from which to pose our research questions. SFB model helps to explain how interpersonal and resource exchanges occur in minority as well as nonminority family firms. In this way, SFB model also helps to explain why some ethnicities might be more or less likely to incorporate specific strategies as they determine how to balance work and family demands. Thus, SFB model is useful in understanding how minority business owners can benefit from adjustment strategies during periods of competing family and business demands.

Policy makers would benefit to understand the nature of adjustment strategies of minority family business owners so that they can implement appropriate government programs and support systems. Business consultants and other professionals would also benefit from the findings of this research when they provide services and trainings to minority-owned family firms. Given the assumption that family-owned businesses under distress tend to fail more frequently (Sharma et al., 1997; Shinnar et al., 2009), we can predict that the more adjustment strategies any particular minority business owners adopt and utilize more frequently, the less likely they will fail and the more likely minority business owners will succeed with better business outcomes.

Related Literature

Adjustment Strategies

Adjustment strategies are defined as instrumental behaviors through which resources such as time and money are reallocated to obtain the goods and services needed to maintain satisfactory levels of living under normal or unusual conditions; these strategies are typically repeated if they are successful (Winter & Morris, 1998). Once adjustment strategies have been deemed as useful or productive in helping to meet family and/or business needs and/or goals, they become patterned responses to cope with disruptions in family firms. When business owners are under pressure, the usual ways of running the business may not suffice, so they develop coping strategies to return to homeostasis, often by using resources from either the family or the business system (Paul, Winter, Miller, & Fitzgerald, 2003). These strategies are important to small family business owners to balance the complex demands of both work and family.

Adjustment strategies are a means of restoring or maintaining an acceptable level of well-being for family firms during hectic times—periods when increased demands on time and human resources in either the family or the business necessitate some type of adjustment from the normal or typical way of meeting family or business needs (Miller, Fitzgerald, Winter & Paul, 1999; Fitzgerald, Winter, Miller & Paul, 2001). Some adjustment strategies allow for more time or resource allocation from the family, whereas other strategies allow for more time or resource allocation from the business (Distelberg & Sorenson, 2009).

The adjustment strategies employed in this research were developed based on interviews of predominantly white female firm owners in the Midwestern part of the United States, and they have been tested using data from the National Family Business Survey (NFBS). The first panel of the NFBS incorporated a large nationally representative sample, but most respondents were either household or business managers from predominantly white family firms. Whether the strategies are applicable and appropriate for other groups of business owners, such as African American, Mexican American, or Korean American owners, has yet to be determined.
According to the SFB model, adjustment strategies are based on the idea that resources can be drawn from either the family or the firm to facilitate a higher level of functioning when the demands from either system are unusually high. In the present study, reallocation of business or family resources, incorporating additional resources in the family/business, and engaging in interpersonal transactions are assessed to see whether these adjustment strategies can facilitate or hinder the sustainability of family firms. Task accomplishment can be constrained if business-owning families lack critical resources, are unable to use existing resources, or are unable to conduct purposeful transactions, all of which may affect business success and consequent sustainability (Kim, Sharpe, & Kim, 2002).

The SFB model posits that systematic responses to competing work and family demands, such as those assessed in this study, create resilience capacity and help family-owned businesses remain “healthy” during such times (Danes, Zuiker, Kean, & Arbuthnot, 1999; Danes, Reuter, Kwon, & Doherty, 2002). As noted by Danes (2013), family business owners can change the processes that they use to deal with change (e.g., through the use of adjustment strategies) more easily than they can change other aspects of their family such as structures, roles, and rules; thus, a process-oriented theory is appropriate for this study.

**Culture, Ethnicity, and Adjustment Strategy Use**

Ethnic differences might be associated with differences in ways of responding to the increased or competing demands of business or family systems in family-owned firms. Ethnicity has been defined as a framework of identifying a group of people through the components of race, religion, and cultural history. A group’s ethnicity is often associated with a common ancestry, and it helps the group to develop a sense of collective identity through shared values and attitudes (McGoldrick & Troast, 1993). Such shared values might be associated with notable differences in the ways that certain minority groups run family businesses. Further, because culture and values are often transmitted through family relationships (Landau, 2007), family structure and relationships contribute in important ways to the understanding of management processes used in minority-owned small family businesses.

Ethnic differences are often manifested in culture. The literature distinguishes between collectivist and individualistic cultures. For example, while African American, Korean American, and Mexican American cultures largely value collectivism (e.g., shared values, commonness, and cooperation) (Sosik & Jung, 2002), white culture largely values individualism (e.g., individual differences, competition, less cooperation) (Parks & Vu, 1994; Danes et al., 2008; Light & Rosenstein, 1995; Shinnar et al., 2009; Willis, 2004). The sense of community is important for all three of these minority groups (Hines & Boyd-Franklin, 2005; Keefe, Padilla, & Carlos, 1979; Shinnar et al., 2009; Kim & Ryu, 2005; Haynes et al., 2008).

Such differences between collectivistic and individualistic cultures could be associated with differences in the use of adjustment strategies among family business owners. For example, family business owners from collectivistic cultures might be more inclined to seek and obtain outside volunteer help from the community during periods when household and business needs compete with each other. Further, because cultural collectivism and individualism characterize relationships of families within their respective cultures, families within collectivistic cultures might have a greater tendency to create blurred boundaries between family and business management.

Other than cultural differences (e.g., family-orientation and community-orientation), forces that affect the adoption of various adjustment strategies may include a history of discrimination (particularly for African Americans), social and career risks (indigenous white and black firm owners may feel higher social and career risks than those of Korean and Mexican counterparts), and differences in ethnic resources (Asian business owners may benefit from rotating credit associations) (Danes et al., 2008; Haynes et al., 2008). In conjunction with these differences across ethnic groups, we expect that the four groups investigated in this study will demonstrate significant differences in their strategies of coping with competing demands between the family system and the business system. Specifically, we expect that minority family business owners will use adjustment strategies more frequently than nonminority family business owners.

**Owner and Firm Characteristics, Adjustment Strategies, and Business Success**

Previous studies have indicated that firm and owner characteristics influence the use of adjustment strategies in family-owned businesses. For example, Miller et al. (1999) found that in nonminority families, the business often took precedence over family (i.e., family adjustments to fulfill business needs occurred more frequently than business adjustments to meet family needs). In addition to ethnicity, gender is an important characteristic that has been investigated in relation to adjustment strategy use (Fitzgerald et al., 2001). In family-business systems, work–family balance for women is more complex than for men (Lee, Danes, & Shelley, 2006). For example, women experience tradeoffs between work and family more
frequently than men (Friedman & Greenhaus, 2000). According to another study (Brink & de la Rey, 2001), successful South African business-owning women used coping strategies to deal with work and family interaction strain.

Education level, age of the business owner, and size of the business are also important predictors of the use of adjustment strategies. For example, Fitzgerald et al. (2001) suggested that older business owners with higher levels of education were more likely to use volunteer help to run the business than were younger owners or those with less education. Business owners with more employees were also more likely to hire outside workers when needed, perhaps because such larger businesses had hiring mechanisms and revenue necessary to do so (Fitzgerald et al., 2001). Paul et al. (2003) also noted that owners of businesses with more employees were more likely to use the adjustment strategies of reallocating business resources, reallocating family resources, and hiring outside help than those with fewer employees.

Social capital often serves as an important resource for minority family businesses and is a notable predictor of both adjustment strategy use and family business success. For example, family and kin networks often help to fund start-up businesses for Korean immigrants (Min, 1988). Korean American family business owners also frequently tap into social capital by using family labor (Min, 1988; Yoon, 1991). The extent to which minority family business owners and nonminority family business owners differ in levels of social capital (e.g., according to reports of perceived community support) might be associated with corresponding differences in adjustment strategy use and business success.

Family business success has been defined in terms of sustainability, productivity, and long-term survival (Danes et al., 2002; Danes et al., 1999; Lee, Jasper, & Fitzgerald, 2010). To operationalize the construct, researchers have used outcome measures such as financial indicators (e.g., sales, profit, growth), subjective assessments of success, and long-term survival rates (Cliff, 1997; Kalleberg & Leicht, 1991; Siegel, Siegel & Macmillan, 1993). Adjustment strategies could play a major role in determining business success according to these indicators. For example, Aronoff (2004) noted that multigenerational survival and success of family-owned businesses required a self-sustaining and self-regulating approach (i.e., through the use of managerial adjustment strategies).

Certain adjustment strategies have also been linked to business outcomes. Reallocating time, such as by getting less sleep or hiring temporary help during hectic periods, was associated with increased business revenue, an objective measure of business success (Olson et al., 2003). Similarly, perceived business success, a subjective outcome, was higher, on average, for business owners who slept less and hired temporary help during hectic times. Hiring temporary help was positively associated with increased gross business revenue and family business income. In addition, Olson et al. (2003) documented that adjustment strategy use in response to disruption explained more of the variance in business success in white-owned businesses than did family resources, constraints, and processes.

Niehm and Miller (2006) observed that small business owners for whom competing demands between work and family were particularly difficult to meet, and business owners who did not experience this degree of strain in work–family balance differed significantly in average reports of perceived business success. To manage these competing demands, business owners could benefit by using certain adjustment strategies to facilitate the process of achieving and maintaining business success (Niehm, Miller, & Fitzgerald, 2005). Niehm, Miller, Shelley, and Fitzgerald (2009) have investigated this relationship between adjustment strategy use and business success. They examined differences in adjustment strategy use between surviving and nonsurviving family businesses and found that owners of surviving family businesses brought family responsibilities to the workplace during busy times, whereas owners of nonsurviving businesses brought business tasks home in order to handle stressful times (Niehm et al., 2009).

Business characteristics such as business type and business size, and business owner characteristics such as gender, human capital, and social capital may be important variables to measure as predictors of business success. For example, previous literature has indicated that work experience and education level predict business success (Brüderl, Preisendörfer, & Ziegler, 1992; Fairlie & Robb, 2007). In addition, in an investigation of the association of gender with business success, Lee et al. (2010) found that female business owners perceived greater levels of success than male business owners. Previous findings have also indicated that the level of satisfaction with community support increased with the level of perceived business success among family business owners (Kilkenny, Nalbarte, & Besser, 1999).

Conceptual Framework and Hypothesis Development

Sustainable Family Business Model

The current study uses the Sustainable Family Business model to ascertain how family and business sys-
tems respond to disruptions in regular patterns by exchanging resources across systems (Olson et al., 2003; Winter & Morris, 1998). A focus of the Sustainable Family Business model is the processes that family members use to exchange resources between the family and the business. Families and firms function interdependently to deal with demands or disruptions in either system. Reallocation family resources to the firm, or vice versa, was related to a significant increase in role interference or difficulty in dealing with competing demands from the business and the family for business owners (Jang & Danes, 2013).

The SFB model shows that the sustainability of a family business is a function of both business success and family functionality, including during times of disruption (Stafford, Duncan, Danes & Winter, 1999). When disruption occurs, either inside or outside the system of family and business, a reevaluation of resources of the family business must take place (Danes et al., 2002; Stewart & Danes, 2001). Using this framework, the present study attempted to predict whether adjustment strategies such as reallocation of resources, incorporating additional resources, or interpersonal transactions can facilitate or hinder the sustainability of family-owned businesses. These kinds of systematic responses create a capacity of resilience in the face of disruptions and help minority-owned family business sustain both the family and business over time (Danes et al., 1999; Danes et al., 2002).

Danes et al. (2008) elaborated on how the SFB model accommodates ethnic family firms within their cultural context and discussed at length three ethnic groups—African Americans, Mexican Americans, and Korean Americans. Similarity in culture among African American, Mexican American, and Korean American business owners could be the “we” (collective) orientation. Having a higher value on “harmony” in the community could allow African American, Mexican American, and Korean American firm owners to adopt adjustment strategies in hectic times, while reallocating or intertwining family and business resources from the two competing systems.

The selection of independent and dependent variables in the current study was based on the SFB model. Namely, business characteristics and business-owner characteristics are treated as control variables, first to predict levels of adjustment strategy use, and second, to predict levels of perceived business success. We selected business characteristics and business-owner characteristics to perform these functions to conform to the SFB model, which suggests that these characteristics comprise “available resources and constraints” in the family and in the business. Adjustment strategy use ratings were treated first as a dependent variable in relation to business and owner characteristics described above. Then, adjustment strategy indices were treated as independent variables in accordance with SFB model, which suggests that the most significant overlap between the family and the business is reflected in business owners’ responses (i.e., adjustment strategies) to disruptions in family and business transactions.

Hypotheses
Based on this SFB model and other supporting literature highlighting the role of business and business-owner characteristics, culture, and adjustment strategy use in promoting business success, we propose two hypotheses.

Hypothesis 1: After controlling for relevant business and business-owner characteristics, minority family business owners (specifically, African American, Korean American, and Mexican American) will more likely use adjustment strategies than nonminority white business owners.

Hypothesis 2: After controlling for relevant business and business-owner characteristics (e.g., age of owner, education, age of business, and business size), the use of adjustment strategies will be significantly associated with perceived success across four ethnic business owners.

Methods
Data and Sample
This study employed data from the 2003 and 2005 NMBOS. The survey instrument utilized for this study was adapted from a survey instrument developed by the Family Business Research Group: NE-167 Cooperative Regional Research Technical Committee (Winter, Fitzgerald, Heck, Haynes, & Danes, 1998), a consortium of 17 colleges and universities in the United States and Canada. The NMBOS were conducted by the Lawrence N. Field Center for Entrepreneurship at Baruch College between 2001 and 2005. The NMBOS questions included four ethnic groups—African Americans, Mexican Americans, Korean Americans, and whites who ran small family firms.

Selection of the four groups can be explained by the fact that the two waves of data collection were implemented as a part of larger project encompassing additional minority populations. To cover the wide range of representative minority samples, the research team initially focused on at least one Asian,
one Hispanic, and African American sample. After considering the prevalence of family business ownership among various minority groups, Korean American and Mexican American family samples were selected. More details of sampling and data collection strategies are outlined in Puryear et al. (2008). Telephone interviews were conducted in the owners’ native language for Mexicans and Koreans. Therefore, the survey instrument had to be translated into Spanish and Korean.

The total sample included 803 small family firms and the subsamples consisted of 193 African Americans, 200 Korean Americans, and 200 Mexican Americans, and 210 whites. There were significant mean differences in business size, age of the business, education, work experience, business needs first, satisfaction with community support, adjustment strategy index, and business success among four ethnic groups. Owners in the white-owned firms were relatively older than owners in the other three minority-owned firms. The average level of formal education was highest for Korean American business owners, and lowest for the Mexican American business owners. However, the average level of work experience was lowest for the Korean American owners and highest for white owners.

Mexican- and Korean-owned firms were relatively larger than black-owned and white-owned firms. Also, more Mexican- and Korean-owned firms were recently formed than African American-owned and white-owned firms. White-owned, African American-owned, and Mexican American-owned firms were more likely to be established, while Korean-owned firms were more likely to be purchased. Among the four groups, both African American-owned and white-owned firms were more likely to be managed by men, but Korean and Mexican-owned firms were more likely to be operated by women. Total adjustment strategy use was highest at 38 for Mexican owners and lowest at about 23 for both African American and white owners. The average level of perceived business success was higher for Mexican American and white owners than for Korean American and African American business owners. Sample characteristics of four ethnic groups are presented in Table 1.

**Dependent Variables**

**Adjustment Strategy Indices.** The NFBS was the first large-scale attempt at capturing the overlap of business and family resources in family-owned businesses (Haynes, Walker, Rowe, & Hong, 1999; Heck, Jasper, Stafford, Winter, & Owen, 2000; Winter & Morris, 1998). The NFBS measured respondents’ use of 14 different adjustment strategies. Later, the 2003–2005 NMBOS included these same 14 items to measure the use of adjustment strategies across four ethnic groups. In both of these surveys, respondents indicated, on a scale of 1 to 5, whether the designated adjustment strategy was used **never, seldom, sometimes, often, and always**.

Fitzgerald et al. (2001) used confirmatory factor analysis to determine the factorability of these 14 items. In their analyses, a five-factor structure emerged, producing the following categories of adjustment strategies: reallocation of family resources, reallocation of business resources, intertwining of tasks, using volunteer help, and hiring paid help. One of the original 14 items (“You temporarily shift some of your business work to others so you can spend more time with your family”) loaded onto two of the five adjustment strategy factors, making it conceptually inconsistent, and it was eliminated from the measure (Fitzgerald et al., 2001). For the remaining 13 items, responses from each category were summed to form five indices of adjustment strategy use. These five indices are included as continuous dependent variables in multivariate analyses to measure ethnic differences in the use and types of adjustment strategies. The overall level of adjustment strategy use was calculated by summing the five adjustment strategy scores (adjustment strategy index, ranged from 13 to 65).

**Perceived Success.** To test the relationship between the frequency (usage) of adjustment strategy and business outcome, perceived success was included as a dependent variable in the empirical analyses. In the 2003–2005 NMBOS, business success was measured by the business owners’ ratings of how successful their businesses have been to date. Response options to perceived success were on a scale of 1 to 5, where 1 indicated “very unsuccessful” and 5 as “very successful.” The average level of perceived success was also highest at 4.0 (ranged from 1 to 5) for the Mexican American business owners, while the levels were lower at 3.5 for both the Korean American and African American business owners.
Table 1. Sample Characteristics of Four Ethnic Family Business Owners (N=803)

<table>
<thead>
<tr>
<th></th>
<th>African American Owners (n=193)</th>
<th>Mexican American Owners (n=200)</th>
<th>Korean American Owners (n=200)</th>
<th>White Owners (n=210)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean(SD)</td>
<td>Mean(SD)</td>
<td>Mean(SD)</td>
<td>Mean(SD)</td>
</tr>
<tr>
<td>Firm characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business size</td>
<td>2.8 (3.6)</td>
<td>5.6 (10.5)</td>
<td>4.1 (39.4)</td>
<td>2.9 (6.4)</td>
</tr>
<tr>
<td>Business type</td>
<td>Established 78.8%</td>
<td>75.5%</td>
<td>41.5%</td>
<td>82.4%</td>
</tr>
<tr>
<td></td>
<td>Purchased/Inherited 21.2%</td>
<td>24.5%</td>
<td>58.5%</td>
<td>17.6%</td>
</tr>
<tr>
<td>Owner characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>Female owners 36.8%</td>
<td>47.5%</td>
<td>46.5%</td>
<td>38.6%</td>
</tr>
<tr>
<td></td>
<td>Male owners 63.2%</td>
<td>52.5%</td>
<td>53.5%</td>
<td>61.4%</td>
</tr>
<tr>
<td>Age of owners</td>
<td>50 (13.8)</td>
<td>47 (11.8)</td>
<td>51 (10.4)</td>
<td>55 (13.8)</td>
</tr>
<tr>
<td>Education of owners</td>
<td>15.9 (10.8)</td>
<td>14.3 (9.0)</td>
<td>17.2 (14.6)</td>
<td>16.5 (11.8)</td>
</tr>
<tr>
<td>Work experience</td>
<td>12.4 (13.3)</td>
<td>13.2 (11.8)</td>
<td>10.2 (9.3)</td>
<td>17.9 (15.1)</td>
</tr>
<tr>
<td>Business needs come first perspective</td>
<td>2.2 (1.3)</td>
<td>2.1 (1.3)</td>
<td>1.9 (1.2)</td>
<td>2.5 (1.3)</td>
</tr>
<tr>
<td>Satisfaction with community support</td>
<td>3.2 (1.3)</td>
<td>3.7 (1.3)</td>
<td>2.9 (1.3)</td>
<td>3.8 (1.3)</td>
</tr>
<tr>
<td>Dependent variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjustment strategy index *(13-65)</td>
<td>22.4 (6.5)</td>
<td>31.8 (11.1)</td>
<td>28.5 (9.7)</td>
<td>22.8 (6.2)</td>
</tr>
<tr>
<td>Perceived success (1-5)</td>
<td>3.5 (1.0)</td>
<td>4.0 (0.9)</td>
<td>3.5 (1.0)</td>
<td>3.8 (0.9)</td>
</tr>
</tbody>
</table>

Note: *Sum of 13 adjustment strategy questions.

Independent Variables
To measure to what extent and what types of adjustment strategies minority family business owners adopted as compared to nonminority family business owners, ethnicity [African American, Mexican American, Korean American, and white business owners (reference group)] was included in the analyses. In addition, as controlling factors, owner and firm characteristics included gender [female, male (reference group)], age, education, work experience, business-first perspective, and owners’ satisfaction level with community support, business size, and established business type. Age (in years), formal education attainment (in years), work experience (in years), business first perspective (1-5 scale; 1=family needs come first, 5=business needs come first), and satisfaction level with community support (1-5 scale; 1=very dissatisfied, 5=very satisfied) were included as continuous variables in empirical models. Work experience was calculated by age minus the length of business operation and was included as a continuous variable. Business size and business age were included as continuous variables in the regression models, whereas business type was a categorical variable [established business type, inherited/purchased business type (reference group)].
Statistical Analyses
Frequencies, means, and standard deviations of business and business-owner data were performed (Table 1). It was determined through correlation analysis that multicollinearity was not a problem (Appendix 1). The organization of these resulting 13 items into their corresponding factors, and the reliability estimates (Cronbach’s alphas) of the five categories of adjustment strategies are reported (Table 2). To profile rates and types of adjustment strategy use among four ethnic groups of family business owners, F-tests were conducted (Table 3). Ordinary Least Squares (OLS) regression analyses were performed to analyze factors associated with types of adjustment strategy use (Table 4) and association between the use of adjustment strategies and business success among minority family business owners (Table 5).

Results
The Five Types of Adjustment Strategies
Table 2 presents descriptive information on the use of adjustment strategies in the total sample. Cronbach’s alphas for the five adjustment strategy indices were .80 (reallocating family resources), .83 (reallocating business resources), .79 (intertwining both business and family tasks), .82 (using volunteer help), and .82 (hiring paid help). Cronbach’s alpha for the total adjustment strategies index score was .71. Thus, both the total adjustment strategies index and the adjustment strategy subscales demonstrate adequate interitem consistency.

Table 2 shows that 89.8 percent of small business owners in the sample utilized any of the thirteen adjustment strategies. An analysis of the five adjustment strategies indicates that 36.2 percent of the sample owners shifted some household responsibilities among family members in order to spend more time at the workplace. Further, family firm owners reallocated business resources by either skipping routine business demands (31.5%) or getting less sleep (31.6%) to spend more time with their family. A relatively higher portion (42.1%) of the sample owners indicated that they completed family responsibilities at the workplace, such as paying household bills, making appointments, etc. Table 2 also shows that 30.9 percent of family firm owners used unpaid volunteers in the business (e.g., asking for help from family members, other relatives, or friends), and 30.1 percent hired temporary paid help for either business or home.

A Comparison of Rates and Types of Adjustment Strategy Use among Four Ethnic Groups
Table 3 presents descriptive statistics on rates of adjustment strategy use among the four ethnic groups. Overall, mean usage levels for all five types of adjustment strategies were statistically different among the four ethnic groups. Specifically, mean level of reallocating family resources was higher for Mexican American business owners (7.4) than Korean American (6.9), white (5.4), and African American (5.2) business owners ($F = 17.74, p < .001$). Mexican American business owners also had a higher average level (5.2) of reallocating business resources than the other three groups (Korean Americans, 4.6; African Americans, 3.0; and whites, 3.0; $F = 42.0, p < .001$).

Table 3 shows that, like the other adjustment categories, Mexican American owners used intertwining tasks more frequently than the other three groups. For example, the mean levels of intertwining tasks were Mexican American (10.4), Korean American (8.7), white (7.9), and African American (7.6) business owners ($F = 72.13, p < .001$). On the other hand, the mean level for using volunteer help was highest for Korean American (4.1) than Mexican American (4.0), African American (3.3), and white (3.1) business owners ($F = 73.68, p < .001$). Lastly, with respect to hiring paid help, the mean level was highest for Mexican American business owners (4.8) than the other three groups (Korean Americans, 4.2; African Americans, 3.3; and whites, 3.3; $F = 26.35, p < .001$).

OLS Results of Adjustment Strategies Use
To test whether minority family business owners (African Americans, Mexican Americans, and Korean Americans) are more likely to adopt adjustment strategies than nonminority white business owners (Hypothesis 1), we investigated the effect of ethnicity on the use of adjustment strategies ($N=803$). Table 4 shows the OLS results for five adjustment strategy indices (i.e., reallocating family resources, reallocating business resources, intertwining tasks, using volunteer help, and hiring paid help). The OLS results indicate that, all else being equal, as compared to white business owners, Mexican American business owners more frequently used reallocating of family resources ($b = 1.80, p < .001$), reallocating of business resources ($b = 2.19, p < .001$), intertwining tasks ($b = 2.28, p < .001$), volunteer help ($b = .91, p < .001$), and paid help ($b = 1.52, p < .001$). Similarly, the OLS results show that, all else being equal, Korean American business owners more frequently used reallocating of family resources ($b =
A. Adjustment Strategies and Business Success in Minority-Owned Family Firms

Table 2. Five Types of Adjustment Strategies Adopted by Family Business Owners (N=803)

<table>
<thead>
<tr>
<th>Adjustment Strategy Indices</th>
<th>Cronbach's alpha</th>
<th>Min–Max</th>
<th>Mean (SD)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reallocation of family resources</strong>: Cronbach’s alpha = 0.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Family members put off or skip routine household task to do business work. (qh8b)</td>
<td>1–5</td>
<td>2.1 (1.5)</td>
<td>35.6%</td>
<td></td>
</tr>
<tr>
<td>2) Family members get less sleep because they spend more time in the business. (qh8c)</td>
<td>1–5</td>
<td>1.9 (1.4)</td>
<td>27.9%</td>
<td></td>
</tr>
<tr>
<td>3) Some household responsibilities are temporarily shifted among family members so more time can be spent in the business. (qh8f)</td>
<td>1–5</td>
<td>2.1 (1.5)</td>
<td>36.2%</td>
<td></td>
</tr>
<tr>
<td><strong>Reallocation of business resources</strong>: Cronbach’s alpha = 0.83</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) Firm owners defer or skip routine business demands (e.g., record keeping or file management) to spend more time with family. (qb49b)</td>
<td>1–5</td>
<td>2.0 (1.3)</td>
<td>31.5%</td>
<td></td>
</tr>
<tr>
<td>5) Firm owners get less sleep to spend more time with family. (qb49c)</td>
<td>1–5</td>
<td>2.0 (1.3)</td>
<td>31.6%</td>
<td></td>
</tr>
<tr>
<td><strong>Intertwining tasks</strong>: Cronbach’s alpha = 0.79</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6) Family work usually completed at home is done at firm (e.g., pay bills, make appointments, etc.) (qh8d)</td>
<td>1–5</td>
<td>2.4 (1.7)</td>
<td>42.1%</td>
<td></td>
</tr>
<tr>
<td>7) Family members working in the business do more business tasks at home. (qh8e)</td>
<td>1–5</td>
<td>2.0 (1.5)</td>
<td>29.9%</td>
<td></td>
</tr>
<tr>
<td>8) You do more business tasks at home. (qb49d)</td>
<td>1–5</td>
<td>2.1 (1.4)</td>
<td>33.5%</td>
<td></td>
</tr>
<tr>
<td>9) You take care of family responsibilities at work more often. (qb49e)</td>
<td>1–5</td>
<td>2.1 (1.4)</td>
<td>34.6%</td>
<td></td>
</tr>
<tr>
<td><strong>Using volunteer help</strong>: Cronbach’s alpha = 0.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10) Family members, other relatives, or friends who usually do not work in the business help out in the business without pay. (qh8a)</td>
<td>1–5</td>
<td>2.0 (1.5)</td>
<td>30.9%</td>
<td></td>
</tr>
<tr>
<td>11) Family members, other relatives, or friends help with the business without pay so you can spend more time with family. (qb49a)</td>
<td>1–5</td>
<td>1.6 (1.1)</td>
<td>17.4%</td>
<td></td>
</tr>
<tr>
<td><strong>Hiring temporary paid help</strong>: Cronbach’s alpha = 0.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12) You hire (paid) temporary help for either business or home. (qh8g)</td>
<td>1–5</td>
<td>2.0 (1.4)</td>
<td>30.1%</td>
<td></td>
</tr>
<tr>
<td>13) You hire (paid) temporary help for either home or business. (qb49g)</td>
<td>1–5</td>
<td>1.9 (1.3)</td>
<td>27.9%</td>
<td></td>
</tr>
<tr>
<td><strong>Adjustment Strategy Indices</strong>: Cronbach’s alpha = 0.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum of all thirteen items</td>
<td></td>
<td></td>
<td>13–65</td>
<td>26.4 (9.5)</td>
</tr>
</tbody>
</table>

Note: *Household managers were asked to indicate “when things are particularly busy in the business, does this happen never, seldom, sometimes, often, or always?” Business managers were asked similar questions on the demands from family. Fitzgerald et al. (2001) carried out a confirmatory factor analysis on the items, which resulted in the five-factor structure used in this study. One of the initial 14 items (“You temporarily shift some of your business work to others so you can spend more time with your family”) was eliminated from analyses because it loaded onto multiple factors.

1.34, p < .001), reallocation of business resources (b = 1.81, p < .001), intertwining tasks (b = .96, p < .01), volunteer help (b = .88, p < .001), and paid help (b = .93, p < .001) than white business owners. However, there was no significant difference in the use of five types of adjustment strategies between African American and white business owners. Thus, Hypothesis 1 is partially supported.

Table 4 also reveals significant factors that were associated with the five adjustment strategy indices. The OLS results show that, all else being equal, gender, age, formal education, work experience, putting business needs first, perceived community support, business size, and having started the business were significant predictors of the use of any of the five adjustment strategies. However, significant effects vary among the five regression models. For example, coefficients associated with females were statistically significant for four models—reallocating family resources, reallocating business resources, intertwining tasks, and using volunteer help. The findings suggest...
Table 3. Rates and Types of Adjustment Strategy Use among Four Ethnic Groups of Family Business Owners (N=803)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Reallocation family resources (3-15)</td>
<td>5.2 (3.4)</td>
<td>7.4 (3.9)</td>
<td>6.9 (3.5)</td>
<td>5.4 (3.7)</td>
<td>F=17.74***</td>
</tr>
<tr>
<td>Reallocation business resources (2-10)</td>
<td>3.0 (1.8)</td>
<td>5.2 (2.5)</td>
<td>4.6 (2.2)</td>
<td>3.0 (1.7)</td>
<td>F=42.0***</td>
</tr>
<tr>
<td>Intertwining both tasks (4-20)</td>
<td>7.6 (2.8)</td>
<td>10.4 (4.2)</td>
<td>8.7 (3.3)</td>
<td>7.9 (2.6)</td>
<td>F=72.13***</td>
</tr>
<tr>
<td>Using volunteer help (2-10)</td>
<td>3.3 (1.5)</td>
<td>4.0 (2.5)</td>
<td>4.1 (2.4)</td>
<td>3.1 (1.4)</td>
<td>F=73.68***</td>
</tr>
<tr>
<td>Hiring paid help (2-10)</td>
<td>3.3 (1.4)</td>
<td>4.8 (2.7)</td>
<td>4.2 (2.3)</td>
<td>3.3 (2.6)</td>
<td>F=26.35***</td>
</tr>
</tbody>
</table>

*p < .10, **p < .05, ***p < .01, ****p < .001.

Table 4. OLS Results: Associations with the Use of Five Types of Adjustment Strategies (N=803)

<table>
<thead>
<tr>
<th></th>
<th>Reallocating Family Resources</th>
<th>Reallocating Business Resources</th>
<th>Intertwining Both Tasks</th>
<th>Using Volunteer Help</th>
<th>Hiring Paid Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnicity</td>
<td>b (SE)</td>
<td>b (SE)</td>
<td>b (SE)</td>
<td>b (SE)</td>
<td>b (SE)</td>
</tr>
<tr>
<td>African American</td>
<td>-0.30 (0.37)</td>
<td>-0.08 (0.22)</td>
<td>-0.14 (0.34)</td>
<td>0.28 (0.21)</td>
<td>-0.05 (0.21)</td>
</tr>
<tr>
<td>Mexican American</td>
<td>1.80 (0.38) ***</td>
<td>2.19 (0.23) ***</td>
<td>2.28 (0.36) ***</td>
<td>0.91 (0.22) ***</td>
<td>1.52 (0.22) ***</td>
</tr>
<tr>
<td>Korean American</td>
<td>1.34 (0.41) ***</td>
<td>1.81 (0.24) ***</td>
<td>0.96 (0.38) **</td>
<td>0.88 (0.23) ***</td>
<td>0.93 (0.24) ***</td>
</tr>
<tr>
<td>(White)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owner/Firm Characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.87 (0.27) ***</td>
<td>-0.41 (0.16) **</td>
<td>1.33 (0.25) ***</td>
<td>0.72 (0.15) ***</td>
<td>0.029 (0.15)</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-0.022 (0.01) *</td>
<td>-0.02 (0.01) **</td>
<td>-0.019 (0.01)</td>
<td>-0.003 (0.01)</td>
<td>-0.01 (0.01)</td>
</tr>
<tr>
<td>Formal education</td>
<td>-0.006 (0.01)</td>
<td>-0.0004 (0.01)</td>
<td>0.018 (0.01)</td>
<td>0.004 (0.01)</td>
<td>-0.01 (0.01)</td>
</tr>
<tr>
<td>Work experience</td>
<td>0.014 (0.02)</td>
<td>0.007 (0.01)</td>
<td>0.03 (0.02) *</td>
<td>-0.002 (0.01)</td>
<td>0.005 (0.01)</td>
</tr>
<tr>
<td>Business need first</td>
<td>0.37 (0.10) ***</td>
<td>-0.02 (0.06)</td>
<td>0.31 (0.09) ***</td>
<td>-0.03 (0.06)</td>
<td>0.039 (0.06)</td>
</tr>
<tr>
<td>Community support</td>
<td>-0.09 (0.10)</td>
<td>-0.12 (0.06) *</td>
<td>0.006 (0.09)</td>
<td>0.001 (0.06)</td>
<td>-0.087 (0.06)</td>
</tr>
<tr>
<td>Business size</td>
<td>-0.009 (0.02)</td>
<td>0.009 (0.01)</td>
<td>0.019 (0.01)</td>
<td>-0.004 (0.01)</td>
<td>-0.015 (0.01) *</td>
</tr>
<tr>
<td>Business age</td>
<td>0.008 (0.01)</td>
<td>-0.002 (0.01)</td>
<td>0.009 (0.01)</td>
<td>-5.5E-4 (0.01)</td>
<td>-0.006 (0.01)</td>
</tr>
<tr>
<td>Started business</td>
<td>-0.028 (0.31)</td>
<td>0.467 (0.18) **</td>
<td>0.013 (0.29)</td>
<td>0.157 (0.18)</td>
<td>0.076 (0.18)</td>
</tr>
<tr>
<td>Intercept</td>
<td>-10.72 (24.17)</td>
<td>8.31 (14.19)</td>
<td>-11.5 (22.39)</td>
<td>1.79 (13.76)</td>
<td>16.18 (14.05)</td>
</tr>
</tbody>
</table>

F-value | 10.33*** | 16.82*** | 10.12*** | 4.83 *** | 6.79*** |

Adj R-Square | 0.14 | 0.21 | 0.13 | 0.06 | 0.09 |

*p < .10, **p < .05, ***p < .01, ****p < .001.

Note: ( ) represents reference group in multivariable analyses.
that female business owners more frequently used reallocation of family resources \((b = 1.87, p < .001)\) compared to male business owners, whereas female business owners less frequently used reallocation of business resources for family needs \((b = -.41, p < .01)\) compared to male business owners. In addition, female business owners were more likely to use intertwining household and business tasks \((b = 1.33, p < .001)\) as well as volunteer help \((b = .72, p < .001)\) than male business owners.

Age was significantly associated with two adjustment strategy indices. That is, owner age \((b = -.022, p < .10; b = -.020, p < .01\), respectively\) was negatively associated with ratings of the use of family resources reallocation and business resources reallocation, suggesting that not only were older business owners less frequently to use reallocation of business resources to spend more time with family, but they were also less frequently to use reallocation of family resources to spend more time at work. This implies that older business owners tended to separate work and family responsibilities. Table 3 reveals that work experience \((b = .03, p < .05)\) was positively associated with intertwining tasks at home or work in hectic times. The findings suggest that those with higher levels of work experience more frequently intertwined the household and business tasks so that needs in both systems could be met.

Community support was included in the empirical models. However, the findings indicate that higher levels of satisfaction with community support \((b = -.12, p < .05)\) were negatively associated with the reallocation of business resources to spend more time with family. Further, believing business needs come first \((b = .37, p < .001; b = .31, p < .001\), respectively\) was positively associated with reallocation of family resources and intertwining tasks. For example, when owners placed business needs above family needs, they more frequently used reallocation of family resources to spend more time at work and intertwined both tasks during hectic times. Business size and whether the owner started the business were also included in the empirical models. Table 4 indicates that number of employees \((b = -.015, p < .10)\) was negatively associated with ratings of hiring paid help in hectic times. On the other hand, when business owners established the business themselves \((b = .467, p < .01)\), reallocating business resources was more common than for owners who purchased or inherited their firms.

### OLS Results of Perceived Success

To test association between the use of adjustment strategies and perceived success (Hypothesis 2), we investigated the effect of adjustment strategy use on perceived success separately for the four ethnic groups. Table 5 presents the OLS results of perceived success, indicating that out of the five strategy indices, two strategies (i.e., reallocating business resources and hiring paid help) were significant factors associated with the levels of perceived success. For example, more frequent use of reallocating business resources \((b = -.099, p < .05)\) was associated with lower perceived success among white business owners. On the other hand, the OLS results indicate that using paid help \((b = .104, p < .05; b = .102, p < .01\), respectively\) was positively associated with perceived success for both African American and Korean American business owners. Thus, Hypothesis 2 is partially supported.

Table 5 provides information on other factors associated with perceived success. It shows that, all else being equal, work experience, community support, business size, business age, and having started the business were significant predictors of perceived success. For example, work experience \((b = .015, p < .10)\) was positively associated with perceived business success among African American business owners. Satisfaction with community support was a statistically significant predictor of perceived business success for all four groups \((b = .26, p < .001; b = .13, p < .05; b = .18, p < .001; \text{and} b = .12, p < .05\), respectively\), indicating that as the levels of satisfaction with community support increased, the levels of perceived success increased. These results imply that community support could play an important role in determining business success for both minority and nonminority business owners.

Table 5 shows that business size, business age, and having established business were significantly associated with levels of perceived success. In particular, the OLS results indicate that as the number of the employees increased, the level of perceived success increased among Mexican American, Korean American, and white business owners \((b = .011, p < .10; b = .015, p < .05; \text{and} b = .026, p < .05\), respectively\). The effect of business age was significant only for the Korean-owned firms, indicating that Korean American business owners with old firms \((b = -.015, p < .05)\) were less likely to perceive their businesses as successful firms than Koreans with relatively new firms. Lastly, the effect of business type was not significant for minority-owned family firms; however, it was significant for white-owned firms. The findings suggest that white business owners who had established firms \((b = .386, p < .05)\) were more likely to view their businesses as successful firms than white business owners who had inherited or purchased their firms.
### Discussion and Implication of Results

Minority-owned family firms are becoming an important component of the small-business community throughout the United States (Fairlie, 2006; Lowrey, 2007). A better understanding of the use of adjustment strategies can provide important insights into the strategies used by various business owners and how they contribute to business success. Using data from the 2003 and 2005 NMBOS, this study examined the use of adjustment strategies by minority family business owners. 

#### Table 5. OLS Results: Use of Adjustment Strategies and Associations with Perceived Success (N = 803)

<table>
<thead>
<tr>
<th>Types of Adjustment Strategies</th>
<th>African American Owners (n=193)</th>
<th>Mexican American Owners (n=200)</th>
<th>Korean American Owners (n=200)</th>
<th>White Owners (n=210)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b (SE)</td>
<td>b (SE)</td>
<td>b (SE)</td>
<td>b (SE)</td>
</tr>
<tr>
<td>Reallocating family resources</td>
<td>-0.021 (0.029)</td>
<td>0.024 (0.023)</td>
<td>-0.046 (0.028)</td>
<td>-0.013 (0.026)</td>
</tr>
<tr>
<td>Reallocating business resources</td>
<td>-0.075 (0.049)</td>
<td>-0.038 (0.035)</td>
<td>-0.041 (0.038)</td>
<td>-0.099* (0.051)</td>
</tr>
<tr>
<td>Intertwining both tasks</td>
<td>-0.016 (0.031)</td>
<td>-0.021 (0.022)</td>
<td>0.029 (0.028)</td>
<td>0.008 (0.031)</td>
</tr>
<tr>
<td>Using volunteer help</td>
<td>-0.078 (0.050)</td>
<td>-0.032 (0.031)</td>
<td>0.016 (0.040)</td>
<td>-0.040 (0.055)</td>
</tr>
<tr>
<td>Hiring paid help</td>
<td>0.104* (0.053)</td>
<td>0.011 (0.029)</td>
<td>0.102** (0.039)</td>
<td>0.028 (0.049)</td>
</tr>
</tbody>
</table>

#### Owner/Firm Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Female owners</th>
<th>Age of owners</th>
<th>Education of owners</th>
<th>Work experience</th>
<th>Business needs first perspective</th>
<th>Community support</th>
<th>Business size</th>
<th>Age of business</th>
<th>Started business</th>
<th>Intercept</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.105 (0.169)</td>
<td>-0.007 (0.007)</td>
<td>-0.010 (0.008)</td>
<td>0.015* (0.008)</td>
<td>-0.027 (0.056)</td>
<td>0.256*** (0.056)</td>
<td>0.031 (0.020)</td>
<td>0.002 (0.005)</td>
<td>0.207 (0.180)</td>
<td>-1.109 (10.04)</td>
</tr>
<tr>
<td></td>
<td>0.083 (0.145)</td>
<td>0.001 (0.008)</td>
<td>0.007 (0.008)</td>
<td>0.010 (0.009)</td>
<td>0.072 (0.054)</td>
<td>0.130* (0.054)</td>
<td>0.011* (0.007)</td>
<td>3.0E-4 (0.008)</td>
<td>-0.203 (0.177)</td>
<td>3.015* (16.09)</td>
</tr>
<tr>
<td></td>
<td>-0.082 (0.150)</td>
<td>0.002 (0.009)</td>
<td>9.8E-4 (0.009)</td>
<td>-1.5E-5 (0.011)</td>
<td>0.032 (0.064)</td>
<td>0.176*** (0.059)</td>
<td>0.015* (0.007)</td>
<td>-0.015* (0.008)</td>
<td>0.081 (0.157)</td>
<td>32.44 (17.77)</td>
</tr>
<tr>
<td></td>
<td>0.153 (0.157)</td>
<td>-0.001 (0.007)</td>
<td>0.005 (0.007)</td>
<td>-0.002 (0.009)</td>
<td>0.005 (0.056)</td>
<td>0.119* (0.054)</td>
<td>0.026* (0.011)</td>
<td>-0.010</td>
<td>0.386* (0.185)</td>
<td>23.41 (17.77)</td>
</tr>
</tbody>
</table>

### Note:

- $^* p < .10$, $^*^* p < .05$, $^*^*^* p < .01$, $^*^*^*^* p < .001$.

- Note: ( ) represents reference group in multivariable analyses.
owners. This study further examined the association between the use of adjustment strategies and perceptions of business success among minority-owned family firms. The descriptive results for adjustment strategies indicate that 89.8 percent of the family business owners sample used one or more of the five types of adjustment strategies. The evidence also indicates that Mexican American and Korean American business owners used adjustment strategies more frequently than African American and white business owners. Furthermore, significant differences across the four ethnic groups were present in mean usage levels for all five types of adjustment strategies. In addition, intertwining tasks was the most frequently used of the strategies, suggesting that regardless of their ethnicity, business owners adopted this strategy more often than the other four (i.e., reallocating family resources, reallocating business resources, using volunteers, or hiring paid help). Mexican and Korean American business owners tended to utilize a variety of adjustment strategies when facing challenges in their family firms, and both groups were more likely to hire temporary help than African American and white business owners.

It is apparent that there were different ways to adopt adjustment strategies during hectic times among the four ethnic groups. Differences in culture among ethnic business owners could be associated with different types of adjustment strategy use. For example, African American, Korean American, and Mexican American cultures, which largely value collectivism, showed a greater frequency of use of adjustment strategies during hectic times. Collectivism could lead to increased use of adjustment strategies to balance the demands of work and family. In particular, Korean American and Mexican American owners heavily relied on using volunteer help of family members. However, there was no difference in use of adjustment strategies between African American and white business owners. Thus, Hypothesis 1 was only partially supported. In addition, the multivariate results also show that all else being equal, three strategies (e.g. reallocation family business, reallocating business resources, and hiring paid help) were significantly linked to perceived success. Thus, the findings partially support Hypothesis 2. This can be explained by the fact that owners might have taken the occasion of pulling family resources out of the business system as a sign of lower perceived success while hiring paid workers might be considered a better way of dealing with the challenges on hand.

We conclude that owner ethnicity significantly predicted overall use of adjustment strategies. Korean American business owners were more likely to reallocate family resources than white business owners. Also, Mexican American business owners were more likely to intertwine tasks between business and family systems than white business owners. The findings imply that business consultants need to understand potential cultural differences in the use of adjustment strategies when working with ethnic minorities and apply this knowledge in their practice. These findings can also inform small family business owners of the options available for them to utilize as adjustment strategies and the modality of those effective strategies adopted by their ethnic group members as benchmarking points.

A link exists between the use of adjustment strategies and perceived success among minority family business owners. However, only three (reallocating family resources, reallocating business resources, and hiring paid help) of the five types of adjustment strategies were associated with the perception of business success, and the direction of these associations was inconsistent. Reallocation of family resources and reallocating business resources were negatively associated with perceived success. In particular, when Korean American business owners more frequently used reallocation of family resources, they had lower levels of perceived success. On the other hand, when African American and Korean American business owners reported more frequent use of hiring paid help during hectic times, these business owners also viewed their business as more successful, on average. Both business consultants and owners should seek to understand cultural differences in the use of adjustment strategies and associations with perceived success among minority business owners. Since few studies address these cultural differences and the association of adjustment strategies with perceived success in minority-owned family businesses, these findings fill a notable gap in the literature.

Importantly, professionals working with minority-owned family firms should develop programs that deliver easy-to-use guides for adjustment strategies, educating family members about the different types of adjustment strategies, and helping firm owners determine which strategies are most effective for their circumstances. For example, if Mexican American or Korean American owners utilized volunteer help or hired paid help more often during hectic times, these business owners also viewed their business as more successful, on average. Both business consultants and owners should seek to understand cultural differences in the use of adjustment strategies and associations with perceived success among minority business owners. Since few studies address these cultural differences and the association of adjustment strategies with perceived success in minority-owned family businesses, these findings fill a notable gap in the literature.
American or white owners are less likely to use adjustment strategies and guide them to use effective strategies during demanding times.

The current study is intended to contribute to the common body of knowledge by developing a better understanding of how different minority groups vary in their use of adjustment strategies. In doing so, subsequent research can build on the current findings. Additionally, the results should be of interest to public policy administrators who are often charged with the responsibility of tailoring services to the needs of different groups. Finally, the findings of this study would be beneficial to special interest organizations that serve to support and advocate for the needs of their constituents (e.g., professional business associations, such as Chambers of Commerce, that represent a wide variety of different minority groups).

**Limitations and Future Research Agenda**

Clearly additional theoretical and empirical research is needed to identify whether frequent use of adjustment strategies could help minority and nonminority owned firms to balance the demands of work and family. It would also be informative to know more about why various strategies were used more frequently than others. For example, African American and white business owners were less likely to allocate business resources to the family during demanding times than Mexican American or Korean American business owners. Are business resources protected “at all costs” to sustain the family’s economic livelihood, or are other strategies, such as intertwining tasks, simply easier to incorporate? To answer these questions, it would be helpful if additional personal interviews are conducted to gain more in-depth understanding of this issue.

There are also likely to be numerous other strategies that our study did not address, nor did our analysis attend to interpersonal factors that may affect the strategies selected, such as interpersonal conflict within either the family or business system (e.g., a firm owner may opt to sleep less and take on additional responsibilities than rely on a family member or employee who may get angry if asked to work overtime or take on additional tasks). Likewise, if a business is having cash-flow challenges, hiring additional help might not be a reasonable option, especially when an extensive network of family and friends might be readily available.

In this study, the SFB model informed the research questions and variables selected. The findings indicate that interpersonal and resource exchanges occur in minority as well as nonminority family firms and the theory helps to explain why some ethnicities might be more or less likely to incorporate specific strategies as they strive to balance work and family demands. Mexican American and Korean American firms were significantly more likely to use all of the strategies to a greater extent than African American or white firms. This finding could reflect that these minority business owners are more skilled or “fluid” in managing demands across systems and some strategies, such as intertwining tasks, may simply be easier to implement than others such as finding volunteer help or hiring paid help. The findings also indicate that women are playing a more active role in the management of both family and business systems because women business owners were significantly more likely to use all of the strategies. Additional research should explore which of the five adjustment strategies are the most effective for women business owners.

Using the SFB model, it is hoped that future studies will perform longitudinal research as business and family success encourage long-term sustainability of both the family and business. Collecting data on adjustment strategies over time would help us to understand if the use of strategies changes over time and how that affects both the family and business systems. It is possible that strategies once adopted only in particularly demanding times become established patterns over time. It is also possible that strategies are temporary, and new techniques are attempted to sustain long-term balance and predictability in systems over time.

Danes (2013) has encouraged researchers to consider using a family capital perspective in attempting to better explain and predict outcomes for family firms and has addressed this perspective as it pertains to minority-owned firms (Danes et al., 2008). Although human and financial capital are widely studied, less is known about social capital, and a study such as this, could certainly help to understand strategies such as using volunteer help in the business and the transformation of social capital into human and financial capital (Danes, 2013). Further research could be beneficial by including social capital to understand the use of adjustment strategies among minority-owned family firms.

**Conclusion**

The potential contributions of this research are threefold. First, given the paucity of previous research on the adjustment strategies among minority-owned family firms, this research uncovered insightful differences in the use of adjustment strategies across three minorities, namely African Americans, Korean Americans, and Mexican Americans, relative to the white control sample. Second, along with other family–firm-related research in the literature, this research adds to
the importance of recognizing the interface between the family system and the business system at a time when family-owned firms are becoming a clear career path among minority communities. Lastly, this research highlights the need to develop further a compelling theory to explain the differences in adopting adjustment strategies among minority-owned family businesses.

Appendix 1. Matrix of Bivariate Correlations for All Variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reallocation of family resources</td>
<td>-</td>
<td>0.15***</td>
<td>0.50***</td>
<td>0.39***</td>
<td>0.36***</td>
<td>-0.10*</td>
<td>-0.06</td>
<td>-0.08*</td>
<td>0.08*</td>
<td>-0.05</td>
<td>0.01</td>
<td>0.09**</td>
<td>-0.06</td>
</tr>
<tr>
<td>2. Reallocation of business resources</td>
<td>-</td>
<td>0.36***</td>
<td>0.25***</td>
<td>0.32***</td>
<td>-0.16***</td>
<td>0.00</td>
<td>-0.06</td>
<td>-0.07</td>
<td>-0.04</td>
<td>0.09*</td>
<td>0.07*</td>
<td>-0.03</td>
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</tr>
<tr>
<td>3. Intertwining family/business tasks</td>
<td>-</td>
<td>0.36***</td>
<td>0.34***</td>
<td>-0.06</td>
<td>0.01</td>
<td>0.00</td>
<td>0.06</td>
<td>0.02</td>
<td>0.08*</td>
<td>0.05</td>
<td>-0.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Using volunteer help</td>
<td>-</td>
<td>0.23***</td>
<td>-0.07</td>
<td>0.00</td>
<td>-0.07*</td>
<td>-0.07*</td>
<td>0.00</td>
<td>-0.01</td>
<td>0.08*</td>
<td>-0.04</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Hiring paid help</td>
<td>-</td>
<td>-0.09*</td>
<td>-0.06</td>
<td>-0.02</td>
<td>0.00</td>
<td>-0.03</td>
<td>0.00</td>
<td>0.04</td>
<td>-0.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6. Age of business owner</td>
<td>-</td>
<td>0.03</td>
<td>0.59***</td>
<td>0.07*</td>
<td>0.04</td>
<td>0.03</td>
<td>-0.37***</td>
<td>0.04</td>
<td></td>
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</tr>
<tr>
<td>7. Education of business owner</td>
<td>-</td>
<td>0.00</td>
<td>0.01</td>
<td>0.00</td>
<td>-0.02</td>
<td>-0.01</td>
<td>-0.06</td>
<td></td>
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<tr>
<td>8. Years of work experience</td>
<td>-</td>
<td>0.01</td>
<td>0.10**</td>
<td>0.09*</td>
<td>-0.70***</td>
<td>-0.01</td>
<td></td>
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<tr>
<td>9. Business needs priority over family needs</td>
<td>-</td>
<td>-0.08*</td>
<td>-0.02</td>
<td>-0.05</td>
<td>0.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10. Satisfaction with community support</td>
<td>-</td>
<td>0.01</td>
<td>-0.10**</td>
<td>0.10**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>11. Number of employees</td>
<td>-</td>
<td>-0.07</td>
<td>-0.08*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>12. Age of business</td>
<td>-</td>
<td>0.09**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>13. Whether owner started the business</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>

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

References


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A Gender Integrative Conceptualization of Entrepreneurship

Susan Clark Muntean
Banu Özkazanç-Pan

Guided by feminist perspectives, we critique existing approaches to the study of women’s entrepreneurship on epistemological grounds and suggest that the entrepreneurship field needs to recognize gendered assumptions in theorizing. Deploying a feminist framework, we suggest that understanding the “gender gap” in entrepreneurship requires focus on institutional and structural barriers women entrepreneurs face. Existing studies of women entrepreneurs often compare women with men without considering how gender and gender relations impact the very concepts and ideas of entrepreneurship. We propose, therefore, a conceptualization of entrepreneurship that illuminates gender bias and calls attention to the interrelated individual, institutional, and structural barriers in the entrepreneurial process that arise out of societal and cultural gender norms. Through praxis or engaged practice, we redirect scholarship in the entrepreneurship field, while proposing ways that can promote gender equality in entrepreneurial activities. In all, our gender integrative conceptualization of entrepreneurship contributes to the entrepreneurship field by recognizing and addressing a more expansive realm of influential factors within the entrepreneurial ecosystem that have previously been researched separately.

Keywords: women entrepreneurs; gender; feminist; ecosystem

In the entrepreneurship field, almost all of the scholarly work on gender or related to female entrepreneurs has been categorized as “women’s entrepreneurship” and relegated to a subfield or niche status. In recent years, there has been a call to address the lack of conceptual papers and theory-building in this subfield (De Bruin et al., 2006). As Greene et al. (2003) point out in a meta-analysis of the literature, 94 percent of papers in the subfield are empirical and lack a rigorous theoretical framework, while those that apply an existing theory have gendered ontological and epistemological assumptions. To address these concerns, this paper advances feminist frameworks for the study of entrepreneurship and calls for critical analyses of gender to be integrated fully into the entrepreneurship field.

Drawing on multiple strands of feminist theory, we first critique existing approaches to the study of “women’s entrepreneurship,” while suggesting that a gender integrated conceptualization of entrepreneurship that attributes gender rightly to both men and women is necessary. We suggest that “women’s entrepreneurship” research focuses unproductively on biological sex and is thus unable to offer solutions to the continued marginalization women face in entrepreneurship activities. To this end, we propose redirecting entrepreneurship research in a way that recognizes the importance of gender in relation to the individual, institutional, structural, and cultural factors integral to doing entrepreneurship. Furthermore, we argue that gender equality in entrepreneurial ecosystems will only be possible when the broader entrepreneurship field recognizes the ways in which gender informs all entrepreneurial activities and environments.

Throughout this article we apply multiple feminist theoretical lenses to demonstrate the ways in which macro-level factors influence entrepreneurial processes and decision-making at each stage. Such an integrated approach is rarely found in the literature, although there have been scholars who have addressed the ways in which structural mechanisms relate to women’s entrepreneurial processes (Ahl, 2002; Bourne, 2006; De Bruin et al., 2007; Brush and Edelman, 2000; Thebaud, 2010). Expanding on the work of these scholars, we suggest that societal-level attitudes, beliefs and expectations regarding gender roles both in the home and in the marketplace are important, as these shape men and women’s self-perceptions and impact resources available to them for starting growth-oriented firms (Anna et al., 2000; De Bruin et al., 2007). Yet understanding these normative gender norms and roles is necessary but not sufficient to change institutional and structural mechanisms that maintain or exacerbate gendered outcomes in entrepreneurship for women and men (Ahl and Nelson, 2010).

As such, while acknowledging that the entrepreneurial discourse and the entrepreneurial process itself are gendered, we depart from much of the work in “women’s entrepreneurship” that contrasts women founders and the performance of woman-founded businesses with men founders and men-founded businesses (Ahl, 2006; Bird and Brush, 2002; Mirchandani, 1999; Robb and Watson, 2012; Watson, 2002). Beyond our feminist critique of the field of women’s entrepreneurship, we engage in feminist praxis to discuss “the way the world could
and should be” in order to transform entrepreneurial ecosystems to support male and female entrepreneurs and their businesses equally. We understand praxis to be the “processes through which theory and practice become deeply interwoven with one another” (i.e., Freire, 1970/1990) and feminist praxis a further understanding of such processes whereby the “intellectual and the political” become mutually constituted in the quest for gender equality, social justice, and change (Nagar and Swarr, 2010: 6; also Stanley, 2013). This engaged approach recognizes the political aspects in the intellectual endeavors to conceptualize entrepreneurship such that efforts to theorize and research entrepreneurship are understood through the lens of gender and with the aim of gender equality. As such, calls for gender equality reflect an intellectual recognition of the ways in which gender is an organizing principle in entrepreneurship research and practice and a political perspective that recognizes women’s marginalization from theory and research in the field. Through our feminist frameworks and praxis, we consider the full range of support entrepreneurs need from a broad range of resource providers and how to make these more accessible in order to transform the ecosystem to be more inclusive (Baughn et al., 2006; Langowitz and Minniti, 2007). Closing the gender gap may encourage the founding and flourishing of enterprises that are more innovative, sustainable, and rewarding places to work. To understand how these changes may take shape, we first discuss feminist scholarship within the context of the entrepreneurship field.

Feminist Approaches to the Study of Entrepreneurship

At the intersections of feminist research and the entrepreneurship field, a small number of scholars have adopted an explicitly feminist perspective to the study of entrepreneurship (Ahl, 2004; Ahl and Marlow, 2012; Bourne, 2010; Calás, Smircich and Bourne, 2007; Özkananç-Pan, 2014). Within this context, feminist theorizing uncovers where stereotypes and “subjective perceptual variables” come from, to enrich our understanding of how these “exert a crucial influence on women’s entrepreneurial propensity and can account for much of the difference in entrepreneurial activity between the sexes” (Jennings and Brush, 2013: 685; see also Gupta et al., 2008, 2009; Gupta, Goktan and Gunay, 2014; Gupta and Turban, 2012; Langowitz and Minniti, 2007). For example, Sullivan and Meek (2012) highlight how the societal attribution of gender roles and gendered socialization processes create unique barriers to entry for women, such as unequal access to assets, skewed educational focus areas, and gendered “daily life activity expectations amongst the sexes”. Like a “perfect storm,” these multifaceted factors magnify each other such that they generate a formidable glass ceiling in the professions (Antony, 2012) and in entrepreneurship. Given these barriers, women have lower expectancy, instrumentality, and valence (Vroom, 1964) with respect to entrepreneurial activities and these are manifested in gender differences at each stage of entrepreneuring (i.e., the enactment of entrepreneurship), including motivation, opportunity recognition, acquisition of resources, and entrepreneurial performance/venture success (Sullivan and Meek, 2012: 428–9; Baron and Henry, 2011).

Emergent feminist voices in the “women’s entrepreneurship” subfield deliver highly relevant material for theory building and empirical analysis for the broader entrepreneurship arena. For example, in a comprehensive meta-analysis of the women’s entrepreneurship field, Jennings and Brush (2013) identify four substantive contributions for the broader field of entrepreneurship arriving out of feminist research: “1) entrepreneurship is a gendered phenomenon, 2) entrepreneurial activity is embedded in families, 3) entrepreneurial activity can result from necessity as well as opportunity, and 4) entrepreneurs pursue goals beyond economic gain” (681). Along the same lines, Ahl and Marlow (2012) suggest abandonment of the male–female binary and adoption of feminist perspectives for application to the entire field of entrepreneurship. Expanding on these feminist contributions to the entrepreneurship field, we outline varieties of feminism and related work in the next section. Following this step, we deploy feminist critique to the field of “women’s entrepreneurship” in order to question assumptions and to provide new direction for research.

Varieties of Feminism

Liberal Feminism. Liberal feminists seek equal opportunity for women and assume that the removal of institutional and legal barriers will result in women founders achieving equitable entrepreneurial outcomes with male founders (Butler, 2003; Greer et al., 2003). Although liberal feminism assumes men and women are essentially the same, critics have pointed out that the male remains the unspoken, implicit norm as an entrepreneur (Ahl, 2002; Smircich and Calás, 1992). Further, liberal feminist perspectives tend to ignore gender inequities in home and family labor (Greer et al., 2003).

Socialist Feminism. Socialist feminists acknowledge the life-long socialization processes that shape women to be equal, but different than men in the ways in which they view the world
Given the strength of cultural experiences that shape the way women entrepreneurs view their roles in society and their chances of success in the marketplace, socialist feminists view liberal feminists’ goals of equality of opportunity based on the assumed androgynous entrepreneur to be misguided (Carter and Williams, 2003). It is important to note that socialist feminism does not view women’s socialized experiences as inferior, but rather different. Consequently, the environment should acknowledge and embrace such gender role differences instead of dismissing or removing them. Embracing a socialist feminist stance means that when there are gender differences (biological, socially constructed, or otherwise), unequal economic power relations associated with such differences are acknowledged.

**Marxist Feminism.** Marxist feminists express the need for the socialization of both child care and domestic/household work in addition to full equality in the paid labor force (Greer et al., 2003; see also Bourne, 2006; Eddleston and Powell, 2012). While contributing an important variable in addressing economic inequality along gender lines, Marxist feminist approaches are limited in relation to theories of entrepreneurship because the focus is on paid labor, with the assumption of being hired by an organization rather than self-employment. Although there are exceptions, when entrepreneurship researchers point out the relationship between the unequal distribution of labor in the household, on the one hand, and the capacity for entrepreneurial activity, on the other, the traditional Marxist goals of developing working-class consciousness becomes problematic for entrepreneurship (Greer et al., 2003). The goals of Marxist feminists may appear to be at odds with entrepreneurial goals, which assume and generally accept the status quo and normative superiority of a market-based capitalist system versus a Marxist-based economic system such as communism or socialism (Barrett, 2014). Moreover, the tension-filled relationship between Marxist economic theories that do not acknowledge women’s productive capacity with the agency afforded them under feminist lenses offers a complex array of possibilities for rethinking various forms of economic arrangements and entrepreneurship activities. To this end, Marxist feminist approaches can offer insights around consciousness-raising around gendered entrepreneurship activities (see also Calás and Smircich, 2006 for an overview of possibilities).

**Radical Feminism.** Radical feminists suggest that men and women are inherently different, and further, that men have exploited these differences to their own hegemonic advantage (Butler, 2003). Radical feminism rejects the socialized norms for overly favoring the dominant masculine hegemony, and makes explicit that adoption of feminist organizations and approaches is its goal. In the dominantly masculine entrepreneurial ecosystem, pro-female and overtly pro-feminist organizations and institutions are rare. However, there is an emerging movement toward launching female-only incubators, accelerator programs, educational workshops, business plan pitch contests, angel investor funds, and networks, which aligns well with radical feminist perspectives (Clark Muntean, and Özkazanç-Pan, 2014).

**Poststructuralist Feminism.** Discourse analysis by feminist discursive theorists illuminate how the discussion of entrepreneurship assumes the masculine ideal type, as it is based on the male mentality, experience, imagery, and perceptual lens (Achtenhagen and Welter, 2007; De Bruin et al., 2006; Bruni et al., 2004). Importantly, these scholars turn the lens back on the researcher and discipline, noting how the very research practices we engage in, even if intending to close the gender gap, may end up perpetuating the dominant masculine model by reproducing social reality (Ahl, 2002, 2006).

Guided by these various different feminist frameworks, we deploy them to question underlying epistemological assumptions in the field of “women’s entrepreneurship” research in the next section.

**Feminist Critique of Existing Literature on Women’s Entrepreneurship**

The focus of our critique is the set of literature that claims awareness or sensitivity to women in entrepreneurship. That is, despite being focused on “women entrepreneurs,” our feminist critique uncovers epistemological assumptions that are problematic in this literature with regard to gender norms and expectations. We suggest that these assumptions can be particularly detrimental for challenging and changing existing behaviors, structures, and institutions that may be perpetuating gender inequality in entrepreneurship. First, the level of analysis and proposed solutions are largely limited to individual entrepreneurs, or women as a class of entrepreneurs that fall short of the male ideal in some respect (Ahl and Marlow, 2012, Ahl, 2006). Second, the literature lacks rigorous theoretical and conceptual development, and finally, existing approaches lack a critical lens as they do not directly challenge or provide sufficient possibilities for chang-
ing institutional and structural barriers. We develop each of these critiques in turn in this section.

**Individualistic Approach: Gender as Biology**

Meta-analyses of the “women’s entrepreneurship” subfield reveal an overarching individualistic approach to the study of women business owners, and even when society’s cultural and institutional barriers are acknowledged, the recommendations imply individual entrepreneurs or women as a class need to “fix” themselves to adapt to the barriers and navigate around bias in the system (De Bruin et al., 2007; Sullivan and Meck, 2012). The entrepreneurial context—the historical, societal, and structural factors that influence the entire entrepreneurial process—is largely ignored in the study of women entrepreneurs (Ahl, 2006; Chell and Baines, 1998). Publications in the top entrepreneurship journals rarely take a critical approach to investigating the structural barriers and making direct recommendations for cultural, social, political, and institutional change to remove them. Further, the literature is silent as to explicit interventions and public policies necessary to level the playing field. In a study of 435 academic articles, Brush and Edelman (2000) found only two studies (Servon, 1996; Sonfield, n.d.) that examine the governmental and public policy issues in the entrepreneurial environment that influence women’s entrepreneurship. While efforts are being made to study the gender gap in access to equity finance in academia (via the Diana Project, for example), only recently have scholars begun to address the massive gender gap in the pipeline toward equity finance, such as that found in business incubators, many of which are indirectly or directly subsidized with taxpayer dollars (Clark Muntean, and Özkazanç-Pan, 2014; Marlow and McAdam, 2013).

Moreover, the individual approach assumes that biological sex and gender are equated in a way that gender is only considered in respect to the study of women entrepreneurs. As such, male entrepreneurs are the unvoiced norm against which women’s entrepreneurial ideas, values, practices, and processes are gauged. By engaging in such gender differentiation, there is little discussion or ability to see the very notions and practices of entrepreneurship as already being gendered. In other words, the presumed gender neutrality of entrepreneurship is rarely noted or called into question, nor is there a critical lens applied toward the gendered institutional and cultural factors that structure the context surrounding entrepreneurial activities. Ironically, these factors impact entrepreneurial outcomes for both women and men (Thebaud, 2010).

**Lack of a Rigorous Theoretical Basis**

These points lead us to question further the epistemological assumptions of the entrepreneurship field. Within this context, the subfield of “women’s entrepreneurship” is comprised largely of empirical studies, mostly descriptive, that engage in the study of only women business owners or that use gender as a “dummy” binary variable in comparing women business owners to men business owners (Greene et al., 2003). By offering comparisons between men and women entrepreneurs, the assumption is one of “equality, but difference” rather than a concern or ability to see how inequalities are taking place during entrepreneurial processes. Robust theorizing about gender and entrepreneurship is rare, and the field is exclusively focused on women, as if men had no gender. Further, theories of entrepreneurship were largely developed based on studies of male entrepreneurs, historically by researchers who were almost exclusively male, and were based on theories generated predominately by men in the study of mostly men (Bird and Brush, 2002; De Bruin et al., 2006; Greer et al., 2003; Hurley, 1999). Thus, women’s experiences have, from the onset of the development of the entrepreneurship as a field of inquiry, either been marginalized or are altogether missing from how entrepreneurs and entrepreneurship are generally understood. In addition, in the mainstream field of entrepreneurship, the entrepreneur is not analyzed for his position as a man, or his experience as a male, nor assessed for what privileges (or disadvantages) his gender bring to entrepreneuring.

**Lack of a Critical Lens to the Structural Issues**

Even scholarship that ventures beyond the mainstream individualistic approach to the study of women entrepreneurs in acknowledging the meso (institutional) and macro (societal/cultural/structural) environments inadvertently may perpetuate gender disadvantage by not problematizing the status quo assumptions, social norms, and structural barriers present in the entrepreneurial ecosystem. For example, Brush et al. (2009) in creating a “gender-aware framework for women’s entrepreneurship” adds “M” to a conceptual model of women’s entrepreneurship to account for motherhood and the socially constructed gender norms found in their meso and macro environments. While the acknowledgement of women’s disadvantaged position in the practice of entrepreneurship is a first step, placing the care of children as a “motherhood” issue rather than a “parental” issue for both male and female entrepreneurs appears to solidify these societal norms instead of challenging them. By adopting the metaphor of “motherhood” to represent the household and family context that impacts entrepreneurial
capacity, motivations and outcomes for women entrepreneurs, but not men entrepreneurs, the authors inadvertently condone socially constructed gender role norms that demand more dedication in the home from women relative to men. Traditional gender roles in which women constitute an unpaid and taken-for-granted resource (Gibson-Graham, 1996; Hoskyns and Rai, 2007) benefitting male entrepreneurs remains invisible. Further, the role of male entrepreneurs as fathers, spouses, and household members with responsibilities to others remains silenced in the literature. Women entrepreneurs are wrongly positioned as being unique in their role as parents, when men entrepreneurs are as equally likely to be parents.

This framing also lacks an understanding of how men’s entrepreneurial success is built on a foundation of women’s unpaid reproductive and unpaid care labor, which enables men to dedicate the time required for entrepreneurial opportunity recognition and entrepreneurial endeavors (see Barker, 2014). Other poorly compensated supporters of these male entrepreneurs include their mothers, hired nannies and babysitters, and housecleaners who are overwhelmingly female (see Cooper, 2000). In all, various women enable the male family member to leave the home for longer hours to work on their business, develop and exploit their networks, and reserve the energy and resources to grow their businesses. The lack of men willing to play this unpaid support role for growth-oriented women entrepreneurs must also factor into the decision calculus why many women entrepreneurs reduce their growth objectives. Thus, scholars need to more carefully analyze the “work-family balance” motivation individual women express for starting a business as well as any lower growth ambitions.

In many ways, such individual-level manifestation of women’s desires and behaviors may very well be based on familial, structural, and cultural constraints placed on them rather than evidence of their lack of desire to start and run high-growth businesses. By not making explicit where the resources come from for male entrepreneurs to thrive, scholars—even if unintentionally or with the opposite intention—solidify and aggravate the systemic economic oppression of women that stems from the appropriation of their labor toward noncompensated and poorly compensated activities. If women are burdened with greater responsibilities with respect to caregiving and housework, this would enable men to found and manage higher growth businesses than women. Thus, gender gaps in the distribution of work in the “private” sphere may explain gender gaps in the “public” sphere, including entrepreneurial activities outside the home.

Our conceptualization of entrepreneurship integrates and makes whole the private and the public realms by acknowledging caregiving and housework as critical to freeing up time for founding, growing, and running businesses for both men and women. This represents a contribution to the entrepreneurship literature, which “hardly mentions family” (Ahl, 2002: 8) and when it does, it does so in relation to women entrepreneurs and never male entrepreneurs.

New Approaches for the Study and Practice of Entrepreneurship

What is needed is to go beyond description of the way the world is and to propose a new way of redesigning entrepreneurial ecosystems that truly promotes gender equality and supports start-ups by women and men. Status quo gender roles are currently sanctioned by entrepreneurship research, perhaps because everyday societal gender norms promoted through popular culture and media go unchallenged by mainstream entrepreneurship scholars. Although women hold approximately half of the jobs in business leadership and half of all managerial positions (Toegel, 2011), the “ideal-type” entrepreneur, business leader and captain of industry is still decidedly male in the media, case studies, textbooks, and the collective imagination. On the flip-side and even well into the 21st century, women are still more likely to be portrayed as primary caregivers than are men, despite their full entry into the workforce. Yet society is changing in some respects. For example, male business managers, owners, and executives express ever greater work-life conflict along with stress from internalizing the societal gender norm that males be primarily economically responsible for their households (Aumann et al., 2011; Bond et al., 2002).

Indeed, the alternative models for women’s entrepreneurship and solutions to gender inequity that scholars have promoted are situated within the gender-biased system. Reading between the lines, we are left with frameworks that assume women are rationally less ambitious, and thus that call for accommodation of their socially constructed responsibilities as primary caregivers (Brush et al., 2009) and acceptance of their greater risk-aversion or personal preferences for smaller sized firms (Robb and Watson, 2012). In addition, proposed solutions stay within the status quo and do not begin to challenge gender bias in the system directly. For example, entrepreneurship scholars have recently suggested that women founders should find males to be on their teams in order to have a better chance of receiving equity funding, rather than solving the bias in the equity financing ecosystem itself (Godwin et al.,...
These “solutions” the field provides individual women do nothing to challenge the structural bias in the entrepreneurial institutions themselves. Indeed, growth-oriented entrepreneurial institutions penalize the very presence of women at the helm, even in mixed teams (Roberts and Johnson, 2013). Why, we ask, are the alternative models focused on “fixing the women” or accommodating societal norms that disadvantage them economically relative to men? Further, why aren’t empirically supported strengths of women and feminine approaches to new venture creation and management applied to launch a more comprehensive and inclusive model of entrepreneurship? To address these shortcomings, we propose and explain our gender integrative conceptualization of entrepreneurship below.

From Concept to Praxis in Gendering Entrepreneurship

Following the call by Calás, Smirich and Bourne (2009), we reframe entrepreneurship as a potent avenue for social change by applying an explicitly feminist lens to our analysis of gendered entrepreneurial processes and the gendered entrepreneurial ecosystem. Further, we establish a territory for theories of entrepreneurship that are normative and explicitly pave the way for social change. We view the study and practice of entrepreneurship as an avenue for achieving greater social justice and fairness and as such, can strive for societally beneficial, sustainable outcomes that lead to human flourishing. Based on praxis (i.e., the feminist practice of working toward gender equality and social justice) we call for new directions in entrepreneurship research and practice. In doing so, we call attention to the lack of gender equality arguments in the field of “women’s entrepreneurship” and in the top entrepreneurship journals whereby feminist work becomes delegitimized by the gatekeepers in our discipline (Ahl, 2002).

The gender integrative conceptualization that we propose goes beyond simple awareness of gender injustices and inequities, and moves to transform institutions that provide crucial entrepreneurial support that could expand the range of choices for both men and women. We differentiate our approach from the “gender-aware framework” or the “integrated perspective” (see Bird and Brush, 2002; Brush et al., 2009; Buttner, 2001) given newer research that suggests women and men are more similar than different in the way they view their businesses (Ahl, 2002; Chell and Baines, 1998). While we acknowledge the range of feminine and masculine strengths that women and men, respectively, can bring to their enterprises, we also address recent empirical findings that problematize the gendering of what it means to be an entrepreneur.

Here we outline interventions that can allow new directions in entrepreneurship theorizing and research. These include rethinking the very foundation of “women’s” entrepreneurship and positing the ways in which caregiving labor and responsibility become shared rather than assigned to women. Our suggestions include three interrelated points: rethinking responsibility for caregiving labor, understanding the role of support organizations in addressing gender equality, and moving toward a holistic understanding of entrepreneurship that recognizes the interdependence of the public and private spheres.

To this end, our first intervention removes the “M” for motherhood in the gender-aware/integrative model of Brush et al. (2009) and replaces it with a “P” for parenthood, making a normative claim that male entrepreneurs as well as partners of female entrepreneurs as coproducers of offspring have equal responsibilities for domestic tasks and caregiving in the household. In doing so, we make visible the previously invisible responsibility of men for caregiving of their children and their homes, as well as making visible the role played by women in the caregiving of the family members and in the homes of male entrepreneurs. Women’s unpaid labor has previously been ignored as a critical resource to entrepreneurial success, while at the same time constituting a form of subordination of women as business owners (Ahl, 2002; Goffee and Scase, 1983). By making explicit the opportunity cost of caregiving in relation to venture creation and growth and its collective economic costs, policy makers may be incentivized to invest in high-quality, full-day public educational programs and child care facilities to spur economic growth. Further, this would serve to enable men and women to participate in entrepreneurial activities “on equal terms” (Ahl, 2002: 8).

In practice, particularly in the United States where the political will to subsidize universal daycare is lacking, this equality of responsibility might be implemented immediately in multiple, flexible ways privately, as well as through taking multiple political actions. Domestic and caregiving work might explicitly be shared equally over a lifetime, but allowing time periods in which the female partner might take on more of these responsibilities, and other time periods in which the male partner takes them on; in other words, it accommodates for times when both partners cannot or choose not to take on equal domestic roles. Equal education of both sons and daughters in entrepreneurial endeavors and in caregiving and homemaking as well as the transfor-
formation of popular culture to reflect progressive, feminist values are long term but pertinent parts of the solution.

Second, addressing the gender gaps in the entrepreneurial support structures and organizations is also a critical component of the solution. Women remain poorly represented in the top echelons of power that hold the ultimate keys to public policy, finance, and entrepreneurial success (e.g., executive suites, boards, banks, venture capital firms, angel investor networks, incubator and accelerator programs, business plan and pitch competition judges, boards of directors and advisors, top corporate law firms, and highest political offices). As long as this institutionalized gender gap remains, gatekeeping activities involving decisions about what is valuable and worthy of time, attention, and investment are likely to remain highly gendered and in favor of men.

We illuminate our approach and compare it to existing gendered conceptualizations in entrepreneurship in Figure 1. Note that we list the negative attributes or gendered stereotypes of men and women entrepreneurs and male-founded and female-founded businesses in the first two types that we posit should be retired in the field of entrepreneurship. The third list of attributes are positive and integrate desirable traits for both men and women entrepreneurs and their gender integrative enterprises.

Our theorizing recognizes that the social order in which the entrepreneurial ecosystem is embedded is gendered, as well as how existing theories of entrepreneurship reconstitute and reconstruct this gendering (Ahl, 2002). Following socialist and Marxist feminist scholars, we acknowledge the problems

<table>
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<tr>
<th>Men’s Entrepreneurship Model (negative attributes to retire)</th>
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<tr>
<td>Profit-maximizing and nonsustainable (do not account for global climate change impacts, growing income inequality, systemic gender economic inequality and social problems that demand entrepreneurial solutions)</td>
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<tr>
<td>Competitive (zero sum game; cutthroat competition)</td>
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<td>Economically exploitative of women’s labor</td>
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<td>Internalizing of socially constructed gender norms (prioritizing breadwinning and time on the business over time with family, even if they desire to spend more time with family)</td>
</tr>
<tr>
<td>Excluding of Other: homophilic behavior (only 4% of equity funding goes to women; minorities and women are left out of networks, incubators, and accelerators; men have almost exclusively male mentors and networks)</td>
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<tr>
<th>Women’s Entrepreneurship Model (negative attributes to retire)</th>
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<tr>
<td>Flexibility-maximizing (allowing time for caregiving, working from home, and spouse’s career objectives)</td>
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<td>Accommodating (reducing time spent on the business to support the family with their time, emotional support, energy)</td>
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<tr>
<td>Sabotaging of their own talent, potential, and sacrificial labor (delay launching and limiting growth of their own business ideas and ventures to support their spouses’ paid work; by default doing all/most of the housework and caregiving without demanding equity in the home and collective support outside the home)</td>
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<tr>
<td>Internalizing of socially constructed gender norms (not seeking high-growth ventures/STEM fields and business/finance education)</td>
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<tr>
<td>Depending on men to get ahead and fearing, avoiding, or sabotaging other women (women have mixed networks and more male mentors than female mentors)</td>
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<tr>
<th>Gender Integrative Entrepreneurship Model (the gender-inclusive attributes to adopt)</th>
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<tr>
<td>Value-maximizing to multiple stakeholders</td>
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<tr>
<td>Quality-of-life maximizing (strives to enhance happiness and collective well-being)</td>
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<tr>
<td>Collaborative (inclusive and attentive to all stakeholders, including paid and unpaid labor that supports the enterprise, social and community groups)</td>
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<tr>
<td>Collectively supported in a just and fair way (acknowledging and demanding collective support for caregiving responsibilities that is gender equitable, ideally state-supported full-day infant through tertiary education that are operated by well-qualified, well-compensated male and female professional educators)</td>
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**Figure 1. Model of Gender Integrative Approach to Entrepreneurship**
with the split of the private from the public, which occurred under industrialization and adoption of modern capitalist economic systems, when mostly men went to the factories, offices, and boardrooms and women mostly stayed at home or labored in unpaid and underpaid support roles (see Acker, 1990).

In the new knowledge economy, the assumptions of the industrial era still remain in our collective subconscious, particularly among the generation of powerful gatekeepers in the entrepreneurial ecosystem (largely middle- to upper-class white males). Stereotypes, idealizations, and assumptions still reflect a male breadwinner and a stay-at-home mom, regardless of this family model being outmoded. Placing primary responsibility for raising children and caring for the household on women effectively takes them out of the market for opportunity-driven, growth-oriented venture creation and management. As a remedy for this structural barrier, we propose a dual solution: first, socialization of the “private” sphere labor in the form of publicly supported child care and full-day education and second, gender equality in the distribution of household labor. Further, these structural gender inequalities can be broken down by scholars illuminating how the historical and cultural positioning of women as being primarily responsible for undervalued, unpaid, and underpaid domestic and caregiving work creates barriers to gender equality in entrepreneurship. In addition, researchers who interview individual entrepreneurs should end the practice of querying only women entrepreneurs about their “work-life balance” and family issues (Ahl, 2002).

As our third point, we further a gender integrative conceptualization of entrepreneurship that challenges the assumptions that the main driver of entrepreneurs and entrepreneurship activity is wealth creation and accumulation. In effect, we suggest that a holistic understanding of entrepreneurship does not decouple public and private spheres or profit-seeking versus social aims. A gender integrative view would celebrate the entrepreneur who primarily seeks social justice, value creation for diverse stakeholders, and/or well-being and happiness over profits. Moreover, our approach problematizes assumptions behind the expressed motivations of women entrepreneurs to found “lifestyle businesses” to balance work and family, while men express motivations to seek wealth in founding businesses (DeMartino and Barbato, 2003). If our society expected both men and women to share family responsibilities equitably, then we believe these gender differences in expressed reasons for starting a business might be eliminated, with men equally expressing motivations of flexibility and ability to balance a career with their family obligations and women equally expressing opportunity-driven motives.

Drawing on radical feminism, we suggest that feminized organizational structures promise to bring higher performance and greater innovation in complex, uncertain, and rapidly changing environments. Female founders have been found to exhibit a preference for more egalitarian and less hierarchical organizational structures (Cliff, 1998) and flatter organizational structures offer greater autonomy to workers. This might lead to higher performance in fields demanding greater cognitive skill and complex and creative problem solving (Pink, 2010). The alternative model we propose builds on feminist organizational practices to call for a new generation of enterprises that are built to meet the 21st-century need for much greater inclusion, diversity, flexibility, and sustainability. The 20th-century industrial firm arose out of an entrepreneurial ecosystem that overwhelmingly privileges masculine ideal-type ways of identifying opportunities, harnessing resources, building and running organizations, and prioritizing shareholders over other stakeholders. The traits we list as gender integrative in Figure 1 push the field toward valuing entrepreneurs and enterprises that are critical to adopt for achieving higher performance in terms of sustainability and collective well-being.

Empirical Support for a Gender Integrative Approach

Recent empirical work suggests support for and value in our gender integrative conceptualization, particularly in respect to gender-neutral imagery, language, and representation of what constitutes the ideal-type entrepreneur and entrepreneurial qualities or competencies. Applying a stereotype threat perspective to the interpretation of results from two controlled experiments in Turkey and the United States, Gupta, Goktan, and Gunay (2014) found that both “men and women evaluated business opportunity equally favorably when entrepreneurs were described using gender-neutral attributes, [but that] gender differences in opportunity evaluation were exacerbated when entrepreneurship was linked to masculine stereotypical information, and reversed in favor of women when entrepreneurship was linked to feminine stereotypical information” (Gupta et al., 2014: 273). In a psychology lab experiment, Baron, Markman, and Hirsa (2001) found that with images of women (shown to both men and women), women were rated as more attractive when they were described as entrepreneurs than when they were described as managers, although they were also rated as less feminine. Implying that individual women re-
ceive an “entrepreneurial boost” in the form of a masculine-based professional competency gain and/or a minimalization of their “feminine liability” in the business world, the authors conclude that “women may benefit to a greater extent than men from assuming entrepreneurial roles, at least with respect to how they are perceived by persons unacquainted with them” (Baron et al., 2001: 926). These empirical findings lend support to the notion that gendered “perceptions of entrepreneurs often influence important decisions about them by venture capitalists, potential customers, prospective employees, and others, and such perceptions may strongly affect entrepreneurs success in establishing new ventures” (Baron et al. 2001: 928; Shane and Venkataraman, 2000).

As a powerful antidote to gender bias in entrepreneurship, Gupta, Turban, and Bhawe (2008) draw on stereotype activation theory (SAT) to suggest that stereotype nullification (i.e., purposefully “associating entrepreneurship with gender-neutral characteristics) may eliminate the gender gap in entrepreneurial intentions” (Gupta et al., 2008: 1055; see also Ahl, 2006; Gupta et al., 2005). Scholars note that such stereotype nullification can reduce “cognitive load” arising from gender stereotyping and that the nullification of gender stereotyping is particularly critical given its pervasiveness (Gupta et al., 2008; Smith and White, 2002; Smith and Johnson, 2006). These theoretically grounded arguments and empirical findings align with our claims and suggestions. Specifically, active nullification of the ubiquitous masculinized stereotyping with regard to entrepreneurship through explicitly describing entrepreneurs and entrepreneurial traits and activities as stereotypically feminine on balance, and/or gender neutral promises to collapse the well-documented gender gap in entrepreneurship.

These gender neutralizing interventions are most critical to high-growth entrepreneurship, where Sweida and Reichard (2013) argue women face a dual stereotype: first, specific industries hold embedded masculine stereotypes and second, entrepreneurship itself is highly masculinized. These authors also suggest that, “by decreasing the masculine stereotype -related barriers associated with high-growth entrepreneurship and increasing women’s high-growth entrepreneurship self-efficacy, it should be possible to increase women’s intention to engage in high-growth venture creation” (Sweida and Reichard, 2013: 296). As feminist scholars working in academia, we have a role to play in ensuring that gender equality is enacted through our research.

Following Heilman (2001) and Gupta et al. (2008), we implore professionals in academia to (1) openly discuss existing, widespread gender stereotypes, (2) adopt gender-neutral language, (3) use gender-integrative case studies and examples, and (4) provide as many female as male role models, mentors, and support providers (e.g., guest speakers, entrepreneurs-in-residence, advisory board members). The field of entrepreneurship itself is hamstrung by a “gendered infrastructure,” which includes relegation of the topic of women’s entrepreneurship and gender and entrepreneurship to separate conferences, tracks, and special issues of journals (De Bruin et al., 2006, 2007; Jennings and Brush, 2013). No work that we can find addresses the need to fix the vast gender gap in the study of academia in entrepreneurship and its power structures (such as the full and endowed professorships, entrepreneurship center executive directors, and on the boards of journals and entrepreneurship associations), which should help to mitigate what constitutes acceptable epistemological and methodological approaches to the study of entrepreneurship and what is in itself valued in the field, as manifested by what work is accepted at the top journals in entrepreneurship.

As has been noted, only a few articles have been published in the top entrepreneurship journals that apply a feminist theoretical approach and/or that treat gender as a lens as opposed to a variable (Brush et al., 2009). In addition, as Jennings and Brush (2013 ) . Note, the financial investment in the study of gender and entrepreneurship is woefully miniscule compared to other tracks of study despite the rise of women entrepreneurs. Our engagement with these ongoing concerns as feminist scholars studying entrepreneurship gives way to critique and new directions for research and action, which we outline next.

Discussion: Contributions of Our Framework and Some Limitations

The approach we propose has the potential to be both an explanatory model for why the entrepreneurial world is as it is, as well as a visionary model of the way the entrepreneurial world might be (i.e., based on gender equality and inclusion with improved outcomes overall). Based on our analyses, key takeaways include recognition and valuing of feminist engagement with business and greater attention to (intersectional) differences among women entrepreneurs. For example, inclusion and integration of different feminist organizational structures based on a model of decentralization, fluidity, flatness, democracy, equality, and consensus can bring greater levels of innovation, flexibility and respon-
siveness to market opportunities (Buzzanell and D’Enbeau, 2013; Ferguson, 1985; Ferré and Martin, 1995; Iannello, 1992; Thomas, 1999).

Further, our work challenges the dominant normative and perceptive association of men with the societally constructed public realm of breadwinning and paid economic responsibilities. This is the first step to increasing the normative support and cultural desirability of women as entrepreneurs (Baughn et al., 2006; De Bruin et al., 2007; Langowitz and Minniti, 2007), and critical, we argue, for men (and women) to be fully engaged supporters of women entrepreneurs as their partners, spouses, advocates, investors, employees, managers, and lenders. Our approach illuminates and explains how societally constructed gender norms interact with gendered professional norms of entrepreneurship, and how such “double binds” might be navigated in practice (Jamieson, 1995). In addition, we address an important—and to our knowledge heretofore unacknowledged point in the field of entrepreneurship—that individual men are harmed by the status quo, in the form of experiencing greater work-life conflict (Aumann et al., 2011). Even though our approach acknowledges both male and female entrepreneurs as part of the discussion on gender, we acknowledge that near-term solutions given the state of the world as it is might require adoption of radical feminist interventions.

Early successes among emerging programs of women-only angel investor networks, incubators, accelerator programs, pitch competitions, and networking events suggest adoption of such a radical feminist approach is in order (e.g., Springboard Enterprises, Astia, WIN Lab, Women Innovate Mobile, We Own It Summit, Women 2.0; LaunchPad2X; Count Me In). While this solution may produce desirable and tangible gains for some women, there still remains a tension between profit seeking and feminism. To this end, we engage socialist and Marxist theorizing about the possibility of socializing currently undervalued and underpaid caregiving labor, while also acknowledging the inherent conflict between Marxist-socialist and free-market capitalist ideologies. For these reasons, private solutions need to complement public and political action, which we outline next.

Based on our gender integrative approach, we suggest that educational solutions and governmental programs drop gender-neutral assumptions, and focus on addressing demand-side problems of individual women. These problems stem from societally constructed gender norms, implicit biases, and subjective perceptions of women’s weaker personal entrepreneurial abilities. Programs need to be designed to address these gendered self-efficacy and self-confidence gaps effectively (Langowitz and Minniti, 2007; Wilson et al., 2007). The solutions, however, must not stop at the individual entrepreneur.

Significant structural barriers remain, including gendered division of labor and domestic responsibilities that can be addressed by national equality programs designed to close the gender gap in equity funding and growth trajectories (Alsos et al., 2006). Supply-side remedies are also needed. The pipeline to equity finance is heavily gendered (Carter et al., 2003; Marlow and Patton, 2005) including participation in accelerator and incubation programs, where approximately 95 percent of participants and directors are male (Clark Muntean and Özkazanç-Pan, 2014). Government policies should directly address the inequities in equity finance, its pipeline and networks, and open up these resources for women. The first step is requiring public and publicly subsidized organizations to collect and make publicly available data on the percentage of women participants and businesses recruited, selected, assisted, and funded, and to pressure privately held institutions to report the share of women-owned businesses they assist and finance (Alsos et al., 2006).

Finally, consciousness raising about the insidious but rampant cultural and societally embedded psychological and sociological barriers for women entrepreneurs needs to happen. The entrepreneurial ecosystem is likely fraught with gender schematic thinking, stereotype threat, and conflicts between gender norms and occupational norms that result in the perfect storm holding back women founders from high-stakes venture capital and high-tech/high-growth entrepreneurship (Antony, 2012). In the hypercompetitive and hypermasculine marketplace, explicitly feminist organizations may need to be more active in the realms of venture capital, business incubation and acceleration programs, and angel investment networks to effect social change through the communication of values, framing of problems, and creation of solidarity that underscores unwavering commitment to gender equity in entrepreneurial outcomes (Buzzanell and D’Enbeau, 2013).

While these are positive attributions and possibilities associated with our model, we also recognize that our framework can also potentially perpetuate stereotypes as women-only entrepreneurial support organizations and spaces become an established norm rather than challenge or change the status quo. It is also important to acknowledge that many of our assumptions are based on heteronormative ideas and a much more complex approach to the study of entrepreneurship would require an intersectional analysis focusing on relations of difference across gender, race, class, ethnicity, sexual orientation, and so forth. Equally, our calls for engaging in social justice and
gender equality in entrepreneurship research and practice may not yield emancipatory entrepreneurship for women and men of the Global South, LGBTQI individuals and others occupying structurally oppressed positions in society. As feminist scholars working in the field of entrepreneurship, we note that much work remains to be completed with regard to theorizing and research that not only recognizes gender as an organizing principle of entrepreneurship but also heeds the call toward gender equality in the enactment of entrepreneurship. In this regard, we offer the gender integrative approach as a first step in voicing and redirecting underlying assumptions guiding “women’s entrepreneurship” research.

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Examining the Age—Performance Relationship for Entrepreneurs: Does the Innovativeness of a Venture Make a Difference?

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Whether older or younger entrepreneurs may be better positioned to achieve performance outcomes for their ventures is a much debated question. Here, we draw on Galenson’s theory of creativity to propose a contingency perspective for understanding the relationship between entrepreneur age and venture performance, suggesting that a venture’s level of innovativeness plays a moderating role. Results from a representative sample of 1,182 nascent entrepreneurs revealed mixed support for our hypotheses. While a negative relationship was found between entrepreneur age and performance for those developing “innovative” ventures, no relationship was found between entrepreneur age and performance for those developing “imitative” ventures.

Keywords: venture performance; human capital; age; venture innovativeness; imitative versus innovative ventures

People under 35 are the people who make things happen. People over 45 basically die in terms of new ideas.
—Venture capitalist Vinod Khosla speaking at the Nasscom Product Enclave, 2011

Venture capitalists talk openly about their bias toward young entrepreneurs...I think they’re wrong...venture capitalists are doing themselves a big disservice by ignoring the real innovators: older, experienced people.
—Vivek Wadwha, Director of Research, Center for Entrepreneurship and Research Commercialization, Duke University

Across current literature, and particularly in the popular press, multiple viewpoints have emerged for how an entrepreneur’s age may be expected to influence venture performance. These viewpoints have moreover differed remarkably, as illustrated in the quotations above. While some argue that younger entrepreneurs may be in a better position to achieve venture success (e.g., Kammel, 2012; Wolverson, 2013), others have taken an opposing stance, suggesting that older entrepreneurs possess a distinct advantage (e.g., Conner, 2012; Wadhwa, 2011). Given these conflicting viewpoints, we offer a contingency perspective in this article for understanding the relationship between entrepreneur age and venture performance based on differences in the “degree of innovativeness” inherent in an entrepreneur’s venture. This approach recognizes that considerable opportunity variation exists in entrepreneurs’ development of new ventures (Samuelsson & Davidsson, 2009); and as we describe, with different levels of innovativeness unique consequences associated with entrepreneur age may come.

In constructing our arguments, we draw on Galenson’s (2009a; 2010) theory of creativity as a theoretical foundation. Our deductive, theory-driven approach signifies an important contribution to current literature inasmuch as many previous considerations of the entrepreneur age—venture performance relationship have been inductively derived (e.g., Bates, 1990; Lin & Tao, 2012) or based purely on anecdotal accounts. Such accounts are problematic (Ressi, 2011), especially as entrepreneurs represent a sizable portion of the population and exhibit a great deal of age diversity across industries (Spangler, 2009; Wadhwa et al., 2008). What’s more, recent reports suggest that entrepreneurial activity is on the rise for individuals of all ages (Kelley et al., 2011), thus intensifying the need for systematic, theory-based research as to how, and under what conditions, an entrepreneur’s age may relate to venture performance.

This article is organized into five sections, the first of which is this brief introduction. In the following section, we introduce Galenson’s theory of creativity and examine how this perspective may inform the entrepreneur age—venture performance debate. We also present the study hypotheses. In the third and fourth sections, we discuss the study methodology and present our findings. We also present the results of several post-hoc analyses. Finally, in the fifth section, we close with a discussion of study results and their implications for research and practice.

Theoretical Background and Hypotheses

Galenson’s Theory of Creativity
Galenson’s (2009a; 2010) theory of creativity suggests that the nature of individuals’ creative process-
es differs across life stages. As such, different patterns of creative behaviors may be expected in older versus younger individuals. Originally developed as a theory for understanding the creative behaviors of artists, Galenson (2006a; 2006b) observed that individuals could be classified into two overarching categories based on the means by which their most innovative works were developed. The first category, termed “experimental innovators,” encapsulates those artists who developed their most creative, and ultimately successful, work through a tentative and prolonged period of learning and discovery. Experimental innovators’ creative output is attributed predominantly to the experience gained on account of a lengthy trial-and-error process undergone in developing their art. In contrast, “conceptual innovators” are those artists whose most creative and successful works represent sudden and often extreme departures from current artistic practices. The creative output of these individuals rests in their ability to see beyond existing conventions; a skill which Galenson (2010) notes can diminish over time, as well as with extensive experience in a given domain.

According to Galenson (2009a; 2010), distinguishing between experimental and conceptual innovators points to an integral role for artists’ age in understanding the expected pattern of their creative activities. These expectations are aligned with the nature of the creative behaviors that tend to be exhibited by experimental and conceptual innovators, respectively. For example, because experimental innovators “build their skills gradually over the course of their careers,” they correspondingly are expected to “produce their best work late in their lives” (Galenson, 2009a, p.2). On the other hand, conceptual innovators are more likely to make their greatest artistic contributions early in their lives given that artists at an early career stage are less “constrained by fixed habits of thought” and remain “free to violate basic conventions” of their field (Galenson, 2009a, p.3). Viewed collectively, therefore, while Galenson’s theory stipulates that creative behaviors occur in both older and younger individuals, the manifestations of these creative behaviors would be expected to differ across life stages (Galenson, 2010).

Galenson’s theory of creativity and its associated age implications for understanding creative behavior has furthermore been extended beyond an examination of artists specifically to include other creative professions. For example, Galenson and Kotin (2007) illustrated that an experimental innovator versus conceptual innovator categorization could be applied to movie directors in the film industry. Likewise, an experimental innovator versus a conceptual innovator classification has been successfully applied as a framework for understanding the creative output of older versus younger authors and songwriters (Galenson, 2004; 2009b).

Applications of Galenson’s Theory of Creativity to Entrepreneurship

Of interest for the current study, Galenson (2009a; 2010) further posited that his theory of creativity may be appropriate for understanding entrepreneurs’ development of new ventures. In offering this suggestion, Galenson (2012, p.17) recognized that the careers of successful “entrepreneurs follow patterns similar to those of great artistic innovators...for they share the same basic approaches and motivations.” The applicability of Galenson’s theory further follows from the notion that the startup of any new venture reflects, on at least some level, a creative process (Fillis & Rentschler, 2010; Winslow & Solomon, 1993). As such, entrepreneurs’ creative behaviors (i.e., venture creation) can also be characterized along experimental versus conceptual lines similar to other creative occupations. Accordingly, it follows from Galenson’s theory of creativity that separate manifestations of creative behaviors may also be expected for successful older and younger entrepreneurs.

Experimental and conceptual perspectives of creative behaviors also enter implicitly into arguments offered on each side of the current entrepreneur age–venture performance debate. As noted, this debate is prevalent in popular press entrepreneurship literature, and can be understood as reflecting two general perspectives: (1) that there exists a positive relationship between an entrepreneur’s age and venture performance (i.e., older entrepreneurs have the advantage), and (2) that there exists a negative relationship between an entrepreneur’s age and venture performance (i.e., younger entrepreneurs have the advantage). Specifically, arguments for a positive entrepreneur age–venture performance relationship feature viewpoints closely aligned with “experimental innovator” perspectives on creative behavior, while arguments for a negative entrepreneur age–venture performance relationship parallel “conceptual innovator” perspectives on creative behavior.

Positive Effects for Entrepreneur Age. Proponents of a positive relationship between entrepreneur age and venture performance observe that several qualities commonly associated with older age may be conducive for success. Wadhwa (2011), for example, has suggested that there is no substitute for the value of experience in an entrepreneur achieving venture success. This position is echoed by several others, who note that older entrepreneurs will have had the opportunity to build several advantages rela-
tive to their younger counterparts, including the construction of a more developed social network, the accumulation of greater financial resources, and the capacity to make more seasoned judgments (Conner, 2012). Progression of age has additionally been linked to higher levels of general wisdom (Grossmann et al., 2012), a quality which may be advantageous for entrepreneurs’ decision-making processes. These arguments are further underscored by research from an upper echelons perspective (Hambrick & Mason, 1984), which has shown that older managers, given their greater levels of past experience and tendency to seek more information than younger managers, may be in a better position to make more informed strategic decisions (Taylor, 1975; Wiersema & Bantel, 1992). Research conducted by the Kauffman Foundation, as well as findings reported by the Founder Institute, have also shown that the survival rate and overall performance of new ventures increases with entrepreneur age, at least into individuals’ early to mid-40s (Ressi, 2011; Robb et al., 2010; c.f., Cressy, 1996). In addition, in his review of various factors that may contribute to entrepreneurial success, Shane (2008) observed that ventures founded by older individuals (45–54 age range) tend to outperform those founded by individuals less than 35 years of age.

As noted, these perspectives on the positive effects of entrepreneur age contain parallels to the expected pattern of creative behaviors for experimental innovators described in Galenson’s theory of creativity. In essence, just as experimental innovators are expected to make their greatest contributions late in life as their skills develop gradually over time (Galenson, 2009a), so too would older entrepreneurs be expected to achieve greater venture success on account of the experience, wisdom, and skills they have built throughout their careers.

**Negative Effects for Entrepreneur Age.** In sharp contrast to those citing positive effects for age, proponents of a negative relationship between entrepreneur age and venture performance argue that qualities commonly associated with youth, in fact, offer the greatest advantage for entrepreneurial success. For example, both Kammel (2012) and Wolverson (2013) have suggested that the energy and motivation levels of younger entrepreneurs may be greater than older entrepreneurs. Research from an upper echelon perspective has additionally shown that younger individuals may be more willing to engage in risk-taking behaviors, be more receptive to change, and be more flexible in their decision making than older individuals (Buchholtz & Ribbens, 1994; MacCrimmon & Wehrung, 1990). Each of these practices can be important for the survival and growth of a new business. Proponents of a negative relationship between entrepreneur age and venture performance also note that arguments suggesting that older entrepreneurs possess greater financial resources than younger entrepreneurs may be overstated, especially as outside investors tend to favor the young (Wolverson, 2013). Indeed, this view is supported by statements offered by venture capitalist Niko Bonatsos, who observed that “investors are keen on paying a premium to partner with very young first-time founders that simply think differently than the rest of us” (Farr, 2013).

Clear parallels may once again be drawn between these arguments and the expected pattern of creative behaviors for conceptual innovators described in Galenson’s theory of creativity. This follows insomuch as arguments for a negative relationship between entrepreneur age and venture performance focus on younger entrepreneurs’ expected levels of innovativeness, flexibility, and dynamism. Each of these traits relate to an individual’s ability to see beyond, and operate outside of, existing conventions—a defining feature of the creative behavior of conceptual innovators (Galenson, 2010), and a capability that may diminish with substantial experience in a given domain (Galenson, 2009a; 2012).

**An Examination of Venture “Innovativeness”**

As illustrated in the preceding sections, the dual characterization of creative behaviors for experimental versus conceptual innovators proposed by Galenson (2009a; 2010) offers a foundation that supports both a positive and negative viewpoint for the influence of entrepreneur age on venture performance. However, Galenson’s theory also points to important contingencies that help to specify under what conditions older versus younger entrepreneurs may possess an advantage. One such contingency is the degree of “innovativeness” inherent in a given venture.

As described above, entrepreneurship scholars generally concur that the start up of any new venture reflects, at some level, a creative process (Fillis & Rentschler, 2010; Winslow & Solomon, 1993). This does not stipulate, however, that all startup ventures require equal levels of originality in their founding, development, and management. Indeed, several entrepreneurship researchers have observed that the ideas on which new ventures are founded vary considerably in their degree of innovativeness (Baumol et al., 2009; Koellinger, 2008; Samuelsson & Davidsson, 2009). While some startups are more or less a reproduction of an existing product, process, or business model, other new ventures feature a high level of novelty. To this end, Samuelsson and Davidsson (2009) delineate a typology for classifying new ven-
tures based on their level of innovativeness, distinguishing between “imitative” and “innovative” ventures, respectively. In imitative ventures, entrepreneurs predominately emulate “products and processes that are already established in the economic environment” (p.230) where the new venture operates or is planned to operate. In contrast, in innovative ventures, entrepreneurs seek to “introduce important novelty along at least some dimension” (p.231) related to the core functions of the venture, be it a product, process, or service. Other scholars (e.g., Cliff et al., 2006; Koellinger, 2008) have offered related perspectives in distinguishing imitative and innovative new ventures as well.

This typology of imitative versus innovative ventures provides a useful framework for examining how an entrepreneur’s age may be expected to contribute to venture performance. For example, in developing an “imitative venture,” older entrepreneurs’ longstanding familiarity with a business sector may be particularly advantageous as it allows for a better positioning of a new venture’s product or service relative to others in the currently established market. Given this knowledge, older entrepreneurs may also possess a clearer understanding of the potential pay-off and risks associated with an imitative venture, and, as a result, be more willing to invest the necessary time and resources required to develop the new business successfully (Edelman & Yli-Renko, 2010). This premise is further supported by conceptualizations of entrepreneurial behavior as a utility function (Levesque & Minniti, 2006; 2011), a view that recognizes older individuals as less willing to commit time toward venture development if the potential rewards are perceived as unclear, too distant, or both. Consistent with these perspectives and Galenson’s theory of creativity, then, it follows that in the case of imitative ventures older entrepreneurs may possess an advantage in light of the wisdom, knowledge, expertise, and more precise opportunity recognition these individuals are likely to have built over the course of their careers (Edelman & Yli-Renko, 2010; Galenson, 2009a; 2010; Wadwha, 2009).

In contrast, younger entrepreneurs may hold an advantage in “innovative ventures” as their success is based, at least in part, on the originality and novelty of the business. Here, the ability to see beyond and break from existing conventions is particularly valuable. To this end, several entrepreneurship scholars have observed that an abundance of time spent in a given domain can limit an individual’s ability to be truly inventive (e.g., Baumol et al., 2009; Cliff et al., 2006). Koellinger (2008) further expanded on this view, delineating that entrepreneurs succeeding in the development of innovative ventures are most often those who are able to draw on varied perspectives that reach beyond the traditional views of a given field. These characteristics are the hallmark of young conceptual innovators according to Galenson’s (2009a; 2010) theory, thereby supporting the notion that entrepreneurs of a less advanced age may have an advantage in innovative ventures.

With the backdrop of this theory and research, therefore, we offer the following contingency hypothesis for the relationship between entrepreneur age and venture performance in imitative versus innovative ventures, respectively:

**Hypothesis 1:** The relationship between entrepreneur age and venture performance is contingent on the degree of innovativeness in a venture.

Along with this more general contingency hypothesis, we further expect the following pattern of relationships between entrepreneur age and venture performance for imitative and innovative ventures, consistent with the theory and research above:

**Hypothesis 2a:** The relationship between entrepreneur age and venture performance is positive for imitative ventures.

**Hypothesis 2b:** The relationship between entrepreneur age and venture performance is negative for innovative ventures.

**Method**

**Study Sample and Data Collection**

Data for this study were obtained from the *Panel Study of Entrepreneurial Dynamics II* (PSEDII). PSEDII, a longitudinal data collection project focused on developing a greater understanding of individuals in the early stages of the venture creation process, contains a total of 1,214 entrepreneurs. These individuals were identified from a representative sample of 31,845 adults living in the United States, each of whom received an initial screening contact by telephone to gauge their eligibility for the research project. To determine their eligibility, trained interviewers asked individuals to respond to a series of scripted questions concerning whether they were “currently trying to start a business” or “currently the owner of a business.” A copy of the interview protocol and all scripted questions for determining eligibility can be found at [http://www.psed.isr.umich.edu/psed/documentation](http://www.psed.isr.umich.edu/psed/documentation).

Those determined to be eligible and willing to participate based on the initial screening were then contacted by phone on six occasions from 2005–
2010 as a means of data collection. A 12-month interval separated each contact, and all data were collected by trained interviewers from the University of Michigan’s Institute for Social Research. All interviewers followed a standardized script to ensure consistency in data collection. During the first measurement point, interviewers predominately focused on obtaining characteristics of the entrepreneurs and their ventures. During measurement points two through six, longitudinal data concerning venture performance were collected. As such, the PSEDII dataset provides five waves of longitudinal data. Study questionnaires used at each measurement point, as well as details on interviewer protocols, can be found at http://www.psed.isr.umich.edu/psed/documentation. A further description of the PSEDII research methodology can be found in Reynolds and Curtin (2008).

For the current study, the total number of entrepreneurs identified at the first measurement point was reduced from 1,214 to 1,182 due to a small number of individuals providing incomplete data on one or more independent variables. These 32 individuals providing incomplete data were deleted list-wise. The mean age of respondents was 46.57 years ($SD = 13.02$) and the majority of individuals (55%) had not previously been part of a business startup. Men comprised 63% of the sample and 57% were married at the time data collection began in 2005. In terms of individuals’ educational background, 24% had a high school degree or less, 39% had some college experience or an associate’s degree from a community college/vocational school, 21% had a bachelor’s degree, and 16% had at least some schooling beyond the undergraduate level. About 31% of individuals were “corporate” entrepreneurs (i.e., engaged in the new business creation process on behalf of an employer). The remaining 69% were “independent” entrepreneurs. Finally, respondents on average had worked 9.39 years ($SD = 10.60$) within the industry in which their new business venture was situated.

Beginning with this initial sample of 1,182 entrepreneurs, the retention rates between data collection points ranged from 71% to 86%. Specifically, 976 individuals participated at Time 2 (82% retention rate from Time 1); 746, Time 3 (77% retention rate from Time 2); 527, Time 4 (71% retention rate from Time 3); 435, Time 5 (85% retention rate from Time 4); and 375, Time 6 (86% retention rate from Time 5). Nonrespondents at any particular time point included those that either refused to participate when contacted or were unable to be reached by an interviewer after three separate callbacks. As a result of missing data, the total number of firm-year observations used in the analyses were $N = 2,973$ drawn from 1,075 of the entrepreneurs.

**Measures**

**Dependent Variable: Venture Performance.** We assessed venture performance using a measure of entrepreneurial persistence. Persistence, which reflects an individual’s level of “direction-specific behavior over time” (Kanter, 1990, p.78), has been used previously as a performance metric in studies of nascent entrepreneurs (e.g., Liao & Gartner, 2006; Wu et al., 2007; Zhao & Wu, 2014). Persistence provides a useful metric in this research context, especially insomuch as the entrepreneurial process represents a time- and labor-intensive effort (Shane & Venkataraman, 2000). In addition, entrepreneurs’ level of effort in starting and developing their venture has been linked to other firm performance indicators (Carter et al., 1996; Edelman & Yli-Renko, 2010). Persistence was captured during measurement points two through six, which constituted the five waves of longitudinal data provided in the PSEDII dataset. More specifically, for this study, persistence in venture development was measured at each time point using a dichotomous variable that assessed whether individuals devoted more than 160 hours (four weeks of full-time work) to their business startup over the previous 12 months (1 = Devoted more than 160 hours of full-time work to the venture during the previous 12 months, 0 = Did not).  

**Independent Variable: Entrepreneur Age.** Respondent age was calculated for each firm-year observation based on a single, self-reported item captured at the first measurement point. 

**Moderator Variable: Venture Innovativeness.** Following Samuelsson and Davidsson (2009), the degree of venture innovativeness was classified as either innovative or imitative based on the results of a latent class analysis comprising four characteristics of the venture: (1) whether a patent, trademark, or related design protection had been applied for; (2) whether research and development was a core component of the new venture’s strategy; (3) whether the venture offered a unique product/service in its respective market; and 4) whether the venture had direct competitors. Each of these venture characteristics was measured using dichotomous items (1 = yes, 0 = no) captured during the first measurement point. Posterior probabilities generated from the latent class analysis were used to classify entrepreneurs’ new ventures—in total, 319 of the ventures in the sample were classified as innovative (27%), while 863 were classified as imitative (73%).
Control Variables. We controlled for several variables when conducting the study analyses. All control variables were captured during the initial measurement point. First, we controlled for individuals’ years of industry experience within the industry in which the new venture is situated. Next, we controlled for business startup experience, captured as the number of previous businesses individuals have helped start as either an owner or part owner. Third, as it may have implications for the startup process, we controlled for whether individuals were corporate entrepreneurs engaged in a business startup on behalf of an organization, or were independent entrepreneurs (entrepreneur type). Given research supporting the value of social capital for nascent entrepreneurs’ ability to navigate the startup process (Davidsson & Honig, 2003), we also controlled for two structural characteristics of respondents’ networks: the number of individuals respondents have drawn on for advice or support pertaining to their new venture (advice/support network size), and the number of individuals that have in some other way contributed to the development of their new venture (other contributor network size). As it is likely that entrepreneurs in our sample may be at different stages in the venture development process, additionally we controlled for previous performance. Specifically, we captured whether entrepreneurs had achieved any previous sales related to their venture prior to the initial measurement point (1 = yes, 0 = no). Finally, we controlled for respondents’ highest level of education obtained.

Statistical Analysis
Analyses were conducted using the generalized estimating equations (GEE) regression method (Liang & Zeger, 1986). We report results from models specifying an independent working correlation structure, binomial distribution, and logit link function. An independent working correlation structure was used because it provided the best fit based on the quasi-likelihood under the independence model criterion (QIC) statistic (Pan, 2001). However, we also retested the study hypotheses using both an AR1 and exchangeable working correlation structure and results were substantiated. All analyses were conducted using the GENMOD procedure in SAS 9.4.

Results
Descriptive Statistics
Table 1 presents descriptive statistics and bivariate correlations for all study variables. In respect to the correlations, it is useful to note that several control variables demonstrated a bivariate relationship with entrepreneurial persistence, including industry experience (r = .08, p < .01), business startup experience (r = .09, p < .01), and previous sales (r = .13, p < .01).

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Advice network size</td>
<td>0.97</td>
<td>2.08</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Other cont. network size</td>
<td>1.11</td>
<td>2.20</td>
<td>.19</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>3. Business startup exp.</td>
<td>1.02</td>
<td>1.94</td>
<td>.03</td>
<td>.02</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Industry experience</td>
<td>9.39</td>
<td>10.60</td>
<td>.00</td>
<td>-.03</td>
<td>.12</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Education</td>
<td>5.53</td>
<td>2.13</td>
<td>.01</td>
<td>.00</td>
<td>.14</td>
<td>.09</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6. Entrepreneur type</td>
<td>0.31</td>
<td>0.46</td>
<td>.03</td>
<td>.00</td>
<td>-.07</td>
<td>.04</td>
<td>-.07</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Previous sales</td>
<td>0.50</td>
<td>0.50</td>
<td>.01</td>
<td>.00</td>
<td>.07</td>
<td>.04</td>
<td>.04</td>
<td>.01</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Venture innovativeness</td>
<td>0.27</td>
<td>0.44</td>
<td>.09</td>
<td>.03</td>
<td>.02</td>
<td>.01</td>
<td>-.09</td>
<td>.06</td>
<td>-.10</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Age</td>
<td>46.57</td>
<td>13.02</td>
<td>-.03</td>
<td>.00</td>
<td>.23</td>
<td>.35</td>
<td>.24</td>
<td>-.08</td>
<td>.01</td>
<td>-.05</td>
<td>-</td>
<td></td>
<td></td>
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<tr>
<td>10. Persistence</td>
<td>0.66</td>
<td>0.47</td>
<td>-.00</td>
<td>.00</td>
<td>.09</td>
<td>.08</td>
<td>.03</td>
<td>.02</td>
<td>.13</td>
<td>-.02</td>
<td>-.03</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>11. Sales</td>
<td>0.48</td>
<td>0.50</td>
<td>-.04</td>
<td>-.03</td>
<td>.10</td>
<td>.05</td>
<td>.06</td>
<td>-.01</td>
<td>.34</td>
<td>-.10</td>
<td>.02</td>
<td>.36</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: Correlations greater than .04 in absolute value are significant at p < .05. Correlations greater than .05 in absolute value are significant at p < .01.

a 1 = Corporate entrepreneur, 0 = Independent entrepreneur.
b 1 = Had previous sales, 0 = Did not have previous sales.
c 1 = Innovative venture, 0 = Imitative venture.
d 1 = Devoted more than 160 hours (four weeks) of full-time work to the venture in the past 12 months, 0 = Did not.
e 1 = Achieved sales in more than 6 of the previous 12 months, 0 = Did not.
Hypothesis Tests
Table 2 reports the results of the GEE regression analyses for persistence. Specifically, two models are reported in a hierarchical progression, with Model 1 consisting of the control variables and main effects, and Model 2 adding the hypothesized entrepreneur age x venture innovativeness interaction.

Hypothesis 1 posited a moderating (i.e., contingency) effect on the relationship between entrepreneur age and venture performance. Hypothesis 2, then, posited that the relationship between entrepreneur age and venture performance would be positive for those entrepreneurs developing imitative ventures (Hypothesis 2a), and negative for those entrepreneurs developing innovative ventures (Hypothesis 2b). We found support for Hypothesis 1 as the age x venture innovativeness interaction was significant (β = -.14, p < .01, Odds Ratio = 0.87). To further determine the nature of this effect and assess Hypothesis 2, we divided the sample based on the new venture’s degree of innovativeness and conducted separate analyses examining the relationship between entrepreneur age and persistence for imitative and innovative ventures, respectively. We also created a graphical depiction of the age x venture innovativeness interaction, which is provided in Figure 1. In depicting the interaction, Figure 1 also lists the predicted probabilities of achieving a successful performance (i.e., persistence = 1) for imitative and innovative ventures at high and low values of entrepreneur age (+/- 1 SD).

As exemplified in Figure 1, a nonsignificant relationship between entrepreneur age and persistence was found for those developing imitative ventures (β = -.09, p > .05, Odds Ratio = 0.92). Hypothesis 2a was thus not supported as these results suggest that the odds of achieving a successful performance in imitative ventures is not meaningfully influenced by entrepreneur age. However, a significant negative relationship between entrepreneur age and persistence was found for those developing innovative ventures (β = -.55, p < .01, Odds Ratio = 0.58). This finding supports Hypothesis 2b, and suggests that holding all other predictors constant, for each one standard deviation unit increase in entrepreneur age (given that model predictors were standardized), the variation in venture performance, controlling for other factors, decreases by 0.55 times. This is consistent with the negative effect of entrepreneur age on venture performance as hypothesized.
odds of achieving a successful performance (i.e., persistence = 1) decreases by a factor of about 1.74. Put differently, this result could also be thought of as a one standard deviation unit increase in entrepreneur age resulting in a 74% increase in the odds of an unsuccessful performance (i.e., persistence = 0). On the whole, therefore, results demonstrated mixed support for our hypotheses.

**Post-Hoc Analyses**

We conducted two post-hoc analyses. Specifically, in our first post-hoc test, we considered an alternative performance criterion to entrepreneurial persistence as a dependent variable. This provides an important test for the robustness of study findings. In our second post-hoc test, we considered whether this study’s contingency hypothesis for venture innovativeness may extend to other entrepreneur characteristics, in particular individuals’ business startup experience, industry experience, and/or education. These post-hoc tests are detailed below.

**Post-hoc Analysis #1: Sales as an Alternative Measure of Venture Performance.** As noted above, persistence provides a useful performance metric for assessing new ventures in the early stages of development given the difficulty these fledgling firms face in obtaining measurable levels of sales and/or profitability. Traditional entrepreneurial performance measures such as yearly sales, firm growth, or net profit are therefore not recommended for emerging new ventures (Davidsson & Honig, 2003; Samuelsson & Davidsson, 2009). However, it is conceivable that other less restrictive measures could be applied. We considered one such metric in our first post-hoc analysis—whether entrepreneurs generated any sales revenue from their new venture in more than 6 of the previous 12 months. More specifically, sales was measured at each time point using a dichotomous variable that assessed whether individuals experienced any level of sales in over half of the previous 12 months (1 = Achieved sales in more than 6 of the previous 12 months, 0 = Did not).

Retesting the study analyses using this measure of sales as a performance metric revealed a pattern of findings similar with the persistence metric. As shown in Table 2, the age x venture innovativeness interaction was again significant when using this sales metric as the dependent variable ($\beta = -0.09$, $p < .05$, Odds Ratio = 0.92). A graphical depiction of this interaction is displayed in Figure 2. Again, predicted probabilities for achieving a successful performance (i.e., sales = 1) are displayed at high and low values of age (+/- 1 SD).

![Figure 1. Moderating effect of venture innovativeness on the relationship between entrepreneur age and persistence.](image)
Also similar to findings for persistence, a nonsignificant relationship between entrepreneur age and sales was found for those developing imitative ventures (β = -.01, p > .05, Odds Ratio = 0.99), while a significant negative relationship between entrepreneur age and sales was found for those developing innovative ventures (β = -.25, p < .01, Odds Ratio = 0.78). An interpretation of this significant finding with respect to odds suggests that for each one standard deviation unit increase in entrepreneur age, the odds of achieving a successful performance (i.e., sales = 1) in an innovative venture decreases by a factor of about 1.28, holding all other predictors constant. In other words, a one standard deviation unit increase in entrepreneur age results in a 28% increase in the odds of an unsuccessful performance (i.e., sales = 0). These findings using sales as a performance metric confirm our earlier findings for persistence.

Post-hoc Analysis #2: Moderating Effects for Venture Innovativeness on the Relationship between Other Entrepreneur Characteristics and Venture Performance. As demonstrated in the preceding analyses, a contingency model of venture innovativeness offered a useful frame for understanding how entrepreneur age may be expected to relate to the performance of new ventures. These findings further beg the question of whether the relationship between other entrepreneur characteristics and venture performance may also be contingent on venture innovativeness. We explored this potentiality in our second post-hoc analysis. More specifically, we considered whether venture innovativeness moderated the relationship between three additional entrepreneur characteristics and venture performance: business startup experience, industry experience, and education. Each of these constructs was included as control variables in our earlier analyses.

Table 3 presents the results for post-hoc analysis #2. As shown, null results emerged for all of the interaction effects examined (i.e., venture innovativeness x business startup experience, venture innovativeness x industry experience, and venture innovativeness x education). This was furthermore the case using either performance metric (i.e., persistence or sales).

Despite these null results for other entrepreneur characteristics, however, it is important to note that the venture innovativeness x entrepreneur age interaction continued to be supported even when modeled simultaneously with these other interactions. As shown in Table 3, results confirmed our findings for Hypothesis 1 as a significant venture innovativeness x entrepreneur age interaction again emerged for persistence (β = -.20, p < .01, Odds Ratio = 0.82). In addition, results confirmed our findings for the first
New England Journal of Entrepreneurship, Vol. 18 [2015], No. 1, Art. 8

Table 3. GEE Results for the Moderating Effect of Venture Innovativeness on the Relationship between All Entrepreneur Characteristics and Venture Performance (Post-hoc Analysis #2)

<table>
<thead>
<tr>
<th>Variable</th>
<th>DV = Persistence$^a$</th>
<th>DV = Sales$^b$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control variables and main effects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advice/support network size</td>
<td>-.01</td>
<td>-.08</td>
</tr>
<tr>
<td>Other contributor network size</td>
<td>.01</td>
<td>-.05</td>
</tr>
<tr>
<td>Business startup experience</td>
<td>.30**</td>
<td>.19**</td>
</tr>
<tr>
<td>Industry experience</td>
<td>.22**</td>
<td>.10*</td>
</tr>
<tr>
<td>Education</td>
<td>.06</td>
<td>.09</td>
</tr>
<tr>
<td>Entrepreneur type$^c$</td>
<td>.03</td>
<td>-.00</td>
</tr>
<tr>
<td>Previous sales$^d$</td>
<td>.25**</td>
<td>.72**</td>
</tr>
<tr>
<td>Venture innovativeness$^e$</td>
<td>-.03</td>
<td>-.15**</td>
</tr>
<tr>
<td>Age</td>
<td>-.20**</td>
<td>-.07</td>
</tr>
<tr>
<td>Interaction effects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age x venture innovativeness</td>
<td>-.20**</td>
<td>-.10*</td>
</tr>
<tr>
<td>Business startup experience x venture innovativeness</td>
<td>.12</td>
<td>-.00</td>
</tr>
<tr>
<td>Industry experience x venture innovativeness</td>
<td>.09</td>
<td>.01</td>
</tr>
<tr>
<td>Education x venture innovativeness</td>
<td>.02</td>
<td>.04</td>
</tr>
<tr>
<td>Intercept</td>
<td>.69**</td>
<td>-.09*</td>
</tr>
</tbody>
</table>

Note: N = 2973 observations for persistence. N = 2468 observations for sales. All entries are standardized estimates.

$^a$ 1 = Devoted more than 160 hours of full-time work to the venture in the past 12 months, 0 = Did not.

$^b$ 1 = Achieved sales in more than 6 of the previous 12 months, 0 = Did not.

$^c$ 1 = Corporate entrepreneur, 0 = Independent entrepreneur.

$^d$ 1 = Had previous sales, 0 = Did not have previous sales.

$^e$ 1 = Innovative venture, 0 = Imitative venture.

* $p < .05$, ** $p < .01$.

Discussion

The question of whether older or younger entrepreneurs may be in a better position to achieve venture success continues to be a staunchly debated topic. Our goal in this study was to add a measure of clarity to this debate by adopting a contingency perspective involving the degree of innovativeness in the venture itself. Drawing on Galenson’s (2009a; 2010) theory of creativity and recent entrepreneurial research on venture innovativeness (e.g., Samuelsson & Davidsson, 2009) as a foundation, we posited that older entrepreneurs may hold an advantage in developing ventures characterized by lower levels of inherent innovativeness (i.e., ventures that may be classified as “imitative” in nature); while younger entrepreneurs may hold an advantage in developing ventures characterized by higher levels of inherent innovativeness (i.e., ventures that may be classified as “innovative” in nature).

Our results offered mixed support for these propositions. While the inherent innovativeness of a venture was found to moderate the relationship between entrepreneur age and venture performance as anticipated, an entrepreneur’s age was only found to have a direct influence on venture success for those developing innovative new ventures ($n = 319$ ventures). No relationship between entrepreneur age and venture performance was uncovered for those developing imitative new ventures ($n = 863$ ventures). These findings were moreover substantiated for two separate measures of venture performance, one of which gauged entrepreneurs’ overall persis-
tence in the venture development process, and a second which considered entrepreneurs’ progress in obtaining sales related to their venture.

In a general sense, these findings are consistent with suggestions that the relationship between an entrepreneur’s age and the performance of his or her venture may be more complex than is often accredited in popular writings (Ressi, 2011). Additionally, study findings support recent suggestions that contingency perspectives may provide a more realistic means to understand the relationship between entrepreneur age and venture performance (e.g., Wadwha, 2009; Wolverson, 2013). To assert only that older or younger entrepreneurs hold an advantage in the development of successful new ventures may be an overly simplistic viewpoint.

However, it does appear that younger entrepreneurs possess certain advantages in the development of innovative ventures in particular. As illustrated in Figure 1, entrepreneurs one standard deviation below the mean age (about 33–34 years old) were nearly 20% more likely to devote considerable time and effort toward developing their innovative new venture over the course of a year than entrepreneurs one standard deviation above the mean age (about 59–60 years old). In addition, as shown in Figure 2, the difference in the likelihood of obtaining sales in more than six months during the previous year for those developing an innovative venture was about 12% greater for younger entrepreneurs compared to older entrepreneurs. These reflect notable differences, especially when considering that entrepreneurs within high-growth industries, which are more likely to reflect innovative ventures, are becoming increasingly older on balance, with the highest rate of growth being in the 55–64 age category (Wadwha, 2009; 2011; 2013b). Reports further suggest that, at a macro level, an older demographic comprises a growing proportion of current and aspiring entrepreneurs (Fairlie, 2013; Kelley et al., 2011; Wadwha, 2013a). Findings here suggest that this growing population may face some disadvantages in achieving equivalent persistence and sales incidence levels as their younger counterparts—a belief that has been suggested at times in popular entrepreneurship literature and echoed by some venture capitalists (see Farr, 2013). These findings moreover support theoretical assertions that older individuals “become less and less willing to commit time to activities that yield returns over time,” especially if the time horizon for realizing returns is potentially long or unclear (Levesque & Minniti, 2006, p. 181). This is more likely to be the case for innovative ventures.

Null results for the relationship between entrepreneur age and venture performance in the case of imitative ventures additionally represents an important study finding. Imitative ventures by definition reflect those new ventures that largely emulate existing products and/or services currently available in one’s environment (Samuelsson & Davidsson, 2009). As such, achieving success in these types of ventures likely involves entrepreneurs’ ability to differentiate their business from similar others in some distinct way, as well as their ability to offer a superior product/service relative to competitors. Researchers have speculated that these capacities may be facilitated by such resources as access to a more developed social network of professional and community contacts and greater accumulated financial resources—both of which may be more likely to be held by older individuals (Galenson, 2010; Kelley et al., 2011; Wadwha, 2011; 2013a). Older individuals have additionally been described as better positioned to capture value from these and other resources in their strategic decision making (see Wiersema & Bantel, 1992; Amit & Schoemaker, 1993). Our results, however, suggest that these differences may be overstated, at least for the nascent entrepreneurs under examination. Indeed, in the current representative sample, younger entrepreneurs were just as likely to realize venture performance with respect to persistence and sales incidence as older entrepreneurs developing imitative ventures.

Still, especially as this null result stands somewhat at odds with arguments offered in Galenson’s (2009a, 2010) theory of creativity and other entrepreneurial theory and research, we encourage scholars to examine the relationship between entrepreneur age and venture performance more closely for imitative ventures before any firm conclusions may be drawn. One possible explanation for our null finding is that younger entrepreneurs may be gaining greater access to certain resources that may mitigate some advantages once held by older individuals. For example, data collection for the PSEDII dataset occurred between 2005–2010, a time frame that follows significant growth in entrepreneurship education across U.S. colleges and universities, as well as the growth of programs and opportunities designed to connect young entrepreneurs with more seasoned individuals (Rideout & Gray, 2013; Winkel, 2013). These programs and initiatives designed to build entrepreneurship-specific skills, such as identifying and exploiting new venture opportunities in existing markets, may ultimately contribute in putting younger entrepreneurs on more of an equal footing with older individuals who have built such skills and expertise over time. We encourage future researchers to consider this possibility.
Finally, it is interesting to note two additional findings that emerged in this study. The first concerns the null effects found for the relationship between two social capital control variables and both measures of venture performance in our research model. Most entrepreneurship research has illustrated that social capital resources may be beneficial for entrepreneurs in the venture development process and in promoting venture growth (e.g., Davidsson & Honig, 2003; Prasad et al., 2013). Bearing this in mind, one possible explanation for current study findings may be our sole focus on “structural” social capital. Specifically, our social capital measures captured only the overall size of one’s “advice/support network” and “other contributor network” respectively. Nahapiet and Ghoshal (1998) identified structural social capital as one of several dimensions of social capital; however, noting that relational and cognitive components also play a role in the value derived from one’s social capital resources. Additionally, structural aspects beyond only network size can make a difference for entrepreneurs (e.g., network diversity). Supporting this possible explanation for current study results, Reese and Aldrich (1995) also found no relationship between a size of an entrepreneur’s personal network and venture survival. We encourage future research to take a more expansive look to better understand the unique influence of entrepreneur age on venture performance beyond other social capital influences.

The second additional finding of note relates to our second post-hoc analysis, which both confirmed findings for the study hypotheses and demonstrated no significant interaction tests between venture innovativeness and three other entrepreneur characteristics. Each of these additional characteristics—business startup experience, industry experience, and education—instead held a positive main effect on venture performance across levels of venture innovativeness.

**Study Limitations**

In considering this study’s contributions toward achieving a greater understanding of how entrepreneur age may relate to venture performance, both its strengths and weaknesses must be kept in mind. First, a key strength of this study was its utilization of a representative dataset of U.S. entrepreneurs in the early stages of the venture creation process. In addition, this longitudinal dataset provided for multiple years of performance data, as well as allowed for us to control for previous venture performance. However, with these strengths also came several limitations in using the PSEDII dataset for this study. Most notably, as with any publicly available, large-scale dataset, our construction of study measures was restricted to the specific data available. For this reason, it is important that future research test the generalizability of our findings by considering alternative performance metrics, including those that are not susceptible to self-report biases, such as actual year-to-year change in revenues or overall business growth. In applying such metrics, however, differences in growth aspirations among entrepreneurs should be kept in mind (see Manolova et al., 2007).

As the PSEDII dataset is restricted to U.S. entrepreneurs, an examination of our findings in other cultural contexts is also warranted. Such tests could be conducted at the individual level similar to the current study, or could build on recent research examining country-level effects for entrepreneur age (Levesque & Minniti, 2011). We especially encourage researchers to extend our analyses to emerging economy contexts, where entrepreneurship has been cited as a significant driver of economic development (Lau et al., 2007; Manev & Manolova, 2010). Understanding how, and under what conditions, an entrepreneur’s age may relate to performance in these contexts may take on even greater importance.

Future researchers should additionally consider other conceptualizations of venture innovativeness than the imitative versus innovative classification applied in this study. While our conceptualization is aligned with previous research (e.g., Samuelsson & Davidsson, 2009), we recognize that a venture’s degree of innovativeness, in reality, is not a dichotomous criterion. New ventures and their founders may also be viewed as varying in their level of innovativeness on unique dimensions. For example, while some new ventures may be built on a radical idea, others may be distinguished as innovative based on their novel method of delivery for an existing product or service. Future research exploring how venture innovativeness may influence the relationship between entrepreneur age (and/or other founder characteristics) and venture performance may want to consider such differences in innovativeness along various dimensions. Researchers could also examine a venture’s level of innovativeness in more polarized terms, for example as being “radical” versus “nonradical” in nature.

Finally, although Galenson (2009a; 2012) stipulated that his theory of creativity is applicable to the field of entrepreneurship, it should be observed that the evidence on which his theoretical observations are built primarily originated in artistic spheres. To this end, while parallels can be drawn between artistic and entrepreneurial domains, determinants of success in each would not be expected to be explicitly identical. In the entrepreneurial context, for example, the development of a new venture may be influenced by entrepreneur characteristics such as age (Levesque & Minniti, 2006) along with other venture
characteristics (Prasad et al., 2013). However, the success of a new venture is also dependent on factors such as its marketability and positioning in a given market, among others. This caveat should be kept in mind when considering study results.

Conclusion
In this article we examined how the degree of innovativeness in an entrepreneurial venture can influence the relationship between entrepreneur age and venture performance—a relationship that has received extensive debate in the popular literature. In so doing, we offer a theory-driven perspective for understanding the moderating effect of venture innovativeness based on Galenson’s (2009a; 2010) theory of creativity and extant research on entrepreneurship. Applying a measure of venture innovativeness used by Samuells and Davidsson (2009), our results for a representative sample of 1,182 nascent entrepreneurs provided in the PSEDII dataset suggest that for those ventures classified as innovative in nature, a negative relationship between entrepreneur age and venture performance exists. However, for ventures classified as imitative in nature, no relationship between entrepreneur age and venture performance was found. It is our hope that these findings will contribute to an increased understanding of how founder characteristics such as age may contribute to the success of new ventures, as well as serve as a platform for future research.

End Notes
1. Some researchers have additionally suggested that no relationship exists between entrepreneur age and venture performance (e.g., Davidsson & Honig, 2003).

2. Most participants were asked by the interviewer about their persistence at each time point (i.e., “In the past 12 months, have you devoted more than 160 hours—four weeks of full-time work—to this business startup?”). However, a small number of individuals did not receive this question, and were assumed to have met the criterion for persistence, if they responded in the affirmative to each of three earlier questions during an interview. These questions assessed whether a venture: (1) had sales in most months during the previous year, (2) recorded a profit in most months during the previous year, and (3) paid salaries to managers as part of the venture’s monthly operating expenses (see pg. 55 of the PSEDII codebook, available at http://www.psed.isr.umich.edu/psed/data). For the current study, those individuals assumed to have met the criterion for persistence based on their responses to these three earlier questions were included in the persistence “success” group (i.e., persistence = 1). We also retested the study analyses excluding these individuals and all results were substantiated.

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Appendix

Generalized Estimating Equations
As noted in the discussion of study methodology, we used general estimating equations (GEE) to conduct the statistical analyses. Although entrepreneurship researchers have increasingly adopted this analytic strategy in recent years (e.g., Jääskeläinen et al., 2006; Hallen et al., 2014; Vanacker et al., 2011), its use remains limited compared to other more traditional quantitative methods. The purpose of this short appendix, therefore, is to provide additional detail on GEE, highlight a few key advantages and disadvantages for its use, and point researchers to other useful resources.

Developed by Liang and Zeger (1986), GEE is an extension of the generalized linear model that offers researchers a method for analyzing longitudinal data in which the dependent variable is not required to follow a normal distribution. Indeed, perhaps the single greatest advantage of GEE is that it allows for the analysis of dependent variables taking on many different distributions, including Poisson, binomial, and negative binomial (Ballinger, 2004). It is also an analytic method supported in many common statistical packages, including SAS (implemented using the GENMOD procedure), SPSS (implemented using GENLIN syntax), and STATA (implemented using the XTGEE command).

While flexible in terms of distributional assumptions, there are some limitations associated with using GEE for longitudinal research that should be kept in mind. Most notably, because GEE is a semiparametric method, there is no true likelihood function. Tests invoking traditional likelihood-based methods (e.g., likelihood ratio test), therefore, cannot be conducted (Agresti, 2010). Questions have also been raised regarding the flexibility of GEE for handling research designs in which the time points of repeated measures are not evenly spaced (Locascio & Atri, 2011), and additional cautions are discussed by Ballinger (2004).

GEE requires the researcher to specify three key pieces of information when constructing the research model: the distribution of the dependent variable, a link function, and a working correlation structure. Of particular interest for GEE models is the working correlation structure, which accounts for the within-subject correlation of the longitudinal data. Incorrectly specifying the working correlation structure can reduce the efficiency of parameter estimates, ultimately increasing the possibility that improper conclusions are drawn from the research model (see Fitzmaurice, 1995; Liang & Zeger, 1986). For this reason, several statistical and heuristic procedures have been proposed to guide researchers in choosing a working correlation structure that best resembles the underlying nature of the data (e.g., Chen & Lazar, 2012; Gosho, 2014; Hin & Wang, 2009; Pan, 2001). No single method has emerged, however, and this has led some researchers to conduct robustness tests in which GEE results are examined for consistency across different working correlation structures (e.g., Reuer et al., 2012; this study).

In sum, GEE, like any analytic method, offers researchers both advantages and disadvantages. For example, a key advantage of GEE is its flexibility for longitudinal data analysis with nonnormal dependent variables. However, a key disadvantage is that GEE cannot be used for tests that rely on traditional likelihood-based methods. Researchers also are required to make several decisions when constructing GEE models, and while some guidance exists, the most advisable choices are not always explicitly clear. Additional details, including more technical aspects of GEE, are provided by Agresti (2010), as well as Liang and Zeger (1986). We also refer interested readers to Ballinger (2004), who provides an in-depth, nontechnical review of GEE directed at organizational researchers.
About the Authors

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Out of the Building, into the Fire:
An Analysis of Cognitive Biases during Entrepreneurial Interviews

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A major source of failure for new ventures is the entrepreneurs’ misunderstanding of the product-market fit. Recently, researchers have suggested that to get a better understanding of the product-market fit, entrepreneurs should “get out of the building” and interview many customers. This approach, while advantageous, is not without drawbacks. This article presents a conceptual model that incorporates the characteristics of “getting out of the building” to conduct customer interviews, and the biases that can arise to influence the entrepreneurs’ misjudgment of the product-market fit. We provide recommendations to overcome these biases.

Keywords: biases; interview; entrepreneur; product-market fit; opportunity identification

Virtually every study of product success has confirmed the positive relationship between understanding customers’ needs and new product performance (Bharadwaj, Nevin, and Wallman, 2012). Cooper (1979) goes so far as to state that the failure to understand customer needs “spells disaster.” The relationship between business success and understanding the market is especially important for startups. Indeed, entrepreneurs often target new markets with innovative technologies and novel business ideas (Navis and Glynn, 2010). In spite of the opportunities associated with this strategy, they face two fundamental changes. First, the market spaces that they choose to enter are often “untested and incompletely understood” (Navis and Glynn, 2010; Tushman and Anderson, 1986: 444); in such markets, customers’ needs and preferences are often characteristically ambiguous (Navis and Glynn, 2010). Second, entrepreneurs in general lack knowledge about the markets for their products and often are unable to produce outputs that satisfy customer needs, thereby having a high possibility of dissolution (Stuart, Ha, and Hybels, 1999). As a result, developing reliable means to understand the product-market fit becomes the forefront in the strategy of entrepreneurial firms (Blank, 2013).

Yet, venture founders often fail to understand the market correctly, resulting in the demise of their startups (Bhide, 1994; Gruner and Homburg, 2000). Some (e.g., Bhide, 1994; Blank, 2013; Sykes and Dunham, 1995) suggest that this deficiency stems from how entrepreneurs investigate ideas. Traditionally, entrepreneurs engage in extensive up-front planning, in which they describe the target market, develop a comprehensive distribution strategy, and lay out five years of financial projections. They tend to rely primarily on secondary data and/or survey responses, operating in a “stealth mode” by keeping their ideas carefully hidden (Blank, 2013). These techniques, however, do not generate a deep understanding of customer needs (Daghfous, Ashill, and Rod, 2013) and, at best, serve as rough surrogates for personal interactions with the customers (Gorry and Westbrook, 2011).

In response, authors (e.g., Blank, 2013; Ries, 2011) have introduced a host of new methodologies whereby managers directly hear the voice of the customer (VOC). VOC refers to “a complete set of customer wants and needs, expressed in the customer’s own language, organized the way the customer thinks about, uses, and interacts with the product . . . and prioritized by the customer in terms of both importance and performance . . . [in relation to] existing alternatives” (Bharadwaj et al., 2012; Katz, 2002: 170). An effective way to capture VOC is to interview customers (Bharadwaj et al., 2012). Such interviews are particularly useful for entrepreneurs because they focus on customer needs and problems, occur early and often, and take place in the customers’ natural environments. Indeed, leading institutions of higher education, such as Babson, Harvard, Stanford, Darden, University of Michigan, and dozens more now stress the technique (Blank, 2013). Authors of bestselling entrepreneurship books suggest the VOC can be captured by getting “out of the building” to talk to potential purchasers (Blank, 2013; Ries, 2011). The process centers on...
gathering real, actionable, and timely data, and often generates more than 100 interviews within a few months (Blank, 2013). Indeed, more than 100 entrepreneurship groups in dozens of countries, often comprised of thousands of members, have begun stressing the importance of the interview. These interviews, however, can potentially generate major judgment errors (e.g., Adams and Hublikar, 2010; Bharadwaj et al., 2012; Cooper, Edgett, and Kleinschmidt, 2004; Cooper and Dreher, 2010) and such errors are compounded if the interviews are conducted by entrepreneurs. Indeed, research has shown that entrepreneurs tend to have greater cognitive biases than nonentrepreneurs (Busenitz and Barney, 1997; Keh, Der Foo, and Boon, 2002; Simon and Houghton, 1999). For example, Busenitz and Barney (1997) found entrepreneurs have a higher degree of overconfidence than managers do. Krueger and Brazeal (1994) provided evidence that entrepreneurs have higher illusion of control and tend to overlook real obstacles. These biases frequently arise in assessing markets (Mattei and Hellebusch 2006), deciding to launch a venture (Simon and Houghton, 1999; Simon, Houghton, and Aquino, 2000), and identifying opportunities (Keh et al., 2002), the exact situations startups face. The judgment errors associated with these cognitive biases may lead to inaccurate understanding of product-market fit in face-to-face interviews, resulting in less rational, less comprehensive decision making.

In this article, we offer a theoretical framework about the antecedents of potential cognitive biases that may arise in face-to-face interviews and the role it plays in the judgment of product-market fit. Product-market fit is defined as being in a good market with a product that can satisfy that market (Andreessen, 2007), and is not a typical outcome variable examined in the entrepreneurial cognition research. However, recent lean startup movement has emphasized the importance of product-market fit in the success of a new startup (Blank, 2013). Andreessen (2007) suggests that all successful startups are the ones that have reached product-market fit, and getting to product-market fit should be the ultimate goal of a startup. Blank (2013) also echoes this sentiment in his lean startup model. He argues that entrepreneurs should first engage in customer discovery interviews to isolate customer needs and then conduct customer validation interviews to determine that the proposed product will meet those needs. He further explains that the goal of both of these steps is to achieve better product-market fit. Product-market fit, which is not a typical outcome variable in entrepreneurial cognitive research, should be studied, and may provide a valuable contribution to the entrepreneurial cognitive research literature. In fact, not achieving product-market fit may be the primary reason why new ventures have poor performance and even fail (Blank, 2013).

Our theoretical model, drawing on the information processing theory (Pech and Cameron, 2006), examines how the way entrepreneurs gather information may influence the cognitive biases arising in face-to-face interviews. Indeed, while cognitive biases may exist in different forms, their presence, magnitude, and consequences may be a function of the way entrepreneurs obtain information (Simon and Houghton, 2002; Zacharakis and Shepherd, 2001). Given this, many scholars have called for research focusing on how best to conduct the interview process (e.g., Adams and Hublikar, 2010; Cooper et al., 2004; Gorry and Westbrook, 2011; Harmancioglu, Grinstein, and Goldman, 2010).

Our article contributes to the literature and managerial practice by answering these calls. First, we strive to identify which biases, including ones not previously discussed in the entrepreneurship literature, are likely to be exhibited by entrepreneurs during interviews, the underlying theoretical mechanisms, and the strategies to manage these biases. Second, we believe that the article also contributes to the literature on entrepreneurial cognition. While several papers have suggested that entrepreneurial environments, in general, lead entrepreneurs to exhibit cognitive biases (Busenitz and Barney, 1997), it is rare that a research on entrepreneurship takes a finer grain approach by suggesting specific characteristics that are associated with specific biases. Thirdly, the paper makes a contribution to theory by relating biases to an important and growing entrepreneurial practice, namely interviewing large numbers of individuals. Finally, the article’s propositions contribute to the emerging research on VOC.

This article proceeds as follows: we first offer an overview of the theory that grounds our research model. We then introduce our propositions based on our theoretical framework, followed by a few recommendations to tackle the challenges associated with interviews. We conclude our article by revisiting the key takeaways of this research and directions for future research.

Theoretical Framework

Information Processing Theory and Diagnostic Cues

We use information processing theory, the dominant paradigm within cognitive psychology (Pech and Cameron, 2006), to explore the method by which entrepreneurs gather information that may influence
the cognitive biases arising in face-to-face interviews. The fundamental assumption underlying the theory is that individuals have limited ability to process information. Examining information processing as it relates to entrepreneurship is particularly relevant because it helps explain how individuals identify and evaluate opportunities (Pech and Cameron, 2006) and is one of the major factors that differentiate entrepreneurs from managers (Kaish and Gilad, 1991). As explained by Mitchell et al. (2004), examining how information processing relates to these issues is crucial to advancing the entrepreneurship field. This has led Singh and Ronch (2011) to assert that understanding how entrepreneurs process information may help to unlock important aspects of new venture creation.

An inherent component of information processing theory relates to the processing of diagnostic cues in order to make decisions (Simon and Houghton, 2003). Diagnostic cues are indicators that are present, given one outcome, and absent given the alternative outcome (Juslin, 1994). For example, an entrepreneur may grow more convinced that he or she should launch a certain product if potential customers state they would buy the product (the diagnostic cue). In other words, individuals start with initial beliefs, but then update those beliefs based on cues they receive from the environment (Paul and Lancaster, 2007).

But, individuals do not always process cues objectively. Instead the cues are “filtered” by the decision environment, which includes factors such as type of cues, amount of cues, and the complexity of the cues. These conditions affect whether cues are noticed, how they are interpreted, and the extent to which they are incorporated into one’s judgments (Felício, Caldeirinha, and Rodrigues, 2012). As such, decision environment has a major influence on the effectiveness and efficiency of decision making (Salmon, 2013).

While the role of decision environment in processing cues could actually yield superior results (Busenitz and Barney, 1997), this is often not the case (Simon and Houghton, 2002). Decision environment can lead individuals to utilize cues incorrectly in three ways. First, it may lead to using an irrelevant cue. Individuals may treat cues that are not relevant to the decision as though they are relevant (Juslin, 1994). In this instance, entrepreneurs may act on cues that they believe are associated with success, but, which in actuality, are not (Simon and Houghton, 2002). Second, entrepreneurs may place too much weight on relevant cues (Pech and Cameron, 2006). To clarify this concept, we provide the following hypothetical example. In certain decision environments, an entrepreneur might conclude that his or her product idea can be successful because he or she interviewed a hundred people (the population) and believes that the majority of them indicated they would use the product (the cue). However, less than 10 percent of the interviewees may have made such a statement. A third and final diagnostic error could occur when individuals underestimate the diagnostic value of a given cue (Nisbett, Zukier, and Lemley, 1981). They may believe that few individuals indicated they would use their product, when in reality many did.

Importantly, extensive literature has indicated that this misuse of cues can lead individuals to employ specific cognitive biases (Åstebro and Elhedhli, 2006; Busenitz and Barney, 1997). For example (Simon et al., 2000), when faced with far more cues than they can manage, individuals may exhibit the availability bias by only using those they can most easily recall (Pech and Cameron, 2006). Similarly, when one encounters two contradictory cues, such as a qualitative assertion by one person versus quantitative statistical evidence summarizing findings from many people, he or she is more likely to use the qualitative cue over the quantitative one (Keh et al., 2002).

To summarize, the paragraph above suggests that the decision environment may lead to the misapplication of cues, which in turn, may lead to cognitive biases. Following this logic, we will develop eight propositions that examine how the characteristic associated with interviewing (the decision environment) may help predict which biases an entrepreneur may exhibit, and what might be done to minimize the reliance on cognitive biases.

**Information Search Characteristics and Biases**

The philosophy of “getting out of the building” and interviewing potential customers opens up the opportunity for entrepreneurs to obtain informational cues to enrich their decision environment. However, the way these cues are processed represents an opportunity and a challenge. Indeed, conducting early interviews may become the dominant method for starting ventures to understand their customers (Blank, 2013). Such interviews may have a greater impact on product success than any other single product introduction practice (Adams and Hublikar, 2010), and are one of the strongest factors that separate the best and worst performers (Cooper et al., 2004). In particular, the interviewer obtains concrete information that is rich in contextual detail, which allows him or her to assess better the product-market fit (Kardes, Cronley, and Kim, 2006; Trope and Liberman, 2003). More specifically, the rich, bi-
directional communication facilitates the transfer of complex ideas (Daghfous et al., 2013), which can lead to promising startups (Peters and Brush, 1996). While startups can accumulate rich, factual, actionable, and timely data through interviews, such an enriched decision environment may be associated with a variety of cues that increases the complexity of decision making. Under such circumstances, cognitive biases are likely to arise as "filtering" mechanisms (Busenitz and Barney, 1997; Forbes 2005). The cognitive biases may lead the entrepreneur to make errors in judgment (Barnes, 1984; Simon and Houghton, 2002; Simon et al., 2000). The biases may occur because of how the interviews are executed, and also because of the characteristics of the interviewing process. Figure 1 represents a model of the entrepreneurial interviewing process, and the biases that may result from the process. As the model illustrates, information search characteristics inherent in the interviewing process may lead to biases and may result in erroneous judgments. The four search characteristics are (1) interviews that are conducted face-to-face; (2) interviews that are conducted sequentially; (3) interviews where large numbers of people are interviewed; and (4) interviews that are conducted by entrepreneurs. In the following section, we develop propositions related to each of these search characteristics.

**Proposition Development**

**Face-to-Face Interviews**

Entrepreneurs are encouraged to “get of the building” and interview customers directly. Face-to-face interviews provide concrete information versus an abstract representation from reports and secondary data (Kardes et al., 2006). The concrete and firsthand information allows the entrepreneur to garner more accurate and detailed information that may be beneficial in making a judgment of product-market fit. For instance, the entrepreneur may read a survey report suggesting that customers like the potential product. However, by interviewing customers face-to-face, the entrepreneur can better determine the product-market fit because he or she not only hears what is said but how it is said (e.g., the extent to which the customer was enthusiastic and animated). Thus, the face-to-face interview allows for not only cognitive responses, but affective and behavioral responses as well (Breckler, 1984). Therefore, conducting face-to-face interviews may lead to biases that may result in suboptimal judgments. The three potential biases are the (1) saliency effect, (2) vividness effect, and (3) reasoning by analogy.
**Saliency Effect.** In conducting the face-to-face interview, the entrepreneur is collecting information to make a judgment regarding the product-market fit. Certain interviews may stand out because a particular interviewee may be very different from others. For example, the interviewee may be attractive, have a tattooed face, be humorous, or have a handicap that distinguishes him or her from others. In such case, the entrepreneur believes the cue provides great insight, even though it does not. More specifically, the information from the interview may become more salient and hence more readily accessible from memory. Although the information may not have greater probative value, the accessible information may be more likely to be used to form judgments (Herr, Kardes and Kim, 1991). Thus:

**Proposition 1:** The more salient the characteristics of interviewees, the higher the likelihood that the entrepreneur will form inaccurate judgments about the product-market fit.

**Vividness Effect.** Saliency effect occurs because of the contrast with other interviewees, but vivid information is context free (Nisbett and Ross, 1980). Vividness effect may occur because the information may be emotionally interesting or image provoking. For example, in the interview process, the interviewee may provide an emotional or interesting anecdote. Given that it is anecdotal evidence, the information may be specific to that one person and may not be informative. However, because that information is interesting or evokes emotion, it is more accessible from memory and will have a greater effect on the entrepreneur’s judgments (Herr et al., 1991; Kisielius and Sternthal, 1984). In this way, the diagnostic cues stemming from this interview may influence judgment to a disproportional amount. Thus:

**Proposition 2:** The more emotional or interesting the interviewees, the higher the likelihood that the entrepreneur will form inaccurate judgments about the product-market fit.

**Reasoning by Analogy.** Whereas the vividness effects may lead an entrepreneur to give too much weight to a valid cue, if an entrepreneur reasons by analogy, he or she may give weight to a cue that is not valid. In forming judgments, entrepreneurs tend to use reasoning by analogy (Simon and Houghton 2002; Stumpf and Dunbar, 1991). Reasoning by analogy is the process whereby an entrepreneur uses a recognizable cue and makes simple analogies to get a better sense of the interview information. This can be especially true in a face-to-face interview where there are many vivid and salient cues that can be used to generate simple analogies. However, face-to-face interviews may also lead to greater errors in reasoning by analogy because the vivid and salient cues may be inappropriate and not directly related in this context (Gilovich, 1981; Haley and Stumpf, 1989). Analogies are often dramatic, suggesting they will be readily recalled. However, almost by definition, they are overly simplistic and apply to a slightly different context. For example, a potential customer may mention he or she was an early adopter of an I-phone because it had a nice appearance. The entrepreneur may become unduly encouraged by this cue believing his or her situation is analogous because he or she is also offering a product that looks nice. However, the success of the I-phone may have stemmed from many other factors, such as Apple’s reputation for innovation or the company’s large investment in marketing. Thus:

**Proposition 3:** In face-to-face interviews, inappropriate cues may be used by the entrepreneur in reasoning by analogy, and information from interviews involving analogy may be disproportionally weighted to form inaccurate judgments about the product-market fit.

**Interviews Conducted Sequentially.** In interviewing customers, the entrepreneur usually conducts the interviews individually to generate fruitful insights into customer needs and problems (Kahn, 1990; Roller, 1987). This allows the entrepreneur to assess better the product-market fit. However, conducting individual interviews means that the entrepreneur must conduct the interviews sequentially. The sequential interview process may lead to biases that result in suboptimal judgments and wrong decisions. The two potential biases are (1) the primacy and recency effect and (2) contrast effect.

**Primacy and Recency Effect.** The sequential interview process means that the entrepreneur interviews customers in order, and studies have shown that order has an effect on judgment (e.g., Anderson, 1965; Hovland, 1957; Miller and Campbell, 1959). The order effect has been labeled the primacy and recency effect. The primacy and recency effect occurs because the initial and the most recent information have the greatest effect on judgment since they are easier to remember (Miller and Campbelt, 1959). This means that cues contained in the earlier and later interviews conducted by the entrepreneur will have a greater effect on the evaluation of the
Contrast Effect. The sequential interview process may also lead to the contrast effect. Judgments are not made in isolation but in relation to a context, and contrast effect occurs when judgments are shifted away from the contextual reference point (Kenrick and Gutierres, 1980; Brickman, Coates, and Janoff-Bulman, 1978). For example, 50 degrees Fahrenheit in February feels warm, while in August it feels cold. Thus, the context can affect peoples’ judgment. In the situation of the entrepreneur conducting a sequential interview, an interviewee may be very negative about the product while others are mildly positive. The entrepreneur, by focusing on the very negative evaluation, or cue, and using it as the reference point, may perceive the mildly positive evaluation as extremely positive. This suggests that the entrepreneur’s interpretation of the cue may not always be accurate. More specifically, the overestimation of the mildly positive evaluation may lead the entrepreneur to form an inaccurate assessment of a product-market fit. Thus:

Proposition 5: In interviewing customers sequentially, an extreme interview may be used as a reference point and influence the entrepreneur’s perception of other interviews, leading to an inaccurate assessment of the product-market fit.

Interviewing Large Numbers of Customers
Proponents of interviewing (e.g., Blank, 2013) suggest speaking with a large number of customers, so the entrepreneur can obtain a substantial amount of information and increase the accuracy of the information. Although interviewing a large number of customers is a good idea, it leads to unwanted consequences if the entrepreneur is not attentive. It may result in (1) overconfidence and (2) dilution effect.

Overconfidence. Accuracy of information can be assumed if many customers provide the same information. It allows for the possibility of triangulation, convergence, and overall corroboration in determining product-market decisions. However, if the interviewing procedure results in interviews of customers that are associated (e.g., the interview takes place in the office of one company), the entrepreneur may have redundant information. The redundancy of information means the information is correlated. The consequence of the correlated information is that the entrepreneur, in reality, is not receiving new independent information, and the accuracy of the information may be limited. In other words, the entrepreneur may treat two cues as though each has distinct diagnostic value when they do not. This may lead to overconfidence.

Overconfidence is the overestimation of the certainty of information (Simon and Houghton, 2003). Thus, overconfidence is the degree of confidence in relation to the accuracy of the information, and may lead to errors in judgment (Hayward, Shepherd, and Griffin, 2006). If the interviews are from customers who are associated, the redundant information increases the certainty but not the accuracy of the information (Oskamp, 1965). In this case, the entrepreneur becomes overconfident, and judgments about product-market fit may be incorrect. Thus:

Proposition 6: Large numbers of interviews targeting customers that are related may introduce redundant information, leading to the entrepreneur’s overconfidence, thereby resulting in the entrepreneur’s inaccurate assessment of the product-market fit.

Dilution Effect. The goal of interviewing customers is to acquire relevant (i.e., diagnostic) information to assess product-market fit. However, not all information is the same in diagnostic value (Herr et al., 1991; Kardes, Kim, and Lim, 1994). Although diagnostic information is critical in forming judgments, nondiagnostic/irrelevant information is useless and should not be used.

When conducting large numbers of interviews, the entrepreneur is collecting large amounts of information. Some information may be diagnostic and some may not. The use of diagnostic information results in an accurate judgment about the product-market fit. However, when faced with large amounts of information, the entrepreneur may try to use all information to make the judgment. However, the mere presence of nondiagnostic information will reduce the effect of the diagnostic information (Nisbett et al., 1981). For example, hypothetically in the interviews, the entrepreneur discovered that, on average, older customers found the product more attractive. The entrepreneur also found that people who liked the product slept on average eight hours a day, and liked to watch the television program Swamp People. The information about how much they sleep and what show they watch may be irrelevant,
and if so, should have no bearing on the product-market judgment. However, the entrepreneur may try to overprocess all the information and the effect of the diagnostic information (older customer) may receive less weight in the product-market fit judgment. In other words, valid cues may be “lost.” Thus:

Proposition 7: Conducting a large number of interviews may lead to nondiagnostic information, which in turn, may reduce the effect of diagnostic information, resulting in an inaccurate assessment of product-market fit.

**Interviews Conducted by Entrepreneur**

An advantage of having entrepreneurs conduct the interviews is that they get firsthand information that is not filtered. The information is not based on the assumptions, perceptions, or guesses of others. However, being personally involved may also have a negative ramification, giving rise to suboptimal judgments due to biased processing. Biased processing, in this case, refers to the tendency to view information positively and ignore disconfirming evidence.

**Biased processing.** Biased processing deals with what and how information is processed and interpreted to form a judgment. The entrepreneur exploring a startup opportunity is likely to overestimate its strengths (Palich and Bagby, 1995), underestimate its weaknesses (Palich and Bagby, 1995), and perceive little risk (Simon et al., 2000). More problematic is the especially strong tendency of entrepreneurs to fail to adjust their beliefs based on feedback (Åstebro, Jeffrey, and Adomdza, 2007; Parker, 2006). This suggests that entrepreneurs may emphasize interview information that is consistent with their initial optimistic conclusions, while ignoring information that is inconsistent with them (Posavac, Kardes, and Brakus, 2010; Lee, Acito, and Day, 1987; Lord, Ross, and Lepper 1979; Sambonmatsu, Posavac, Kardes, and Mantel, 1998). For example, the entrepreneur may believe that a certain market fits well with the product. By holding this belief, he or she will only look for interview information that will support that belief. Furthermore, interview information that provides weak support for that belief may be interpreted as strong support. The entrepreneur becomes confident, and may conclude that he or she was right all along in that the product is a good fit for that market.

The above discussion suggests that entrepreneurs will make several errors related to processing cues. They might notice a disproportionately large number of positive cues and a disproportionately small number of negative cues. Furthermore, entrepreneurs are likely to misinterpret negative or neutral cues as positive. Thus:

Proposition 8: By personally conducting interviews, entrepreneurs may process and interpret interview information that supports their personal beliefs, resulting in an inaccurate assessment of the product-market fit.

**Discussion**

The approach of “get out of the building and interview real customers” constitutes sound advice with many positive advantages. The entrepreneur can acquire real, actionable, and timely data. However, it is also not without problems. The interviewing process may lead to biases that adversely influence the quality of a judgment. If the entrepreneur is not cognizant of these biases when interviewing customers, bad judgments may transpire and lead to wrong decisions. Thus, entrepreneurs should follow certain procedures in the interviewing process to reduce biases. Especially, entrepreneurs are more susceptible to cognitive biases than others (Busenitz and Barney, 1997; Forbes 2005) and therefore, the interviews conducted by them may be particularly prone to certain biases. They can, however, reduce these by following a few recommendations (Table 1).

**Table 1. Cognitive Biases and Recommendations**

<table>
<thead>
<tr>
<th>Search Characteristics</th>
<th>Biases</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conducted Face-to-Face</td>
<td>Salience Effect</td>
<td>Minimize impact of irrelevant information; weigh equally the information provided by interviewees; avoid judgment based on appearances; audio-tape interviews</td>
</tr>
<tr>
<td></td>
<td>Vividness Effect</td>
<td></td>
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<tr>
<td></td>
<td>Reasoning by Analogy</td>
<td></td>
</tr>
<tr>
<td>Conducted Sequentially</td>
<td>Primary and Recency Effect</td>
<td>Review interviews in random order</td>
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<tr>
<td></td>
<td>Contrast Effect</td>
<td></td>
</tr>
<tr>
<td>Large Numbers of People</td>
<td>Overconfidence</td>
<td>Interviews are from different people who are not associated; review audio-tape interviews</td>
</tr>
<tr>
<td></td>
<td>Dilution Effect</td>
<td></td>
</tr>
<tr>
<td>Entrepreneur Conducts</td>
<td>Biased Processing</td>
<td>Understand the interview is to explore, not to validate</td>
</tr>
</tbody>
</table>
Judgment errors might occur due to the saliency or vividness effects, and/or the tendency to make irrelevant associations. Therefore, it is critical that the entrepreneur should minimize the attention paid to irrelevant information. Information provided by interviewees who demonstrate higher levels of saliency or vividness should be given the same weight as the information provided by other interviewees, and the entrepreneur should also avoid judging the quality of the interviewees’ opinions based on their appearances. One effective tool to accomplish this is audio-taping the interviews. Furthermore, the entrepreneur should review the interviews in random order to reduce the recency and contrast biases. Because these biases are caused by the order in which the entrepreneur conducts interviews, randomization can minimize memory issues.

The entrepreneur should also make sure that interviews are from different customers who are not associated. If related customers provide the same information, the information may be redundant. Research on the knowledge-based view indicates that knowledge redundancy undermines the chance to incorporate diverse perspectives and reduces the likelihood of creating radical innovation (Makri, Hitt, and Lane, 2010). Extending this idea to interviews about product-market fit, one may expect that interviews conducted in a homogeneous customer group might be less valuable because similar information might be repeatedly reported. Conclusions about the product-market fit could sometimes be misleading if the product is targeted to a broader range of customers. By contrast, if the entrepreneur involves diverse groups of customers in the interviews, he or she will have the opportunity to see different customer needs and incorporate different opinions about the product-market fit. The interviews may therefore generate more insightful discoveries and may be more easily generalized.

Bringing multiple individuals into the decision making, and using processes such as devil’s advocacy, may be especially effective (Schweiger, Sandberg, and Ragan, 1986). Devil’s advocacy occurs when someone takes a position, even if he or she does not believe it, that opposes someone else’s conclusion. Those advocating the approach believe that the subsequent debate will generate better insight. Also, Winkler and Poses (1993) suggested that individuals may limit their own biases by writing down all the reasons supporting their prediction and all the reasons disconfirming it.

Finally, the entrepreneur must keep reminding himself that the goal of the interview is to explore, not validate. The process of validation, in nature, is often confirmatory, rather than exploratory; that is, when an entrepreneur focuses on validation, he or she often tries to seek out information indicating a link that is believed to exist, rather than to explore the unknown. Thus, if an interview is geared toward validation, the entrepreneur typically has already established causal reasoning about the product-market fit. This could lead, consciously or subconsciously, to focusing on information that confirms the initial hypothesis, and ignoring information that refutes it. This selective inclusion and exclusion of information may constrain the entrepreneur’s opportunity to incorporate new insights, thus limiting the discovery power of the interview. Indeed, entrepreneurship research has highlighted that new ventures have a competitive advantage because they have less inertia, more innovative ideas, and a greater ability to see opportunities (Simon and Houghton, 2002). As a result, the entrepreneur must always keep an open mind in the interview to maximize knowledge acquisition. One particularly effective technique may be to focus initially only on objectively observing customer problems, and only afterwards, trying to solve them by developing a product or service (Blank, 2013).

Limitations and Conclusions
We acknowledge a limitation of our research. We have not parceled out all the possible nuances of the complex web of relationships related to characteristics of decision-making contexts and cognitive biases. This would be particularly difficult given that biases, while distinct, are often closely related to subtle differences in mechanisms, which may lead to exhibition of one bias versus another (Hogarth, 1987). As Whetten’s (1989) noted, “[I t is] unfair to expect that theorist be sensitive to all possible boundary constraints … in the absence of experimental evidence, we must be realistic regarding the extent of a theorist foreknowledge.” Given the relatively new research attention on the intersection of interviewing, entrepreneurship, and product-market fit, we believe that this investigation may serve as a valuable first step toward unraveling all the nuances of the relationships. We fully recognize, however, that this article is not an ending point, but hope it provides a valuable springboard for those who follow.

There are several directions for future research related to this article that could advance the field. First, scholars should empirically test the paper’s propositions. Second, exploring whether the assertions in this article apply equally to entrepreneurs and managers will increase our understanding of the article’s boundary constraints. Finally, scholars may want to uncover the extent to which one of the proposed relationships is stronger than another.
In conclusion, the current investigation highlights the importance of “getting out of the building” in the interview process, and acknowledges the potential cognitive issues associated with adopting this approach. While biases are difficult to eliminate, we believe that the suggested remedy techniques can, to some extent, reduce their effects in the entrepreneurial process.

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hile entrepreneurship may be driven by personal interests and lifestyle choices, entrepreneurial actions are not only economically driven opportunity-searching processes but also enactments of social transformation that may or may not lead to socioeconomic benefits. We advance that exploring these entrepreneurial processes can inform a theory of the firm that may explain how socioeconomic processes shape the socioeconomic environment of communities while serving individuals. This article discusses several understandings of the firm, as theorized in extant literature. Guided by these different conceptualizations, we present a case study of an artist and artisan cluster in Western Massachusetts to demonstrate various understandings of entrepreneurial processes. By way of conclusion, we develop the idea of the firm as a geographically embedded relational understanding aiding entrepreneurs to achieve personal goals while coconstructing their local environment.

By way of conclusion, we explain the firm as a geographically embedded network of temporal (but recurrent) processes aiding entrepreneurs to achieve personal goals while (un)purposefully coconstructing their local socioeconomic environment.

There is a new and emerging understanding of the firm rooted in the field of New Economic Geography. This perspective is the outcome of a progressive understanding that seeks to link and explain simultaneously the micro and macro level of organizational analysis. At the macro level, it explores the relationships across firms and the firm as an organization. At the micro level, it describes the dynamics of individuals within firms and across firms. As such, it builds on earlier ideas of the firm and its processes, while expanding on the understandings of business and business activities. This conceptualization, besides taking into account the firm’s geographical location and the role of individuals, suggests that socioeconomic relationships among organizations and between organizations and their environment are both relational (Bathelt & Glückler, 2003; Yeung, 2005) and processual in nature (Wooldridge, Calás, & Osorio, 2005). Accordingly, it advances two interrelated ideas. First, it suggests that the socioeconomic environment where individuals enact organizations’ processes is simultaneously the outcome and the framework of these processes. Second, it proposes that organizations and their environment are open socioeconomic processes linked to, and influenced by, the geographical space where they take place.

While work in economic geography uses this theoretical lens to focus on understanding the spatial distribution of organizations (and individuals) as socioeconomic processes within regions (Bathelt & Glückler, 2003), we explore its potential to inform a processual theory of the firm for entrepreneurs and their enactment of the firm and its environment. To this end, we use the so-called business environment known as the cluster as an exemplar for several reasons. First, the cluster consists of a large concentration of entrepreneurs, entrepreneurial processes, and firms. Second, the cluster has been conceptualized as

Keywords: theory of the firm; economic development; entrepreneurship theory; clusters; sustainability
an organizational phenomenon that links the micro and macro levels of analysis. And, finally, the cluster has been defined as an above-average geographical concentration of interrelated firms affecting local conditions by fostering local economic wealth and an improved quality of life for neighboring stakeholders (Marshall, 1890; McDonald & Belussi, 2002).

As such, our empirical work examines an artist and artisan cluster in Western Massachusetts to highlight how epistemological premises of the theory of the firm may frame understanding of the role of entrepreneurs as part of local dynamics, explore the link between firms and their environment (i.e., physical, social, economic), and frame the perceptions of the relationships among firms.

As a point of entrance, we use Calás, Smircich, and Bourne (2009) and Steyaert and Hjorth’s (2006) metathoretical perspective to frame entrepreneurship as a process of social change. In addition, we draw from Taylor and Asheim’s (2001) classification of the theories of the firm, McDonald and Belussi’s (2002) review on clusters, and Smircich and Stubbart’s (1985) work on the interpretation of the environment. Accordingly, we discuss the role of the entrepreneur under different theoretical representations of the firm in extant literature. This initial discussion stresses two underlying and interrelated premises. First, the role of entrepreneurs is to find the best position for their purposes within the environment. And second, entrepreneurial ventures and their environment are currently posed as two independent phenomena. Following this analysis on entrepreneurship across different contextualizations of the firm, we present and discuss a new relational understanding of the firm along with the new role of the entrepreneur. As such, our article advances that entrepreneurial enactment of the environment defines the entrepreneurial venture and vice versa.

The Entrepreneur, the Firm, and the Environment
The success stories of entrepreneurs are explicit reminders that organizations do not act; rather, it is people who enact organizations. Thus, what people do on behalf of the organization and/or enact as an organization is framed by what individuals conceive as the organization and its environment (Smircich & Stubbart, 1985). In a broad sense, these enacted understandings can be divided into two main camps: the rationalistic perspective, which presents both the firm and its environment as an objective economic reality, and the socioeconomic perspective, which incorporates individuals as social-beings (Taylor & Asheim, 2001). In the next section we discuss these two perspectives to later advance the relational view, an alternative framework that presents the firm as a geographically embedded relational understanding aiding entrepreneurs to achieve personal goals (economic and noneconomic) while coconstructing their local environment.

Rationalistic Perspective
The rationalistic or economic perspective assumes both the organization and its environment—including entrepreneurial opportunities—to be two independent and objective economic realities. Hence, it is presumed that both can be either observed or perceived by the entrepreneur. Within this perspective, we can assume the entrepreneur to be primarily concerned with economic efficiencies as the determinant of the fitness and survival of the firm (Taylor & Asheim, 2001). Thus, entrepreneurs, it could be argued, seek to take advantage of geographical clusters of interlinked production organizations as the ideal production system (McDonald & Belussi, 2002). Three major categories—all of them portraying the firm as an abstract production function—can be identified within this perspective: (1) neoclassical economics, (2) behavioral economics, and (3) structuralism.

Neoclassical Economics. In neoclassical economics, the firm is an economic function that represents production (Coase, 1937). The space in which entrepreneurs may act is explained as the economic structure where firms interact with other firms (i.e., the market or entrepreneurial space). An ideal market is described by an above-average geographical cluster of interlinked production functions (i.e., firms) where entrepreneurs may only succeed if they follow rational and objective decisions about resource allocation (e.g., Hill & Brennan, 2000). A fundamental element to this argument is Weber’s (1929) location theory, which considers situating firms (and entrepreneurial efforts) in close geographical proximity as motivated by entrepreneurs’ desire to achieve economic efficiencies. These choices are informed by entrepreneurs’ objective observations of the environment and driven by the strategic need to address the transportation cost of inputs and outputs. Furthermore, the clustering of business in proximity to human settlements is explained as both the firms’ (entrepreneurs) need for labor and the workers’ need for wages.

Evolving from earlier conceptualizations of the firm as a production function, the transaction cost (TC) approach was developed to explain the boundaries of the firm, its internal dynamics, and the relationships among firms (i.e., market vs. hierarchies’ dilemma) (Williamson, 1971, 1975). TC served to show how decisions available to the entrepreneur...
simultaneously define the firm as a production function and set the existence of a market as an economic externality to the firm (entrepreneurial processes). These decisions are limited to a choice between controlling (e.g., to make) and not controlling (e.g., to buy) the production process, thus defining the presence and nature of the market as part of the entrepreneurial process.

Firms and markets can only exist under economic premises favoring buying over making choices (Coase, 1937). Any other scenario discouraging the preference of markets (e.g., buy) over hierarchies (e.g., make) not only pushes firms and markets out of theoretical existence but also denies the role of entrepreneurs, as it takes away choice (Williamson, 1971, 1975). Entrepreneurs within the cluster rely on its existence to survive, in as much as the cluster requires firms to exist. The neoclassical description of these dynamics assumes the actions of entrepreneurs to be a response to aseptic economic externalities rather than an interactive progression among parties immersed in a commonly shared, ever-changing, socioeconomic environment. This conceptualization ignores the “processual” nature of the transactions (Hodgson, 1988). Likewise, it disregards the fact that entrepreneurs (firms) within clusters may negotiate and establish long-term relationships based on trust and reciprocity (Dicken & Malmberg, 2001; Dicken & Thrift, 1992; Grabher, 1993).

**Behavioral Economics.** As a result of a practical distinction between rational choice and actual decision-making by individuals, an alternative behavioral conceptualization of the firm (March & Simon, 1958) and its environment was developed (Higgins & Savoie, 1995). This new approach replaces the rational decision-making assumptions based on perfect knowledge with satisficing choices involving imperfect information and uncertainty. In this context, it is acknowledged that entrepreneurs do not objectively observe the environment but perceive it with their own flawed views (Smircich & Stubbart, 1985). This notion fosters a new school of thought, behavioral economics, which is defined by bounded rationality and opportunistic behavior assumptions (Williamson, 1985).

This perspective set the ground for a new theory of the firm, and a new understanding of entrepreneurship, based on institutional adaptation and change (North, 1991). It rejects the solely economic understanding of firms and relationships among firms, as it acknowledges the role of individuals as performers of the firm’s decision-making process, thereby asserting the role of entrepreneurs. Although the behavioral school mirrors the neoclassical suppositions about the firm as a production function, the former sets itself apart by considering that production decisions are not rational and perfect but satisficing, as they are made by individuals.

Cyert and March (1963) presented perhaps the best argument on the behavioral conceptualizations of the firm that serves to explain how decisions available to entrepreneurs may lead to clusters. Their argument proposes that, because of bounded rationality and the need to protect their decisions from uncertainty, entrepreneurs will not only choose to cluster their firms around resources but they will also choose to form “coalitions” to overcome imperfect information, uncertainty, and conflict. This represents a major break with the neoclassical tradition, which presupposes rational markets ignoring all those elements. Each coalition can be described as an entrepreneur’s transaction network, since its constituency includes all stakeholders, internal and external, that the venture can or could have. Hence, entrepreneurial decision-making, instead of being a mechanical event, becomes a process involving conflict, uncertainty, problem-stimulated search, learning, and adaptation over time. This suboptimal decision-making can be directly translated into a conceptualization of the cluster. Entrepreneurs’ site selection, and therefore clustering, does not occur because of the availability of optimal conditions but because of strategic decisions taken by entrepreneurs. Within this perspective, the driving force is the entrepreneur’s willingness to accept satisficing scenarios (Pred, 1967; Smith, 1971) as a protection from external uncertainties.

Though it adds meaning and extends the range of entrepreneurial choices by replacing assumptions of efficiencies with satisficing approaches, behavioral economics is still limited to economic incentives and choices, blinding entrepreneurs to any other, noneconomic rationale. Thus, it only constitutes a partial view of the cluster and the role of the entrepreneur.

**Structuralism.** Unlike neoclassical or behavioral economists, who assume a self-regulated market with a smooth market-price system facilitates managerial choices, structuralist scholars adopt a more pessimistic view of the abilities of the invisible hand of the market (Arndt, 1985). Assuming that differences among environments are structural and exogenous to market agents, structuralists advance that the range of opportunities available to entrepreneurs is constrained by market conditions, which are assumed as external and independent from the entrepreneur (e.g., Porter, 1981, 1998). Hence, the role of entrepreneurs becomes two-fold: first, to find an environment with satisficing opportunities to locate their venture; and, second, to fit the venture into this environment structure.
Advancing the structuralist agenda, Arndt (1985) suggests free markets have three major flaws: (1) there is not a good signaling mechanism (opportunities are hard to find), (2) economic actors are rationally bounded (no social component is considered), and (3) factors of production tend to be immobile (immobility of resources). Often an external intervention (i.e., state-driven, top-down coordination, with an infusion of resources) is required to help entrepreneurs to force or sustain the existence of their ventures and their ideal environment: the cluster (i.e., Markusen, 1994; McDonald & Belussi, 2002; Porter, 1990, 2003). This external mechanism is assumed to supersede and restrict any entrepreneurial decision, as it advances that the venture’s performance is largely determined by the environment’s conditions (Porter, 1981). External mechanisms, such as state intervention and/or central planning organizations, are assumed to be necessary to achieve a balanced and inclusive development of the environment (Arndt, 1985). Furthermore, entrepreneurs are assumed to be aware of their limited perception and satisficing bias. Therefore, external regulatory forces are accepted by the cluster membership (i.e., entrepreneurs) as having a vision above and beyond them, and, accordingly, these regulatory forces become vested with the necessary power to make the vision a shared reality that may ensure the survival of all ventures.

In general, the existence of ideal conditions for entrepreneurial ventures (i.e., firms) to survive assumes the presence of a supraorganizing structure and an external governance mechanism coordinating all entrepreneurial efforts and monitoring all ventures (e.g., the state). This ideal environment is marked by an above-average geographical concentration of interconnected ventures (e.g., a cluster). The nonexistence of a cluster indicates, by extension, the absence of the governance structure or, at least, its inefficiency. While the causal relationship between a cluster of entrepreneurial ventures and structure is a given, the conception of how governance mechanisms should work and what path of development should be followed is not universally shared. Anglo-Saxon structuralists implicitly or explicitly assumed that there is a single and universal path; hence, underdeveloped regions/countries should just imitate the past experience of developed ones (Bustelo, 1998). In contrast, Latin-American structuralists emerged with a critical awareness of the two basic assumptions of the Anglo-Saxon model: universality and isolation. The Latin-American approach argues there is no such thing as a single path of development (nonuniversality) and the world economy is an integrated system with a center (developed countries) and a periphery (developing countries) (Prebisch, 1950). Whether the perspective presupposes universality or not, structuralism assumes that clusters are not the outcome of savvy entrepreneurs promoting collective efforts but the ongoing accomplishment of external forces controlling the environment by regulating transactions and controlling structures, which ignores the processual nature of firms, entrepreneurs, and environments.

A summary of the above discussion is presented in Table 1.

**Socioeconomic Perspectives**

Different from rationalistic or economic theories, socioeconomic theories highlight the social construction of the entrepreneurial venture and the environment. These theories seek to incorporate the human element in the model, not only as a labor factor or unperfected decision-maker but also as a social being capable of purposefully generating rules, building communities and changing its environment, both social and physical. Five major theoretical frameworks encompass this perspective: (1) institutional theory, (2) network theory, (3) resource-based view, (4) discursive approach, and (5) temporary coalitions.

**Institutional Theory.** Institutional theory’s understanding of entrepreneurial ventures—and, by extension, clusters—builds on the seminal work of sociologists such as Powell and DiMaggio (1991), Zucker (1977), Meyer and Rowan (1983), and Scott (1981). Ventures (or organizations) and their socioeconomic environment are a socially constructed reality developed by individuals following the processes advanced by Berger and Luckman (1989). Likewise, entrepreneurial choices are developed and implemented under a shared, socially constructed system of beliefs, with the dual objective of advancing the venture (or creating a social or economic change) while locating the mirroring (and supporting) organization in a physical location. It is in this context that institutional theory, in general, understands “real places” and how place-specific institutions affect local patterns of socioeconomic development (Boschma & Frenken, 2006).

Institutional theory, at the firm level, dictates that entrepreneurs’ choice in early adoption of new practices can be explained by “competitive isomorphism,” while later implementations can be elucidated as an “institutional isomorphism” argument (García-Pont & Nohria, 2002). These two dynamics, when in place, serve as alternate drivers of mimetic behavior that foster and sustain conglomerates of interrelated ventures known as clusters (Fennell, 1980). This process has been described as the “hot spots” argument (Pouder & St. John, 1996), which advances that early adopters of a strategy, such as moving to a particular location, do so expecting to
achieve a competitive edge over other ventures. If they succeed (or, at least, do not fail trying), this strategy may drive a surge of competitive isomorphism, as other entrepreneurs may seek to (re)locate operations in the vicinity to attain the same benefits as the pioneers. In the end, such a strategy becomes a socially constructed, self-fulfilling prophecy, as the cluster becomes a protective, socioeconomic enclave, where entrepreneurs locate ventures to save them from the market’s volatility and, sometimes, its destructive competitiveness (Hodgson, 1988). Hence, although entrepreneurs can pursue any opportunity because of local social dynamics, in practice, their decisions become constrained by the enacted consensus among peers. Eventually, agreement among peers, and social acceptance of a shared reality, defines what a successful entrepreneurial venture may be. Furthermore, neither the endowments of the physical locality where processes take place, nor the reciprocal relationship between processes and the socioeconomic environment, are taken into account.

**Network Theory.** The idea of describing a cluster of geographically delimited and interrelated ventures as a network, and portraying the colocating of entrepreneurs within this network as a successful strategy, is not new. Penrose (1995) notes the network concept first appeared in the business and economic literature in the nineteenth century with Marshall’s (1890) commentary on industrial districts. Accordingly, she argues Marshall’s work, describing a collection of geographically concentrated small- and medium-size ventures operating closely together while depending on each other for operations and services, refers to networks of interrelated businesses. This conceptualization of network, she further elaborates, presents relationships and links of a more open nature than contemporary understandings of social networks.

Seen thusly, network theory is concerned with the networking of ventures through the networking of individuals (entrepreneurs) (Gabbay & Leenders, 1999). While traditional institutional theory presents a model where firms/institutions/ventures interact and react to each other, network theory situates dy-
dynamic processes within networks of reciprocity, interdependence, and unequal power relations (Grabher, 1993; Taylor, 1996). Therefore, while clusters are enacted at the individual level as local businesses and society dynamics (Smircich & Stubbart, 1985), at the supra level a cluster represents the socioeconomic network in which ventures are embedded (Yeung, 1998, 2005).

At the center of this approach are Granovetter (1985) and Powell’s (1990) assumptions that all economic exchanges are socially embedded. The nature of entrepreneurial effort becomes understood as contingent upon culture, cognition, political institutions, and social structure (Zukin & DiMaggio, 1990), which are both institutions and institutionalized rules of transaction. The entrepreneurial enactment of relationships is articulated and incorporated into networks that act as templates directing and regulating socially embedded market exchanges. Thus, the role of entrepreneurs as enactors of these relationships becomes both extended as their responsibilities include looking after the interests of all the venture’s stakeholders and constrained by these very same responsibilities.

**Resource Based View (RBV).** The resource-based view (RBV) (Barney, 1991; Penrose, 1995) maintains that entrepreneurial ventures are nothing but bundles of activity-specific resources, which are valuable because of the unique capabilities they provide to the venture, not their economic worth, and constitute the environment in which ventures are set. As such, RBV follows the same line of reasoning of venture embeddedness described in the social networks argument (Foss, 1994). Thus, the RBV framework advances that venture performance is contingent on the right entrepreneurial use of nearby resources (Egelhoff, 1988). Under the RBV approach, clusters can be explained as the coordinated ability of a group of entrepreneurs effectively combining and using local resources, such as, the so-called “Italian districts” described by Becattini (1991, 2002).

Further understandings of the key role of knowledge to combine other resources gave origin to the knowledge-based view (KBV). Accordingly, KBV introduces a variation of RBV where the primary rationale for a venture to exist is the creation, transfer and application of knowledge (Demsetz, 1991; Grant, 1996; Nonaka, 1994; Spender, 1996). Thus, the venture, as a unit of knowledge, becomes simultaneously one more of the cluster resources and a tool for entrepreneurs’ plans. Entrepreneurs become understood as knowledge brokers and cluster success relies on their ability to leverage knowledge to establish permanent relationships with other entrepreneurs.

KBV proposes “the heterogeneous knowledge bases and capabilities among firms are the main determinants of performance differences” (DeCarolis & Deeds, 1999, p.954). Not only may entrepreneurs draw from different bases and capabilities to create new knowledge, they also have differential access to externally generated knowledge (DeCarolis & Deeds, 1999). As a case in point, it is suggested that close geographical proximity of ventures or entrepreneurs with similar interests promotes the natural exchange of ideas through institutionalized networks, while nonmembers of the network will be deterred from accessing this knowledge (Lynn, Reddy, & Aram, 1996; Saxenian, 1990). Therefore, access to localized knowledge and processes—as originally described by Marshall (1890)—has become one of the main arguments explaining both the existence of clusters and their value to entrepreneurs. Hence, KBV has also contributed to the expansion of the social network view, where clusters are local networks that channel flows of knowledge.

Ventures—and by extension clusters of ventures—in RBV and KBV interpretations are theorized in ways consistent with the socioeconomic perspective. They consider local resources in terms of the capabilities they represent and not in terms of their relative economic costs. Likewise, they measure cluster success as the economic success of each one of the firms and not by cluster conditions. However, while RBV argues all resources are equally valuable, including entrepreneurs, KBV suggests resources without the know-how to use them are useless. Hence, KBV proposes knowledge is the cornerstone of all resources. As such, venture success is dependent on the entrepreneur’s ability to use resources.

**Discursive Approach.** Discursive research relies on a social constructionist perspective to discourse. Rather than assuming conversations as reports of what happens in the world, a social constructionist approach treats the discourse in itself as a form of action; conversations among individuals are means to (co)construct reality (Berger & Luckman, 1989). Hence, discourses are “communities of practice” that enact shared realities, including knowledge creation and beliefs. Unique environments, such as new ventures or clusters, “exist” only because they are enacted as such by a collective (Smircich & Stubbart, 1985). The discourses (the new venture and its boundaries) are legitimated through a legalistic definition that mirrors their enactment.

Communities of practice are defined by conversations that encourage flows of knowledge (Lave & Chaiklin, 1993). This (co)creation of knowledge and practices is relational and centered on “talk” (Taylor & Asheim, 2001). It requires agency from the in-
volved individuals, as well as an exchange of ideas and concepts, thus highlighting the role of entrepreneurs. Although the members of the community may not always be aware of their membership (Wenger, 1998; Wenger, McDermott, & Snyder, 2002), the coherence and characteristics of their network may signal them to outsiders as participants of a particular, enacted collective, as is the case in clusters such as Silicon Valley (Saxenian, 1990; Yeung, 1998, 2005).

The existence of a venture and/or a cluster can only happen if there is a discourse enacting them and their practices. Geographical conglomerates of ventures will not be acknowledged as clusters if ventures behave in isolation of each other, despite their physical closeness or even casual engagement. Likewise, ventures can only be assumed to exist if people enact them. Hence, identification and analysis become a matter of characterization and scrutiny of local discourses, as well as the relationships among local residents. It is then that the role of the entrepreneur becomes to establish, enact and sustain a discourse known as the venture. Likewise, the cluster can only exist if there is a community of entrepreneurs enacting a collective discourse that represents ventures and ventures interacting with each other.

**Temporary Coalitions.** While the discursive argument focuses on relationships from the individual’s perspective, temporary coalitions address the interests of the group at large (Taylor, 2004; Taylor & Asheim, 2001). This approach is based on Taylor’s understanding of the venture not as the space of happenings but as a collective process that funnels the interests of a group of people (i.e., a temporal, purposeful association of individuals driven by personal, socioeconomic interests) (Taylor, 2004). Hence, the task of entrepreneurs is to ensure the existence of the firm as the space of common understandings, where individuals can enact actions and intentions that link to other individuals (Smircich & Stubbart, 1985). And by doing so, they blur the boundaries of the firm as it becomes the community in itself.

Echoing Ouchi’s (1980) argument on clans as mechanisms of intermediation, this approach explains the existence of a purposeful process: ventures—and, by extension, clusters—as enacted cooperatives of individuals with similar objectives, strong sense of ownership, and low levels of opportunism. Hence, this perspective assumes the ongoing existence of these processes as long as there is a congruent objective among participants, along with a collective sense of fairness in the exchanges within the group. However, even the sense of fairness, as with any other understanding within the collective, becomes socially constructed by the collective (Berger & Luckman, 1989).

Creation of personal wealth, and not optimal performance, is assumed to be the ultimate objective of the collective, whether it is the venture or the cluster, and, thus, the goal of the entrepreneur. Of foremost importance for the entrepreneur is the awareness that individual creation of wealth cannot disadvantage the wealth creation of the collective’s members if the coalition is to survive and even flourish. Nonetheless, ventures—and clusters—are not permanent; coalitions only exist as long as there is an enacted common interest bringing a particular set of individuals together. Networking linkages are established and dissolved by purpose-driven entrepreneurs as environmental conditions—economic, social, and regulatory—change and are adjusted (Taylor, 2004; Taylor & Asheim, 2001).

A summary of the socioeconomic conceptualization of the cluster according to each theoretical perspective and its consequences regarding the nature the firm is presented in Table 2.

**The Relational Understanding of the Firm (and Entrepreneurial Ventures)**

A new conceptualization of organizations has recently been developed in the field of New Economic Geography. This approach describes any organization—including the firm and the entrepreneurial venture—as a purpose-driven network of processes contingently constituted by the ongoing collective outcome, at different spatial scales, of individuals conducting everyday actions (Gibson-Graham, 1996; Yeung, 2005). In terms of the firm, this conceptualization allows the tacit understanding that the outcomes of these processes are of economic nature, as the dominant logic and the process involved are of economic nature. Likewise, the social milieu behind this relational conceptualization, when looking at the actions of entrepreneurs, accepts the open possibility of noneconomic outcomes.

This relational notion of the firm, proposed by Yeung (1998, 2005), simultaneously echoes Granovetter’s (1985) ideas of economic transactions as socially embedded, Penrose’s (1995) view of the firm as a collection of social processes, and Durkheim’s (1895 [1966]) social milieu ideas. It presents the firm and, more important yet, the entrepreneurial venture as a purpose-driven, temporal coalition of geographically embedded individuals pursuing a shared goal, not an abstract social construct of economic outcomes. This understanding is supported by two interrelated ideas. First, organizations and their environment are open socioeconomic processes linked to, and influenced by, the geographical
space where they take place, as individuals simultaneously change and are changed by the space they occupy. Second, it suggests that the socioeconomic environment where entrepreneurs perform and enact their ventures is simultaneously the outcome and the framework of these processes (Osorio, 2008; Wooldridge, et al. 2005). Underlying these ideas is the premise that all ventures are just individuals linked in temporary coalitions via social networks. Hence, different spatial patterns and collective interests generate different kinds of relationships within the network and foster different configurations of organizations and local outcomes (Yeung, 2005). The role of entrepreneurs is to monitor and coordinate happenings within different spaces and networks to ensure that structures and participants aid their interests and that no interference takes place among the different processes.

Entrepreneurial actions and ventures are the outcome of two interrelated actions: the pursuit of common interests by the members of a collective and the dynamic interaction among individuals due to common interests. As individuals connect in joint activities and discussions, helping each other and sharing information, a network where participants become embedded is built (Yeung, 1998, 2005). This relational network is formed by interpersonal relationships, family ties and/or simple social liaisons (Wooldridge, et al. 2005; Yeung, 1998, 2005). Moreover, it is consolidated by a series of institutionalized interactions. To sustain the links, individuals invest time and effort and follow common (tacit or explicit) rules of engagement. They develop a shared collection of resources: stories, tools, experiences, approaches to recurring problems, habits—in short, a shared practice (Osorio, 2008).

**Research Design and Method.** In light of the above discussion, we contend the new and emerging understanding of the firm rooted in the field of New Economic Geography can serve to recognize entrepreneurial endeavor as a geographically and socially

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<th>Perspective</th>
<th>Nature of the Environment (e.g., Cluster)</th>
<th>Nature of the Organization (e.g., Venture)</th>
<th>Role of the Entrepreneur</th>
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<tr>
<td>Institutional Theory</td>
<td>Socially embedded conglomerate of rules and routines controlling and creating economic processes</td>
<td>Socially embedded rules and routines controlling and creating economic processes</td>
<td>To coordinate socially constructed—and commonly shared—system of beliefs to ensure that enacted ventures conform with consensual understandings of action</td>
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<tr>
<td>Network Theory</td>
<td>Socially embedded conglomerate of reciprocal and interdependent networks that control and create economic processes</td>
<td>Socially embedded reciprocal and interdependent network that control and create economic processes</td>
<td>To monitor and influence linkages/relationships across individuals and organizations, and to ensure a commonly enacted goal</td>
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<tr>
<td>Resource Based View (RBV)</td>
<td>Conglomerate of bundles of resources framed by social embeddedness and (co)created knowledge. Learning place created through social dynamics</td>
<td>Bundle of resources framed by social embeddedness and (co)created knowledge. Learning place created through social dynamics</td>
<td>To enact means to ensure, attain, and organize all needed resources to make things happen within the venture</td>
</tr>
<tr>
<td>Discursive Approach</td>
<td>Socially constructed “talk” involving unequal power geometries and contestations between individuals. Managerial/collective discourse referring to clusters</td>
<td>Socially constructed “talk” involving unequal power geometries and contestations between individuals. Managerial discourse referring to clusters</td>
<td>To (co)create the discourse of the venture and its environment in collaboration with the venture’s stakeholders</td>
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<tr>
<td>Temporary Coalitions</td>
<td>Socially constructed community-based temporal alliances driven by collective agency</td>
<td>Socially constructed community-based temporal alliances driven by collective agency</td>
<td>To ensure the existence of the venture as the space where individuals can enact actions and intentions that bridge across to other individuals</td>
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embedded, ever-changing processes that is part and parcel of the space where it takes place. This alternative view contrasts with understandings of entrepreneurial endeavor as atemporal, geographically delimited, economic phenomenon subject to a present/absent dichotomy and fueled by legistical representations of itself or economic abstractions of its operations. As such, we argue that the new perspective can serve to acknowledge individuals as participants in an ongoing, communal, organizing process—embedded in local happenings and evolving through time—that may (or may not) result in economic driven organizations (i.e., firms). Hence, the unit of analysis cannot be the fully instituted entrepreneurial venture or the entrepreneur but the processes that, through time, may constitute the venture and aid (or deter) the entrepreneur. Thus, how may entrepreneurial processes inform a theory of the firm to explain the way in which the actions of entrepreneurs, as they engage in new ventures that serve their individual purposes and intentions, shape the socioeconomic environment of their communities?

To answer our question, we apply a concurrent mixed-method framework (Creswell, 2003), which combines an in-depth case study (Yin, 2003) and a social networks perspective (Crewe, 2007), informed by an ethnographic methodology, as complementing tools of research and not as a sum of methods. Our approach offers a methodological awareness for observing reciprocal and simultaneous organizing happenings. It positions local organizations and individuals as contextualized, interconnected, interdependent, and interactive entities engaged in practices simultaneously shaping one single meta-process: the commonly shared socioeconomic environment. In parallel, our methodology assumes that this meta-process fosters, sculpts, and influences entrepreneurial ventures (individuals, organizations) and embedded entrepreneurship (organizing) processes. Hence, rather than presenting the actions of entrepreneurs and the socioeconomic environment as two independent phenomena, our multimethod approach ontologically locates and explores both phenomena as a single processual time and location-dependent happening.

Data collection for our exemplar case study involved four years of fieldwork in a former mill town in Western Massachusetts. The location was selected because of the intentions (and entrepreneurial actions) of community members to address the socioeconomic decline of their city by forming a series of organizations to promote and coordinate the local arts and artisan community. The research design included ethnographic observations covering all Arts City Council meetings (once a month for 1 to 3 hours each) and Arts and Culture Master Plan meetings and gatherings (once or twice a month for 3 to 5 hours each), as well as several of the city-wide art-related activities, such as Open Studio events (at least twice a year for 6 hours each), Art Walks (once a month for 4 hours each), and the City Hall as an Art Building Project (twice a year for 3 hours each). Additionally, our observations were complemented and informed by local media reports, archival data, and hundreds of informal conversations and interviews with local and visiting artists, local business owners, city officials, and state representatives. Interviews and conversations took place at artist studios, art galleries, public meetings, and business locations. Meetings and conversations in which consent was given were recorded, while extensive handwritten notes were made in all instances. Likewise, all official records and minutes for all arts-related public, official, and grassroots events were gathered. Finally, we subscribed to all official and grassroots distribution lists and got copies of all materials provided in preparation for, and as a result of, these meetings and public events.

**The Case.** The city, organized as a mill town, no longer had factories; instead, it had empty buildings and rundown neighborhoods, with rows of empty houses. Real estate prices had gone down and businesses had closed. For many, the city had lost its soul and state intervention was needed to get the city back on track. Yet, for artists and artisans, it became an affordable haven of opportunities.

Large nineteenth-century factory buildings, with high ceilings and eight-foot high windows, allowed plenty of sunlight and the gutted quarters provided enough room to fit sculpting studios, woodcarving shops, and ceramic and glass ovens. City zoning ordinances and state factory codes allowed for materials to be stored and art shops to be run. In short, the physical space presented the ideal infrastructure and the right price for artists’ and artisans’ studios. Likewise, grassroots performing arts found local spaces among the empty neighborhoods to practice and do public presentations. Traditional ballet studios and art schools were not far behind, as they found an opportunity to do business there, too. The excess of empty space in these buildings—and around the city—allowed for multiple partitions and close social relationships, which evolved into large artist and artisan communities under the same roof and/or in close spatial proximity, as this is a relatively small city with a high urban concentration (social embeddedness). As a result, some of these entrepreneurial relationships flourished into entrepreneurial ventures (organizations) with economic and noneconomic goals (economic and noneconomic driven entrepreneurship).
In the year 2000, local people outside the art and artisan network started noticing artists and artisans, not because they were more in number but because these individuals and their organizing had started to have a direct economic impact on the city’s processes, as their work was being portrayed in national media (e.g., Hagan, 2000). Simultaneously, a series of entrepreneurial (grassroots) activities, such as the Windows Project in which artists used businesses’ front windows as art galleries, sprang up around the city, shaping a new local reality anchored in the arts. These activities reflected both the local social and economic renaissance and the artists’ and artisans’ agenda to make art “part of the daily life […] and to put it out of the museum” (former Windows Project Coordinator and Chairwoman of the local Cultural Council). These activities, and their impact on the local social milieu, provided individual artists and artisans with a sense of city ownership as part of their identity and prompted purpose-driven participation on their part in shaping the city. This self-awareness was reinforced by perceptions of power, purpose, and unity invested in the collective by members of the wider community, who considered the artists and artisans an enacting force and part of their local “normality.”

All of this came to a high with the city formally sponsoring a grant application to create a nonprofit arts organization to not only serve all local artists and artisans but also register them so their entrepreneurial ventures and actions could then be institutionalized, promoted, and counted. The organization came into being, formalized many casually formed art collectives, and promoted noneconomic and economic driven organizings, such as art communes, collective marketing campaigns, collaborative projects, subcontracting, etc. Nevertheless, this city-wide, “official” venture did not create the new art-related organizations nor did it make more stable already existing relationships or force economic goals where there were none. The newly formed nonprofit represented an official lens through which to see the local organizing of the arts, as it recognized the arts industry as the local milieu and provided the framework to explain local entrepreneuring (i.e., the enactment of entrepreneurship) (Johannisson, 2011; Steyaert, 2007). Yet, the only thing that the new nonprofit arts organization did was record the already ongoing outcome of many years of socioeconomic entrepreneurial processes within the community.

Artists and artisans in close geographical proximity around the city had, over the years, developed social and economic relationships. As a bookbinder, with more than 20 years residence in one of the buildings, put it: “You work hard at odd hours. You keep bumping in the hallways with the same people. Why not just take a break and talk for five minutes? Ideas and projects come, you know, just by talking to others. And you make friends with them.” As these casual encounters became more frequent, they became regular meetings where ideas were discussed and collaborations were established. As a local artist explains: “I wanted something similar to the feeling that I’d had in college—a lot of studios with artists working in different media. In school, there was such energy around me, and a lot of nice people with dedication to work of a certain quality.” This comment does not come from a small, struggling artist but from a well-known lamp maker. As she was always backed up with orders from galleries nationwide, she had expanded her studio from 800 to 5,000 square feet in 2000 and had hired several locals and apprentices to satisfy the demand for her lamps.

This organizing and developing of relationships fosters learning that, in turn, empowers new entrepreneurs and fuels entrepreneurship beyond the economic straight jacket. Another artist, a former employee and apprentice of the lamp maker, compares the ambience as “similar to being at graduate school.” Working with such prominent artists as the lamp maker, she notes, has enabled her to expand and explore her skills and limits. People come in and out of each other’s studios with questions and comments so that the city has become an ongoing, creative, learning experience, constantly fueling entrepreneurship endeavors. She now has her own successful studio in the city and maintains good relations with her friend and former employer. The local social milieu can be explained as presenting the community as a place where people do not ask “can we do it?” but “how do we do it?”

Another organizing practice in this local network is exemplified by the cabinet and furniture maker and wood sculptor community. A current, widely recognized furniture maker known for his trademark was not always a well-established artist. Early on in his career, he was just an aspiring entrepreneur. When he came to the home of the largest woodworker community in the city, he was a young artist anxious to launch his career and work alongside talented, high-caliber people. However, he did not have an established reputation nor did he own any equipment or have the funds to buy it. Nevertheless, the local communal spirit was on his side. Three artists in the building were renting workspace in their machine room. This “sealed his fate” and made it possible for him to work, sell and build up savings to be on his own, but not alone, as he never left the building. He liked it there because “It’s like continuing education. You can walk down the hall and ask a question and get three different answers. There is a
tremendous amount of camaraderie here.” In fact, this spirit and its creative effects on the members of this community were described by a glass artist as a “cross-pollination of ideas,” a perfect place to nurture entrepreneurship.

However, this networking scenario is anything but ideal. These dynamics and interactions did not come without conflict and struggle in forms that disrupted the organizing as easily as it happens. By way of a direct example, while the networking spirit fueling the entrepreneurial ambience is present within each of the three buildings housing the art communities, it does not easily cross to the communities in the other buildings. While constant efforts are made by key individuals to link the building communities, these endeavors have not been truly successful. A case in point is the open studios biannual sale. This event was started at one of the three building communities as a way to create a single organization to promote members’ work, taking advantage of a collective effort rather than have to struggle as individuals. The event was started at one of the three building communities as a way to create a single organization to promote members’ work, taking advantage of a collective effort rather than have to struggle as individuals. As time went by, artists and artisans from the other two building communities, along with some of the artists spread across the city, joined this event in order to take advantage of its momentum and marketing. A couple of years later, a growing dispute based on ownership of the annual sale idea and shared duties to support it came into the picture and what was once a common project across all artists and artisans in the city became isolated sales days by each one of the three buildings. Although this disrupted the homogeneity of the artist and artisan community and broke apart the city-wide marketing organizing, it did not dislocate the local working network, since people across communities continued to collaborate and undertake joint projects at the individual level. The economic driven entrepreneur network was broken, yet the social entrepreneur network was still present and working. This change served to highlight the economic bias when seeking for entrepreneurship activities; to the casual observer, the organization was no longer operating and the city was in trouble, which was not the case. This was a moment of redefinition of entrepreneurial purposes and priorities.

This may sound like a perfect place to live in if you are an artist or artisan, however, the socioeconomic environment discussed above is coming into conflict with the local physical environment (economic growth and social stability brings more population and gentrification) and this, in turn, brings socioeconomic conflict (social cliques and power dissonances disrupting the status quo). Since it was residents who started the city’s renewal, the open spaces were targeted for some of the new housing projects, thus reducing the outdoor recrea-

Discussion

In this article, we argue that entrepreneurs frame their actions according to their understandings of the purpose of their venture; thus, researchers need to match their framework to study such ventures properly. Entrepreneurs with a rationalistic perspective will manage their venture as an economic unit or production function, while entrepreneurs with a socioeconomic understanding will focus their efforts on orchestrating, to a higher or lesser degree, all the stakeholders’ interests. This is reflected in the exemplar of the artist and artisan community. From the artists’ and artisans’ own perspectives, very few were acting under solely economic intentionality. From their views, they were enacting creativity and the economic transactions were collateral incidences of these socially embedded processes. Their entrepreneurial choices to locate in a specific site or to engage in a given process were not solely economically informed. They did not consider themselves as doing business; rather, they saw themselves engaged in a lifestyle. Exchanges of labor and materials were not always economically measured, as they were often understood as part of the social fabric of the community and not the cost of doing business. Thus, alternative currencies like reputation, trust,
social capital, or knowledge were also regularly exchanged. This did not allow for outsiders to quantify or observe the transactions and relationships taking place within the community using solely economic lenses. To official eyes, there were very few art-related businesses, even when they were already a prominent feature in the city. Quantitative data, in the form of census and economic records, did not provide enough information about the processes or reach of these businesses. Traditional views did not allow for the recording of socioeconomic processes as there were, at the beginning of the entrepreneurial processes, no organizations to document.

The rationalistic interpretations of entrepreneurship, which present entrepreneurial efforts as timeless processes of production and where uncovering of latent opportunities is assumed to be driven by economic forces, cannot help to explore the dynamics of this vibrant community of individuals and organizations, in particular its emergence. The rationalistic approach assumes the business–society relationship to exist only when entrepreneurs act as economic agents or economic forces. Thus, the socially driven entrepreneurial actions of the artists and artisans and their outcomes are, for all practical purposes, nonexistent. The use of a satisficing model cannot help much either. The understanding of relationships among entrepreneurs, and between entrepreneurs and their environment, posed in the context of economic supply-and-demand interactions was, for all practical purposes, not present in the reported data. Local organizations, as well as artists and artisans, are not self-conceived as economic agents; thus, they become invisible to theoretical and research lenses.

The use of socioeconomic approaches can improve the analysis and bring some of the noneconomic strategic choices into context with an understanding of the existence of economic outcomes as socially embedded processes. Yet, such approaches are still incomplete. While they acknowledge that artists’ and artisans’ lifestyles could be responsible for the social dynamics happening when they were making or implementing organizational plans, they do not clarify their mechanisms and ignore the actions that were not economic driven. Furthermore, the free exchange of knowledge, the collective local milieu, the apparent nonequivalent exchanges of resources among artists and artisans, and the artists’ and artisans’ constant reinvention of the space, could not always be explained as part of the traditional absent-present dichotomy that socioeconomic approaches use as a lens to capture entrepreneurship occurrences.

The discursive approach can help bring front stage the actions of the artists and artisans as strategists and entrepreneurs of their own doings. Yet, the lingering legalistic definition of the firm—as the channel for their actions—still hinders research. Individuals who cannot be recorded as economic agents and/or processes not mirroring legalistic definitions of the firm cannot be accounted for. As firms in this context are no longer production functions but communities of people with shared values or culture, interviews and discourse analysis are required to understand the local happenings and to frame the actions of entrepreneurial individuals. The organizing of individuals and their strategic engagement in collaborative relationships is the research focus. Entrepreneurship is no longer conceptualized as nested in a socioeconomic process; rather, it is the process itself. Thus, the entrepreneurial actions of artists and artisans, and not census data, become understood as the ventures. However, while individual agency becomes acknowledged as the driving force of the processual nature of entrepreneuring, individuals’ motivations to associate or to network are still not present as causalities of the processes defined as entrepreneuring, hence leaving them undertheorized. Likewise, the presence of a location as a context for the discourse is not considered either.

The use of temporal coalitions as research lenses acknowledges the intentionality behind the artists’ and artisans’ actions. As such, the temporary pooling of competencies, skills, and assets to exploit a commercial opportunity for personal wealth creation became relevant. Artists and artisans identified through ethnographic work and interviews as enacting local coalitions become recognized and their strategic actions documented as part of a socioeconomic system that is, to a greater or lesser extent, local in its orientation. The links among artists and artisans that foster organizing become acknowledged and defined by the time and space specificity of the entrepreneurial opportunities, as well as the personal gain attained through the joined efforts. However, the influence that social space has in the actions of the actors (e.g., propinquity, paths of transit, etc.) cannot be explored. Furthermore, this research perspective still ignores the geographical characteristics of the space where each process takes place.

In an effort to address human actions such as entrepreneurial processes in the context of their spatiality, researchers in the field of New Economic Geography have developed a novel conceptualization, which describes all organizations as purpose driven, geographically influenced, networks of processes contingent on the ongoing collective outcome of individuals conducting everyday actions (Gibson-Graham, 1996; Yeung, 2005). Individuals are acknowledged as socioeconomic agents and the effects of geography over their actions are taken into account. Thus, the actions of artists and artisans may become explained by the intentionality behind them,
as well as by their reach and the resources available, including the geography where they take place.

**Conclusions**

Our article complements scholarship on entrepreneurship, as it proposes that entrepreneurship can be understood as a social process immersed in power struggles and conflict, rather than as a present/absent dichotomy. Furthermore, we advance that spatial proximity (or lack of it) must be considered relevant and, thus, should be addressed as part of the entrepreneurial context itself.

Entrepreneuring is a complex process that affects not only the enactors but also members of the community where the enactors are hosted. As such, we suggest that local history, social networks, and environment should be taken into account. Likewise, the understanding of what is entrepreneurship becomes questioned, as the venture is presented not solely as an economic agent but as a geographically embedded collective, subject to rules of reciprocity constantly enacting and disrupting conceptions of normality. Exploring entrepreneuring in the context of local history, social networks, and environment suggests that, while ventures may be sustainable, they may not be self-sustainable, as they are not isolated phenomena but relational processes affected by local happenings (Yeung, 1998).

In all, entrepreneurship is not a present or absent economic dichotomy; it is neither devoid of social context nor is it an organizing process independent of the firm. Rather, entrepreneurship is a geographically bound relational process resulting from the everyday actions of individuals in pursuit of personal goals, often defined as lifestyle choices. Thus, entrepreneuring is part and parcel of the socioeconomic context where it takes place and is influenced by the personal choices of the entrepreneur.

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An Entrepreneurial Context for the Theory of the Firm


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Stated succinctly, entrepreneurial orientation (EO) refers to specific aspects of an organization-wide proclivity toward new endeavors. After about four decades of research on this topic, EO has emerged as a predominant construct of interest in strategic management. In addition, EO has also attracted attention from scholars and researchers working in other fields, such as marketing (e.g., Matsuno, Mentzer, & Oszomer, 2002), tourism studies (e.g., Tajeddini, 2010), and operations research (e.g., Li, Liu, & Liu, 2011). A large body of research now distinguishes between entrepreneurial and conservative firms, depending on the emphasis on EO as reflected in the decision-making practices, managerial philosophies, and corporate behaviors that are entrepreneurial in nature (Rauch, Wiklund, Lumpkin, & Frese, 2009; Wales, Gupta, & Mousa, 2011). The word “entrepreneurial” generally refers to a holistic constellation of three primary characteristics: innovativeness, proactivity, and risk-taking (although sometimes it also includes two additional facets proposed by Lumpkin and Dess (1996): competitive aggressiveness and autonomy).

The three-pronged gestalt conceptualization of EO is common in the literature, but it also poses, what I believe, is a serious challenge to knowledge development in the area of EO. I invoke the 3D framework (Jennings & Brush, 2013)—dispute, demand, and dare—to discuss a hitherto underappreciated issue in the EO literature. My thesis is that turning the spotlight on the holistic conception of EO reveals a fundamental unsettled question that can serve as a fertile topic of inquiry for researchers and scholars.

There is general agreement in the EO literature that a firm would not be considered entrepreneurial unless it is not simultaneously proactive, risk-taking, and innovative (Covin, Green, & Slevin, 2006). To quote Tang, Tang, Marino, Zhang, and Li (2008: 219), a firm “must be concurrently risk-taking, innovative, and proactive in order to be labeled ‘entrepreneurial’” (Miller, 1983). Indeed, this gestalt construction of EO separates the vast majority of studies following Covin and Slevin (1989)’s conceptualization from the later and less-used Lumpkin and Dess (1996)’s conception of EO.

Gupta and Gupta (2015) recently turned a critical eye toward the gestalt EO concept and disputed the nature of interrelationship between the various facets of EO. More specifically, Gupta and Gupta (2015) raised concerns about our existing understanding of the ways in which the three (or five) sub-components of EO may be related to each other. This dispute can have profound, and far-reaching, implications for EO research. To my knowledge, empirical research to date sees EO as the overall sum of its various facets, so that the degree to which an organization is entrepreneurial is reflected in the sum of the organizational score on each of the various EO components. As Kuratko (2007: 4) wrote: “the degree of [EO] can be thought of as an additive function of the …three entrepreneurial dimensions; that is, degree of innovativeness + degree of risk-taking + degree of proactiveness.” This additive view of EO can be contrasted with a possible multiplicative view (Gupta & Gupta, 2015), so that EO is the overall product of the various entrepreneurial elements. In other words, \( EO = \text{degree of innovativeness} \times \text{degree of risk-taking} \times \text{degree of proactiveness} \). The dispute, therefore, is about how the entrepreneurial elements are related to each other within a holistic unitary conceptualization of EO.

It could be argued that the demands of conventional entrepreneurship research have so far precluded, or even discouraged, researchers from taking a nuanced look into the holistic EO concept. The additive view of EO is (almost) as old and well-established as the EO construct itself, and has remained largely unquestioned through its history. Entrepreneurship research has had to wage a constant battle for legitimacy (Chiles, Bluedorn, & Gupta, 2007; Shane & Venkataraman, 2000), and so it was perhaps not surprising that entrepreneurship researchers enthusiastically embraced the EO concept as it quickly gained popularity through publication in top journals (Covin & Slevin, 1989; Lumpkin & Dess, 1996). In subsequent years, knowledge generation around the EO construct occurred through em-
empirical research conducted in a wide range of settings, so that there now exist hundreds of published studies that explore how EO is related to other variables. However, conceptual development about the true nature of the EO construct has been limited (Anderson et al., 2015), leading Miller (2011) to call for new research that asks novel questions about EO.

The dictionary definition of dare is “doing something requiring boldness.” I believe EO research should aspire to tread more boldly when it comes to the issue of appropriate conceptualization of EO. Challenging the conventional conception of EO would require researchers, editors, and reviewers to be more daring in their approach. I see three possibilities in this regard: either the additive or the multiplicative view is valid, both additive and multiplicative views are valid, or neither the additive nor the multiplicative view is a valid way of conceiving of EO. I discuss the implications of the three possible alternatives below.

It is possible that only one of two ways of looking at the EO concept—additive or multiplicative—is valid. If this is the case, researchers should directly compare the additive and multiplicative formulations of EO so as to generate insights about which formulation truly captures the essence of the EO concept. Alternatively, it is possible that both additive and multiplicative formulations are valid ways of understanding the EO concept. Researchers may then strive to understand whether there are specific situations in which one or the other formulation is more or less effective. A goal of such studies would be to generate insights about which formulation has more explanatory or predictive power in what situation.

It is the third possibility that excites me the most: maybe, neither multiplicative nor additive formulations adequately capture the holistic EO concept. Perhaps, EO is manifested in an intertwined system of relationships and meanings of the entrepreneurial elements of risk-taking, proactivity, and innovativeness. In other words, EO may occur “at the intersection” of the three (or possibly, five) entrepreneurial components. Extending this logic further, is it possible to conceive the various entrepreneurial elements as “interlocking” with one another? One can then visualize EO in terms of interlocking rings of entrepreneurial elements, linked in such a way that the movements of any one of them (e.g., risk-taking) is constrained by the others (e.g., innovativeness or proactivity). I refer to such a formulation as a geometric view of EO.

It will be clear from the above discussion that once we open ourselves to the idea that the additive function may not be the only way to formulate the EO concept, we are confronted with exciting possibilities about the nature of EO. Over the years, a large—and growing—body of research has accumulated about EO, but questions do persist about the way(s) in which the various facets of EO are linked to each other. This essay distinguishes between three ways in which the various entrepreneurial elements can be combined to form the overall EO construct: additive, multiplicative, and geometric. The underlying motivation to draw this tripartite distinction is the belief that conceptual development about EO will be accelerated if researchers explore new formulations not considered before. I hope the ideas discussed here will be useful for EO researchers and scholars interested in challenging conventional wisdom in the field.

References


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