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# 2015 BABSON COLLEGE ENTREPRENEURSHIP RESEARCH CONFERENCE

**SUMMARIES** 

## ORGANIZATIONAL PRACTICES, STRATEGIC VARIETY, AND PERFORMANCE

Sondos G. Abdelgawad, IE Business School, Spain

### **Principal Topics**

Strategic variety is a key aspect of firm-level entrepreneurial behavior. This study reconciles mixed findings about the antecedents and consequences of strategic variety in firms. We propose that internally and externally oriented work practices enhance strategic variety, and that strategic variety has a curvilinear relationship with firm performance. We empirically show the effects of search and scanning, internal communication and experimentation on strategic variety. Furthermore, our results show that strategic variety has an inversed U-shaped relationship with firm performance.

### Method

We used data obtained from 311 Swedish firm, collected through a mail questionnaire. These firms were engaged in a wide range of market-oriented actions such as foreign sales and marketing, production and R&D. We have chosen the Swedish context because the relatively small market size in Sweden makes it imperative for firms to seek strategic variety through internationalization. Hierarchal regression was used to test the two hypotheses of the study. In testing hypothesis 2 of the curvilinear relationship, a quadratic term of strategic variety was formed (strategic variety squared).

### **Results and Implications**

In testing hypothesis 1 of the direct effects of variety inducing practices on strategic variety, the inclusion of variety inducing practices significantly increases the explanatory power of the model compared to the base model. The R2 increases from 0.075 to 0.24. In testing hypothesis 2 of the quadratic strategic variety effects on the dependent variable firm performance, significant coefficient of the quadratic term and significant increase in the explanatory power of the model after including the quadratic term support our hypothesis.

The main contribution of this paper is threefold. First, we introduce a set of practices that induce strategic variety within firms into the literature on organizational practices. This implies identifying an important source of firm level entrepreneurship and renewal. We build on the assumption that variety is conducive to firms' entrepreneurship through specifying key organizational practices that contribute to firms' strategic variety. Second, we contribute to the strategic variety literature through providing a middle ground argument that reconciles contradicting evidence on the relationship between strategic variety and firm performance. Finally, we contribute to the literature on firm level entrepreneurship through conducting our study in the context of SMEs, as previous studies were mostly focused on large firms (Simsek and Heavey, 2011).

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### FACTORS INFLUENCING OPPORTUNITY RECOGNITION: AN EMPIRICAL STUDY

Mujtaba Ahsan, San Diego State University, USA

### **Principal Topics**

One of central research issue in entrepreneurship research is opportunity recognition (Baron, 2004; Gaglio & Katz, 2001; Shane & Venkataraman, 2000). Despite the importance of opportunity recognition as a critical entrepreneurial capability (Ardichvili, Cardozo, & Ray, 2003) and source of competitive advantage (Alvarez & Busenitz, 2001), we have limited understanding of factors that influence the manner in which entrepreneurs search and identify opportunities. In this paper we explore how factors such as education, prior work experience, prior start-up experience and biographical characteristics influence the manner in which entrepreneurs search for opportunities. Specifically, we attempt to understand how the characteristics of entrepreneurs who undertook systematic search for opportunities when starting their venture differ from those entrepreneurs who did not undertake systematic search.

#### Method

We have compiled a unique dataset of entrepreneurs in India using secondary sources (newspaper, website etc.). Specifically, we have collected information on the education background, work experience, start-up experience, and biographical characteristics of the entrepreneurs along with information on source of idea for their ventures (systematic search or other). The measures for general and specific human capital will be based on prior literature (e.g., Davidsson & Honig, 2003; Shane, 2000; 2003; Shepherd & DeTienne, 2004; Ucbasaran et al., 2003). The dependent variable is a binomial variable for source of business idea (systematic search or other). We measure entrepreneur's age in number of years and gender is coded as a binomial variable. We also have a control for the venture start year.

#### **Results and Implications**

The initial results indicate support for our hypotheses. Specifically we find that the education type and quality (e.g., technical Vs. non-technical, international Vs. local) is significantly related with systematic search for opportunities. This research study seeks to make important contribution to existing literature on opportunity recognition. First, the findings of this study will help in understanding the differences in human capital between entrepreneurs who engage in systematic search and those that do not engage in systematic search when starting their venture. Second, by including biographical characteristics of entrepreneurs we provide additional evidence on factors that influence opportunity search and identification. Finally, by studying entrepreneurs in India we expand this literature stream which has predominantly focused on North America and Western Europe. This will not only increase the generalizability of the literature, but will also help in understanding if national culture impacts the manner in which entrepreneurs search and identify opportunities.

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# NASCENT NETWORKS IN EMBRYONIC FIRMS: FACTORS INFLUENCING NETWORK DEVELOPMENT AND SUCCESS

Mujtaba Ahsan, San Diego State University, USA Alex F. DeNoble, San Diego State University, USA Martina Musteen, San Diego State University, USA Congcong Zheng, San Diego State University, USA

# **Principle Topic**

Like many novice entrepreneurs, student entrepreneurs starting their own ventures for the first time face many challenges such as lack of knowledge about the industry, market, and technology and also lack of confidence. These hurdles have been often collectively called liabilities of newness and smallness. To overcome these deficiencies young startups seek the support of university incubators, other entrepreneurs, professors, industry experts etc. The extent of support that they receive can have a significant impact on their evolution, success and ultimate survival.

### Method

We have designed a qualitative study that aims at gaining a better, richer insight into the role of mentors in the initial stages of young ventures. Specifically, we sought to better understand the emergence and evolution of initial mentoring relationships in embryonic startup teams. We performed six in-depth interviews with founders/co-founders of teams associated with a university incubator which we then analyzed in several phases. The six teams varied in terms of industry focus and were in various stages of development.

### **Results and Implications**

Our findings suggest that entrepreneurs in the initial stages of venture development rely heavily on mentors that they knew from their previous life as well as those assigned to them formally by the incubator. The mentors' backgrounds vary widely from being fellow students with significant industry/sector experience, to personal friends or family members to seasoned entrepreneurs and executives. The strategy for using such mentors also vary on a continuum from being very personal and used for emotional support and confidence building to accessing highly technical knowledge in the areas of marketing and product development. The number of mentors that the entrepreneurs we interviewed also varied widely from relying heavily on a single mentor to having a broad range of mentoring relationships. The size of the mentoring network also broadly correlates with the strategy/mode of interaction with the mentors. Entrepreneurs with fewer or single mentors seemed to have more in-depth, emotionally charged relationships in which information is exchanged in a fluid, consistent manner. Their meetings were often more regular, longer and over longer periods of time. The meetings with their mentors often occurred without specific issue to be discussed. In contrast, entrepreneurs on the other side of the continuum seemed to have interacted with mentors in a more "on-demand" mode where they would call on the mentors when the need arose. Mentors were also sought out specifically to "fill in" in an information need that arose as the venture developed. Interestingly, many of the entrepreneurs we interviewed have acknowledged that mentors sometimes provided them with information that helped them identify areas of lack of knowledge or blind spots that they were not aware of. In all cases, mentors were perceived as indispensable sources of knowledge and support instrumental to positive progress of the venture. The findings of this research study enables us to better understand the drivers of network formation and development, and consequently give us insights on how they can be leveraged by young aspiring entrepreneurs.

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# IF WE CANNOT HAVE IT THEN NO ONE SHOULD HAVE IT: BUSINESS EXIT AND RE-ENTRY

Naveed Akhter, Jönköping International Business School, Sweden

### **Principal Topic**

The recent study from Zellweger et al. (2012) showed that 90 percent of their surveyed entrepreneurial families were engaged in more than one firm which explains the rising importance of portfolio entrepreneurship literature in general (Carter and Ram, 2003) and in the family business context in particular (Sieger, Zellweger, Nason and Clinton, 2011). However, while the reasons why business families engage in portfolio entrepreneurship are well-known (Carter and Ram, 2003) and a recent study highlighted how they build up a business portfolio, there is no research about how business families manage an existing business portfolio in the long run. The context of business exit in particular can be a promising value-creating strategy (DeTienne, 2010), as it may not necessarily represent failure but can help preserve socioemotional wealth related to the family firm, notably in times of declining performance. Thus, to add to the understanding of the long-term success and endurance of business families, I investigate how they react to declining performance by engaging in exit strategies in their business portfolios.

#### Method

I study a sample of six family business portfolios from Pakistan, a total of 49 businesses and 20 exits that faced declining performance. This context is purposefully chosen due to the wide prevalence of portfolio family firms in emerging economies (Jaffe and Lane, 2004; Khanna and Yafeh, 2007) and particularly in the Pakistan region (Zaidi and Aslam, 2006). Due to the limited available extant theory, I choose a qualitative approach (Eisenhardt, 1989; Lee, Mitchell and Sablynski, 1999). Main data sources are interviews supplemented with observations and other supporting evidence collected over the last four years.

## **Results and Implications**

First key insight is, business family often prefers shutting down a satellite portfolio firm — meaning closing down operations and keeping all the firm's assets, rather than selling it to a third party. Second, analyzing the motives behind this decision reveals that the likelihood of shutting down versus selling a satellite firm is higher when there is a high family and satellite business identity fit. In this situation, selling a satellite business is not perceived as an optimal strategy given that part of the family's identity would get lost. Third, initial evidence portrays that degree of business decline is an important contingency factor, and we shed further specific light on how the "shutting down" choice contributes to family firms' long-term success.

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### A TALE OF TWO MASTERS: CEO SUCCESSION IN DUAL-FAMILY FIRMS

Musab Almutawa, IE Business School, Spain

# **Principal Topic**

Though family firms are the most common type of organization, the literature has not yet thoroughly distinguished among the different kinds of family firms, treating family firms as more of a homogenous entity. In this paper we aim to explicate the heterogeneity of family firms. We specifically explore the concept of dual-family firms which are firms that have two dominant family owners who have enough ownership to influence the direction the firm takes. Dual-family firms are especially interesting because the principals' interests are convergent and yet have the potential to be divergent. Both principals will want to maintain or increase their respective socioemotional wealth, and will also want to have a financially viable firm. The setting, however, can be mired in continuous power struggles as the partner families try to enhance their respective socioemotional wealth, sometimes to the detriment of the other. The degree and magnitude of those tensions are contingent on the ownership structures of dual-family firms (i.e. equal ownership or major-minor ownership). To explore the dynamics of dual-family firms we look at how dual ownership structures influence the choice of CEO successors. Given the importance of CEO succession in family firm literature, this is arguably the most visible way of differentiating dual-family firms from singlefamily firms. We will use theories of socioemotional wealth and agency theory in the principalprincipal agency context to argue that the choice of successor for dual-family firms relies on the ownership makeup of the firm.

# **Results and Implications**

Preliminary findings suggest that dual-family firms are surprisingly common. 29 percent of all surveyed firms were dual-family firms, whereas 57 percent of all surveyed firms were single-family firms. More importantly, it seems that dual-family firms act differently than single-family firms. One of the surprising findings was the emergence of co-CEOs in dual-family firms where both families had equal ownership. Additionally, in dual family firms where one of the family owners has dominant ownership, the succeeding CEO is more likely to be from the dominant family. As such, the introduction of the dual-family firm concept provides a way of exploring the diversity of family firms, and adds a layer complexity that provides a more nuanced understanding of family firms.

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# FAMILY FIRMS, SOCIO-EMOTIONAL WEALTH AND ENTREPRENEURIAL ORIENTATION: EVIDENCE FROM SAUDI ARABIA

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#### **Principal Topic**

The research empirically investigates the relationship between socioemotional wealth (SEW) and entrepreneurial orientation (EO) in family firms. SEW pertains to the noneconomic aspects of family firms and suggests that family firms make decisions to protect their socio-emotional endowment i.e., the stock of affect-related value that a family derives from the firm (Gomez-Mejia et al., 2011, 2007). The literature regarding whether family firms are entrepreneurial or conservative is inconclusive. In family firms, entrepreneurship has a significant role in their survival, however, as the protection of socio-endowment is prioritised above financial performance, this is likely to impact on EO. Five dimensions of SEW are measured (Berrone et al., 2012): Family control and influence (F); Identification of family members with the firm (I); Binding social ties (B); Emotional attachment of family members (E); and Renewal of family bonds to the firm through dynastic succession (R). The extent of EO is assessed using the 9 item scale developed by Covin and Slevin (1989) measuring innovativeness, pro-activeness and risk taking.

# Method

Data was collected from family firms in Saudi Arabia. The survey was sent to a stratified random sample of privately held family firms drawn from across six industries and gathered directly from respondents. A total of 266 usable responses were received and the data is analysed using hierarchical regression analysis, principal components analysis (PCA) and sensitivity analysis.

## **Results and Implications**

Significant positive relationships were found between EO and family control and influence (F) and binding social ties (B). Also, as the number of generations involved in the family business increases, the level of EO decreases. This research makes four contributions to the entrepreneurship literature. Firstly, instead of comparing family to nonfamily firms, the research sheds light on family firm heterogeneity. Second, both sides of the debate concerning the entrepreneurial behaviour of family firms have garnered support and in our data the relationship is positive. Third, the inverse relationship between generational involvement and EO provides evidence that EO varies over time. Finally, the study is the first (to date) to empirically verify the conceptual FIBER dimensions developed by Berrone et al., (2012).

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# CHARACTERISTICS OF OPPORTUNITIES AND EXPLOITATION IN CLOSED AND OPEN INNOVATION

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# **Principal Topic**

Entrepreneurial opportunities have long been a focus for entrepreneurship scholars. Discussions have been on whether opportunities are created or discovered and how they come into existence. Little examination has been devoted to how the characteristics of the opportunities influence the way they are exploited. This paper aims to examine how characteristics of entrepreneurial opportunities shape their subsequent exploitations by entrepreneurial firms. Our theoretical starting point is the two distinct modes in which companies can exploit and commercialize a new opportunity: open or closed innovation.

Research on open/closed innovation has mainly examined the exploitation of opportunities from the perspective of how characteristics, capabilities and strategies of firms influence the choice of open or closed innovation mode. Scarce research has been devoted to understanding how the nature of the opportunity itself influence this choice. Opportunities can vary in several dimensions, including their novelty, source, knowledgebase, and relatedness to other firm activities. We propose that the characteristics of the opportunity influence the mode of exploitation chosen by the firm.

#### Method

To identify opportunities to be included for the analyses, we rely on archival data. Norwegian firms conducting R&D qualify for tax-credit on R&D expenditures, provided that they submit an application in detail explaining the nature of the opportunity they aim to develop and commercialise through innovation. These applications constitute an identifiable population of opportunities exploited by R&D active firms in Norway. The information were coded into variables on opportunity characteristics, and open/closed exploitation modes. Regression analyses were run to examine relationships between opportunity characteristics and mode of exploitation.

# **Results and Implications**

The contributions of this study are threefold: First, it addresses an understudied area within the innovation literature related to the role of opportunity characteristics in the decision of open/closed innovation. Second, it adds to the entrepreneurship literature by seeking to understand how characteristics of the opportunity influences the decision of organizing mode. Taking the opportunity as the unit of analysis, we study the interaction between opportunity characteristics and firm level capabilities and resources in opportunity exploitation. Third, by bridging literatures on entrepreneurial opportunities and open/closed innovation, we respond to calls for larger integration of entrepreneurship and innovation literatures.

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# FIRM GROWTH, STRATEGIC ADAPTABILITY, AND ENTREPRENEURIAL ORIENTATION

Brian S. Anderson, University of Colorado-Boulder, USA Yoshihiro Eshima, Osaka University of Economics, Japan

#### **Principal Topic**

Drawing from attention theory (Ocasio 1997; 2011), our model posits that prior firm growth focuses managerial attention on aggressively meeting customer expectations to maintain the firm's growth trajectory. This focus facilitates strategic adaptability, defined as the capability of the firm to adjust to changing market expectations. Strategic adaptability then directs managerial attention towards pursuing new entrepreneurial opportunities to meet those changing expectations, which firms exploit by adopting an entrepreneurial strategic posture (Green et al., 2008). We further specify a conditional indirect effect model, positing that uncertainty in the firm's task environment changes the nature of the path between performance and strategic adaptability, and between adaptability and EO's lower order dimensions as reconceptualized by Anderson et al. (2014).

# Methods

We adopted a two-study design to test our research model. In the first study, we collected data from the senior most executive of 610 small to medium sized business in South Korea. We measured EO using the Covin and Slevin (1989) scale, but modeled EO using a formative specification as outlined by Anderson et al. (2014). We measured strategic adaptability using a three-item psychometric scale, and performance using a three-item subjective comparison of firm growth metrics relative to industry peers. In the second study, we collected data from the senior most executive of 120 small to medium sized business in the United Kingdom. However, in study two we collected objective financial data from a third party for sales and asset growth in the year preceding data collection, strengthening causal inference.

## **Results & Implications**

Model specification using structural equation modeling for both studies provides support for the research model, and results appear robust to endogeneity concerns (see Antonakis et al. [2010]). One implication of our study is in integrating a robust theoretical framework—attention theory—to the EO-antecedent relationship conversation. Further, our study develops the role of strategic adaptability in translating prior performance into future entrepreneurial action; EO has long been associated with various manifestations of learning and strategic change, although this relationship is arguably underdeveloped. Our study addresses this concern, and strengthens the causal connection between strategic change and EO.

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# SOCIAL ENTERPRISES AND INNOVATION PERFORMANCE: THE MEDIATING EFFECTS OF R&D ACTIVITIES AND EXTERNAL KNOWLEDGE SOURCING

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# **Principal Topic**

Social entrepreneurs are expected to bring about new economic, social, institutional, and cultural environments (Rindova et al., 2009); the very essence of their endeavors being social change (Alvord et al., 2004, Christensen et al., 2006, Mair and Marti, 2006; Steyaert and Hjorth, 2006). The literature largely suggests that innovation capacity is an intrinsic quality of a social enterprise. However, recent work by Renko (2013) shows that innovative nascent social entrepreneurs are unsuccessful in developing their innovative ideas into successful companies, and that non-innovative social entrepreneurs have far higher odds of succeeding. In order to shed light on this issue, the current paper investigates how the social character of enterprises affects their innovation activities and their innovation performance.

#### Method

Building on the knowledge-based view of the firm (Grant, 1996), we argue that social enterprises differ significantly from their commercial counterparts with respect to two important activities driving innovation performance, namely (a) the extent to which they develop knowledge internally, and (b) the extent to which they source external knowledge. We surveyed a representative sample of 7159 Flemish enterprises regarding their economic and social goals, as well as their innovation activities in the period 2010-2012 and obtained a response rate of 52% (after two reminders and follow-up). We use structural equation modelling to investigate to which extent a focus on social goals affects R&D spending and external knowledge sourcing, and how this translates into innovation performance.

# **Results and Implications**

Our analyses demonstrate that social enterprises indeed differ from their profit-oriented counterparts with respect to R&D spending and engagement in external collaboration and external information sourcing, resulting in different innovation performance. This paper contributes to the social entrepreneurship literature by analyzing social enterprises innovation activity and performance through the lens of the knowledge-based view of the firm. The results emphasize the distinctiveness of social enterprises, and highlight that findings analyzing innovation in for-profit enterprises cannot simply be transferred to the social enterprise setting.

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# CAN ENTREPRENEURS HAVE A BETTER WORK-LIFE BALANCE?: A CROSS COUNTRY ANALYSIS

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# **Principal Topics**

Work-life balance (WLB) is in the central debate of quality of life. Some scholars argue that self-employment might be a panacea for a WLB, but it also can be a double-edged sword (Prottas and Thompson, 2006): entrepreneurs still struggle with combining work and other responsibilities in life. Different work characteristics of entrepreneurs might influence their capabilities to achieve WLB because implies opportunities but also several constraints that shape and affect people's capabilities to combine work and life domains (Hobson, 2013), but also national context can influence (Reynolds et al., 2005). The aims of this article are 1) to test the influence of individual work characteristics and 2) to test the (interaction) effect of a country's culture on the entrepreneurs' abilities to maintain WLB. We analyze these data from capabilities and agency theory adapted for WLB (Hobson, 2013).

#### Method

We use primary data from solo-entrepreneurs and micro-enterprises owners (up to 10 employees), collected in 57 countries in 2013 (n=13,742). We conduct a multilevel analysis. Our DV is the self-evaluation of entrepreneurs WLB using three-item scale (Valcour, 2007). At the individual level we test different characteristics of entrepreneurs like their motivation, autonomy, and firm characteristics (solo entrepreneur vs. ones that create jobs, industry, innovativeness). For second level we test the economic development of each country and if some formal institutional arrangements (Gender Inequality Index) influence the WLB. Demographics are taken as control variables.

# Results and implications

Our main results confirm that higher level of job autonomy and the opportunity motivated entrepreneurs have more WLB but established self-employed are less satisfied with their WLB than the start-ups. At country level, the gross national income has positive effect on WLB. Finally, moderator analyses showed a positive effect of experience on WLB and autonomy on WLB turns out to be weaker in the context of a high gross national income. We provide some theoretical implications: work context variables which in theory could be experienced as resources, such as work experience, may in practice be experienced as a demand. Practical implications are also discussed.

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# THE CURIOUS CASE OF CORPORATE SPIN-INS: GENERATING PROFITS OR PROBLEMS?

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#### **Principal Topic**

Often, when employees leave to start their own companies their new innovations are permanently lost to the parent-firms. But in some cases, the former employer acquires the new venture, thereby reintegrating the employees, along with their innovations. These thinly studied acquisitions, known as "corporate spin-ins," offer an interesting playing field for corporate entrepreneurship. Since a large majority of all acquisitions fail to achieve the synergies necessary to justify acquisition premiums, spin-ins may offer an opportunity for acquirers to reduce costly information asymmetries and generate superior outcomes by leveraging prior employment ties. However, the return of exemployees who successfully cashed in on their innovations is not without complications. This paper situates spin-ins theoretically within the corporate entrepreneurship and M&A literatures, and empirically examines a proposed framework through a pair-wise comparison of acquisitions, both with and without prior employment ties.

#### Method

To compare spin-ins to acquisitions without prior ties, two dependent variables were used: Cumulative Abnormal Returns (CAR) and Acquirer Asset Impairment (AAI). Our fixed effects, pair-wise comparative model also employed known covariates of acquisition performance. In order to ensure an ample population of acquisitions both with and without prior employment ties, we focused our SDC Platinum search on acquisition-intensive sectors, including software, cloud services and electronic gaming. Using biographical information from disclosure statements, we identified 217 acquisitions of firms founded by ex-employees of 81 parent-firms, from 1995 – 2011. For the purpose of constructing a matched set, we also identified 500 acquisitions consummated by 177 firms that had no prior ties to the acquired firms' founders.

# **Results and Implications**

Our findings suggest that spin-ins significantly outperform corporate acquisitions in which there are no prior employment ties; however, spin-ins are still, on average, value destroying, evidenced by intangible asset write-downs in the majority of the deals comprising our study. It appears that spin-ins substantively mitigate the synergy short-falls caused by information asymmetries, but ultimately fail to generate positive returns due to faulty or incomplete integration of the spun-in entity. Therefore, the utility of spin-ins to a corporate entrepreneurship strategy may be bounded by the acquirer's ability to handle organizational and cultural disruptions that stem from the process of reintegrating former employees who have achieved significant wealth.

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# A SOCIAL COGNITIVE PERSPECTIVE OF HOW ENTREPRENEURIAL MUNIFICENCE BENEFITS ENTREPRENEURSHIP CAREER INTENTIONS

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#### **Principal Topic**

Over the past few decades, entrepreneurship scholars have directed their focus to understanding the process by which individuals decide to pursue careers in entrepreneurship. However, surprisingly few studies have been conducted that focus on the role and influence of incubator experience on individual career intentions. Adopting a social cognitive theory (Bandura, 1986) perspective, this study empirically examines the factors that influence entrepreneurial career intentions through the interactions between individual cognitive factors (achievement motivation, risk-taking propensity, entrepreneurial self-efficacy) and entrepreneurial munificence, defined as the scarcity or abundance of critical resources needed by entrepreneurs to operate within an environment.

#### Method

Hypotheses were tested using hierarchical regression analyses on a sample of 106 MBA students of whom 34 had worked in an incubator for at least 5 months. We controlled for gender, immigration, and employment status. To test whether or not our findings were adversely affected by sample size considerations, we conducted a power analysis using the G\*Power application and found a highly acceptable power of 91.1%. Constructs were measured by established, validated scales and had internal consistencies above the recommended 0.70. Entrepreneurial munificence was measured by whether or not the student participated in the start-up incubator experience. Further, content analysis was used to provide inductively developed categories representing aspects of environmental munificence present in the incubator, including working alongside entrepreneurs, mentoring and networking, and daily learning.

# **Results and Implications**

Our study empirically demonstrates that the effect of one's perceived ability to become an entrepreneur on the intention to engage in such a behavior is contingent upon entrepreneurial munificence. The latter can not only have the potential to bolster individuals' beliefs in their own entrepreneurial self-efficacy and capabilities, but also further strengthen their intentions to launch their own business. This study contributes to the literature by extending social cognitive theory to the study of entrepreneurial intentions. Our results call for further research developments and offer guidance to practitioners as to how incubators can be leveraged as entrepreneurially munificent environments that foster individual intentions to shift careers and engage in entrepreneurship.

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# THE ECONOMIC, SOCIAL AND ENVIRONMENTAL GOAL PRIORITIZATION OF ENTREPRENEURS: AN EMPIRICAL EXPLORATION

Sophie Bacq, Northeastern University, USA Marcus Dejardin, University of Namur, Belgium Olivier Giacomin, European Business School, France Frank Janssen, Université Catholique de Louvain, Belgium

#### **Principal Topic**

Building on recent research on sustainable entrepreneurship, we adopt a goal setting perspective with reference to the three pillars of sustainable development, namely profit, people and planet. Sustainable entrepreneurship research calls for studies that identify and better understand the influence of individual characteristics on the triple bottom line. Therefore, we aim to explore the individual factors influencing entrepreneurs' *prioritizing* of one objective over the two others. Building on research that shows that an individual's characteristics and his/her perceptions of the context both influence his/her entrepreneurial goals, we study the individual drivers of the sustainable orientation (the triple bottom line) of the entrepreneurial activity.

#### Method

We use a quantitative approach and explore data from two sources. First, we rely on the Adult Population Survey conducted in 2009 by the GEM. This sample is constituted of nascent entrepreneurs and established entrepreneurs from 54 countries. Second, we use data from the World Bank to control for contextual factors such as GDP per capita. From the GEM dataset, we use three dependent variables that account for goal prioritization between economic, social or environmental goals. We use demographic variables (gender, age, education level, size of the household), individual variables (perception of entrepreneurial competences, previous activity) and variables related to the entrepreneurial activity (sector, level of competition) as explanatory variables that could influence the likely importance that an entrepreneur gives to the three components of the the triple bottom line.

# **Results and Implications**

We find that demographic and individual variables differently influence goal prioritization. In addition, we find that the influence differs between nascent and established entrepreneurs. However, for the two groups of entrepreneurs, we find that the GDP/capita has a positive influence both on the social and environmental objectives in comparison to the economic one. We believe that these results will contribute to better understand the impact of individual characteristics on the triple bottom line of their organization.

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# AN INVESTIGATION OF THE CENTRALITY OF COMPETING INSTITUTIONAL LOGICS FOR SOCIAL ENTERPRISES

Tae Jun Bae, Hofstra University, USA

#### **Principal Topic**

Since social enterprises differ from both traditional for-profit and non-profit organizations with regard to their pursuit of dual mission: social mission and commercial mission, the question of "why some social enterprises are more likely to incorporate these competing missions than others" has attracted the attention of scholars in past several years (Dacin, Dacin, Matear. 2010; Doherty, Haugh, & Lyon, 2014). Nonetheless, the research addressing the conditions under which social enterprises are likely to achieve dual missions is relatively young and, as such, is still establishing its basic tenets. With the recognition of that understanding the variations in social enterprises' dual mission achievement requires consideration of the organizational or individual factors that can impact on the centrality, the degree of which multiple logics are relevant for organizational functioning (Besharov & Smith, 2014, 375), this reserch attempts to specify some of conditions under which social enterprises' centrality of competing logics rises and falls.

I proposed that social enterprises with the investor stakeholder group (or shareholder group) rich in ethical investors (H1), customer stakeholder group rich in impure altruistic buyers (H2), and employee stakeholder group rich in cross-sector workers (H3) will enhance their centrality of competing logics to a greater extent than those with each stakeholder groups lacking in ethical investors, impure altruistic buyers, and cross-sector workers.

### Method

The sample was used from the Korean Social Enterprises using Korea Social Enterprise Promotion Agency (KSEPA)'s directory, which has tracked 1,012 certified social enterprises by February of 2014. In total, 203 social enterprises have completed two sets of survey and I deleted 13 responding firms due to missing data, resulting in a total of 190 usable responses(for a total usable response rate of rate of 18.96%). Hypotheses were tested using OLS hierarchical regression.

# **Results and Implications**

The empirical results indicated that the higher portion of investors without financial return expectation is negatively associated with the unequal weights to competing issues. It means the greater portion of ethical investors positively influence the centrality of competing logics, which supports my first hypothesis. Similar result was generated from the test of third hypothesis. I found social enterprises high in cross-sector workers percentage are more likely to have relatively equal weights to competing issues. However, the results do not support for the effects of impure altruistic customers on centrality of competing logics. A possible explanation of this insignificant result would be that consumption itself might not be the important factor in social entrepreneurship. According to Coase (1960), social problems with which social entrepreneurs can play a role in dealing might be the results of negative externalities – negative side effects – of production processes, not the results of consumption.

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# IMPACT OF ENTREPRENEURIAL ORIENTATION ON UNIVERSITY PERFORMANCE

Sandhya Balasubramanian, University of Massachusetts Lowell, USA Yi Yang, University of Massachusetts Lowell, USA

#### **Principal Topics**

Entrepreneurial orientation (EO) reflects the entrepreneurial strategy-making processes that key decision makers use to enact their firm's organizational purpose, sustain its vision, create competitive advantages, and eventually influences firm performance (e.g. Lumpkin & Dess, 1996; Miller, 1983). The beneficial relationship between EO and firm performance has been examined immensely through a growing stream of research (e.g. Rauch et al, 2009) in both the entrepreneurship and strategic management literature. But, most prior studies have focused on firms in the private sector, and implications of EO in other organizational settings including universities remain an underexplored area. Few studies that have examined entrepreneurial actions of universities have largely focused on technology transfer outcomes (Perkmann et al, 2013; Rothaermael et al, 2007). In this study, we widen this scope to a holistic systems perspective that extends beyond university commercialization outcomes.

#### Method

The sample of 246 University president letters for the period of 2008-2012 was obtained from websites of US doctorate-granting universities. Drawing from Short et al's (2010) work, we measure EO using DICTION software. Dependent variables included commercialization outcomes (research funding, invention disclosures, patents, spinoffs,) from the AUTM database and overall performance measures (student enrollment and graduation rates, faculty counts, overall university ranking) from IPEDS and U.S. News and World Rankings. The moderating effect of size of the university and STEM focus are also assessed. We control for presence of medical school, level of research activity and institution type as they impact the range, scope and mission of the universities.

# **Results and Implications**

Regression results show that three EO dimensions – innovativeness, proactiveness and risk-taking influence university performance in terms of technology commercialization outcomes. Additional results support the relationship between EO and overall university performance. Our study enhances the understanding of the relationship between EO and performance in entrepreneurial universities – a rather understudied phenomenon. We contribute to the discussion on EO measurement in a context where its presence and relevance are still under scrutiny. Our findings are crucial as universities are emerging as a key institution in the entrepreneurial society in generating new knowledge and facilitating spillovers that spur innovation, economic growth, job creation and competitiveness in global markets (Audretsch, 2013). The findings have significant managerial implications for higher education administrators as institutional adaptiveness to a changing environment and capacity of universities to produce innovation through research and new ideas are true reflections of university entrepreneurialism (Shattock, 2009).

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# DOES HIGH INNOVATIVENESS ALWAYS LEAD TO HIGH PERFORMANCE? A LONGITUDINAL INVESTIGATION OF THE NECESSARY CONDITIONS

Artur Baldauf, University of Bern, Switzerland Tatiana Romanova Stettler, University of Bern, Switzerland

#### **Principal Topic**

Prior research has suggested that outcomes from firm's innovativeness might be both positive and negative (Simpson, Siguaw, & Enz, 2006). The benefits from being innovative are widely discussed and documented in the literature (e.g., Claycomb & Miller, 1999; Hult, Snow, & Kandemir, 2003; Luo, Sivakumar, & Liu, 2005). However, departing from established routines and products implies substantial resource commitments (Miller & Friesen, 1982) and these can be futile taking into account high failure rates of new products (Pombriant, 2006). In the current study, we compare short and long-term effects of innovativeness on firm performance. Specifically, we argue that firm's learning orientation (LO) expressed in its propensity to question long-held assumptions about organizational norms (Baker & Sinkula, 1999b; Senge, 1990) plays an important role in this relationship and can potentially offset the negative effect from innovativeness.

#### Method

We surveyed firms from the German-speaking area at two points in time using a standardized questionnaire. Our data-collection efforts resulted in 244 responses in 2006 (T1) and 64 repeated responses in 2012 (T2). Beside that we collected secondary performance data for a subset of our sample (n = 94). To test our research hypotheses, we applied cross-lagged autoregressive structural equation model analysis. Additionally, we controlled for sampling bias using logistic regression.

# **Results and Implications**

Our findings reveal that the relationship between innovativeness and subjective firm performance is positive in T1 and negative in T2. Thereby, we undermine the long-held assumption about the exclusively positive performance effects of firm innovativeness. Further, we find support for our mediating model and show that over time the negative effect of innovativeness on firm performance can be offset by a stronger orientation toward learning. In this sense we establish temporal embeddedness of these relationships and contribute to the research on entrepreneurial strategy. Finally, we assess validity and measurement invariance of the key constructs across the two observation time points and establish the impact of environmental dynamism and economic crisis, thereby adding both to the corporate entrepreneurship and organizational learning literature.

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### NEW VENTURE TEAM COMPOSITION - A CONFIGURATIONAL APPROACH

Artur Baldauf, University of Bern, Switzerland Adrian M. Wuethrich, University of Bern, Switzerland

### **Principal Topic**

Numerous entrepreneurship scholars have investigated associations between New Venture Team (NVT) composition and new venture performance (cf., Klotz et al., 2014). In this regard, researchers have considered NVT personality characteristics (Zhou, 2013), conflict (De Jong, Song, & Song, 2013), and context (Hmieleski and Ensley, 2007). Scholars have mostly assumed linear and single causation models to examine the NVT composition–performance relationship. However, recent findings from the literature suggest that the effects of NVT composition are likely to emanate from a complex interplay between NVT personality characteristics, conflict and context (Joshi and Roh, 2009; van Knippenberg et al., 2004). To date, little is known about how multiple of these constructs combine to result in subsequent outcomes. Therefore, we draw from the configurational perspective (Meyer, Tsui, & Hingins, 1993; Fiss, 2012) to identify possible configurations of NVT personality characteristics, conflict and context that are causally relevant for specific levels of new venture performance to occur.

#### Method

To explore causally relevant configurations, we sampled young Swiss new venture firms and their teams in a German-speaking environment that are in their early stages of development and growth. These teams consist of two to four members while their new venture firms are between one and five years old. We collected primary data on the relevant constructs from multiple respondents by the use of a web-based standardized questionnaire. To identify causally relevant configurations, we applied Boolean logic (Fiss, 2007) using fuzzy set qualitative comparative analysis (fsQCA) software (Drass and Ragin, 1999; Greckhamer et al., 2013).

## **Results and Implications**

The preliminary results of our study indicate that different configurations of NVT personality characteristics, conflict and context are causally relevant for both high and low levels of new venture performance to occur. Especially, we are able to elicit which NVT personality characteristics and which forms of conflict, respectively, are necessary or sufficient conditions for performance conditional on the occurrence of other constructs or context (Ragin, 2000). Therewith, we add to the growing stream of literature that seeks to identify both how and when NVT composition is likely to be associated with enhanced levels of new venture performance (Eesley, Hsu, & Roberts, 2013).

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# ACCESS TO FINANCE IN GREEN START-UPS AND YOUNG GREEN COMPANIES— A THREE COUNTRY STUDY

Linda Bergset, Oldenburg University & Borderstep Institute, Germany

### **Principal Topics**

Eco-innovation is increasingly acknowledged as a way for business to reduce negative environmental impact originating from or exacerbated by economic activity. Start-ups and young companies have been found to contribute especially towards environmental goals by developing radical eco-innovation. Young companies are also, however, observed to generally struggle with access to finance. This paper examines whether "green" start-ups and young "green" companies (0-8 years) might struggle to an even greater extent, as such companies are theorised to display a different mix of characteristics compared to other companies (e.g. linked to entrepreneurial motivation, strategy or product features).

#### Method

Three methodological steps are employed in this investigation. First, interviews with 24 green start-ups in Finland, Germany and Sweden were completed. Second, a survey with three random samples of companies in the same countries yielded a data set with answers from 273 companies to questions related to the company itself, finance and funding and the sustainability of the company. Third, the participating 273 companies' product portfolios were assessed according to the EU's classification "Environmental Goods and Services Sector" yielding a group of 54 companies with green products/services and a control group of other companies.

# **Results and implications**

The interview results suggest that green start-ups and young green companies may experience particular challenges in their search for finance/funding due to a lack of investor/funder knowledge about sustainability-related issues that are relevant to investment. First results from the survey establishes that there is generally no significant difference between green companies and other companies in neither challenges experienced in access to finance nor rejection from financial institutions/funding programmes. However, green companies do significantly more often use the founders' own funds in the expansion phase, which is related to difficulties in access at this stage. In order to account for further differences within the group of green companies, a regression analysis including a range of control variables will be carried out for the final paper. While usage of financial instruments is similar across the two groups, interestingly, green companies significantly more often bootstrap using overdraft or supplier credit. Furthermore, they significantly more often use private incubators and IPO/share issues as financing methods, potentially indicating a higher level of innovativeness.

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# BOARD LEADERSHIP AND INDEPENDENCE IN ENTREPRENEURIAL VENTURE IPOS

Fabio Bertoni, EMLYON Business School, France Michele Meoli, University of Bergamo, Italy Silvio Vismara, University of Bergamo, Italy

# **Principal Topic**

In this paper, we study how the structure and leadership of the board of directors (BOD) affects the value of entrepreneurial ventures. There are essentially two functions that are played by independent directors in the BOD, underpinned by two complementary theories. First, agency theories views the BODs as a monitoring tool. Second, the resource-based view sees the BOD ars a source of resources and competences. The literature shows that the monitoring role of the BOD prevails in large listed companies, while the resource provision role of the BOD dominates in young entrepreneurial ventures.

However, a series of recent papers show that board independence may become excessive and be detrimental to the value of the company. In entrepreneurial ventures, a BOD that gives too many inputs to the executives, in terms of strategic advices or network of business contacts, will end up diluting the attention of the executives. In the BOD of a young entrepreneurial venture, excess board independence comes in the form of information overflow for the CEO, with a stonger impact for firms characterized by CEO duality.

#### Method

We analyze a sample of 968 firms that went public in France, Germany, and Italy in the period 1995-2011. The list of IPO firms is from the EURIPO database that provides prospectuses and other detailed information on all companies that have gone public in Europe. In our empirical model, the dependent variable is the Tobin's Q, while the main independent variables are measures of board leadership and board independence. Our models control for a series of firm-specific characteristics, IPO-specific characteristics and other characteristics of the BOD.

### **Results and Implications**

Our preliminary results show that the relationship between value and board independence is inverse U-shaped in entrepreneurial venture IPOs. Consistently with our expectations, the phenomenon of excess board independence is more pronounced in companies with CEO duality, and it is not significant in companies where the CEO is not the president of the BOD. Interestingly, we find that the U-shaped relationship between value and board independence is much more pronounced in the younger entrepreneurial ventures in our samples.

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# SURVIVAL FACTORS FOR FRENCH NEWLY FOUNDED FIRMS BETWEEN 2002 AND 2005: ARE THEY VARYING OVER THE TIME?

Gaël Bertrand, ESG Management School (PSB), France

### **Principal Topic**

We examine key survival factors (KSF) and their evolution over the time since the start-up to the third year of existence of the newly founded firms. Our main objective in this work is to provide evidence to support the assumption that the key survival factors of a newly founded firm may change over the time. That statement would help to explain why so many researches have produced so many different results across the world and across the time.

Prior research on multidimensional analysis of newly founded firms' survival reveals clearly 4 dimensions that seem crucial and widely accepted in scientific community, for understanding the KSF:

- The Entrepreneur,
- The Firm.
- The "Entrepreneurial process,"
- The External Environment,

As a result, a four-dimension model has been built to understand the phenomena.

#### Method

Due to the nature of the dependant variables we opted to use a multivariate logistic regression model. 233 dichotomous variables have been categorized into 4 thematic blocs. We cross validate our logistic regression by forward and backward statistical selection. The fit of the model have been measured with, on one hand the Hosmer and Lemeshow and maximum likelihood test and on the other hand R square of Nagelkerke and Cox and Snell.

# **Results and Implications**

The major contribution of this work comes from the evolution over the time of the KSF, the analysis shows clear differences between the two-steps analysis. This result confirms that KSF varies over the different development steps of the young firm. Another main result highlighted by this work is the positive impact of entrepreneurial processes on the third year of survival for all economic sectors analyzed.

This paper brings also results about KSF within the five economic sectors which are all different and specific, especially for entrepreneur, environment and firms. This results imply thereby that survival analysis have to take into consideration the sectorial dimensions to get specific and detailed results.

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#### THE PROCESS OF RECOGNIZING AND DEVELOPING COMPLEX OPPORTUNITIES

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### **Principal Topic**

The identification of opportunities is widely recognized as one of the most fundamental activities of entrepreneurs (Shepherd & DeTienne 2005). Yet, little is known about the identification of complex opportunities, which are subject to ambiguous cues and hold more than one value proposition. As complex opportunities have become increasingly important in theory and practice, e.g. social or green entrepreneurial opportunities, which have to meet the double-bottom line of economic and social/ ecological value, a deeper understanding of the identification of complex opportunities is required. Accordingly we seek to contribute to theory by investigating how complex opportunities are identified.

#### Method

We have conducted a qualitative study, which is well suited for the explorative investigation of phenomena. In our qualitative study with 20 sustainable entrepreneurs we relied on two primary data sources: Interviews and the Structure Laying Technique (SLT). The semi-structured open interviews consisted of three main sections: 1) personal background; 2) opportunity recognition process starting from the very first idea; 3) weighting of economic, ecological and social goals. To visualize and (re-) construct the process of opportunity identification we employed the Structure Laying Technique (SLT), which allows for an insight into the subjective reflection and the reconstruction procedure of the interviewee (Flick, 2009). We have followed an inductive coding process, focusing on the sources, activities and influences associated with the identification of opportunities.

#### **Results and Implications**

We reveal that entrepreneurs either follow the strategy of strategic alignment or holistic integration. Strategic alignment refers to the economically focused approach to align social and ecological attributes with the economic goals of the entrepreneur. This strategy is directed at the business case for sustainability, in which the creation of social and ecological value has shown a positive link to the financial performance of the business.

The observed strategy of holistic integration, on the other hand, followed the logic of developing a holistic and systemic opportunity for sustainable development without compromising one or the other dimension. Entrepreneurs employing this strategy aim at creating a balanced and interconnected sustainable solution, equally valuing all three dimensions of sustainability. Our findings extend theorizing in the opportunity recognition literature by investigating two strategies for identifying complex opportunities.

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# MOVING IN OR MOVING OUT: THE IMPACT OF ENTREPRENEURSHIP ON IMMIGRANTS' ECONOMIC INTEGRATION

Miriam Bird, University of St. Gallen, Switzerland

### **Principal Topic**

Immigrants often have limited opportunities in the labor market, resulting in low occupational mobility due to low levels of human, financial, and social capital (Bates, 2011, Redstone Akresh, 2006) and potentially also discrimination (Carlsson and Rooth, 2007). The constrained labor market opportunities immigrants face are often highlighted as a major reason for the high rates of immigrant entrepreneurship in developed nations (Li, 2001), and as such entrepreneurship has been portrayed as a form of immigrants' economic integration (Sanders and Nee, 1996). However, hitherto we do not know what factors enable immigrants to stay in entrepreneurship and what factors may encourage immigrant entrepreneurs to exit from entrepreneurship. I theorize that the family, constituting bonding social capital, acts as a provider of important resources and therefore influences immigrants' likelihood of exiting from entrepreneurship.

# Method

To investigate the exit patterns of immigrants (i.e., the likelihood of immigrants to exit from entrepreneurship), I rely on detailed longitudinal data. In order to investigate the various factors for exit from entrepreneurship, I identified all immigrant entrepreneurs that entered self-employment in 2001 and followed them until 2006. The main focus of this study is to investigate the factors on the individual and the family level that either foster or constrain immigrant entrepreneurs to remain in entrepreneurship. I use competing hazard models to investigate the different exit options immigrant entrepreneurs have.

#### **Results and Implications**

This study sheds light on our understanding how entrepreneurship among immigrants shapes their opportunities in a society and how different outcomes can be attributed to the individual and the family as such. The results indicate that family resources are particularly important for immigrants' likelihood of staying in entrepreneurship. Although often neglected in immigrant entrepreneurship studies, I also find that bridging social capital resources reduce the likelihood that entrepreneurs will leave entrepreneurship, highlighting this as a crucial role for economic integration of immigrants. Finally, this study shows that it is important to understand the specific social context these types of entrepreneurs are embedded in.

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# WHAT CONSTITUTES AN EFFECTIVE BOARD: EXPLORING BOARD COMPOSITION, ROLES AND BEHAVIORAL INTEGRATION IN HIGH-TECH START-UPS

Ekaterina Bjørnåli, NTNU, Trondheim, Norway Andreas Ellingsen, Arkwright, Norway

# Principal topic

Contrary to large companies, the entrepreneurial firm boards do not operate separately and distantly from the top management team (TMT). Recent studies emphasize the crucial role of the board in early stage high-tech firms and its contribution to the firm's survival and growth, yet such research is still limited. We address the gap by exploring how the board functions in order to enable the firm's development and growth. We do so by investigating in-depth what constitutes an effective board in a high-tech start-up, namely, (1) who the board members are, (2) what roles they perform, and (3) how these roles are performed. Our conceptual framework draws upon the resource dependence and upper echelon theories.

# Methodology

Given limited prior research, our study is an inductive, multiple case-study and based upon unique qualitative data collected in Norway in 2014. Our five case companies are in various life cycle stages and represent different sub- sectors within the clean technology industry, including solar technology, hydropower, geothermal energy, and heat pumps. The case firms were established between 2005 and 2008, and thus fit the definition of a start-up being less than 10 years old. We have interviewed the CEOs personally using semi-structured interview guide. Then we contacted TMT and board members to have them complete the online survey.

## **Results and Implications**

Overall, our findings provide evidence that board composition in terms of complementary resources added by external board members (that the TMT lacks), their increased engagement in the service role and the board's behavioral integration are important commonalities of the board effective work. Collectively they contribute to a firm's competitive advantage by strengthening firm's strategic action capabilities, both speed and breadth. Hence, the effective board work is akin to dynamic capability. However, not only the ingredients, but also the order of implementation is important to achieve board effectiveness. This study provides insights into board behavior in entrepreneurial firms, a relatively unstudied area in entrepreneurship and governance research. For entrepreneurs and policy makers this study can advise on what is needed to create an effective board in a high-tech start-up.

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# LEARNING FROM FAILURE AND SUCCESS: THE ROLE OF DIVERSITY OF EXPERIENCES

Annelies Bobelyn, Eindhoven University of Technology, the Netherlands

### **Principal Topic**

It is widely accepted that organizations can improve their performance by learning from own past experiences and the experience of others. Some studies have argued that organizations learn more from failure than from success, while others have found a reverse effect. The same applies for learning from similar versus diverse events. This paper combines the debate on both issues by investigating how learning from success versus failure interacts with diversity of experience. The venture capital industry provides a reasonably appropriate context to study this phenomenon. As each venture capitalist (VC) typically invests in a variety of firms, each new investment provides opportunities to apply learnings from past experiences. The objective of this paper is therefore the impact of experiences with failed and successful firm investment on the performance of new firm investments.

#### Method

The hypotheses were tested in a sample of 287 British firms active in the life science sector which received venture capital between 1990 and 2010. Performance was measured as the realization of a successful exit (IPO or trade sale). For the experience measures, I tracked the investment portfolio of the lead VC investing in the firm. Success experiences are measured as the accumulated number of IPOs and trade sales, while failure experience is the accumulated number of bankruptcies in the portfolio of the VC. Diversity is measured by use of a herfindahl index based on industry classifications. I also control for overall VC experience, the number of financing rounds and the number of investors involved. For the analysis of the data, I rely on competing risks models.

#### **Results and Implications**

The empirical evidence shows that as IPO and trade sale experience increases, also the trade sale likelihood increases. Similarly, as trade sale experience of the VC increases, also the IPO hazard increases, however the number of IPOs in the portfolio of the lead VC has a negative effect. Regarding failure experiences, a negative effect was found. Furthermore, as expected a significantly negative effect for success diversity was found, while failure diversity had a negative but insignificant effect on trade sale likelihood.

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# ENTREPRENEURIAL SELF-EFFICACY AS A MEASUREMENT OF ENTREPRENEURSHIP EDUCATION – UNDERSTANDING PROGRAMME AFFECTS AND DEMOGRAPHIC VARIABILITY

Monique Boddington, University of Cambridge, UK Shima Barakat, University of Cambridge, UK

# **Principal Topics**

Entrepreneurial Self-Efficacy (ESE) has been receiving increasing attention in the literature (Chen et al. 1998; Boyd and Vozikis 1994; Kasouf et al. 2013 Lucas & Cooper 2005; Vanevenhoven & Liguori 2013; Zhao et al. 2005). Following Bandura (1977) self-efficacy can be understood as a person's confidence in their own ability to perform a specific task. ESE strongly correlates to new venture creation (Zhao et al. 2005) and is thought to be a strong predicator of intentions and actions (Boyd and Vozikis 1994). ESE also provides a legitimate and robust construct that can be used to evaluate entrepreneurial education (Chen at al. 1998; Lucas & Cooper 2005; Vanevenhoven & Liguori 2013).

Entrepreneurship is being increasingly taught across the globe and there is an increasing demand to understand the impact of different initiatives to improve enterprise education and much more work needs to be done (McNally, Martin, & Kay 2010; Vanevenhoven & Liguori 2013; Weaver, Dickson, & Solomon 2006). This paper uses ESE to understand the impact of entrepreneurial programmes across Europe.

#### Method

We use a European sample of enterprise education programmes, ranging from boot camps to longer degree courses. ESE was measured before, after and 6 months after the entrepreneurial programme, using a previously validated instrument (Barakat et al 2014) which measures 9 factors of ESE, entrepreneurial attitude and entrepreneurial intentions. To analyse differences between group means, repeated measure ANOVA was used.

# **Results and Implications**

Entrepreneurship education appears to have a larger impact on the ESE of certain groups over others, for example, women have lower ESE both before and after an enterprise programme. Different teaching methods yield different results, for example, entrepreneurship programmes that provide mentoring and/or bring entrepreneurs into the classroom have a larger impact than those that don't; programmes that are part of a curriculum have a more long term impact than non-curricular courses. This work will provide a valuable resource to guide the design, recruitment and delivery of entrepreneurship education – the more we understand how entrepreneurship education impacts different individuals and how different teaching methods impact entrepreneurial self-efficacy, the better educators can deliver impactful interventions to meet their specific objects.

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# MOTIVATIONS TO INTERNATIONALIZE: THE ROLE OF ENTREPRENEURS' VALUES

Daniela Bolzani, University of Bologna, Italy Maw Der Foo, National University of Singapore, Singapore

#### **Principal Topic**

According to available literature, motivation to internationalize is related to firms' proactiveness towards foreign-market opportunities and firms' environment. In this perspective, the emphasis is on the firm rather than on the decision-makers within the firm. However, we know that firms do not set goals for themselves: entrepreneurs do.

Building on psychological theories of goal-directed behavior (Locke and Latham, 1990) and of values (Schwartz, 1992), we propose that internationalization - as any entrepreneurial action - is motivated by entrepreneurs' desires and goals (Shane et al., 2003; Fauchart and Gruber, 2011), in a complex interplay between personal- and company-level goals (Zahra et al., 2005).

Goals are cognitively organized in hierarchies, where lower-level goals are instrumental to achieve higher-level goals (Rokeach, 1973). The highest level of goals is represented by personal values, which serve as guiding principles in people's lives (Schwartz and Bilsky, 1987). This study aims at: (1) highlighting the hierarchies of goals which motivate entrepreneurs to internationalize; (2) analyzing the relationship between values and internationalization attitudes.

#### Method

We obtained primary data through face-to-face structured interviews with 108 entrepreneurs in Italian new technology-based firms, not yet internationalized. We first carry out an inductive study to highlight hierarchies of goals for entrepreneurs thinking about a potential internationalization opportunity. To this end, we use a 'laddering' interviewing technique and a means-end-chain analysis (Gutman, 1997) to uncover increasingly abstract goals (i.e., (1) focal-goals; (2) intermediate-goals; (3) values). We then use hierarchical regression to test whether the set of identified goals are antecedent to entrepreneurs' internationalization attitudes.

# **Results and implications**

Respondents produced 196 'ladders', mentioning 500 goals, which were content-analyzed by three judges. We numerically and graphically analyzed the relationships among goals and their hierarchical structure. We find subordinate internationalization goals (e.g. increase revenues; diversification; personal growth) and their relationship with super-ordinate individual values (i.e., power, achievement, self-direction; security). The regression shows that self-direction and security value-orientations enhance internationalization attitudes.

Our theoretical contribution is twofold: i) complementing firm-level internationalization motivations with individual-level ones; ii) investigating the role of goals and values on entrepreneurial attitudes. In addition, we present a methodological contribution, i.e. the laddering technique. Policy makers can gain relevant insights to influence entrepreneurs' values and attitudes conducive to internationalization choices.

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### EFFECTS OF HEALTH INSURANCE POLICY ON ENTREPRENEURSHIP

Andrew P. Boysen, The Wharton School, University of Pennsylvania, USA

# **Principal Topic**

Does the availability of health insurance for young adults affect entrepreneurial behavior? Prior research has proposed that the employer-provided system of insurance in the US may reduce entrepreneurship, as individuals are locked into an employer-employee relationship to maintain coverage. It has also been proposed that policy has the potential to shape the form of entrepreneurial activity, and that this potential may be even greater than the potential of policy to affect the rate of entrepreneurship. I propose that insurance availability for young adults, through dependent coverage mandates, may differ in their relationship with incorporated and unincorporated entrepreneurship. Given recent findings that a reduction in job lock for young adults may reduce labor market participation and shift individuals towards more part-time and flexible work, I look for a negative relationship between policies extending parental coverage to adult dependents and incorporated entrepreneurship, and a positive relationship between those same policies and unincorporated entrepreneurship. Further, I look for evidence that the negative relationship between these policies and incorporated entrepreneurship is reduced in instances where costs of incorporation are reduced, or benefits increased.

#### Method

Using a series of state and federal laws mandating dependent coverage for young adults, I look at moves into incorporated and unincorporated self-employment, using a repeated cross-section, state-representative, sample from 1988 through 2014. I also look at how the relationship between incorporated entrepreneurship and dependent coverage policies differs in instances where the costs of incorporation are reduced, or the benefits increased.

#### **Results and Implications**

I find an insignificant, though positive, relationship between unincorporated entrepreneurship and dependent coverage mandates. I find a negative and significant relationship between incorporated entrepreneurship and dependent coverage mandates. The absolute size of this negative relationship is significantly reduced in instances where the costs of incorporation are reduced, or the benefits increased.

This study expands the body of work on the relationship between health insurance and entrepreneurship, using multiple policy events. It also explores how the relationship with policy may differ by type of entrepreneurship, and how the relationship may additionally depend on variations in existing policy, highlighting potential new directions in entrepreneurship policy research.

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# GIVE-AND-TAKE RITUALS: HOW INFORMAL ENTREPRENEURS ELEVATE THEIR STATUS

Oana Branzei, Ivey Business School, Canada Patrick Shulist, Ivey Business School, Canada

#### **Principle Topic**

Original theories of status and markets underscore status as a symbolic and universalistic resource that is externally and evenly allocated (Podolny, 1993). Newer theory, however, sees that there are also concrete and particularistic elements of status, which can be allocated unevenly across different situations, and can be built and changed through social and economic exchanges (Binning & Huo, 2012). While most status work in entrepreneurship explores how entrepreneurs draw on the symbolic and universalistic status of others to enhance venture legitimacy (Saxton & Saxton, 2011), we inductively explore a context where status is vastly different. We focus on informal entrepreneurs – those working outside of the institutional and legal frameworks of their countries (Webb, Tihanyi, Ireland, & Sirmon, 2009) – and inductively explore how they discursively construct concrete and particularistic status through social and economic actions.

#### Method

We use 180 in-depth interviews with entrepreneurs from four contexts where both informality and entrepreneurship are endemic (Kenya, Tanzania, Rwanda and Ghana) and analyzed them using a new combination of comparative (Eisenhard & Graebner, 2007) and processual inductive methods (Gioia, Corley & Hamilton, 2013). In coding these interviews, we emphasize the concrete and particularistic nature of status for informal market entrepreneurs.

# **Results and Implications**

We reveal how entrepreneurs in informal markets use status transactions to create and/or replicate opportunity (Bennett & Estrin, 2007). We build on the understanding of status as a social resource (Binning & Huo, 2012) and contribute more broadly to social resource theory (Foa & Foa, 1974) which specifies how non-economic resources (status, love and information) are exchanged with economic resources (goods, services, money).

Our inductive understanding of how entrepreneurs give-and-take status from themselves, in large part through dual transactions (economic and non-economic), extends our understanding of expressions of entrepreneurial agency (Goss, Jones, Betta & Latham, 2011). We elaborate on the positive implications of self-declarative and self-authoring processes (Rindova, Barry & Ketchen, 2009) by showing their role in building concrete and particularistic status. By revealing status-building antecedents to opportunity creation and replication, we then reconcile the dual paradox of (il)legitimacy (Webb, Tihani, Ireland & Sirmon, 2009) and wealth potential (Alvarez & Barney, 2014) in informal markets by explaining how status transactions relink upward social mobility with opportunity creation and replication.

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# A POST-HEROIC VIEW ON ENTREPRENEURIAL CREATIVITY: THE UNDERESTIMATED ROLE OF EMPLOYEES AND NETWORK INTERMEDIARIES

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# **Principal Topic**

Entrepreneurship research is regularly biased by a quite heroic conceptualization of the entrepreneur. Entrepreneurship is seen as a "one man show", where individual entrepreneurs act as "creative destroyers" (Schumpeter, 1934 [1912]) using their individual creativity (Tang et al., 2012), psychological traits (Cardon et al., 2013) and social capital (Florinvet al., 2003) to discover opportunities (Shane & Venkataraman, 2000) and to create the new.

However, the pertinence of *organization* in the entrepreneurial process (with executives and employees embedded in networks) has by and large received little attention compared to the entrepreneur as a luminary individual. To provide a counterpoint to this view, we propose a *postheroic* perspective. We emphasize that not only leaders and founding teams (Harper, 2008) shape the creative process to end up with something novel and valuable (Amabile, 1996), but that this also applies to the whole entrepreneurial firm as an organization with executives and *employees* – whereby the creation process takes place across multiple levels within interorganizational networks: At the beginning, new ventures often not only lack internal resources, but also creativity-enhancing network relationships (Stinchcombe, 1965). This is why the initiation of entrepreneurial networks often starts with the help of intermediaries (e.g. business angels, business incubators, transfer offices, VCs; Zhang & Li, 2010). Drawing on the well-established research on the role of intermediaries for entrepreneurial creativity and innovation (Howells, 2006; Zhang & Li, 2010), we assess the post-heroic contribution of employees to this relationship. We furthermore add to the research on intermediaries, as we do not only analyze the mere existence of venture-intermediary relationships, but also the recurring networking practices that manifest and stabilize these relations.

# **Results and Implications**

In a survey-based study, drawing from the data of 101 CEOs and 261 employees in start-ups, multilevel moderated mediation analysis is applied. According to our results, relationships with intermediaries are particularly effective for entrepreneurial creativity if recurring networking practices are in place. Herein, the involvement of employees from lower hierarchical levels turned out to have a stronger mediation effect than the individual efforts by the CEO. We discuss our findings against the backdrop of the proposed post-heroic view.

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# OF THOSE WHO PLAN: A META-ANALYSIS OF THE RELATIONSHIP BETWEEN HUMAN CAPITAL AND BUSINESS PLANNING

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#### Summary

Our paper investigates who engages in business planning. We investigate how prior work experience and education shape an individual's disposition toward business planning, the type of business planning undertaken and contextual factors that moderate the relationships. In doing so, out study fosters our understanding of the role business planning fulfills in the entrepreneurship process.

#### Literature

Our work brings together contemporary literature in entrepreneurship on the use of business planning, with classic work from Becker (1964) on human capital. Following human capital theory, we develop hypotheses regarding effects of different dimensions of human capital on business planning and their comparative effect strengths as well as contextual moderators. We specifically focus on effects of education, general experience and domain-specific entrepreneurial experience. We further perform a similar unpacking on the concept of business planning, distinguishing between the aspects of having a formal plan, and engaging in the process of planning. Furthermore, we build expectations around temporal and geographical factors that may moderate our model.

#### Data

We test our hypotheses against a sample of 8,095 SMEs described in 31 different data spanning 20 different countries. We use meta-analysis to evaluate our hypotheses and leverage the variation in our dataset to examine our moderating hypotheses.

### Results

We find a positive effect of education and work experience on planning. Strikingly our analyses reveal a non-significant relationship between entrepreneurial experience and business planning. Examining the aspects of planning, we find a non-significant relationship of human capital and having a formal business plan, while human capital is significantly related with the planning process. Regarding moderation effects, we found no significant change in the human capital - business planning relationship over a 30+ year time span. However, cultural uncertainty avoidance shows a significant moderation effect where the relationship is stronger in high uncertainty avoiding cultures.

#### **Implications**

Our results offer important implications for three areas. We depict who engages in business planning, we further our understanding how work contexts shape the disposition to plan. To the human capital literature, we add that in the entrepreneurial setting, individual human capital is connected with the process of planning, and not necessarily the outcome of having a formal plan. This suggests useful development in the core theory about whether human capital is more generally connected with processes than with more artefactual elements such as a formal business plan.

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# VENTURE CAPITAL INVESTMENT AND FIRM PERFORMANCE: A SPATIALLY INFORMED SOCIAL NETWORK APPROACH

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# **Principal Topic**

Relational ties and network status, in contrast to arm's length transactions, are central to many financial activities. In this study we bring together social network theory and a resource-based view on firm performance by investigating if structural as well as spatial differentiations of venture capital [VC] investors in syndication networks imprint on early growth prospects of their portfolio firms.

### Method

The effect of VC investors' network status and geographical network position on the early growth performance of ventures is tested using longitudinal data on Belgian portfolio firms (N=64) that received funding between 2001 and 2008 and their domestic as well as international VC providers. Data has been retrieved from the Zephyr database (Bureau van Dijk). Financial statement data provided by the National Bank of Belgium were consulted for information on target firm performance. To construct and analyze structural and spatial features of VC co-investment networks, graph theory is applied. Networks are based on dynamic adjacency matrices. Hypotheses on the relation between network attributes and portfolio firm performance were consequently analyzed employing multilevel models of change.

## **Results and Implications**

The study departs from a customary neoclassical understanding of finance and provides a sociological as well as geographically-informed understanding of VC activity. Applying a multilevel framework on longitudinal growth data of Belgian VC investors and their syndication partners, we find that both VC investors' local and cross-border network embeddedness impacts venture performance. The results of the study suggest that inter-firm relational ties and, particularly, cross-border linkages (1) are important channels for the transfer of information and knowledge and (2) expand the resource-base of portfolio firms. Despite distance-constraints with respect to the transmission of tacit knowledge resources, particularly international relational ties are found to be beneficial for headcount growth which is associated with their role as crucial sources of non-redundant information and innovation-triggering knowledge.

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# LEVELS OF CORPORATE ENTREPRENEURSHIP INTENSITY, LONGER TERM PERFORMANCE AND ABILITY TO RECOVER

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#### **Principal topic**

This study investigates the longer-term effects of corporate entrepreneurship intensity on operating profitability, revenue growth and return on equity. Our period of investigation is 2000-2014 and includes periods of economic upturn and downturn. We have four research questions: (1) How stable is EO over the years? (2) Does corporate entrepreneurship intensity (EO) in established firms lead to longer-term financial performance improvement. (3) Does the effect on firm performance differ in times of economic growth and downturn? And (4), are stable levels of corporate entrepreneurship intensity better for firms than fluctuating ones?

#### Method

Using two surveys, we measured in 2000 the EO and several contextual variables of 216 companies with > 400 fte from different sectors, using the entrepreneurial orientation dimensions 'innovativeness', 'risk taking' and 'pro-activeness'. We repeated this research in 2014 for the 135 companies we could trace from the 2000 sample. Over a period of 14 years, we have three measurements of EO: the first measurement in 2000 (n=216), the second in 2014 (n=96) and a third measurement in retrospect in between, namely in 2007 (n=84). We link these three sets of EO measurement to the financial performance data from annual reports of the 135 companies in the second sample.

# Results and implications

First result from the study is that EO is partly stable and partly fluctuating. We found significant correlation between EO in 2000 and in 2014 (indicating stability), but also significant correlation with environmental fluctuations (in hostility). We did find some support for long-term effects of EO; firms with a lower EO in 2000 had a higher rate of bankruptcy in the 14-year period. However, strongest relationships between EO and performance measures were in the first two years after we measured EO. Furthermore, economic circumstances do moderate the EO – performance relationship. We found that in the first year of a recession, EO had a negative correlation with performance measures, but already in the second year, it became positive. There are indications those coherent changes in environment and EO result in superior performance. Together, these findings give several new insights on longer term EO development and effects, and suggest managers adapt EO to the current or expected market situation.

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# TO PIVOT OR NOT TO PIVOT: WHY DO NASCENT VENTURES CHANGE THEIR BUSINESS MODELS?

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# **Principal Topics**

For nascent ventures, becoming cash flow positive may require changes in the business model. A business model is an interconnected set of activities and exchange relationships that create value, and includes customer value proposition, source of revenue/profit, resources, capabilities and key processes (Zott, Amit, & Massa, 2011). During venture development, the entrepreneurial team makes decisions about resource and activity configurations designed to deliver value to customers (Demil & Lecocq, 2010). Nascent ventures may be under conflicting pressures—to stay the course and give the business model time to succeed and attain legitimacy, or to cut losses and make a change rapidly (Gersick, 1994; Zimmerman & Zeitz, 2002). A change, or pivot, in key value creating activities, such as distribution, product technology, or market choice can hasten an early closure. In this study, we address the following question: "What causes nascent entrepreneurs to change their business models?" Drawing from the literature on strategic change and entrepreneurship, we hypothesize that earlier stage of development, more entrepreneur experience, previous angel funding, and environmental factors will be positively associated with business model changes.

# Method

Our data were drawn from a population of 906 nascent ventures in the Boston area which have applied for angel investment during the past three years. Using a survey that measured strategic change, independent variables were stage of venture development, entrepreneur experience, angel investment, and environmental factors, while the dependent variable was measured by 15 items capturing organizational change (Barton, 2010). Control variables included size and age of ventures. Our response rate was 32.6% (71 postal surveys and 224 on line).

#### **Results and Implications**

Respondents ranged across stages of development and business sector. The average number of changes was five for all ventures. Contrary to our hypothesis, businesses farther along in development were more likely to make changes in their business model. The start-up experience of the founding team was negatively related to changes in the business model; however, a greater number of angel investments was positively related. Our findings suggest that perhaps there may be some coaching associated with angel investment leading to business model changes.

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# VENTURE CAPITAL INVESTING: ARE WOMEN ENTREPRENEURS PERCEIVED AS RISKIER INVESTMENTS?

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# **Principal Topic**

Venture capitalists seek to reduce risks by making choices they feel have greater certainty for increasing value. We use two theories, risk tolerance and status theory of investment firms, to investigate whether venture firms with higher status and prestige may be more risk tolerant due to their position and accomplishments, while lower status venture firms might be more risk averse because they are still trying to prove their capabilities (Sorenson & Stuart, 2001). We consider whether or not role incongruity of women entrepreneurs may lead to stereotyping of women as more risky investments.

#### Method

We utilized three years of venture capital funding data (2011-2013) from Pitchbook, that provides public data on 6,000 US companies funded by venture capital. Independent variables were venture capital firm status, measured by VC firm size in employees, assets under management, age, and geographic location, (Sorenson & Stuart, 2001). Dependent variables were investment in stage of company, industry, if there was a woman on the entrepreneur team/or CEO, and the total dollars invested. Control variables were age of venture, size of venture (employees) and current revenues. Hypotheses examined the effects of prestige or status of the VC firm and likelihood of investments in companies with women on the team, by stage of financing, industry, valuation and geographic location of venture.

# **Results and Implications**

Results show that venture capital firm status produces a difference in risk tolerance and risk aversion in terms of investments in companies with women entrepreneurs. Older, larger and more established venture firms were more likely to invest in companies with women while younger, lower status venture firms were less likely to do so. We find that higher status venture capital firms are more risk tolerant while lower status firms are more risk averse which contributes to theoretical research on status and reputation. Companies with women CEOs, which are more likely to be older and bigger, receive lower valuations than companies with men CEOs. As businesses with women access VC funding through primarily higher status VC firms, they are further disadvantaged when growing their businesses due to the lower valuations/less favorable terms at investment.

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# ENTREPRENEURSHIP AT THE BASE-OF-THE-PYRAMID: EXAMINING THE ROLE OF TRUST

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### **Principal Topic**

The relationship between trust and venture performance has been systematically examined on samples from developed economies, frequently producing positive associations. However, it is not clear if trust plays a similar positive role in base-of-the-pyramid (BOP) markets, which are characterized by weak formal institutions and can leave entrepreneurs with little recourse if others act opportunistically. In this paper, we examine: (a) entrepreneurs' trust in their exchange partners and its influence on entrepreneurial venture performance in BOP markets and (b) key conditions that moderate this relationship. We focus on three theoretically relevant exchange conditions that center on entrepreneurs' ability to: (1) draw upon legal recourse in cases of opportunism (i.e., a venture's legal (in)formality), (2) absorb losses when experimenting with trust (i.e., the availability of slack resources), and (3) know when to trust (i.e., the entrepreneurs' level of education).

#### Method

We test our theory using a sample of 272 entrepreneurs operating in Swaziland, a prototypical BOP context.

# **Results and Implications**

Contrary to findings in developed markets, our results suggest that trust is negatively related to ventures' performance in BOP market settings, identifying an important boundary condition for the generalizability of trust perspectives. Our study also contributes to research on boundary conditions within trust perspectives (Krishnan et al., 2006; Poppo et al., 2008) by examining what factors intensify or erode the effect of trust on venture performance in BOP markets. The results suggest that even in BOP markets in which weak formal institutions dominate, formality enables entrepreneurs to use the potential for legal recourse to their advantage in dealing with trust-based relationships. Similarly, whereas higher levels of education can increase entrepreneurs' awareness of potential opportunism, slack resources might lead entrepreneurs to take too many risks in trusting their exchange partners. This study contributes to our understanding of what factors determine venture performance in BOP markets, adding to the research on sources of heterogeneity among ventures' performance. Overall, the results underscore the value, and risks, of trust in inducing entrepreneurship in BOP markets.

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# OPPORTUNITY IDENTIFICATION AND IDENTIFICATION WITH OPPORTUNITIES: EXPANDING THE MOTIVATIONAL DYNAMICS OF ENTREPRENEURIAL ACTION

Philipp Bubenzer, HEG Fribourg, Switzerland Denis A. Grégoire, HEC Montréal, Canada Nathalie Nyffeler, HEIG-VD, Switzerland

# **Principal Topics**

What motivates nascent entrepreneurs to develop further an idea they have had for a new product / service? Although a few studies examined the influence of opportunity ideas' characteristics on the identification, development and exploitation of such ideas, the bulk of empirical research has focused on the effects of nascent entrepreneurs' background characteristics, resources and predispositions. By comparison, research on the motivational underpinnings of opportunity pursuits has remained somewhat under-developed. Though many studies include broad considerations like respondents' entrepreneurial intentions and attitudes towards entrepreneurship, few papers specifically consider one's personal stance vis-à-vis particular ideas. To address this oversight, we develop and test new theory about nascent entrepreneurs' personal identification with different ideas for new products and services. We hypothesize that one's personal identification with an idea is not only related to stated motivations to develop an idea further, but also reinforces the positive influences of perceived desirability, feasibility and commercial value on such motivations.

# Method

We test these hypotheses by tracking students' and professionals' efforts during a series of brainstorming exercises in the context of year-long innovation projects. The unique aspect of our research design is that we polled participants at different times, including before they have talked to anybody about ideas they have generated on their own, after they have discussed some of their ideas with other participants, and after they have discussed their ideas with industry experts. As a result, we are able to track potential changes in identification, and correlate this with both stated intentions to present/discuss an idea at a later stage and observed efforts to do so.

# **Results and Implications**

By revealing the extent to which personal identification with different ideas influences motivations to develop such ideas further, we contribute new theoretical insights about the motivational dynamics fostering entrepreneurial action. Interestingly, our work also translates into concrete instruments that can foster abilities to discern between different ideas – thereby enabling more effective resolution of ideation activities towards the development of ideas into actionable products, services, and new ventures.

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# THE DARK TRIAD, EMPLOYEE CREATIVITY, AND PERFORMANCE IN THE NEW VENTURE CONTEXT

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# **Principal Topics**

Entrepreneurship literature has generally focused on the positive attributes of the entrepreneur, leaving a significant gap in relation to the dark side (Miller, 2015). The dark triad represents the three most commonly studied negative characteristics (Paulhus & Williams, 2002): Machiavellianism, subclinical narcissism, and subclinical psychopathy. Though each is unique, they share a core of manipulation, callousness, and duplicity. Context is predicted to play an important role in predicting positive or negative outcomes related to these characteristics. Contexts with low interest alignment and relational distance correspond to short-term success but long-term failure (O'Boyle et al., 2012). Settings with high interest alignment and relational distance link the dark triad to short and long-term success (Deluga, 2001; Ricks & Fraedrich, 1999). Applying this framework in the new venture context, founders with higher dark triad levels should be related to positive outcomes (higher employee creativity and performance). However, employee tenure should weaken this relationship.

#### Method

Using structural equation modeling (SEM), study one analyzes responses from 244 US small business owners in business less than 10 years with less than 20 employees. Results show significant relationships between founder dark triad and employee performance moderated by employee tenure. Study two also used SEM with a sample of 300 new venture founders in business no longer than 10 years. Results show significant relationships between founder dark triad levels and employee creativity when moderated by employee tenure.

### **Results and Implications**

For investors, dark triad characteristics are important predictors of critical new venture employee outcomes. Founders with higher levels of psychopathy are linked to a significant decrease in both employee creativity and performance that is magnified for performance as employee tenure increases. Machiavellianism is associated with increases employee performance in both the emerging and enduring zones. Yet the cost of this performance increase appears to be a significant reduction in employee creativity. Possibly the least harmful due to their social skill and soft (friendly) manipulation (Jonason, Slomski, & Partyka, 2012), narcissism corresponds to long-term increases in both employee performance and creativity.

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# DETERMINANTS OF THE FLOWS OF VENTURE CAPITAL IN THE USA

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### **Principal Topic**

We develop econometric models for the annual flows of money into and out of venture capital funds in the USA. We examine the interconnectedness of the following factors believed to affect the flows: limited partners' annual internal rate of return, the emergence of new industries, government policies, and public stock markets.

# Method

We tested the following hypotheses:

Venture capital commitments = f(Limited partners' annual IRR, Stock market indices, Public policy changes)

Limited partners' Annual IRR = f(Number of IPOs, Amount raised with IPOs, Number of acquisitions/mergers, Value of acquisitions/mergers)

Venture capital investments = f(Limited partners' commitments, growth rate of emerging new industries)

# **Results and Implications**

Results: the annual amount of new commitments correlates with the annual IRR in the previous year (p<0.000001); the annual IRR correlates with the annual number of IPOs (p<0.01); and the annual amount of new investments correlates with the amount of new commitments in the previous year. The Internet/Web was the only emerging industry that was significant (p<0.05). No other variables were significant at the 0.05 level.

Based on our results, we conclude that financial returns govern the flows of venture capital and that returns are determined by the number of IPOs. Neither the number of acquisitions nor their total value correlated with the rate of return; indeed, there was a glimpse that the number of acquisitions was negatively correlated with the returns (p<0.1). We think that it is because IPOs are on average much more lucrative than acquisitions and set the valuation of acquisitions. When the IPO window is closed or barely ajar, valuations are lower and fewer companies are harvested via IPOs and more via acquisitions. The only emerging industry that had a significant effect on the flows was the Internet/Web, which was no surprise as the returns during that era were astronomical. We found no relationship between changes in the capital gains tax and the flows. Again, it was not surprising as the percentage of commitments coming from participants affected by the capital gains tax is relatively small. Our findings imply that the most important policy to foster robust flows of venture capital is one that ensures healthy stock markets for IPOs.

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# THE LENSES OF GENDER: A NARRATIVE ANALYSIS OF SUCCESSION IN FAMILY BUSINESS

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### **Principal Topics**

Extant research relies on stereotypical role based views of men and women in family business and begins from assumed essentialist sex differences (Hamilton, 2006; 2013; Ahl, 2006). In order to advance the field, family business researchers need to engage in more contemporary debates in gender and feminist theorizing (Hughes et al., 2012). Here, we take a social constructionist view of family business succession, investigating often taken-for-granted norms of or notions about gender. We look at how gendered talk and practice in family businesses contributes to who can be the successor and how succession unfolds. We engage with Bem's classification of masculine and feminine (1983), Collinson and Hearn's work (1994) on multiple masculinities as well as Hamilton's work on gender in family business (2006; 2013) to guide our interpretation.

#### Method

We draw on ten narrative accounts in five family businesses to explore the discursive construction of succession. We first compiled a succession narrative for each individual, before identifying prevailing themes across the narratives. To do so, we proceeded in a manner similar to grounded theory, remaining responsive to emergent themes and keeping the story intact while using prior theoretical concepts (Reissman, 2003). We compared and contrasted the themes and subthemes

# **Results and Implications**

Talk of male control and dominance, business as a 'man's world' and women's alignment with support and domestic roles prevailed, pointing to the continued presence of patriarchal relations in family business. Gendered discourses shape who can be the potential successor. The head of the family business is described in strongly masculine terms: rational, competitive, and decisive (Bem, 1993). The successors' integration is also patterned by gender. Successors prove their 'manliness' to gain legitimacy. Whether it be by 'cleaning up' and firing staff upon arrival (FB#1; FB#4), by 'making a name for yourself' or demonstrating you are more than 'just the boss's son' (FB#2). Family business members privilege certain forms of managerial masculinity over others. We contribute to understanding the complexity of family business succession by exploring the role of gendered discourses, thus far largely ignored.

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# ENTREPRENEURIAL FEAR OF FAILURE: SCALE DEVELOPMENT AND VALIDATION

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# **Principal Topics**

Prior research on fear of failure describes it as the appraisal of threats in evaluative situations with the potential for failure (Conroy, 2001). These situations activate cognitive beliefs and affective states about the aversive consequences of failing, triggering different behavioral mechanisms. These mechanisms include avoiding the threat or approaching the threat aggressively (Gray, 1971). Notwithstanding the evidence of the possibility of different behavioral responses to fear of failure, an examination of empirical research in the entrepreneurship literature would seem to highlight that fear is always and only an inhibitor of entrepreneurial behavior. Although this prior research is very helpful in assisting understanding of the effects of fear of failure (Arenius & Minniti, 2005; Langowitz & Minniti, 2007; Minniti & Nardone, 2007; Vaillant & Lafuente, 2007), questions remain regarding the adequacy of measures to fully capture the complexity of the effects of fear of failure. The purpose of this research is, therefore, to develop a multidimensional measure of entrepreneurial fear of failure (EFF).

# Methods

Building on prior research (Hayton et al., 2013), we inductively develop the item sets and operationally define seven dimensions of the fear of failure construct (financial security, personal ability, potential of the idea, funding of the venture, threat to social esteem, opportunity cost, and venture's ability to execute). The initial EFF scale was subjected to exploratory factor analysis using principal-component analysis with oblique rotation, using a sample of students and entrepreneurs. Convergent and discriminant validity of the new measure, as well as its nomological network are examined in two further samples.

# **Results and Implications**

Preliminary results shows that our measure of EFF comprises multiple factors that are specific to the entrepreneurial process. Specifically, the initial solutions showed that the measure is composed of six factors: *financial concerns* (financial security and funding of the venture merge into a single factor), *personal ability*, *potential of the idea*, *opportunity costs*, *threat to social esteem*, and *venture's ability to execute*. With these results as a foundation, this paper represents an important next step in the development of fear of failure research in entrepreneurship.

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# DO YOU SEE WHAT I SEE? A MULTI-METHOD EXAMINATION OF THE EMOTIONAL SINCERITY OF ENTREPRENEURS

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# **Principle Topic**

Emotions entrepreneurs experience and display can affect their ability to gain funding (Baron, 2008; Jennings et al., 2012; Mitteness et al., 2012), motivate employees (Bruegst, et al., 2012; Brundin, et al., 2008), devote time/effort toward their ventures (Murnieks et al., 2012; Foo et al., 2009), and to be successful (Drnovsek, et al., 2012). Yet, individuals can actively manage and regulate their emotional experience and displays to elicit reactions in others (e.g., customers/investors) (Dasborough & Ashkanasy, 2002; Gross, 1998; Martens et al., 2007). Survey methodologies used to assess individual emotions are problematic, since individuals can manipulate their reported emotions deliberately or unintentionally (Robinson & Clore, 2002). Other methodologies, such as analysis of speech patterns or facial expressions, may be more reliable and accurate, as these are much more difficult to fake (Sideridis, et al., 2014). In this study, we use affective computing technologies to evaluate the emotions entrepreneurs display and convey to others. By examining the extent to which entrepreneurs' speech and facial patterns correlate with what they say about their ventures, we draw conclusions about their emotional self-regulation and the extent to which the words they use to explain their emotions match their biophysical emotional reactions to affective events such as failure, opening the firm, rapid growth, or hiring of key personnel.

## Method

We analyzed videos of 39 entrepreneurs telling their venture story using computerized facial emotion analysis and content analysis to explore how facial expression varied based on affective events. We used iMotions Attention Tool, which analyzes over 200 key elements of a person's face to detect six basic emotions, affect, and intensity of each emotion every 200ms.

# **Results and Implications**

We focused on eight specific affective events and found considerable variation in emotional expression within entrepreneurs (emotions expressed for one event/object versus another) and across entrepreneurs (different emotional expressions for similar events). Results of this study will help us understand the emotion regulation strategies entrepreneurs utilize, and tailor our research instruments to more accurately assess and analyze emotions in entrepreneurship.

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# SELF-REGULATION, LEARNING AND ADVANCEMENT: EFFECTS OF ENTREPRENEURIAL SELF-EFFICACY AND COPING BEHAVIORS ON LEARNING AND VENTURE GOAL PROGRESS

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# **Principal Topics**

In the competitive and dynamic entrepreneurial environment, the venture progress is largely determined by whether entrepreneurs can efficiently and effectively explore new ideas and learn. Learning, however, can be a stressful process, as it involves risk taking, experimentation, and trial-and-error. In fact, scholars suggest that errors, mistakes and failures help entrepreneurs learn and grow (Shepherd, 2004). Despite the importance of learning in the startup process, little is known about antecedents and outcomes of entrepreneurial learning. We suggest that self-regulatory processes facilitate learning which in turn leads to venture goal progress.

Specifically, we study the role of entrepreneurial self-efficacy and coping behaviors on entrepreneurs' venture activities, learning and their venture goal progress. Entrepreneurial self-efficacy, which refers to the individual's belief that he or she has the ability to achieve successful venture outcomes (Bandura, 1997; Chen, Greene, & Crick, 1998), is expected to enhance learning process and outcomes. Moreover, given the stressful nature of entrepreneurship (Uy, Foo, & Song, 2013), entrepreneurs' coping behaviors which lead to positive interpretations of the experience should enhance the effect of efficacy on the outcomes.

# Method

Participants are 65 entrepreneurs at incubator sites in the United States. They give responses weekly in about 2 months' time. Participants report how much they have learned in the past week related to their venture, their goal progress, entrepreneurial self-efficacy, and venture activities. They also report their coping behaviors at the beginning of the study.

# **Results and Implications**

We expect that coping behaviors and entrepreneurial self-efficacy jointly influence entrepreneurs' learning and goal progress. Moreover, entrepreneurial self-efficacy affects entrepreneurs' learning and venture goal progress through increasing venture activities. This paper contributes to the entrepreneurial learning and self-regulation literature. Our study complements the perspective of action learning (Revans, 1980) by suggesting that entrepreneurially self-efficacious entrepreneurs benefit from learning by having more venture activities. Moreover, we add to the self-regulation literature by relating entrepreneurial self-efficacy and coping behaviors to entrepreneurs' learning and goal progress.

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# VIRTUAL COMMUNITY CORRELATES OF MUTUALLY BENEFICIAL ENTREPRENEURIAL BEHAVIOR

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### **Principal Topics**

The operational environments of virtual entrepreneurial firms offer unique opportunities that may not be evident in physical/ brick and mortar contexts. Sweeping developments in information and communication technologies, ease of information flows, and low cost access to technological tools have led to radical changes in the opportunities available to entrepreneurs and their exploitation methods as well (Roberts, 2001). However, not much is known about the nature and dynamics of the online entrepreneurial ecosystem or if and how it promotes novel interactions. In particular, virtual entrepreneurs that choose to host their business on a common cybermediary platform may experience greater sense of identity, shared values, and membership due to their shared online environment. This sense of virtual community may give rise to mutually beneficial firm behaviors whereby support of other businesses becomes the norm in contrast to entrepreneurial firms existing in physical environments which tend to view other firms competitively. We integrate the literatures on sense of virtual community (Blanchard, 2007), virtual/ e-word of mouth (Kozinets, 1999), online social capital (Williams, 2006) and e-community support (Rothaermel & Sugiyama, 2001) to answer the research question: What are the virtual community correlates of mutually beneficial entrepreneurial behavior?

### Method

A total of 1500 virtual entrepreneurial firms hosted on a worldwide cybermediary platform were contacted for sampling purposes. The *dependent* variable i.e. firm performance was operationalized as average sales per quarter and satisfaction with business experienced by entrepreneur. The data on four *independent* variables were obtained from primary sources via survey questionnaires (a) *Sense of virtual community:* sense of community experienced towards others in the community; (b) *Ecommunity support:* frequently making purchases at other shop-fronts; (c) *Virtual/e-word of mouth:* how many other businesses the virtual firm features; (d) *Online social capital*: social capital resource accumulated.

# Results/Implications

This study contributes to understanding the mutually beneficial behaviors of virtual firms and their effects on firm performance. It is an initial attempt to elucidate the dynamics of the supportive online entrepreneurial ecosystem. Results indicate performance measures were related to ecommunity support and online social capital. We draw attention to the nature and effects of cooperative inter-firm behaviors in the virtual domain.

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# FORMAL INSTITUTIONS AND ENTREPRENEURSHIPS: MODERATING ROLE OF CORRUPTION

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# **Principal Topics**

In this paper, using a hierarchy of institutions posited by Oliver Williamson (2000), we analyze how informal institutions, formal institutions, governance, and resource allocation influence the rate and type of entrepreneurship. Governance is important for entrepreneurs because they have to interact with bureaucrats often and as the government size increases. The second level of the Williamson's model is formal/regulatory institutions. Regulatory institutions are critical because they reduce uncertainty and risk associated with entrepreneurial activity. Regulations related to tax policies can influence the type of entrepreneurial activity undertaken by an entrepreneur because tax policies affects the return on investment by the entrepreneur. Informal institutions are at the top of the hierarchy because informal institutions are embedded in the society that gradually can become habitual and can be hindrance for productive activity. We consider corruption an ideal example of this because Corruption is embedded in society in many developing countries. In this article we use corruption as a moderator to determine how informal institutions of a country interact with formal institutions and governance to influence various types of entrepreneurial activities.

# Results

Governance has positive relationship with both formal entry density and necessity opportunity and negative relationship with opportunity entrepreneurship. When corruption is included with the government size the relationship with formal entry density remain positive, relationship with opportunity entrepreneurship becomes positive from negative and significant. For necessity entrepreneurship, the relationship becomes negative and significant. Time requirement for tax preparation and entry density changes relationship from negative without corruption to positive when corruption is included as interaction. Similar results are observed in the relationship with both opportunity and necessity entrepreneurship. Corporate tax rate has negative relationship with both formal entry density and necessity entrepreneurship but positive and significant relationship with opportunity entrepreneurship. However, corruption and corporate tax interaction changes the relationship to significant negative relationship with opportunity entrepreneurship, but the impact on formal entry density and necessity becomes positive but not significant. When it comes to complying with regulatory environment corruption seems to be helpful for necessity entrepreneurs. Frequent tax payment requirement has negative relationship with opportunity entrepreneurship if entrepreneurs have to deal with corruption, but for necessity entrepreneurs the relationship becomes positive and significant. However, when there is time requirement for dealing regulatory compliance, corruption adds to the burden, thus relationship with necessity entrepreneurship is negative and significant.

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# FACULTY FOUNDERS AND THE MULTI-GENERATIONAL UNIVERSITY SPINOFF

Michael P. Ciuchta, University of Massachusetts Lowell, USA Alex Vestal, Oregon State University, USA

# **Principle Topic**

Increasingly, universities are seen as a catalyst for economic development within a region (Lockett & Wright, 2005; Rothaermel et al., 2007. One key mechanism through which they fulfill this role is through the generation of spin-offs (Nicolaou & Birley, 2003; Pirnay et al., 2003). Recently, scholars have begun to direct attention towards understanding the implications of varying spinoff types on organizational outcomes (Åstebro et al., 2012; Wennberg et al., 2011). In this study, we adopt the perspective that spin-offs face critical junctures in the accumulation of resources and capabilities (Vohora et al., 2004) but that the fungibility of those resources may be constrained by the particular makeup of the founding team. Thus, we examine the impact of the presence of a faculty founder on the *type* of subsequent spinoff that is generated by the focal firm.

### Methods

We test our hypotheses using a sample of 115 spin-offs from a large Midwestern university. Of these spinoffs, 25 had a faculty CEO, 22 had a student CEO, and 15 had an academic staff CEO (the remainder had non-university affiliated personnel as the CEO). These spin-offs subsequently generated an additional 55 spin-offs, consisting of 8 tech-only spinoffs, 13 person-only spinoffs and 34 person/tech spinoffs. Data for this study consists of archival data as well as primary data gathered through an online survey.

# **Implications**

In order to gain a more complete understanding of the overall ecosystem in which university spin-offs occur, it is important to account for both underlying heterogeneity in the "first generation" spin-offs as well as the impact such heterogeneity has on later "progeny" firms. Ours is an early investigation of spin-off linkages over multiple generations of firms. Our theory also introduces a new perspective on the creation and appropriation of public versus private knowledge. While previous research suggests that academic founders are motivated to generate public knowledge, our theory suggests that these same founders also have propensities to keep their knowledge private and this propensity has meaningful implications for the economic development of a region.

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# STAYING WITH THE TEAM: IDENTIFICATION AND SWITCHING COSTS IN THE ENTREPRENEURIAL PROCESS

Michael P. Ciuchta, University of Massachusetts Lowell, USA Jay O'Toole, Georgia State University, USA

### **Principle Topics**

Among entrepreneurship scholars, there is growing interest in the emergence of entrepreneurial teams (Schjoedt et al., 2013; West, 2007; Forbes et al., 2006). Drawing on social identity theory (Abrams & Hogg, 1990; Tajfel & Turner, 1985) we develop a framework that suggests that a team member's prior exposure to other team members influences the member's decision to persist with the team, and that this influence is mediated by the member's identification with the team (Van Vugt & Hart, 2004). Moreover, we argue that the mediated effect is moderated by the member's switching costs (operationalized as relevant work experience). That is, identification's influence is particularly strong on the decision to stay when the focal member has a more attractive option.

#### Methods

The research setting of our study is the 2014 Global Game Jam (GGJ). The GGJ is the world's largest game jam with over 10,000 people participating in the annual event. The structure of the GGJ is similar to other game jams and hack-a-thons. Participants, including game programmers, designers, illustrators, producers, etc., meet up for a weekend of rapid game development over a 48-hour period. Prior research offers evidence that the GGJ offers a development environment directly analogous to professional game development and that around 5% of games worked on during the GGJ are monetized within six months of the event. Data for our analyses come from over 1200 responses to a post-jam survey administrated immediately following the 2014 GGJ and over 550 responses to a six-month follow-up survey distributed to individuals who completed the first survey.

### **Implications**

This study contributes to our understanding of team turnover, an understudied aspect of new venture development (Ucbasaran et al., 2003). While previous studies have examined decisions to persist with an existing, and usually struggling endeavor (DeTienne et al., 2008; Gimeno et al., 1997), we study these processes in teams within their earliest stages of development. Results have practical implications for enterprising individuals attempting to build an entrepreneurial team, especially for a creative venture.

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# ENTREPRENEURS GOING GLOBAL: THE ROLE OF EXPERIENCE AND PERCEIVED KNOWLEDGE IN THE SELECTION OF INTERNATIONALIZATION DESTINATIONS

Daniel Clark, Indiana University, USA

### **Principal Topics**

Idiosyncratic internationalization motivation has been recognized as an important component of entrepreneurial internationalization. Often examined through the lens of international experience, the well-travelled entrepreneur is more likely to internationalize their business and more rapidly (Oviatt & McDougall, 2005). Individual factors have been theorized to also affect the "where" decision, which is largely driven by knowledge and psychic distance (Johanson & Vahlne, 1977). While the area of idiosyncratic perception of psychic distance in internationalization has gathered some attention (Williams & Grégoire, 2014), the area of perception of knowledge – what the individual thinks they know, also called *familiarity*, is not well understood (Schwens & Kabst, 2011). Guided by cognitive theory, I examine the effects of the familiarity heuristic on the internationalization location decision of entrepreneurs. I posit four hypotheses: that familiarity effects cognitive load (1), and target attractiveness (2) in a curvilinear inverted-U fashion, and that these effects are positively moderated by international experience (3, 4).

### Method

Using Verbal Protocol methodology (Ericsson & Simon, 1983) I conduct and analyze in-depth interviews with 17 entrepreneurs. Each entrepreneur is asked to analyze 10 internationalization decisions, across different countries (170 total analyzable cases) using think aloud protocols. IVs are familiarity and international experience. DVs are cognitive load and target attractiveness. Age of the entrepreneur, their entrepreneurial experience, business education level, and experience in the industry of the case, are controlled for. Cognitive load is captured through counting thought segments, and target attractiveness through an internationalization priority rating. Data is analyzed through multi-level modelling decomposing variance into decision and participant-specific components; primary effects are examined through regression modelling.

# **Results and Implications**

All four hypotheses are supported. Entrepreneurial heuristics literature shows that entrepreneurs use heuristics to simplify complex decisions (Baron, 1998), and our findings support this notion. However, at high levels of international experience, the heuristic effects of familiarity are nullified, and familiarity appears to compliment international experience as an information source which increases target attractiveness. These findings support the developing theory that entrepreneur perceptions are important (Williams & Grégoire, 2014); that decision heuristics are an active element of international decision-making, and that experience and heuristic cognitive scripts can interact and complement each other.

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# EQUITY CROWDFUNDING'S ROLE IN REDUCING INFORMATION ASYMMETRIES AND INCREASING ENTREPRENEUR SUCCESS

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### **Principal Topic**

The skill required to predict the feasibility of an entrepreneurial opportunity limits most individual because of significant information asymmetries in new ventures. We study the degree to which crowdfunding is an effective means to successfully fund new ventures by examining how the interaction between the crowd and the entrepreneur affects information asymmetries. The research also shows how technology impacts the equity investment through crowdfunding because it creates a greater level of information asymmetry for some potential investors in the crowd.

### Method

Data was collected from Crowdcube, an equity-based crowdfunding platform that offers the crowd the chance to make an equity investment in a UK business. Our sample includes 50 successful and 50 unsuccessful firms that range from basic to more technologically sophisticated. The firm's online profile provided information used in data collection. Logistic regression was used to regress investment success or failure from technology sophistication and degree of information provided while controlling for investment goal, equity ownership offered and expected third year sales. Success was a measure of entrepreneurs meeting their predetermined funding goal in a specific period of time. Other variables included technology, information and control variables related to third year sales, equity ownership and investment goal.

# **Results and Implications**

The results show that the amount sought by a firm is the only control variable that has a significant impact on success. The negative relationship between amount and success suggest that firms that ask for higher and higher amounts will decrease their likelihood of success. We found a positive and significant relationship between information provided and success which suggests that the degree of information provided to a large number of individuals increases the likelihood of success. Technology has a negative and significant relationship with success.

The contributions of this research shows that due diligence is a process that public investors complete prior to making investment in new ventures and are able to do it at a low cost when working in a crowd. It also shows that crowdfunding is an efficient way to communicate information and raise funds.

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# YOU NEVER GET A SECOND CHANCE TO MAKE A FIRST IMPRESSION: A STUDY ON ENTREPRENEURIAL PITCHES

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### **Principal Topic**

Over the years, a substantial body of literature has developed regarding angels' investment decision-making criteria (e.g., Mason & Harrison, 1996; Mason & Stark, 2004; Mitteness et al., 2012). Many of the claims entrepreneurs make during their pitch are not objectively verifiable. This makes investors having to trust their own "gut feeling" which reflects their unconscious, subjective evaluation of the entrepreneur -based on their short interaction during the pitch.

Using implicit personality theory, we provide a more comprehensive framework regarding angel investment decision making by examining the impact of the entrepreneur's verbal and nonverbal behaviors, as well as the entrepreneur's cognitive abilities and emotional intelligence on the angels' first impression of entrepreneurs' competence and warmth, and ultimately on their evaluations of funding potential.

#### Method

In collaboration with the largest angel group in Belgium, we have designed a study that combines data from both parties involved in the investment decision making process (i.e. angels and entrepreneurs) and combine self-reported data with data drawn from observations (which will be coded by third parties). After each pitch, angels were asked to complete a short survey capturing perceived warmth and competence (based on Fiske et al. (2002)), and evaluations of funding potential. Entrepreneurs were asked to complete an emotional intelligence test online (MSCEIT, Mayer et al., 2002) and to complete a short survey. Finally, all pitches were videotaped and coded by trained third parties for relevant verbal and nonverbal behaviors. This process resulted in data collected on 67 projects, evaluated by 112 angels, equaling 1035 investment decisions.

# **Results and Implications**

This study contributes to the entrepreneurship literature by examining the impact of previously ignored factors in angel investing research. Utilizing the theoretical lens of implicit personality, we aim to provide a more comprehensive framework regarding angel investment decision making by examining the impact of entrepreneurs' emotional intelligence, their cognitive abilities and their verbal and nonverbal behaviors on the first impression they make on angels.

The findings from this study will also have practical implications for both entrepreneurs and angels. Entrepreneurs will benefit by gaining insights into the factors that influence angels' evaluations of funding potential and angel groups will be able to provide entrepreneurs with better pitch training to optimize their chances of successfully raising money from angels.

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# "B THE CHANGE": HYBRID SOCIAL ENTERPRISE AND THE PROBLEM OF IDENTITY CORRESPONDENCE

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### **Principal Topic**

The rise of social enterprise as a new class of organization and the basis of emerging hybrid industries has potential implications for the future of both charity and business. However, we know relatively little about the processes or means by which individual actors and organizations become aligned with movements, nor and the mechanisms by which this alignment leads to active participation in collective action and, ultimately, field emergence (Snow & McAdam, 2000). We examine this phenomenon through an inductive study of the B Corp movement in the U.S. and build a process model of identity correspondence spanning the individual and organizational levels.

### Method

We take an inductive approach, following the tenants of grounded theory (Glaser & Strauss, 1967; Locke, 2001) and Gioia and colleagues methodology for rigorous qualitative data collection and analysis (Corley & Gioia, 2004; M. T. Dacin, Munir, & Tracey, 2010; Gioia, Corley, & Hamilton, 2013; Gioia, Price, Hamilton, & Thomas, 2010). We conducted 15 semi-structured, 45-120 minute interviews with B Corp leaders and participants. We also analyzed 77 articles from major news and business publications, 253 pages of documents from B Corp headquarters archives, and over 1000 B Corp company profiles. These analyses were supplemented by 32 hours of field observation at B Corp meetings and events and many informal interactions with B Corp leaders and participants.

### **Results and Implications**

Our findings suggest that individuals become aligned with hybrid social enterprise as a way to extend their values and identity as a socially/environmentally active person into their work life. Organizations become aligned and actively involved with the hybrid social enterprise movement as a way to amplify their existing organizational identity and culture as a social firm, verify that identity by measuring social performance, and communicate that identity more effectively to multiple stakeholder groups. This emerging framework may offer new insights into identity correspondence as a driver of participation emerging movements at both the individual and organization levels. These findings may help spur new theory about hybrid organizations, identity, and collective action and the relationships between them more broadly.

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# THE EMERGENCE OF OUTLIERS IN ENTREPRENEURSHIP: A SELF-ORGANIZED CRITICALITY FRAMEWORK

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# **Principal Topic**

At the beginning of 2015, in an inductive investigation of four entrepreneurship-related data sets (N=12,000+), Crawford, Aguinis, Lichtenstein, Davidsson, and McKelvey discovered power law (PL) distributions in all resource-, cognition-, action-, and environmental-based input variables, as well as all revenue-, employee-, and growth-based outcome measures. Finding these visually distinct, heavy-tailed distributions is significant because it overwhelmingly supports the notion that 1) outliers in the tail of the distribution disproportionately influence the behavioral and statistical dynamics of the entire system, and, most importantly, 2) outcomes are not random, but are driven by a simple set of underlying mechanisms that apply to all systems in the population.

This paper investigates one causal mechanism that drives PL distributions: self-organized criticality. We propose four fuzzy constructs that can apply to every venture, regardless of scale: *endowments*, *expectations*, *engagement*, and *environments*, proffering that these provide a mutually exclusive, yet collectively exhaustive, framework for explaining how outliers emerge in entrepreneurship. We develop a hypothesis of auto-genesis, where feedback loops from potential stakeholders at the micro-level drive outcome expectations at the nascent organizing stage and, subsequently, exhibit self-similar patterns of outcomes at more aggregated levels of analysis.

### Method

For theoretical generalizability and more robust causal influence claims, we test our hypotheses with longitudinal data from the Panel Study of Entrepreneurial Dynamics II, Comprehensive Australian Study of Entrepreneurial Emergence, and Kauffman Firm Survey. We conduct nonparametric Spearman's Rho correlations between initial expectations for venture growth and actual firm outcomes in the fifth year of operation. We also run semi-parametric maximum-likelihood bootstrap estimates of our hypothesized PLs at the individual, team, and venture level over time, comparing the slope of each distribution's tail across time, level of analysis, and dataset.

# **Results and Implications**

Our results demonstrate that, while environmental resources and initial venture endowments are significant predictors of outliers, the expectation for future growth is the primary driver of entrepreneurial outcomes. The findings in this study lend insight to research and to practicing entrepreneurs, suggesting that ventures with expectations or endowments below critical thresholds of the PL must engage with potential stakeholders at a quality and quantity in the tail of the distribution to substantively scale the venture.

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# CROWDFUNDING: A MORAL LEGITIMACY VIEW OF THE IMPACT OF FOUNDER AND PROJECT CHARACTERISTICS ON FUNDING PERFORMANCE

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### **Principal Topic**

This study examines how project founder characteristics and social identity impact crowdfunding performance. In addition, we investigate the role of legitimacy within these relationships. Suchman (1995) proposes that legitimacy can be grouped into three distinctive subsets: pragmatic, moral, and cognitive. In applying this theory to crowdfunding, we expect moral legitimacy to have the greatest impact on fundraising outcomes. We hypothesize that project founder characteristics and social identity are crucial to funding performance. In addition, we posit that well known founders, such as celebrities, attract more media attention to their campaigns than founders who are less renowned. As a result, and because moral legitimacy involves people's evaluations of entrepreneurial founders, celebrities are likely to receive increased moral scrutiny, both positive and negative.

# Method

To empirically test our hypotheses, we use a content analysis of articles written during the campaign periods of the top-20 Kickstarter crowdfunded projects of all time. The sample includes 235 articles. Within the articles, every sentence is coded to be pragmatic, moral, cognitive, or non-legitimizing. Each sentence is also determined to either support or challenge the project's legitimacy. A total of 4377 sentences are analyzed. Next, this sample is compared to a second (random) sample, which includes failed campaigns, to provide insight into why some projects are funded while others are not. Lastly, each project's Kickstarter page is analyzed to determine project founder characteristics and social identity, as well as to gather control variables.

### **Results and Implications**

First, as we predicted, we find that project founder characteristics (prior knowledge and prior hardships) significantly impact crowdfunding performance. While we do not find social identity to be a significant predictor of crowdfunding performance, it is found to significantly impact media visibility. Second, we find celebrities to receive significantly more media visibility than non-celebrities, as expected. While we observe no significant difference between celebrities and non-celebrities in pragmatic or cognitive legitimacy levels, celebrities did receive significantly higher levels of moral legitimacy. Our results suggest that famous project founders are more likely to successfully raise capital via crowdfunding.

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# THE USE OF CLUSTER ANALYSIS IN ENTREPRENEURSHIP RESEARCH: REVIEW OF PAST RESEARCH AND FUTURE DIRECTIONS

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### **Principal Topic**

Cluster analysis is "a generic name for a variety of mathematical methods numbering in the hundreds that can be used to find out which objects in a set are similar" (Romesburg, 2004; p. 2). With cluster analysis, typically observations (cases) are grouped together based on how similar they are to each other with regards to certain variables. Cluster analysis is often used as an exploratory technique, although it can also be used in a confirmatory role (Fisher & Ransom, 1995). Cluster analysis has been employed in a number of studies in the entrepreneurship literature (Birley and Westhead, 1994; Gibcus et al., 2009; McMahon 2001) However, as noted by Ketchen and Shook (1996) cluster analysis is subject to a number of limitations, such as its reliance on researcher judgment, the absence of statistical tests to reject or fail to reject hypotheses, and a lack of a theoretical basis for developing clusters. When using cluster analysis on a set of data, a set of clusters will be generated by the algorithm, regardless of whether groups that are substantially distinct from each other actually exist (Barney & Hoskisson, 1990; Hatten & Schendel, 1977).

### Method

The goal of this paper is to explore the use of cluster analysis in the entrepreneurship literature over the past 25 years. We searched EbscoHost for journal articles containing both the terms "cluster analysis" and "entrepreneurship" from the following journals: Entrepreneurship and Regional Development, Small Business Economics, Journal of Business Venturing, Entrepreneurship Theory and Practice, Journal of Small Business Management, Journal of Developmental Entrepreneurship, Journal of Management Studies, Journal of International Entrepreneurship, Venture Capital, Academy of Entrepreneurship Journal, Academy of Management Review, Academy of Management Journal, Journal of Enterprising Culture, and Management Science.

# **Results and Implications**

Published articles making use of this technique in these entrepreneurship journals are reviewed and summarized, focusing on the clustering algorithm used, the level of analysis, and how the number of groups were determined. Based upon reviewing this literature regarding how cluster analysis has been used in the discipline, some recommendations for how cluster analysis techniques can be used in future research are discussed.

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# START-UP COSTS, TAXES AND INNOVATIVE ENTREPRENEURSHIP

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### **Principal Topics**

Entrepreneurs have to deal with one-off start-up costs, such as notary charges as well as recurring costs in the form of income and corporate taxes. A number of prior studies have linked start-up costs and taxes to the level of entrepreneurial activity within and across economies (Djankov et al., 2002; Braunerhjelm and Eklund, 2014). Start-up costs and taxes may not only influence entrepreneurial entry but also the likelihood of innovative entrepreneurship (Schumpeter, 1934; Baumol, 1990).

Low start-up costs encourage the entry of lower quality entrepreneurs, and hence the pool of entrepreneurs is of higher quality when start-up costs are higher (Kaplan et al., 2011). Taxes, which represent recurring costs that reduce the gains from innovation, have a deterrent effect and discourage, in particular, risk-taking entrepreneurs with innovative ideas. Innovative entrepreneurs are motivated by the expectation of high returns on their innovative activities in the form of "entrepreneurial profit" (Baumol et al., 2007).

# Method

To investigate how start-up costs and taxes relate to innovative entrepreneurship, we use the Global Entrepreneurship Monitor (GEM) dataset comprising 632,116 individuals, including 43,223 entrepreneurs from 53 countries for the years 2004 to 2011. Given the binary nature of the dependent variable *innovative entrepreneur*, we use various probit regressions clustered by countries to avoid underestimation of standard errors.

# **Results and Implications**

Our results support the conclusion that start-up costs and taxes have significant effects on whether nascent entrepreneurs innovate or not. We find significant positive and significant negative required start-up costs and taxes relationships with entrepreneurs' likelihood to innovate respectively. Our findings suggest that governments can stimulate innovative entrepreneurship by tying costs *less directly* to the rewards of innovation. In addition, if innovative entrepreneurship is indeed an important source of economic growth (Schumpeter, 1934), then our finding that entrepreneurs have a low propensity to innovate in countries with severe tax systems could partly explain why taxes may have a negative influence on economic growth as suggested in prior studies (Lee and Gordon, 2005).

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# ARE HIGH-GROWTH FIRMS OVERREPRESENTED IN HIGH-TECH INDUSTRIES?

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# **Principal Topics**

It is frequently argued that policymakers should target high-tech firms (HGFs), i.e., firms with high R&D intensity, because such firms are considered more innovative and therefore potential fast-growers. This argument relies on the assumption that the association among high-tech status, innovativeness and growth is actually positive. We examine this assumption by studying the industry distribution of high-growth firms across all Swedish 4-digit NACE industries.

# Method

We use a data-set that covers all limited liability firms in Sweden during 1997-2008. We employ a fractional logit model in a regression analysis framework, as this model is well-suited to deal with proportions as the dependent variable.

# **Results and Implications**

The results of fractional logit regressions indicate that industries with high R&D intensity, ceteris paribus, can be expected to have a lower share of HGFs than can industries with lower R&D intensity. The findings cast doubt on the wisdom of targeting R&D industries or subsidizing R&D to promote firm growth. In contrast, we find that HGFs are overrepresented in knowledge-intensive service industries, i.e., service industries with a high share of human capital.

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# HOW YOUNG RESOURCE CONSTRAINED START-UPS EXPLOIT OPPORTUNITIES: A RESOURCE MANAGEMENT PERSPECTIVE

Robin De Cock, Ghent University, Belgium Johan Bruneel, KULAK, KU Leuven, Belgium

### **Principal Topic**

The enthusiasm about entrepreneurship is often associated with the 'big money' model of entrepreneurship (Bhidé, 1992). This VC-backed model of entrepreneurship, however, is in stark contrast to the traditional low-budget start-ups, which form the overwhelming majority (Pierrakis, 2010). Entrepreneurship research shows a similar bias towards capital intensive sectors (Macpherson and Holt, 2006). As a result, there is very limited research about the founding and subsequent growth of companies that started with little or no access to external finance (Harrison et al, 2004). Previous studies have mainly focused on constraints in the supply of finance, whereas how entrepreneurs create value by exploiting opportunities under financial constraints has been given much less attention (Winborg and Landstrom, 2001). To address this shortcoming in the literature, our study investigates how resource-constrained entrepreneurial firms handle the resource management process under different environmental contingencies.

### Method

We use a longitudinal, qualitative case study design and followed 6 London based, resource-constrained start-ups in the first two years of their existence. We theoretically sampled 3 start-ups operating in a low uncertainty environment and 3 operating in a high uncertainty environment. To provide more theoretically grounded insights into the resource management processes in start-ups, we use the extended case method (Burawoy, 1991). Since the resource management perspective already offers a rich variety of insights, we did not want to start from scratch and develop a new theory but preferred instead to use the extended case method to stretch and consolidate the existing work on resource management.

# **Results and Implications**

The results of the case study were able to confirm and extend theoretical understanding of resource management in resource-constrained firms. Firstly, we found that all bootstrapping start-ups start with a resource portfolio which is structured similarly. Human and social resources form the fundamental building blocks of a bootstrapping start-up. Secondly, our findings show that the bundling process was very different depending on the environment in which the firm operates. Thirdly, it was shown that start-ups that chose for a market opportunity leveraging strategy operate in environments with low uncertainty while those operating in an environment with high uncertainty chose for an entrepreneurial leveraging strategy.

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# THE IMPACT OF BUSINESS MODEL CHANGE ON NEW VENTURES' SURVIVAL

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### **Principal topic**

Business models have a significant impact on a firm's performance, value creation and innovation. Moreover, business model change can be seen as a firm's answer to a changing environment and may reflect its increasing ability to use its resources and knowledge to create the best possible business model given the environment (Zott & Amit, 2008). Despite the importance of business moel change, few studies have focused on the impact of business model change on the firm's performance.

Those few studies that did focus on business model change (e.g. Andries, Debackere, and Van Looy, 2013), usually adopted a case-study approach and did not research how business model change can impact the survival of a new venture. Other gaps that remain in the literature are answers to the questions "how radical versus incremental business model change may impact firm survival" and "how the frequency of business model change can influence the firm's survival".

#### Method

We use a longitudinal sample of 173 new ventures in the emerging mobile health or mHealth industry. Based on secondary data such as press releases, company websites and industry reports, we coded the business models of these firms for each year of their existence and were thus able to analyze business model change over time. Using survival analysis, we analyze how a firm's business model change impacts its survival. More in particular, we analyze how business model change can have an impact on the firm's failure, acquisition or survival status.

# **Results and implications**

With this study, we contribute to the business model and organizational change literatures. Despite the higher importance of business model change for new ventures in nascent markets, business model change has not been studied in this context before. Moreover, no previous studies have used large samples to study the impact of business model change on the firm's survival. Finally, by focusing on new ventures and nascent markets, we also contribute to the entrepreneurship literature.

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# ANTECEDENTS OF CHANGE: ANALYZING THE CHANGE OF EXIT INTENTIONS AND EXIT STRATEGY

Tobias Deutschmann, RWTH Aachen University, Germany Julia Gösswein, RWTH Aachen University, Germany

### **Principal Topic**

The high practical relevance of entrepreneurial exit is underpinned by the fact that US\$ 2.4 trillion of worldwide M&A deals took place only in 2013 (Thomson Reuters, 2013). Nevertheless, academic research on entrepreneurial exit has received increasing scholarly attention only in recent years. Both external and internal triggers (e.g., DeTienne & Cardon, 2008; 2012; Wennberg, Wiklund & DeTienne, 2010) have been found to influence entrepreneurs' exit intentions and strategies.

This is the first study, however, to analyze environmental conditions and firms' financial, human and technological resources that may imprint the firm at founding and their development over time with respect to their impact on entrepreneurs' exit intentions and strategies.

#### Method

This study is based on a survey conducted among the CEOs of a random sample of young, Germany-based ventures in the IT-services and machinery-industries. In general, questions are phrased for current and retrospective (time of venture emergence) perception. We operationalize the likelihood of various exit strategies according to DeTienne, McKelvie and Chandler (2014) on a 7-point Likert scale. All dependent variables used are based on well-established measures. We apply hierarchical linear regression to test our hypotheses. Among others, we control for venture age and performance.

# **Results and Implications**

Our analysis reveals that in many cases changes in external and internal factors are more important drivers of entrepreneurs' exit intentions and exit strategies than their initial level at founding of the firm. For both scholars and practitioners alike, our findings raise doubts regarding the impact of firm imprints on entrepreneurial exit.

In terms of external factors, our findings suggest that low levels of environmental uncertainty at founding and even more decreasing environmental uncertainty over time lead founders to favor stewardship strategies such as sale to an employee or another individual. In terms of internal factors, we show among others that an increase in firm size and total funds increase the likelihood for financial harvest strategies. Contrasting our remaining findings, we find initial innovativeness to be an important driver of exit strategy, however, no proof that change in innovativeness has a significant impact on the matter.

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# THIS IS MY FIRM! THE INFLUENCE OF PSYCHOLOGICAL OWNERSHIP ON ENTREPRENEURIAL EXIT INTENTION AND EXIT STRATEGIES

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### **Principal Topic**

Despite the high practical relevance of entrepreneurial exit (DeTienne, 2010), research has just started to analyze entrepreneurial exit as a critical part of the entrepreneurial process (e.g., DeTienne & Cardon, 2012; DeTienne, McKelvie & Chandler, 2014).

An individual-level trigger that is considered highly relevant in theory is psychological ownership (DeTienne, 2010), which refers to "the feeling of possessiveness" (Pierce, Kostova & Dirks, 2001, p. 299). An entrepreneur with high psychological ownership should not have an exit strategy or prefer a stewardship exit strategy, which can secure the continuation of the company and may enable higher involvement with the company after the exit (DeTienne, 2010). In addition, a person with low psychological ownership should be more likely to pursue a financial harvest strategy, which allows the founder to maximize financial gains regardless of the individual involvement with the company.

This study explores the effect of entrepreneurs' psychological ownership on their exit intentions and different exit strategies.

# Method

To examine these issues, we conducted a survey among founder-CEOs of German ventures, which compete in the software and industrial equipment industries and have a maximum company age of eight years.

The dependent variables are operationalized by Leroy, Manigart, Meuleman, and Collewaert's (2013) 3-item assessment of the exit intention and DeTienne et al.'s (2014) intended exit strategy probability items, measured on a 7-point Likert scale. The items for the independent variable psychological ownership are borrowed from Van Dyne and Pierce (2004). Among others, we control for gender, founder age, education, motivation and number of employees. Hierarchical linear regression is used to test the determinants of exit intention and strategies.

# **Results and Implications**

Our results support the main hypotheses and expose that psychological ownership decreases the likelihood of exit intentions. In terms of exit strategies, we reveal a negative influence of psychological ownership on exit to financial investors and a positive effect on the stewardship strategy family succession. Interestingly, we find a negative influence on the stewardship strategy founding team exit. In addition to the academic contribution, our research helps practitioners to understand potential consequences of their emotional ties to their venture.

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# ENTREPRENEURIAL CONTAGION WITHIN CROWDFUNDING: SOCIAL LEARNING AMONG KICKSTARTER BACKERS

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### **Principal Topic**

The entrepreneurial ecosystem includes a variety of people and groups (Shane & Venkataraman, 2000), notably customers and investors. Crowdfunding is unique in that aspiring entrepreneurs are able to interact with and solicit for financial support within a virtual community, a dynamic that allows for rich conversation, critiques, and unparalleled transparency with would-be investors (or "backers") at a very early point in the process (Belleflamme et al., 2013). Very little literature currently exists on crowdfunding due to its recent ascent, but what does exist is focusing in large part on factors related to the success of projects within the platforms.

This study explores a social, temporal aspect of crowdfunding—meaning the nuances of the relationship between investor (or "backer") and the entrepreneur (or "project creator") and the virtual community that exists—and, how these interactions may influence future entrepreneurial behavior, both in terms of time of action and characteristics of that action. Our perspective is one of contagion and spillover, specifically how one's experiences and self-efficacy (Boyd & Vozikis, 1994) as a backer impact future behavior as a creator.

# Methods

Using the full population of projects from the Kickstarter platform launch in April 2009 through June 2012, the engagement behavior of 37,000 project creators are used to identify key thresholds at which entrepreneurial action is likely to occur and in what form. Portfolio performance, similarity factors (gender, industry, geographic location, team composition, goal) and community engagement (comments) are key variables of interest. We employ OLS and hazard modeling to test our hypotheses.

### **Results and Contributions**

The findings of this project shed light on the influence of the virtual community on individual entrepreneurial behavior, both as a backer and as a creator. By understanding the platform timeline of individuals we expand on the role of contagion in entrepreneurship (Cardon, 2008; Sullins, 1991; Sy et al., 2005; Barsade, 2002; Shane et al., 2003) and expand our understanding of social learning theory (Scherer, Adams, & Wiebe, 1989; Rae, 2000) to pre-nascent stage activity, capturing individuals who have chosen to engage in entrepreneurship but not yet pursued the opportunity.

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# DYNAMITE OR FISHHOOK FISHING: STRATEGIC APPROACHES TO VENTURE INTERNATIONALIZATION

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### Principal topic

While existing research on international new ventures (INV) has significantly advanced the understanding of the drivers of early venture internationalization (Oviatt & McDougall, 2005; Zucchella, 2007), venture strategies and behavior after early international entry have received less attention. The survival and success of INVs seems to depend on entering many foreign markets to create competitive advantages and a sufficiently large customer base (cf. Oviatt & McDougall, 1994). However, resource scarcity associated with young ventures (Zahra, 2005) poses a serious constraint to large-scale internationalization. Hence, young ventures have to balance the need to enter foreign markets with their limited resource base. *How* this challenge translates into international strategy selection by young ventures, *why* ventures select a particular approach, and *how* the approaches drive internationalization success are the main research questions of this paper.

### **Data and Methods**

A multiple case study approach was used to ground the theory development in data. The sample consists of nine young ventures. The primary source of data is semi-structured interviews with founders and key employees who were directly involved in the internationalization process. Additional primary and secondary information was collected through questionnaires, filed notes, and public sources.

### **Results and Implications**

The analysis revealed two distinct approaches to INV internationalization – the Options Portfolio Approach (OPA) and the Focused Market Approach (FMA). The OPA is characterized by multiple, parallel foreign market entries. The INVs see their foreign activities as a portfolio of options in which resources are constantly shifted to where they generate most return and fastest growth. Contrary, the FMA involves sequential market entries where each market receives particular attention and resources. For example, case ventures using the FMA explicitly seek and invest in local partnerships to acquire local market knowledge and adapt their product portfolio to local needs.

Results indicate that for each strategic approach distinct factors are responsible for success and that ventures change their internationalization approach based on market failures.

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# AN ENTREPRENEURIAL THEORY OF ENCOUNTERING: USING DELEUZIAN AND LINGUISTIC ANALYSIS TO GRASP THE ROLE OF THE ENCOUNTER IN ENTREPRENEURIAL NARRATIVE

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# Principal topic

This study introduces the Deleuzian concept of "encounter" to describe the moments of high intensity that direct, redirect, accelerate, decelerate, and, often, perturb entrepreneurial paths marked by entrepreneurial bricolage (Baker & Nelson, 2005). A conceptual framework is proposed to first define the Deleuzian encounter. The choice of signifiers referring to the encounter will then be studied in a corpus of entrepreneurial narratives to deepen the understanding of how entrepreneurs express and experience this concept.

# Method

This study proposes a definition of the Deleuzian encounter, following the survey of Deleuze's writings and the occurrences of encounter. This is a necessary initial step, as encounter has not been numbered amongst the concepts usually attributed to the philosopher, such as "rhizome," "fold," "deterritorialization," etc. Having defined the concept, we will then examine the signifiers used to refer to the different aspects of the encounter in entrepreneurial narratives through linguistic analysis. Employing theories expounded by the school of Gustave Guillaume, we will manually construct an exploratory semantic field and perform precursory semantic as well as morphosyntactic analyses on certain presentations from the Entrepreneurship Corner corpus susceptible to contain pertinent data.

### **Results and Implications**

Our semantic field and observation of the morphosyntactic structures point to the presence of the encounter in our corpus, and to the wide variety of ways that entrepreneurs refer to this concept. Related to these particular moments are emotions of diverse sorts expressing how an individual is grasped by the encounter, enriching the perspective of emotion in entrepreneurship (Foo, 2009; Welpe et al.2012). The introduction of this concept into the repertoire of tools that management science uses to analyze entrepreneurial literature elucidates ways that entrepreneurs construct their path and refer to this construction in their narratives. These findings open new perspectives and new discussions in domains of management science. Moreover, the semantic field constructed and the morphosyntatic structures observed could be used for coding for a larger thematic analysis about encountering in entrepreneurial narrative literature.

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# DOMESTICATING BRICOLAGE A SECOND TIME: WHAT DOES THE WAY BY WHICH BRICOLAGE IS APPROPRIATED BY ENTREPRENEURSHIP RESEARCH TELL US ABOUT THE FIELD?

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# Principal topic

This article examines how research in entrepreneurship has integrated the concept of bricolage since the early 2000s. A substantial difference seems to exist between the definition and the use of the concept made by entrepreneurial theory and the foundational source of the notion of bricolage, i.e. Levi-Strauss's book The Savage Mind (1966). We assume that this translation of an anthropologic concept into a managerial one is symptomatic of the paradigms structuring the field of entrepreneurship and investigate possible reasons why this field may have difficulties accepting the subversive aspects of bricolage.

### Method

This paper is based on a comprehensive literature review of the concept of bricolage in entrepreneurship. We identified foundational papers on entrepreneurial bricolage, and articles explicitly using bricolage in the field of entrepreneurship. We conducted a critical analysis investigating whether the concept of entrepreneurial bricolage has been transformed or stabilized over time, as well as its use in practical observations participating to its definition. The result is compared to the levi-straussian definition of bricolage to find out if the subversive dimension of bricolage has been maintained or if it has been discarded to protect the core characteristics of the classical view of entrepreneurship.

# **Results and Implications**

In the way entrepreneurship seizes bricolage, we think that we are witnessing a second domestication of bricolage allowing researchers to preserve the rational/heroic representation of the entrepreneur. Critical research revealed that this access to the status of "heroic symbol" comes from an economic and political, but also cultural and moral, construction in which qualities such as efficacy, innovation or creativity are opposed to inefficacy, routine or disillusion (Jones and Spicer, 2009). Baker (2007) noted that one of the major obstacles to the dissemination of entrepreneurial bricolage in education might come from the "shameful" aspect of doing bricolage. We intend to show that shame might not be the sole obstacle to overcome and that the field will profit from a reflexive analysis on its somehow misleading appropriation of the concept of bricolage.

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# WHAT MAKES VENTURE CAPITALISTS LOOK BEYOND COMMON PRACTICES? RE-EXAMINATION OF ORGANIZATIONAL ANTECEDENTS THROUGH THE BEHAVIORAL THEORY LENS

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# **Principal Topic**

While management research on the consequences of managerial effort (attention, advising) has flourished, less research investigates the dynamics of effort – factors that lead managers to change where effort is directed. We offer a behavioral theory with three complementary views of when managers engage with new business aspects – problem-driven search, accumulated experience, and constraint reduction.

### Method

We use unique data on the investment level advice giving behavior of a set of French VC managers over time to explore our theory. Our sample encompasses all 280 PFCs financed by 23 (of the population of 32) French VCs specializing in early-stage funding as of 2006. We test our hypotheses with a final sample of 148 PFCs that were part of the VC portfolio at the time when we measured VCs' advice giving and we use the excluded 130 PFC investments that the VCs had already exited to construct both our measures of established or regular areas of advising and VC experience. Data on the areas where VCs gave advice came from the questionnaires, completed by general partners.

# **Results and Implications**

Our results show strong support for problem-driven and experience-driven explanations for advice giving on new areas, but do not support constraint-driven explanations. Additional analyses show that firms tend to attend to new aspects by adding to their portfolio of attended areas, not by shifting effort from regularly attended to new areas, and that advising on new areas leads to reduced venture performance. These findings contribute to three primary literatures. First, this study adds to our understanding of the sources and drivers of managerial effort and advice giving. Second, this study provides a theory and an empirical investigation of the ways in which the different core pillars of behavioral theory – cognition, response to feedback, search, constraints, and routines – interrelate specifically around the development and evolution of attention and cognitive effort. Third, this study speaks to the dynamics between ventures and venture capitalists.

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# ENTREPRENEURS' DISPOSITIONAL AFFECT AS ANTECEDENT OF NETWORK SIZE AND QUALITY: WHAT'S AFFECT GOT TO DO WITH IT?

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# **Principal Topic**

Networking is of utmost importance for entrepreneurial success (e.g., Stam, Arzlanian, & Elfring, 2014) and continues to be a prominent theme in entrepreneurship research (Busenitz, Plummer, Klotz, Shahzad, & Rhoads, 2014). Network characteristics, such as network size and quality, can differ significantly from one entrepreneur to another. However, it remains unclear why those differences occur. Sarasvathy and Venkataraman (2011) go so far as to say that "almost the entirety of social networks research takes networks as mostly given." This study tries to shed some light on the dark by empirically investigating "entrepreneurs' dispositional affect", which can be defined as entrepreneurs' "stable tendency to experience positive [or negative] moods and emotions" (Baron, Hmieleski, & Henry, 2012). Specifically, this study analyzes to what degree entrepreneurs' dispositional affect (independent variable) can predict entrepreneurs' network size, time spent networking, and long-term orientation & quality of relationships (dependent variables).

### Method

An online survey was conducted with entrepreneurs from the alumni network of a business school. To ensure a high response rate (>50%), every entrepreneur was contacted by phone and personally invited to participate. The independent variable was measured with the extended "Positive Affect Negative Affect Schedule" (PANAS-X) (Watson & Clark, 1994). The dependent variables were measured with adapted items from Semrau and Werner (2014), Greve and Salaff (2003), and Ganesan (1994). Hypotheses were tested with ordinary least squares regression models.

# **Results and Implications**

As of this writing, calculations are still in progress. Final results will be presented at the BCERC in June 2015. This study contributes to research in three important ways: First, it enriches the well-established research field of entrepreneurial networking by addressing imperative yet unanswered research questions on why networks differ among entrepreneurs. Second, it helps build the foundation for the emerging research field of entrepreneurial affect. Third, given the "extreme emotional context" (Cardon et al., 2012) of entrepreneurship, research on entrepreneurial affect can also enrich theory development in other disciplines (such as organizational behavior, psychology, and strategic management). In addition, this study contributes to practice by helping entrepreneurs better understand how affect impacts one of the key success factors of entrepreneurship, namely: the size and quality of their network.

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# LISTENING TO HOW WOMEN ENTREPRENEURS VIEW SUCCESS: A CONTEXTUAL EXPLANATION OF ENTREPRENEURIAL BEHAVIOR

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# **Principal Topic**

Success, often measured quantitatively with economic factors, is an enduring topic in entrepreneurship research. Seldom do studies ask entrepreneurs about success from *their* perspective. Entrepreneurs and their firms are closely connected, however; company development depends not only on anticipated economic consequences but also on how the business interacts with other areas of the founder's life. It is useful to consider influences of individual motives and goals on the entrepreneurial process. We examine the entrepreneur's view of success empirically and theoretically as a contextualized outcome based on the founders' goals and motives, shaped by personal norms as well as professional norms. We explore three questions: Which contextual factors most affect the individual's understanding of success? How do entrepreneurs' own success definitions influence entrepreneurial intention, behavior, and company development? How should entrepreneurs' definitions of success inform entrepreneurship research?

### Method

Conceptually we build on expanded version of Ajzen's theory of planned behavior. Empirically we draw on findings from interviews of 31 German and 12 US women entrepreneurs. Using system dynamics methods, we use interview analyses to create causal models of interviewees' experiences, motivations, actions, and outcomes. We then identify common themes to develop a model of success and factors that influence it, as well as its effects on intention and behavior.

### **Results and Implications**

We show that personal and social norms influence the individual's view of success; thus "success" is highly individual and not easily quantifiable. Nevertheless, we observe that influencing factors in Germany and the USA are thematically similar. The emerging model helps clarify the interrelationships among factors affecting success-in-context and portrays the strong influence of contextual aspects on entrepreneurs' goals and success definitions. An entrepreneur's personal success definition, along with perceived professional norms, subsequently affect intention, behavior, and company development. The study underscores the diversity of today's entrepreneurs, and qualitative data and system dynamics methods contribute to more richly textured, holistic understanding. We argue that future research should explore entrepreneurial behaviors that economic indicators alone cannot capture, as they are affecting what founders do and how companies develop.

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# A CLOSER EXAMINATION OF INNOVATION AND VALUE CREATION IN FAMILY FIRMS: THE ROLE OF VALUES

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### **Principal Topic**

A central tenant of a firm's value-creating mission involves the ability to innovate (Drucker, 1985). Extant innovation literature focuses predominately on technology as a form of innovation, and often does not explicitly relate innovation to customer value. However, more recently scholars have begun to recognize the need of focusing on the *value* created by innovation. To demonstrate, Chen and Sawhney (2011) propose four dimensions of innovation for firms - offering-oriented innovation, customer-oriented innovation, operations-oriented innovation, and partner-oriented innovation, and twelve types - product, platform, solution, customer need, interface, communication, value capture, management, process, supply chain, channel, and ecosystem (also, see Wolcott and Lippitz, 2009). They argue that innovation should be driven by the purpose - creating customer value, rather than the means, e.g. technology.

The evolutionary view of business emphasizes that a firm's purpose evolves over time, which ultimately involves a higher level of consciousness, seeking more than just maximization of productivity and profits (Nelson and Winter, 1977). In the family business context, a greater level of complexity exists as the firm and the family evolve concurrently. Increasingly, family values are seen as pivotal to driving the firm's long-term value creation.

To examine this complexity, in this exploratory research we enlist Chen and Sawhney's 12-dimension innovation framework to establish business innovation, and the Rokeach Value Survey (RVS) (Rokeach, 1973; also, see Tomczyk, Lee, and Winslow, 2013) to assess family values. We examine the research question: In family firms, is there a difference between how innovation is perceived by, and manifests in family versus nonfamily decision-makers, and specifically, how do values impact this process?

# Method

Using an in-depth multiple case study approach, 5 Irish case studies are examined. The following criteria were used to distinguish family firms: (1) 50 percent or more of ordinary voting shares are owned by members of the family, related by blood or marriage; (2) 50 percent or more of the management team is drawn from the largest family group who owns the company; and (3) the company is perceived by the chief executive to be a family business.

In-depth interviews were carried out with family and non-family executives and board members active in the firms, representing multiple industries, departments, and generations. To triangulate the data, secondary sources were also utilized websites, annual reports, press articles etc. were also collected. The empirical material was coded and analyzed using established techniques for qualitative research. In order to increase the reliability of the coding and ensure diverging perspectives, the research team is comprised of four members who specialize in the area of entrepreneurship in family business: two PhD students, an assistant professor, and an associate professor. The steps of analysis are done independently by two members, who iteratively meet to compare their individual interpretations, with discrepancies reviewed collectively with the other two members. The material was analyzed using a traditional content analysis method, applying Chen and Sawhney's dimensions of innovation and the RVS to identify emergent attributes between the family and non-family decision-makers.

# **Results and Implications**

By contextualizing Chen and Sawhney's value-based view of innovation and the RVS value measurement instrument in family firms, we expand the current understanding of innovation, and importantly, move to a better appreciation of how values potentially affect the value-creation process.

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# ENTREPRENEURIAL EXIT - IT'S TIME TO MEASURE SUCCESS

David Feierabend, RWTH Aachen University, Germany Philipp Gebhard, RWTH Aachen University, Germany

# **Principal Topic**

Entrepreneurial exit has been acknowledged as a critical component of the entrepreneurial process (DeTienne, 2010; Wennberg & DeTienne, 2014). At the heart of recent research lies the basic belief that exit is a multidimensional phenomenon that can be perceived as a positive as well as a negative outcome by the individual entrepreneur. Theoretical reasoning suggests that not only the financial outcome plays a role in entrepreneurs' perceptions of exit (DeTienne, 2010). Scholars rather suggest that exiting entrepreneurs also aim at other dimensions of success, such as reputational gains, employee retention, or continued pursuance of the firm's strategic mission (Graebner & Eisenhardt, 2004; Dalziel, 2008; Graebner et al., 2010). Building on the findings outlined above, we develop a scale to measure *Entrepreneurial Exit Success (EES)*. The development of this scale is important as it enables researchers to distinguish between successful and unsuccessful exits— furthermore, forming the basis for research on determinants for *EES*.

### Method

This study employs a multi-method approach, consisting of a thorough scale development process building on semi-structured interviews and an online survey sent out to entrepreneurs in German-speaking Europe who have already completed an exit process. Emphasis has been placed on obtaining a balanced sample across industries and exit routes. Our scale development process follows DeVellis (2003) encompassing an extensive qualitative analysis and two quantitative analyses. Until now, the qualitative part (including a comprehensive literature review, 23 interviews with experienced entrepreneurs and discussions with scale development experts) is completed. A quantitative analysis has been conducted with completion of full data collection still underway.

# **Results and Implications**

In the qualitative analysis, we found strong convergence of success dimensions among the interviewed entrepreneurs. In line with these findings, the quantitative analysis applying maximum likelihood factor analysis yielded four significant factors. As such, *EES* is represented by the dimensions personal financial benefits, personal reputation, employee benefits, and firm mission persistence. These dimensions complement each other and represent the entrepreneur's perception of the exit process outcome. At the current state of analysis we offer strong evidence for a multifaceted approach to *EES*.

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# DO THE VENTURE IDEAS OF REPEAT ENTREPRENEURS CHANGE AFTER THEIR DISCOVERY?

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### **Principal Topic**

This research investigates whether or not repeatedly successful entrepreneurs view their initial venture ideas as changing after their discovery compared with discontinued entrepreneurs. Many scholars have argued that learning occurs across time; identification is a social process; identification is an interactive process; and that it is naïve to think that identification is a one-time event (Archichvili, Cardoz & Ray, 2003; Dimov, 2007; klein, 2008; Sarason, Dean & Dillard, 2006). These arguments often came in response to the work by Austrian economists who asserted that at least some ideas exist ready to be discovered (Fiet, Piskounov & Patel, 2005; Shane & Eckhardt, 2003). Hidden in this debate is a secondary one that is as much ontological as it is epistemological. Namely, some have argued that it is a disagreement between those who see greater value in an economic approach, which can be externally validated (Fiet, 2007; Kirzner, 1973, 1979; Shane, 2000) versus a cognitive or psychological approach that is used in different ways by all humans (Baron, 2004; Corbett, 2007). We indirectly examine these scholarly distinctions by comparing repeat and discontinued entrepreneurs.

### Method

We conducted 61 targeted interviews with entrepreneurs, which we categorized by type and transcribed. We analyzed the results using ANCOVA and the Levene's test. We interpreted interview themes using Nvivo analysis.

# **Results and Implications**

We found that the entrepreneurs interpreted the same question differently, based on an imprecise specification of the focal time frame. Some were thinking in the near term; whereas, others were thinking retrospectively many years later. We suppose that given enough time that all venture ideas change, which is uninteresting. The question that we were asking is does it make any operational difference in the short term whether the initial venture ideas change? To tease out this distinction, we are re-interviewing the entrepreneurs, which at the time of the writing of this summary has not as yet been completed. However, we expect to have complete results by the time of the conference.

We expect to find that repeat entrepreneurs initially recognize venture ideas based on criteria from their specific knowledge, which is like matching the pattern of the specific attributes of a venture known by repeat entrepreneurs to have been successful in the past (c.f., Baron, 2006).

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# SPECIFIC KNOWLEDGE AS A KEY TO LAUNCHING SUCCESSFUL NEW VENTURES

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### **Principal Topic**

This research investigates whether or not repeatedly successful entrepreneurs compared with discontinued entrepreneurs actually use specific information versus general information for launching their ventures. Several scholars have argued that specific knowledge is a key for entrepreneurs to earn above average economic returns (Hayek, 1945; Jenson & Meckling, 1995; Fiet, 2002, 2007). It is the recollection of information about people, places, special circumstances, timing and technology (Fiet, 2007). It is potentially valuable because it is non-tradable and can be used to create a quasi monopoly in time and space, resulting in the gaining of a temporary competitive advantage. However, other scholars have implied in their work that previous experience is all that is necessary, perhaps even to the point where they can enjoy a competitive advantage (Shane, 2000; Shane & Venkataraman, 2000). This is more than an abstract debate because acquiring specific information can become a sunk cost whereas general information can be redeployed, thus reducing the acquisition cost.

# Method

We conducted 61 targeted interviews with entrepreneurs, which we categorized by type and transcribed. We analyzed the results using ANCOVA and the Levene's test. We interpreted interview themes using Nvivo analysis.

# **Results and Implications**

After controlling for age and years of industry experience, the overall ANCOVA model was significant (p = .032), so we were able to test the pairwise comparisons. There was a statistically significant difference in the predicted direction (p = .037). We did not violate the assumptions of the Levene's test, which means the results were valid, despite the unequal sample sizes. The Nvivo analysis provided additional support for the interpretation of the results.

We attempted to find other pairwise differences, which were not statistically significant, which we surmise was due to inexact measurement.

This is the first known empirical test of Hayek's (1945) much-cited, specific information hypothesis. The result is important because it provides aspiring entrepreneurs with guidance about what type of information that they should acquire when launching a new venture. The results also suggest that the added risk of acquiring specific information is justified by the much greater success when launching a new venture, controlling for age and industry experience. In this case, the greater cost and risk are justified by greater entrepreneurial success in launching new ventures.

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# ENTREPRENEURIAL MOTIVATION IN SUSTAINABLE ENTREPRENEURSHIP: HOW MOTIVATION FACTORS IMPACT THE ENTREPRENEURIAL PROCESS

Denise Fischer, RWTH Aachen University, Germany René Mauer, RWTH Aachen University, Germany

### **Principal Topic**

There has been growing recognition that a transition towards a more sustainable future is needed. Entrepreneurs are seen as key agents for that transition by launching sustainable products, services, and processes (Hall et al., 2010). Currently, we know little about the motivations of sustainable entrepreneurs in the early-stage venturing process, even though interest in this topic is steadily increasing (Hall et al., 2010). Entrepreneurial motivation plays a fundamental role for the understanding of new venture creation processes (Herron & Sapienza, 1992; Cohen et al., 2008; DeTienne et al., forthcoming). Motivation can be seen as an important variable to explain why some individuals recognize sustainable development opportunities and others do not (Patzelt & Shepherd, 2011). However, we lack knowledge on how motivation affects the new venture creation process.

#### Method

We conducted longitudinal case study research (Langley, 1999; Van de Ven, 2007) between fall 2014 and spring 2015 on a selected sample of eight sustainable ventures in Germany. Our data collection consists of transcriptions of interviews with venture founders, as well as of written archival data from internal and external sources. Interview data was coded and interpreted independently by at least two researchers in order to ensure reliable and valid interpretation. We used single case and cross-case analysis to analyze the digitally recorded and transcribed interviews.

# **Results and Implications**

Our research shows that sustainable entrepreneurs are highly intrinsically motivated and that trade-offs between monetary gains and sustainable values exist. Further, we find two different mindsets of sustainability-oriented entrepreneurs whereby regulatory focus theory (Higgins, 1998) helps to explain the two encountered self-regulatory systems. Whereas some entrepreneurs see sustainability as part of their ideal self-state, others understand it as part of their ought self. We also discovered effects of motivation on specific steps over time, e.g. on the acquisition of funding, as prevention-focused entrepreneurs tend to take funding from investors that share their sustainable values while promotion focused entrepreneurs acquire financial resources in alignment with venture growth. Our insights help in understanding what motivates nascent sustainable entrepreneurs what could be applied in entrepreneurship education and venture coaching to equip a larger number of sustainable entrepreneurs who target ecological and social well-being.

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# WHAT LEADS TO EFFECTIVE SELF-REGULATION? ORIGINS AND OUTCOMES OF ENTREPRENEURS' GRIT

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# **Principal Topic**

Self-regulation is important for entrepreneurs because they operate in dynamic and uncertain environments in which there are few external guides for behavior, and they must regulate their behavior such that they are able to remain focused on pursuit of long-term goals despite multiple tasks and situations that may distract them (Baron et al., 2012; Nambisan & Baron, 2013). Furthermore, entrepreneurs tend to be emotionally connected to their ventures (Baron, 2008; Cardon et al., 2012; Shepherd et al., 2009). Thus, they need the ability to act based on reason and logic rather than emotional reactivity. Differentiation of self, a concept developed in the field of family systems, pertains to an individual's ability to balance emotional and intellectual functioning while concurrently balancing intimacy and autonomy in interpersonal relationships (Bowen, 1976, 1978). Individuals with higher levels of differentiation of self are better able to distinguish thoughts from feelings, can effectively balance strong affect with logical reasoning, and are less emotionally reactive (Kerr & Bowen, 1988). Thus, higher levels of differentiation facilitate individuals' abilities to regulate their emotions, and consequently, their behaviors. Another aspect of self-regulation is grit, which is an individual's perseverance in the pursuit of long-term goals, emphasizing stamina in both interest and effort over extended periods of time (Duckworth et al., 2007).

# Method

A national sample of business founders completed a survey (n=232) that included measures for differentiation of self (Skowron & Friedlander, 1998), grit (Duckworth & Quinn, 2009), subjective well-being (Deiner et al., 1985), career success as a subjective measure of entrepreneurial success (Abel & Spurk, 2009), and firm performance (Covin et al., 1990). Control variables included age, sex, education, and ethnicity. Data were analyzed using structural equation modeling.

# **Results and Implications**

Results indicated that higher levels of differentiation of self contributed to entrepreneurs' grit — to their focus and persistence in the pursuit of long-term goals — which, in turn, led to higher levels of entrepreneurs' success. Furthermore, this study suggests that differentiation of self is an antecedent to self-regulatory factors. Implications suggest that increased levels of entrepreneurs' differentiation of self will improve their ability to be self regulated, which will increase their levels of performance and success.

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# USING IMAGINATION TO CREATE BETTER BUSINESS OPPORTUNITIES? AN EXPERIMENTAL STUDY

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# **Principal Topic**

Many scholars state that entrepreneurs use their imagination. Imagination is the creation of mental images of external objects, events or situations currently not present to the senses. Imagination can be subdivided in three distinct processes: prospective thinking, counterfactual thinking, and perspective taking. Potential entrepreneurs use their imagination, among others, to recognize or create business opportunities. However, whether or not the use of imagination leads to better business opportunities is not empirically tested. The aim of this paper is to test which imagination process leads to better business opportunities. Using an experimental setting we contribute to the discussion on business opportunities by introducing the imagination concept and its three sub processes.

#### Methods

For this survey-based experiment we use a basic randomized design with the three imagination conditions (prospective thinking, counterfactual thinking, and perspective taking) and a control group. Using manipulation tasks, we trigger the participants to use a specific imagination process in each condition, and no imagination process in the control group. These imagination processes are the independent variable in this study. The dependent variable is the quality of the business opportunity, operationalized as potential economic value, newness, and perceived desirability. 170 students from diverse study backgrounds, who joined an entrepreneurship elective, participated in this study.

# **Results and Implications**

We find that participants in the prospective thinking condition come up with business opportunities of which the quality is significantly higher than the business opportunities of the participants in the other conditions. The finding is a first step in testing the claim of many scholars that the use of imagination is important for recognizing business opportunities. Additionally, entrepreneurial education programs aimed at enhancing opportunity identification ability may look into training the use of imagination.

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#### THE EFFECTS OF WEALTH ON ENTRY INTO ENTREPRENEURSHIP

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### **Principal Topic**

We explore whether a lack of wealth constrains individuals from starting businesses by measuring startup rates and the early performance of new ventures in the U.S. economy across different wealth percentiles. Theoretically, wealthy individuals can start new ventures more easily than less wealthy individuals by assigning their wealth as collateral to access credit markets (Acs, 2008). However, research on wealth and entrepreneurial entry provides mixed results. Some studies find that a lack of wealth deters entry (Evans and Jovanovic, 1989; Fairlie, 1999) whereas other studies find that this relationship applies only to the wealthiest 5 percent (Hurst and Lusardi, 2004). The possibility that wealth acts as a constraint is an important issue as it suggests that poorer nascent entrepreneurs are more likely to abandon their startup efforts. This study also provides insight into job creation by nascent entrepreneurs from different wealth percentiles, making important contributions toward our understanding of inequality and entrepreneurship.

#### Method

We examine the link between wealth and entrepreneurship using the Panel Study of Entrepreneurial Dynamics II dataset of 1,214 nascent entrepreneurs. We extend prior studies by disaggregating wealth into quintiles before performing regressions. This allows us to identify whether liquidity constraints apply at specific levels of wealth. We employ an alternative specification of dummy variables indicating net worth quintiles as our regressors of interest. Given that previous studies found nonlinear effects (Evans & Jovanovic, 1989; Parker, 2009), we generalize those dummy variables into a Bezier basis for a semi-parametric B-spline.

# **Results and Implications**

Poorer nascent entrepreneurs are more likely to abandon their startup efforts compared to the wealthiest 20 percent of the population. And while first-year revenues for wealthy, successful entrepreneurs are greater, the number of employees hired does not differ significantly across the wealth distribution. Integrating these findings, and controlling for industry complexity and human capital, we see that while entrepreneurial entry is concentrated at the top, the types of ventures started by nascent entrepreneurs and their impact on the economy vary across the wealth distribution. This suggests that entrepreneurship may act as an amplifier, rather than modifier, of inequality in the U.S.

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# WHEN COPYCATS CAN SUCCEED? BUSINESS MODEL IMITATION AND THE LEGITIMACY OF NEW VENTURES IN EMERGING ECONOMIES

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### **Principal Topic**

Research in institutional theory generally suggests that imitating a successful business model can provide initial legitimacy for new ventures (Aldrich & Fiol, 1994; DiMaggio & Powell, 1983). However, researchers of "institutional distance" suggest that institutional requirements differ between countries (Kostova, 1999; Kostova & Zaheer, 1999; Xu & Shenkar, 2002). The fundamental assumption that the successful business is highly legitimated and presents an appropriate way of doing business remains questionable when considering the difference in market contexts.

In this paper, we aim to further explore the factors which influence the dynamics between imitation and initial legitimacy generation. We explore the business model copycats (BMCs) — firms that try to establish their market place in emerging economies by imitating leading business models from advanced economies — from the institutional perspective. We investigate a question that: what influences BMCs' initial legitimacy?

Our goal is to contribute to theory by investigating the contingencies and boundary conditions at play in the relationship between imitation and the initial legitimacy generation of BMC ventures in emerging economy.

#### Method

We investigate 736 assessments, nested within 46 venture investors using a conjoint experiment analyzed with hierarchical regression and hierarchical linear modeling (HLM).

#### **Results and Implications**

Our findings suggest that domestic regulatory support, domestic normative support, and the match of the teams (copied and copying team) influence the attribution of initial legitimacy for the BMC venture by investors. Our empirical results also show that the investors' knowledge of the copied firm strengthens all three tested main effect relationships.

We make our first contribution to the literature of legitimacy building in early entrepreneurship ventures by expanding the theoretical argument that suggests imitation as an important mechanism to achieve initial legitimacy (Aldrich & Fiol, 1994; Lieberman & Asaba, 2006), and provide first evidence of factors which play a role in this relationship. We make our second contribution to advance the understanding of institutional theory and entrepreneurship in the specific context of emerging economies. Our empirical analysis provides support for the argument that contextual difference in emerging economies shape the appropriateness of entrepreneurial goals and behaviors, as well as the effectiveness of actions (Bruton et al., 2008).

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# CROWDING OUT EFFECTS OF WELL-INTENDED ENVIRONMENTAL POLICIES

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# **Principal Topic**

Using a computer simulation model spanning more than a century, this study explores the potential "crowding out" effects that arise when protective environmental policies inadvertently reduce the financial opportunities available to entrepreneurs. The principal aim is to examine the extent to which the quantity and quality of innovations produced by entrepreneurs are impacted by government policies that are intended to protect the environment. Framing these dynamics in the context of the entrepreneurship pillars developed by Baumol, Litan, and Schramm (2007), our findings suggest that government policies unintendly limiting the Coasian or Schumpertarian rents available to entrepreneurs will have an adverse long-term effect on firm formations, average firm fitness, entrepreneurial innovativeness and the achievement of sustainable growth. By impeding one or more of the entrepreneurship pillars, attempts to achieve long-term sustainability may be significantly compromised, even if near-term goals to address environmental degradation are achieved. Our results suggest that these effects arise when government subsidies and taxes lead to over-investment in stagnant environmental technologies and the emergence of an oligopolistic industry structures. We find that subsidies are particularly prone to these outcomes. Our proposed framework and supporting analysis offer challenges and opportunities for scholars, entrepreneurs and policy-makers.

# Method

Our study responds to multiple calls for careful scrutiny of the differences between policy-based and market-based approaches. "Empirical studies which attempted to differentiate the impact of environmental entrepreneurship from action by government, incumbent firms and social movements would offer great advancement to the field," wrote Lenox and York (2012: 147). The results of our simulation provide strong empirical evidence that differences exist between these approaches and they are significant. Our contribution also serves a growing theoretical need to address lingering gaps in the study of short-term versus long-term outcomes of policy-based actions. Our theory builds on existing frameworks grounding the core causes of and solutions for environmental degradation as fundamentally involving market failures (Dean and McMullen, 2007; Jaffe, Newell and Stavins, 2003; Lenox and York, 2012; Popp, 2003, 2006, 2010; York and Lenox, 2013). However, our revelation that even well intended policies crowd out environmental entrepreneurs fundamentally changes the landscape with respect to how best to address market failures. As Dean and McMullen (2007) hinted, it is far from clear that governmental action is the only answer, or even the best answer.

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# THE IMPACT OF FORM AND CONTENT ON REVIEWER ASSESSMENT: AN EXAMINIATION OF A DEPARTMENT OF DEFENSE FUNDED CONSORTIUM GRANT PROGRAM

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# **Principal Topic**

Grant funding is an important source of early stage funding for many technology firms, particularly since it is non-dilutive. Typically grant funding follows a similar process as early stage private equity funding, where an application document is scored by a panel of experts. A key area of interest to those seeking funding is to understand the components that make their application standout in order to receive higher scores from reviewers. A few recent studies of the private equity process have indicated that business plan wording can influence funding behaviors. Yet there has been little or no empirical research on grant application content.

#### Method

This study examines 281 "business plan-like" applications to a Department of Defense supported grant consortium, and compares the language content of the applications with the ratings given by reviewers after reading the application. The applications were digitized and examined using the *Diction* software program. *Diction* is a language analysis software program that searches a text passage for occurrences of thirty-one dictionary scores belonging to five general categories of certainty, activity, optimism, realism, and commonality. We examined four evaluative dimensions used in the formal reviewer scoring: technical merit, commercial potential, competitive sustainability, and ability of management team to execute plan.

# **Results and Implications**

In the *Diction* program, the general category of "Certainty" reflects language indicating resoluteness and completeness. Application content with higher "Certainty" scores was significantly related to higher reviewer scores. "Insistence" (a certainty variable) was positively correlated with all four evaluation reviewer dimensions, while "Ambivalence" (a negative certainty variable) was negatively correlated to all four evaluative dimensions. In the *Diction* program, the general category of "Commonality" reflects language indicating group interest and values. Higher "Commonality" content scores were associated with higher scores on both commercial potential and management ability, but not with technical merit or competitive sustainability. "Denial" (a negative optimism variable) was also negatively correlated with commercial potential. The results of this study clearly indicate that word choice and phrasing can influence reviewers, and ultimately impact the ability to receive funding.

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# OPPORTUNITY EVALUATION DIFFERENCES BETWEEN CORPORATE ENTREPRENEURS AND INDEPENDENT ENTREPRENEURS: THE EFFECTS OF PRODUCT-MARKET RELATEDNESS, RISK, AND SLACK RESOURCES

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# **Principal Topics**

Phan et al. (2009) called for corporate entrepreneurship scholars to investigate the role of cognitive and organizational factors in a firm's entrepreneurial actions. We use the social cognition arguments of Corbett and Hmieleski (2007) to demonstrate how corporate entrepreneurs think differently from independent entrepreneurs. Corbett and Hmieleski (2007) argue that cognition differences between these two groups are attributable to a difference in entrepreneurial context and the demands of different entrepreneurial roles that engage distinct role schemas. We investigate how corporate entrepreneurs and independent entrepreneurs make decisions regarding the pursuit of entrepreneurial opportunities.

We examine three factors in our approach to entrepreneurial assessment of new venture opportunities. First, we explore the probability of successful outcomes from the initiative. We also include product similarity and market familiarity of the new business to the existing business of the corporation or individual in order to examine if entrepreneurs prefer opportunities that are related to their current businesses. Independent of these three factors, we also experimentally manipulate slack resources.

# Method

Our full factorial experiment uses relatedness of the venture to current products explored and current markets served, and probability of expected outcomes. Respondents were informed that all opportunities represent desirable outcomes, such that valence is not varied between venture scenarios. Furthermore, respondents were primed with a description of their core business' situation (e.g., resource requirements over the next relevant time period, in combination with resources available), to evaluate investment opportunities in light of available resources. We adjusted available resources compared to core business resource requirements to capture high and low levels of slack.

# **Results and Implications**

Early results indicate that this study has the potential to make several important contributions. First, results indicate that corporate entrepreneurs and independent entrepreneurs activate different role schemas when evaluating opportunities, regarding the choice to diversify risk versus maximize expectancy. Additionally, our results clarify the effect of resource availability on entrepreneurial decision-making. Finally, we find that product and market relatedness are important to corporate entrepreneurs when making decisions to invest in new business ideas.

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# CAREER REASONS AND FINANCIAL PERFORMANCE OF SMES IN A DEVELOPING ECONOMY

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# **Principal Topic**

Our main research question was "Do the motive patterns of entrepreneurs in Nicaragua, the second poorest country in the Western hemisphere, predict the survival and/or financial performance of their firms?" Much of the previous research on motivation for business ownership was based on data from countries with developed economies. Only two of these earlier studies looked at the relationship between career reasons and outcomes, only one with established business owners in Great Britain.

# Methodology

Our stratified sample was drawn from a database of 13,000 firms of three sizes as defined by Nicaraguan standards (microenterprises, small, and medium sized businesses), representing five industries (agricultural production, manufacturing production, mining, commercial, and services), across 7 of the 17 departments (states) of Nicaragua, representing the major economic regions. Data were collected through direct, face-to-face interviews of 500 business owners in the first round and, because of attrition for various reasons, 357 (204 females and 153 males) business owners in the second round who participated in the first round.

# **Results and Implications**

Factor analyses of the career reasons revealed common factor structures for men and women. The three factors consisted of reliable multiple-item scales that showed significant sex differences--scale means for women were lower than those for men. Only 305 respondents reported 2012 revenues. In a developing economy, large revenues likely derive more from market forces than owner characteristics, so we eliminated the 18 respondents (6%) with monthly revenues greater than 200,000 Cordobas (\$7,450). Linear regression showed that two of the factors – one we labeled Recognition, the other Communitarianism – predicted the 2012 revenues. This means that two person variables measured in 2010 predicted financial performance in 2012. An intriguing question for future research is whether the relationship between the career reason factors and financial performance will continue beyond the two year time period. An important implication for practice is that motivations for business ownership may be very different in developed economies versus developing economies. Moreover, though women may not voice as strong a motivation for business ownership as men, investors and bankers should not assume that motive strength alone predicts financial outcome.

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# WHEN SUCCESS IS BAD: THE DARK SIDE OF SUCCESSFUL MEDIA ROLE MODELS FOR THE FORMATION OF ENTREPRENEURIAL SELF-EFFICACY

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#### Method

To investigate the impact of perceived success and similarity of media role models on entrepreneurial self-efficacy we conducted an online experiment among 131 German students (graduate and undergraduate level). Using a student sample seems to be promising since students at an advanced stage of their study have to make decisions for their future career. This leads to a degree of uncertainty and stress that in turn makes them more open to social comparison and role modeling. Our experiment used a 2 (successful, unsuccessful) x 2 (similar, dissimilar) design. The participants were asked to evaluate a random page of the magazine regarding several design criteria. Participants were randomly assigned to one of the four experimental groups and women were exposed to female role models and men to male role models. At the end of the survey we measured entrepreneurial self-efficacy beliefs.

# **Results and Implications**

We used manipulation checks for success and similarity, which show significant differences between the groups indicating successful manipulations. Analyzing the results we found a significant interaction between success and similarity (F = 4.62, p < .05). This gives evidence that participants have a decreased self-efficacy when they read about a successful role model perceived as dissimilar. This supports our Hypothesis. In contrast, we did not find a direct relationship between similarity and success and self-efficacy. Summing up, the results reveal a dark side of successful media role models since entrepreneurial self-efficacy was significantly lower if the observer perceived the role model as dissimilar. This is in line with theory. Practical implications arise for educators and policy makers trying to foster entrepreneurship via presenting entrepreneurial role models. If entrepreneurial examples are used in lectures or in campaigns to raise efficacy beliefs they should be carefully selected, i.e. successful role models that are similar to the target group. Subsequently, there is no "one size fits it all"-approach. We did not find a direct relationship of role model success and self-efficacy.

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# GROWTH MOMENTUM: WHAT ENTREPRENEURIAL CEOS DO TO ACHIEVE HIGH ORGANIC GROWTH

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### **Principal topic**

Some companies grow while others do not. A theory developing study on what CEOs of fast growing SMEs and stables sales SMEs do different in terms of applying growth determinants under their control that can explain the difference in performance, lead to an organic growth model. Determinants such as market, age of the firm and others that cannot be influenced were disregarded. This developed theory claims that the application of growth determinants by CEOs lead via the intermediate variable growth momentum to growth. Growth momentum comprises employees that (i) know company objectives, (ii) are motivated to achieve these objectives and (iii) have the opportunity to perform. The organic growth model is tested via 19 hypotheses.

#### Method

The population of the study consists of SMEs in the Netherlands each with more than EUR 8.5 million sales in 2013. Of this population of 40,000 companies, a sample of 4,600 received an invitation to participate in an online survey. Gazelles were defined as companies with more than 20% sales growth reported in the last 3 years. The model was tested with Gazelles and with firms having stable sales companies forming the control group. Stable sales companies had less than 10% sales growth reported in the last 3 years. PLS-SEM was used to analyse the various relationships and constructs of the model.

# **Results and Implications**

Findings indicate that the difference in application of growth determinants by CEOs of Gazelles and CEOs of companies with stable sales indeed explains the difference in growth performance. Evidence was found that, unlike the stable sales CEOs, the Gazelle CEOs create growth momentum with the application of the growth determinants. Gazelles CEOs see staff motivation as the most important CEO task to make staff perform as good as possible to reach company growth objectives. Company culture and performance feedback are important instruments for staff motivation. What is new is the link between a business model as fixed strategy and as a guide for company employees. The current study's findings are relevant for today's business practice as they show the way for aspiring CEOs to learn what they can do in terms of interventions to increase their companies' organic growth.

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# DOES PASSION LEAD TO BUSINESS CREATION OR IS IT THE OTHER WAY AROUND? A TEST OF TWO ALTERNATIVE THEORETICAL MODELS IN A RANDOMIZED FIELD EXPERIMENT

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# **Principal Topic**

Passion has been conceptualized as a motivational driver that enables entrepreneurs to realize their business ideas (Cardon et al., 2009). Given that entrepreneurship is a process that takes several months or years with countless hours of intensive work (Reynolds & Curtin, 2008), it makes intuitive sense to argue that passion plays an important role in entrepreneurship.

However, the role of passion in entrepreneurship is not as clear as it seems. On one hand, Cardon et al.'s (2009) theoretical model suggest that passion is a driver of entrepreneurial effort and performance. On the other hand, Gielnik et al.'s (in press-a) theoretical model contends that passion is an outcome of entrepreneurial effort and performance.

By testing the two models using a longitudinal quasi-experimental design, we add to the theoretical discussion on whether passion is an antecedent or an outcome of entrepreneurship. We build on the dualistic model of passion (Vallerand et al., 2003) and provide a more nuanced theoretical perspective on passion as a predictor or outcome of business creation. We also identify pathways through which training could impact business creation and entrepreneurial passion.

#### Method

We conducted a randomized controlled field experiment with over 300 participants using an action-oriented entrepreneurship training (cf. Bischoff et al., 2014) in Nairobi, Kenya. We compared the training group with a non-intervention control group and used a longitudinal pre-/post-test design with three measurement waves over one and a half years.

We compared each of the alternative models to the common parent model using a Chi<sup>2</sup>-difference test (Bollen, 1989). To distinguish between the measurement model and the structural model (Anderson & Gerbing, 1988), we conducted path modeling (Hofmann & Morgeson, 1999).

# **Implications**

Our findings highlight the need to consider the alternative perspective of including passion as an outcome of entrepreneurial behavior. Our longitudinal design also provides more fine-grained insights on the nature and directionality of the proposed linkages. Lastly, we contribute to the development of a comprehensive theory of entrepreneurship training.

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# THE ROLE OF NARRATIVE IDENTITY WORK IN SERIAL ENTREPRENEURSHIP: A LONGITUDINAL STUDY

Antonio P. Giuliani, University of Illinois at Chicago, USA Alberto Monti, Bocconi University, Italy

### **Principal topic**

To date research in identity work and entrepreneurship has been generally understudied. Recently, the attention of management scholars toward the ways in which individuals fashion and negotiate their identities at work has been increasing (e.g. Alvesson, Ashcraft and Thomas, 2008) and has started to garner the attention of entrepreneurship and institutional scholars too (e.g Navis & Glynn, 2011). Entrepreneurs need to be perceived as distinctive and unique to garner attention and to attract resources. At the same time they need to project their ventures within the larger environment, by negotiating their identities to elicit legitimacy. To complicate the matter, serial entrepreneurs usually wear different hats across the ventures they are a part of and often interact with audiences that differ from one venture to another.

#### Method

We conduct a longitudinal mixed-method case study to address this topic. We tracked the entrepreneurial identity dynamics of a famous and successful serial entrepreneur: Damon Albarn, a British music producer and musician, who is credited with the creation of multiple bands, projects and artistic ventures within the music scene and beyond across the world. A dataset comprised of all paper and online publications from January 1995 until May 2014 that covered Mr. Albarn or the projects he was involved with was collected through secondary sources (newspapers, specialty magazines, e-zines, blogs) and catalogued by the authors and their research assistants. Further expansion of the dataset included all video material retrievable through online access and converted into textual data for further analysis. The dataset has been analyzed via Gioia's grounded method (Gioia, Corley & Hamilton, 2013) and corroborated via semantic network analysis (Oswick et al., 2010).

# **Results and Implications**

Our exploratory results highlight how entrepreneurs engage in identity work by differentiating their discourses. They strategically elicit intertextual linkages to associate with (disassociate from) cultural settings that may enhance (endanger) their chances of success and activate interpretive frameworks to support their claims. The use of both qualitative and semantic network analysis represents an important contribution. We believe that the use of more objective metrics embedded in the semantic network approach opens up the possibility for a more systematic comparability of empirical results.

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# ENTREPRENEURIAL DYNAMISM AND INNOVATION CAPACITY: EVIDENCE FROM AN UNCOMPETITIVE REGIONAL ECONOMY

Aineias Gkikas, Cardiff University, UK Dylan Jones-Evans, University of the West of England, UK Robert Huggins, Cardiff University, UK

# **Principal Topics**

Whilst fast-growth entrepreneurship has attracted increasing attention and debate amongst academics and policymakers, there have been few studies that have examined the impact of these firms within less competitive regions (Mason et al., 2015). This is despite evidence that entrepreneurship is a localized phenomenon as well as a spatially uneven process that tends to persists over time (Stam, 2010).

#### Method

This paper uses a unique dataset - the Wales Fast Growth 50 - to examine the entrepreneurial dynamism and innovation capacity of a sample of 84 fast-growing entrepreneurial firms based in an uncompetitive region of the United Kingdom. Whilst the research utilizes only a relative small sample frame and one case study region, the broad representation of the types of fast-growth firms (e.g. different sectors covered) suggests that the exploratory findings should have a high degree of generality.

# **Results and Implications**

In terms of entrepreneurial dynamism, the ability to identify the gap in the market, possessing a wide skill-set and having a deep knowledge of the industry are found to be critical factors as is developing innovative products and services, both in-house and in collaboration with other partners. In terms of innovation capacity, the most frequent reported activities were related to computer software (70.2 per cent); changes to marketing methods (66.7 per cent), and training for the development of innovation (63.1 per cent). The least reported innovation activities were related to acquisition of advanced machinery (28.6 per cent) and external R&D (33.3 per cent). In terms of factors constraining innovation, the lack of qualified personnel (26.2 per cent) and availability of finance (25 per cent) were perceived to be the most important barriers. This study is one of the first attempts to examine high growth entrepreneurship within an uncompetitive regional economy and provides invaluable insights for policy makers, academics and practitioners in understanding the relevance of this phenomenon within such a spatial setting.

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# A MATTER OF TRUST. THE INFLUENCE OF ENTREPRENEUR-INVESTOR TRUST ON FOUNDERS' EXIT INTENTION AND EXIT STRATEGY

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# **Principal Topic**

Given its popularity in the public media, it is surprising that researchers have only recently gained interest in entrepreneurial exit as a critical component of the entrepreneurial process (DeTienne, 2010). There is general agreement on the fact that stakeholder relations and in specific, the entrepreneur-investor dyad, play a crucial role for new venture creation and success (MacMillan, Kulow & Khoylian, 1989; Cable & Shane, 1997). However, to the best of our knowledge, merely Collewaert (2011) has investigated investor relations in the light of entrepreneurial exit, approaching the topic from a conflict perspective.

Trust is considered an important trigger and precondition for cooperative relationships between entrepreneurs and investors (Shepherd & Zacharakis, 2001). Thus, focusing on the last stage of the entrepreneurial process, this research analyzes the role that trust between entrepreneurs and investors plays for founders' exit intentions and exit strategies.

#### Method

This study is based on a survey conducted among CEOs of young, privately-held, German SMEs active in the IT services and mechanical engineering industries.

To analyze entrepreneur-investor trust, we employ a 7-item instrument borrowed from Schoormann and Ballinger (2006). Entrepreneurs' overall exit intentions and strategies as dependent variables are measured on a 7-point Likert scale according to Leroy, Manigart, Meuleman and Collewaert (2013) and DeTienne, McKelvie and Chandler (2014) respectively. To test our hypotheses, we use hierarchical linear regression to predict the determinants of entrepreneurs' exit intentions and exit strategies. Among others, we control for different types of funding sources, firm size and performance as well as for founder ownership, age and education.

# **Results and Implications**

With this study, we provide new empirical insights to the development of the entrepreneurial exit literature. Our analysis exposes a U-shaped relationship between entrepreneur-investor trust and founders' exit intentions. In addition, we show that high entrepreneur-investor trust influences entrepreneurs' exit strategies towards a sale to financial investors and IPO, whereas low entrepreneur-investor trust favors liquidation strategies.

For practitioners, our research contributes to both investors' and entrepreneurs' awareness of how a cooperative relationship based on mutual trust influences entrepreneurial intentions, strategies and ultimately, decision-making up to the final stage of the entrepreneurial process.

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# BLURRED LINES: FAMILIAL AND ENTREPRENEURIAL LOGICS IN A FAMILY TECHNOLOGY VENTURE

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# **Principal Topics**

Family firms often face a tension between pursuing growth oriented strategies (i.e. business logic) or strategies that benefit family owners (i.e. family logic). This creates multiple challenges, especially when family firms are new ventures seeking resources. Negative perceptions held by external stakeholders (e.g. professional investors and non-family top executives) likely make it difficult for family-founded new ventures to obtain resources. Nonetheless, many successful examples exist of family firms that have successfully acquired substantial resources, particularly amongst technology ventures (e.g. VMware, Eventbrite, Evernote, etc). Yet, little theory examines how these ventures acquire resources while managing the tension inherent to family firms. Therefore, in the context of technology ventures, we ask the following: *How does a family technology venture manage the tension between family and business logics in order to obtain resources (financial, social, and human capital)?* 

#### Method

To address our question, we use a single, in-depth case study of "Family Tech", a technology venture in the IT industry founded by two adult brothers and their father. Family tech was extremely successful in securing multiple investments from professional investors and hiring professional executives. Our data consists of 30 semi-structured interviews over two waves with family and nonfamily employees, investors, and customers. In addition we used archival data and observations of a TMT meeting and a business event.

#### **Results and Implications**

Our findings indicate that family executives used four main tactics to acquire resources while balancing the tension between family and business logics. First, family executives engaged in sensegiving tactics using language and symbolic administrative actions downplaying the "familiness" in Family Tech. These tactics were initially effective, facilitating the acquisition of early employees and funding. Second, family executives nurtured a "coopted core" of loyal employees who did not view the venture as a typical family business. Yet, this core group of employees lacked the experience and external connections to further grow the venture.

To address this limitation, family executives hired seasoned professionals and executives around key resource milestones (e.g. investments or customer acquisition). Family executives, in conjunction with members of the coopted core, contributed to an environment preventing cyclers from flourishing. Further, family executives exploited mutual interdependence with the venture's majority external investors, preventing investors from replacing family management or easily exiting from the venture. Overall, these findings contribute to the literatures of hybrid organizations, family business, and entrepreneurship.

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# IF, WHEN AND FOR HOW LONG SHOULD FORMAL PLANNERS PLAN THEIR NASCENT VENTURE

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### **Principal Topic**

Despite recent theoretical and empirical advances highlighting the importance of examining the temporally embedded nature of performance, one under explored area of entrepreneurship research is that we know little about when, for how long and even if business planning actually speeds venture outcomes. Does formal planning actually quicken venture creation? Are planners more likely to 'fail fast'? Scholars also know little about when should planning be done: is business planning best done before, alongside or after other start up activities? Finally, how long should nascent entrepreneurs spend planning: at what point does analysis of a business opportunity end up paralyzing venture creation and disbandment outcomes?

#### Methods

Using the dedicated PSED II panel data on nascent entrepreneurship, we use propensity score matching to control for endogeneity in the planning-performance relationship. This is important because entrepreneurial (e.g. prior education, entrepreneurial experience) and venture (e.g. competitive and innovative milieu) characteristics impact not only on the decision to plan (selection effects) but also on the venture outcomes (performance effects). Propensity score matching allows us to 'balance out' differences between entrepreneurial characteristics and business contexts, reducing "the problem of unfair comparison" (Li, 2013: 214) which allows us to provide a reliable and robust estimate of the impacts of plan timing effects on venture creation.

#### **Results and Implications**

Our key result is that formal business planning speeds venture viability: the hazard rate for formal planners is higher than for non-planners, indicating that formal planners are more likely to create a viable venture faster than those who rely on informal planning. However, formal planners are less likely to disband. The efficacy of formal planning is also contingent on when and for how long such planning was conducted: formal planners were more likely to achieve a viable venture if they planned just prior to or after conducting the bulk of their start up activities. The results also show that those that take less than two months to plan are more likely to realize a viable venture but planning longer than that has no benefits.

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# TOWARDS THE DEVELOPMENT OF AN ENTREPRENEURIAL SCORECARD: WHICH FACTORS INFLUENCE PUBLIC FUNDING DECISIONS ON NEW VENTURE BUSINESS PLANS?

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# **Principal Topic**

This paper examines how different factors may influence decisions by public funders to support entrepreneurial ambitions, based on submitted business plans. The research seeks to generate new insights on methods of assessing entrepreneurial business plans and towards the design of an entrepreneurial scorecard that can assist funding decision makers.

#### Method

The study deployed statistical methods to examine 1,728 business plans submitted to a nation-wide public seed funding programme in Colombia during the period 2012-13. In order to identify external factors that might impact the fund granting decision, a bivariate analysis was conducted according to two related approaches: 1) contingency table analysis to test the independence between each external factor and the funds granting decision (i.e. accepted, rejected); and 2) calculating the information value (F) of each external factor.

# **Results and Implications**

Using six primary variables that represent factors thought to influence the level of acceptance or rejection of business plans, we find *strong* predictive power of location by department (versus *weak* predictive power of location by city or region and *moderate* predictive power of industry). Variables such as application timing within the call cycle, amount requested and available budget also had little association with the outcome of application. This suggests that *external factors* - related to the funding process itself - have little negative effect on entrepreneurs' access to public seed funding; suggesting that decisions are mostly based on variables directly related with the business plan itself (i.e. *internal factors*).

However, we identify that the model will display predictive validity - through association of factors regarding seed funding decisions with the actual decisions — when the departments (supporting funding applications) engage in encouragement of entrepreneurship selectively, i.e. when they are selective on location/industry/applicant source. Thus, rather than a criteria scorecard for funding success, findings also suggest that for efficacious development of entrepreneurial effort, the public seed funding system could attempt to dilute locational and industry variation in its focus.

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# ECONOMIC INEQUALITY AND ENTREPRENEURIAL ACTIVITY

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### **Principal Topic**

Entrepreneurship and economic inequality share a strong implicit connection in terms of resource allocation, motivation, social mobility, and wealth accumulation to name a few. While there is a long history of exploring the relationship of entrepreneurship in economic theory (inter alia Baumol, 1968; Schumpeter, 1961) there remains a paucity of research situated at the nexus of economic inequality and entrepreneurial activity.

Drawing on the economic development and entrepreneurship literatures we propose an inverted U relationship between entrepreneurship and economic inequality. This relationship suggests that in countries characterized by lower economic inequality there will be a positive relationship between entrepreneurial activities and rising economic inequality. However, in countries characterized by high economic inequality this relationship will be reversed, with lower entrepreneurial activity levels as inequality rises. We also propose that economic inequality will serve to magnify (positively moderate) the relationship between both entrepreneurial attitudes and aspirations and the various forms of entrepreneurial activity.

# Method

Our data is drawn from the well-established datasets of the Global Entrepreneurship Monitor (GEM), which estimates entrepreneurial activity, aspirations and attitudes, from 97 countries over an 11 year timeframe; the World Bank, which provides measures of inequality in the form of GINI coefficients and various GDP measures; the World macro governance indices, which provides a number of national level control variables. We use ordinary least square regression to estimate the relationship between each entrepreneurial activity and economic inequality. We also test this relationship in our subsamples, which was indicated by higher economic inequality countries (GINI index above the median) and lower economic inequality countries (GINI index below the median).

# **Results and Implications**

Preliminary analysis supports the inverted U relationship and suggests that efforts to increase entrepreneurial activity can actually draw on some economic inequality but that this activity will drop off if inequality becomes too extreme. Our results, using a single factor of overall entrepreneurial attitude, also correlated strongly with entrepreneurial activity. The novel contribution of this paper, however, is that inequality positively moderates this relationship between attitude and activity. All things being equal, we propose that increases in economic inequality serve to concentrate resources; this in turn limits the number of potential entrepreneurs that can access needed resources. At the same time we propose that inequality increases motivations for entrepreneurship both in terms of push and pull (reward) based drivers. From a policy perspective our results indicate that some inequality is beneficial to increasing entrepreneurial activity, but that past a given level we see a decline in overall activity as inequality increases.

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# IDENTIFYING THE INTELLECTUAL CORE IN ENTREPRENEURSHIP RESEARCH: A LATENT SEMANTICS ANALYSIS BASED APPROACH

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# **Principal Topics**

Over the past three decades, entrepreneurship has evolved into a distinctive scholarly domain (Shane and Venkataraman, 2000; Shane 2012). As a relatively young discipline, entrepreneurship research is diverse, fragmented, and lacks clearly defined boundaries (Schildt, Zahra, and Sillanpaa, 2006). The continuing success and healthy development of entrepreneurship as an academic discipline depends on a better understanding of the intellectual core and structure of the field. Although entrepreneurship researchers recognize the need for a better understanding of the field, there is a lack of empirical studies that explore the identity and structure of the field as a scholarly domain (Shane 2012; Luor et al., 2014). This paper seeks to address a gap in our understanding of the field by empirically examining a large body of research that has appeared in a top journal in the field, Journal of Business Venturing (JBV), from 1985 to 2014.

#### Method

This study uses Latent Semantics (LSA) as the method of analysis. We analyze abstracts of research articles from JBV in the last 30 years. The approach consists of four major steps: 1) use of natural language processing techniques to extract terms from the abstracts; 2) construction of the term-by-document matrix to impose structure on the corpus; 3) use of singular value decomposition to group the abstracts into clusters; and 4) labeling of the resulting clusters to identify major topics of research. The abstracts are divided into 10-year periods.

# **Results and Implications**

LSA results indicate meaningful clusters for each 10-year period. For 1985-1994, we identified nine clusters. For 1995-2004, there were 11 clusters. For 2005-2014, we identified 13 clusters. The strongest clusters from 1985-1994 include entrepreneurship as a subfield of strategic management, contextual and cultural influences on entrepreneurship, and venture capitalist involvement in new business development. From 1995-2004, the field seems to have shifted to emphasize organizational emergence, cognitive aspects of entrepreneurs, and new venture performance. From 2005-2014, topics include identification of opportunities, high-technology entrepreneurship, and entrepreneurial finance. The shifting of cluster importance and addition/deletion of topical areas suggest a narrative of entrepreneurship as a research domain that is clearly developing into a distinct academic discipline.

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# CEO RISK BEARING AND INTERNATIONALIZATION STRATEGY OF IPO FIRMS

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# **Principal Topic**

Internationalization, or expansion of firm sales to foreign countries, is a critical strategic decision for firms of all types (Hitt et al., 2006). Yet, this strategy is particularly risky for firms completing an initial public offering (IPO) (Filatotchev & Piesse, 2009; Shrader et al., 2000). For instance, internationalization can expose an IPO firm to liability of foreignness (Lu & Beamish, 2001), which is defined as the sum of 'additional costs a firm operating in a market overseas incurs that a local firm would not incur' (Zaheer, 1995: 343) such as the cost of coordination across countries. As compared to larger firms' internationalization strategy, IPO firms' internationalization can be particularly risky because the lack of public history of these firms can threaten their legitimacy in foreign markets and substantially increase their liability of foreignness (Yu et al., 2011). Given the riskiness of a firm's internationalization strategy, it is necessary to understand why certain IPO firms pursue an internationalization strategy whereas others do not.

#### Method

This study identifies the risk bearing associated with the compensation form of the CEO as one such driver. Specifically, we use behavioral agency theory (Wiseman & Gomez-Mejia, 1998) to argue that higher levels of CEO stock option wealth and CEO restricted stock will increase the CEO's risk bearing and make him or her less likely to engage in risky strategic actions such as pursuing an internationalization strategy. Behavioral agency theory incorporates the role of loss aversion into predictions of agent risk taking through applying the concept of risk bearing (wealth-at-risk of loss). Risk bearing, defined as the "perceived threat to agent wealth" (Wiseman & Gomez-Mejia, 1998: 136), is negatively related to risk taking behavior of the CEO (e.g., Lim, 2014). Since stock options and restricted stock grants create risk bearing for the CEO (e.g., Lim, 2014), we expect CEOs of IPO firms with higher levels of stock options and restricted stock to avoid making risky decisions such as internationalization.

# **Results and Implications**

The OLS hierarchical regression results based on a randomly selected sample of 200 IPO firms that completed an IPO between 2006 and 2010 show that, after controlling for several factors, the higher the level of CEO stock options, the lower the likelihood of the IPO firm's operational internationalization (foreign sales/total sales). However, restricted stock holding of the CEO is not a statistically significant determinant of the internationalization strategy.

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# FINANCE COMMITTEES AND SHORT-, MEDIUM- AND LONG-TERM IPO PERFORMANCE FIRMS

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# **Principal Topic**

A large body of literature in entrepreneurship has investigated the antecedents of short-term and long-term performance of newly listed IPO firms (e.g., Gulati & Higgins, 2003). One stream of research within this broad literature is concerned with the characteristics of board of directors (e.g., Certo et al., 2007). This study intends to contribute to this stream of research by investigating the role of finance committees on the short-, medium-, and long-term IPO performance. Specifically, we ground our arguments in resource dependence theory (Pfeffer & Salancik, 1978) to compare the short-, medium-, and long-term performance of newly listed IPO firms that have a finance committee with those that do not have one. Examining this research question is important because while several studies have enhanced our understanding of board-level antecedents of IPO performance (e.g., Kroll et al., 2007), little – if any – attention has been given to the role of board committees in entrepreneurship research. We believe that this is an important omission in the extant literature, since empirical (e.g., Laux & Laux, 2009) as well as anecdotal evidence (e.g., Carter & Lorsch, 2004) suggests that boards mainly function through committees.

#### Method

Finance committees can be particularly important for IPO firms because a majority of IPO firms rely on internal financing, since obtaining external funds is difficult for these newly public firms (Helwege & Liang, 1996). Finance committee members, through their connections in the financial industry, could help IPO firms obtain external financing from private debt markets. Similarly, IPO firms often have a limited ability to issue debt (Helwege & Liang, 1996). Thus, finance committee members' assistance in doing so could be particularly likely to improve the performance of these firms. Although board members with a financial background could also bring similar benefits to IPO firms, we believe that having the structure of a committee can provide a valuable opportunity for these individuals to leverage their knowledge on financial issues.

# **Results and Implications**

By using a random sample of 200 U.S. firms that completed an IPO between 2006 and 2010 and controlling for alternative determinants of IPO firms' financial performance, the OLS hierarchical regression results show that IPO firms with a finance committee outperform those without a finance committee but only in the long-term. Specifically, IPO firms that have a finance committee have statistically higher ROA (for the first, second and third year) than IPO firms without one.

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# FOUNDER INVOLVEMENT IN RESEARCH AND DEVELOPMENT: IMPLICATIONS FOR FIRM SURVIVAL AND GROWTH

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# **Principal Topic**

Many new firms are created by founders with sophisticated technical skills. But founders' focus of attention and responsibilities may change when the firm progresses along its life cycle. The objective of this paper is to investigate to what extent the involvement of founders in R&D activities changes over the life cycle of a firm and how such changes impact the success of that firm.

### Method

Our analysis is based on information for all German firms founded in knowledge-intensive industries between 1998 and 2007 for which we have annual information from start-up to 2007. We combined firm-level data from the Mannheim Enterprise Panel, which contains detailed firm characteristics such as name of the owners and managers, turnover, employees, and legal form with patent data to arrive at a final sample of 1466 firms, which have at least one patent application.

# **Results and Implications**

Applying event-history techniques, we find that firms with a founder involvement in R&D activity survive longer compared to firms without founder involvement. Using quantile regressions, we observe that founder involvement spurs growth for firms in medium and higher growth trajectories. Thus, there is no tradeoff in terms of growth between founders who remains active in research versus ones who focus on the general management. We further provide insights into the operating mechanisms by interacting founder involvement with external investors. A VC investment positively moderates the impact of founder involvement in the middle and high growth-quantile, whereas we find no such interaction effect for other equity investors. Hence, for fast-growth firms, VC-financing is best leveraged when it supports the founder to continue inventive activity.

Our results offer various implications for the entrepreneurship literature. We build on and extend competence-based theory by offering a framework in which particularly the idiosyncrasy of founders' technological competence is a key success factor for firms. In addition, we link competence-based theory with the 'founder's dilemma' according to which founders need to decide between keeping control or growing the firm. Our results indicate that though founders give up control when accepting VC, the positive effect of founder involvement in R&D is leveraged.

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# MOTIVATIONS, CREATIVITY AND ENTREPRENEURIAL ACTIVITIES

Maria Halbinger, Baruch College, USA

# **Principal Topics**

Researchers, policy makers and practitioners all struggle with the conundrum of why there are fewer entrepreneurs than opportunities. Entrepreneurship research has primarily looked into the role of environmental (e.g. Aldrich, 2000) or technological factors (e.g. Shane, 2001). Relatively less attention has been paid to uncovering individual-level effects to this respect. Person-centered research in entrepreneurship has investigated individual characteristics but mainly emphasizes differences between entrepreneurs and non-entrepreneurs (e.g. Busenitz & Barney, 1997). Research in entrepreneurship seldom focuses on empirically investigating the individual characteristics associated with engagement in different types of entrepreneurial activities, particularly those preventuring. By applying a psychology lens on the notion of entrepreneurship as a process, this study addresses this gap and adds an explanation to why not all opportunities translate into entrepreneurship. Specifically, it analyzes how creativity and motivation – intrinsic and extrinsic – affect the exposure, recognition and exploitation of opportunities.

#### Method

The study analyzes data on 678 individuals in hacker- and makerspaces across Europe, North America and Australia. This dataset is advantageous because it allows investigating all process activities including pre-venturing. In a series of logistic regressions, the entrepreneurial process activities, i.e. opportunity exposure, recognition, and exploitation (firm foundation and other implementation forms) operate as dependent variables. Creativity and motivation – intrinsic and extrinsic – function as explanatory variables. I control for individual level characteristics including personality traits, enjoyment from occupation and switching costs from employment.

#### **Results and Implications**

The study contributes primarily to the literature on entrepreneurial process models through the introduction of well-established psychological constructs into the field of entrepreneurship. Specifically, the analysis provides evidence that while intrinsic motivation is conducive to the early activities of entrepreneurship, there is a negative relationship between intrinsic motivation and the later activities of exploitation. In contrast, extrinsic motivation is positively associated with opportunity exploitation (firm foundation and other forms of implementation). Furthermore, creative individuals are more inclined to both recognize opportunities and start firms. Furthermore, although switching costs from employment negatively affect the transition to entrepreneurship, the main results still hold. Overall, the study provides insights into the individual characteristics that matter at different entrepreneurial activities thereby suggesting that the opportunities emerging from this context involve business potential, but may remain unexploited and available to be skimmed from the market.

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# THE LIFE CYCLE OF AN ENTREPRENEURIAL PROJECT

Markko Hamalainen, Aalto University, Finland

# **Principal Topic**

Entrepreneuership literature typically studies entrepreneurial projects and endeavors as the growth of a firm, and not as a process on individual level of analysis (Sarasvathy, 2004). Even the studies that have addressed entrepreneurial careers, have been more concentrated on how entrepreneurs start their careers than on how they progress through their endeavors (Dyer, 1994; Politis, 2002). In this paper, I take the perspective of an individual entrepreneur, and propose a theory that explicates the dynamics of a typical entrepreneurial project.

# Method

I use grounded theory methodology for conceptually modeling the empirical data that comes from interviews with 41 entrepreneurs. The data collection was guided by the principles of theoretical sampling, and the analysis is based on constant comparisons between incidents and concepts.

#### **Results and Indications**

I discover that the actions of an individual entrepreneur are organized as a continuation of projects. A project is an activity that the entrepreneur is strongly committed to, prioritizing it over all other activities. I further find that a project life cycle consists of five successive phases that are marked by distinctive changes in the level of entrepreneur's commitment. I name these phases as recognizing opening, engaging in action, passionate immersing, project saturation, and project release.

My results suggest that the pacing of an individual entrepreneur's development during his or her entrepreneurial project significantly differs from the pacing of the venture's development as an organization. While the organization may grow continuously over years, the commitment of an individual entrepreneur to any specific endeavor is temporally limited. As a result, entrepreneur's actions are organized as a continuation of projects, which may or may not take place within the same organization. Hence the growth and survival of a venture is not determined merely by organizational and market level strategic issues, but also by the extent to which the entrepreneur pursues his or her new projects within this particular organization instead of choosing to entertain a new venture.

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# A META-ANALYSIS OF UNIVERSITY TECHNOLOGY TRANSFER EMPIRICAL RESEARCH

Clovia Hamilton, University of Tennessee, USA Russell Crook, University of Tennessee, USA

### **Principal Topics**

In 1980, Congress passed the Bayh-Dole Act (P.L. 96-517) which allowed universities to obtain title to inventions created with government funded research and established technology transfer offices (TTOs) to manage the process of patenting and licensing these inventions. Although there is much research about TTOs, there are no comprehensive studies that look at key attributes of TTOs, and how and to what extent these attributes relate to different performance outcomes. Further, much TTO research does not rely on theory to explain why key TTO attributes relate to performance.

We leverage resource-based theory (Barney, 1991) to describe why key TTO attributes might be related to performance. The theory asserts that when organizations possess resources that are valuable, rare, and hard to imitate, higher performance can result.

#### Method

We conducted a comprehensive literature review of TTO empirical studies. To be included, each study had to contain (1) a measure of a university TTO resource attribute (e.g., university research budget, industry funding, equity licensing, cash licensing, invention disclosures, patents, staff, staff experience, patenting legal expenditures, age of the TTOs, incubators), (2) a measure of performance (e.g., number of startups), and (3) an effect size estimate (e.g., correlation) of the relationship between an attribute and performance.

We then used meta-analysis to aggregate the evidence to reveal whether and to what extent a relationship exists. Meta-analysis yields a weighted average effect of the size of a relationship (Hunter & Schmidt, 2004). Meta-analysis also minimizes the impact that sampling and measurement error have on any given study's results.

### **Results and Implications**

We find that both human and organizational resources are significant relative to patents, licensing, and startups. The effects for human and organizational resources relative to licensing are strongest. Applying the resource based view, this is likely due to the fact that with respect to licensing, the TTO organizational and human resources are valuable, rare and hard to imitate.

Our findings are anticipated to help university TTOs better understand the key resources attributes that impact their performance. Doing so will not only reconcile conflicting findings in extant research, but will also enable university leaders to optimize the use of their scarce resources.

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# THE DYNAMICS OF FINANCIAL SLACK IN YOUNG VENTURES

Jürgen Hanssens, Corporate Finance and Taxation at Ghent University, Belgium Marc Deloof, University of Antwerp and Antwerp Management School, Belgium Tom Vanacker, Corporate Finance and Taxation at Ghent University, Belgium

# **Principal Topic**

A significant stream of research has focused on the performance effects of slack resources—those resources in excess of resource demands from current business (Bradley et al., 2011; George, 2005). Despite the importance of slack resources, current work only describes some relatively simple patterns of how slack resources evolve in firms. For example, the accumulation of slack resources is described as "age-dependent" (Sharfman et al., 1988). Hence, our theoretical and empirical understanding of how slack resources evolve as firms age remains limited. We use imprinting theory as a theoretical lens to increase our understanding of the dynamics of financial slack. We propose that the level of financial slack at founding will be an important determinant of future levels of financial slack because consensus may develop around the suitability of this level of slack. We further propose that founder-CEO departures lead to a decay of the imprint formed at founding and the formation of a new imprint on entrepreneurial firms' levels of financial slack.

# Method

We study the evolution of financial slack in the 15 years after startup, using a unique multiwave panel of 4,962 Belgian firms that were founded between 1996 and 1998.

#### **Results and Implications**

Our findings show that the level of financial slack at founding significantly affects firms' future levels of financial slack. The relationship between the level of financial slack at founding and future levels of financial slack becomes weaker after the departure of the founder-CEO. The departure of the founder-CEO provokes a sensitive period where a new imprint is marked on firms. Specifically, the level of financial slack after the departure of the founder-CEO becomes one of the most important determinants driving future levels of financial slack (while the effect of the level of financial slack at founding, although still significant, becomes economically less impactful).

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# WOMEN ON THE EDGE OF A BREAKTHROUGH? TOWARDS A THEORY OF WOMEN ANGEL INVESTING

Richard T. Harrison, University of Edinburgh, UK Tiago Botelho, University of Glasgow, UK Colin M. Mason, University of Glasgow, UK

# **Principal Topic**

In this paper we develop a theory of women's participation in the angel investment market. First, women may have a lower propensity for risk and a more conservative attitude to investment, reflected in different patterns of investment activity. Second, the homophily principle, that similarity breeds connection, structures network ties of every type: as women are in different social networks than men and as a result have different access to social capital, their investment activity will differ. Third, research into competition and performance in heteronormative environments suggests that women perform less well than in single-sex environments, which would be reflected in lower participation in angel investing through mixed-sex groups. Fourth, there may be a 'glass wall' effect: for women: less diverse career tracks and lower levels of entrepreneurial backgrounds will be reflected in lower investment levels.

### Methodology

We explore these issues using data from a new UK survey of 238 business angels (28 women) from 71 angel groups investing in a total of 472 businesses. This is one of the largest-ever surveys of angels in the UK.

# **Results and Implications**

There is evidence to support our four propositions. First, on risk, women investors were less likely to invest in seed stage, made smaller investments and were less likely to invest in innovative ventures. Second, on homophily, women overall were much less likely than men to be members of angel groups, suggesting that similarity does indeed breed connection in this market. Third, on competition, women and men do appear to differ in how they participate in angel groups: women do not participate as fully as men nor do they use the knowledge and opinion of other investor members or gatekeepers/network managers in the same way as men. Fourth, on the glass wall, women are younger, less likely to have entrepreneurial backgrounds, and have less experience at board level in larger businesses. This suggests that the growth of women angels is bringing in women with different backgrounds, attitudes and experience. The paper concludes therefore with recommendations for policy, entrepreneurial practice (for investors and entrepreneurs) and research.

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# DOING WELL BY BEING WELL: THE INTERPLAY OF PHYSICAL WELL-BEING, BURN-OUT SYMPTOMS AND FIRM PERFORMANCE OF NECESSITY-, RATIONALITY- AND OPPORTUNITY-DRIVEN ENTREPRENEURS

Isabella Hatak, WU Vienna University of Economics and Business, Austria Andreas Rauch, University of Groningen, The Netherlands Matthias Fink, Johannes Kepler University Linz, Austria Andreas Baranyi, Medical University of Graz, Austria

# **Principal Topic**

The reasons for starting up a business are highly diverse: Entrepreneurs aim at realizing a vision, are motivated by financial gains, or are simply pushed into entrepreneurship. Yet, the realization of these diverse entrepreneurial goals requires the entrepreneurs to not only contribute mentally, but also expend physical effort. Such high levels of engagement, in combination with the uncertainties associated with entrepreneurship, can impact negatively on entrepreneurs' well-being and health-related quality of life, leading to the development of burn-out symptoms. Although the balance of empirical evidence suggests that owning and running a business impacts on the health-related quality of life of entrepreneurs, prior research into health-related issues around entrepreneurship does neither account for the heterogeneity of objectives of entrepreneurs, nor for the performance effect of health-related issues among different types of entrepreneurs. Thus, the aim of the present study is to compare the relationship between physical well-being and the emergence of burn-out symptoms among different types of entrepreneurs, and to examine the nuanced impact of burn-out on their firm's performance.

# Method

By using established, reliable and validated self-assessment instruments, we collected data among 168 Dutch entrepreneurs, with 26% of the firms participating in the survey operating in the retail industry. The firms had on average 11 employees.

# **Results and Implications**

Regression analysis reveals that physical well-being is related to the development of burn-out symptoms. Moreover, burn-out is negatively related to operational performance. Finally, we found some indication for the type of entrepreneur affecting both the relationship between physical well-being and burn-out, and between burn-out and operational performance. These results provide several contributions to entrepreneurship research. First, the principal contribution of our study is a nuanced analysis of triggering factors and economic consequences of entrepreneurs' burn-out symptoms by distinguishing between different types of entrepreneurs. Second, the results of this study make a contribution to research on entrepreneurial success factors, in which health-related issues such as burn-out have received limited attention so far.

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# FINANCING SOCIAL ENTREPRENEURSHIP: EVIDENCE FROM THE PANEL STUDY OF ENTREPRENEURIAL DYNAMICS

Diana M. Hechavarría, University of South Florida, USA Maija Renko, University of Illinois –Chicago, USA Jill Kickul, New York University, USA

#### Principal Topic

With an estimated \$6 trillion expected to be directed toward social enterprise organizations by 2052, entrepreneurs and venture philanthropists are experimenting with a variety of forms of social ventures that generate economic, social, and/or environmental benefits (Fulkerson & Thompson, 2008). Research has highlighted critical issues surrounding financing of social enterprises (Shaw and Carter, 2007) and concluded that traditional financial theories do not provide an adequate framework to understand the financing of social ventures. Thus, there is a real gap in our understanding of how social entrepreneurs are actually financing their nascent ventures. The traditional approach to financing non-profit social ventures is through grants, fundraising and limited use of debt, while for-profit ventures get funding through market-rate private equity and debt (Emerson et al., 2007). However, while Tiku (2008) and Fulkerson & Thompson (2008) highlight that more institutional sources are beginning to provide debt and equity investments to social entrepreneurs. Accordingly, we aim to investigate what kinds of funding entrepreneurs exploiting socially driven opportunities versus financially driven opportunities are using. Building upon research that investigates entrepreneurial founding teams (Ruef et al., 2003), we draw on the concept of the entrepreneurial group (Ruef, 2010). An entrepreneurial group can be described as the set of actors who actively support the creation of a new organization (Ruef, 2010). By applying an inductive framework and the entrepreneurial group perspective, this study examines how various attributes of the start-up impact the funding choices executed at the earliest stages of venturing. In sum, we investigate the following research questions:

- 1. Does the kind of opportunity (socially driven versus financially driven) relate to the kinds of financing utilized by start-ups?;
- 2. Do entrepreneurial group characteristics affect the kinds of financing utilized by start-ups?;
- 3.And finally, does the kind of opportunity (social versus financial) modify the relationship between entrepreneurial group characteristics and start-up financing?

#### Method

Data for this study is taken from the Panel Study of Entrepreneurial Dynamics I and II (PSED I/PSED II). We examine the start-up capital structures by comparing socially motivated entrepreneurs to financially motivated entrepreneurs and entrepreneurial group characteristics. We follow Renko (2013) and distinguish social start-ups and financial start-ups based on the first response to "why do you want to start this business?" Altogether, we identified 86 cases where the first response was socially motivated and 294 financially motivated cases (total n=380). We also include several independent variables capturing team dynamics in line with the entrepreneurial group perspective, as well as control variables linked to firm characteristics and strategy. Our main dependent variable is the use of debt/equity in early funding.

# **Results and Implications**

Using robust regression, our study finds that ownership structure significantly impacts the capital choices of start-ups. Particularly, female majority owned start-ups are significantly more likely to use equity than debt when venturing than debt to finance the early start-up stage However, when female majority owned start-ups pursue socially oriented opportunities, they are more likely to use debt than equity. Moreover, start-up teams with higher levels of industry experience and start-up experience are considerably more likely to use debt than equity to finance their start-ups when they are pursuing socially oriented ventures, compared to financially oriented ventures. Overall, we find that compared to financially motivated entrepreneurs, social entrepreneurs are more likely to use leverage debt at the earliest stages of venture development. Together with emergent theorizing, these empirical results provide a basis for a theoretical model on social venture seed funding. Social entrepreneurship finance is an exciting new frontier and research in this area can assist social entrepreneurs succeed and scale their ventures.

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# TAKING CARE OF BUSINESS: THE IMPACT OF CULTURE ON THE BLENDED VALUE CREATION GOALS OF FEMALE ENTREPRENEURS

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# **Principle Topics**

Although entrepreneurship is generally conceptualized as an economic endeavor, founders often pursue a diverse range of value creation targets. Mirroring this reality, the focus of entrepreneurship research has expanded beyond economic profits as value creation, and acknowledged the substantial role of entrepreneurs in leading societal progress and environmental preservation (Shepherd & Patzelt, 2011). As a result, social and environmental value creation are increasingly vibrant areas of inquiry in entrepreneurship research (Cohen et al., 2008; Cohen & Winn, 2007; Mair & Marti, 2006; Short, Moss, & Lumpkin, 2009; Agafonow, 2014; Chell et al., 2014). Building on this philosophy, our research takes a comparative approach to identify the primary antecedents that shape entrepreneurs' "blended value" goals (Zahra et al., 2014) across societies and genders. We draw on ethics of care and theories of societal post-materialism to determine how gender and cultural values impact entrepreneurs' intended value creation.

#### Method

Our research draws data from four sources: the Global Entrepreneurship Monitor (GEM) (Reynolds et al., 2005), World Value Surveys (WVS)/European Values Survey (EVS) (Inglehart & Welzel, 2005), the Happy Planet Index (HPI), and the World Bank's World Development Indicators (WB-WDI) (2009).

Our sample consists of 18,880 entrepreneurs in 48 counties and uses multi-level seemingly unrelated regression methodology.

# **Results and Implications**

Our findings suggest that women and men exhibit significant heterogeneity in the blended value goals of their businesses, depending on their cultural context. Specifically we find that women emphasize social value goals over economic value creation goals when compared to men. Our results also suggest that individuals starting ventures in strong post-materialist societies are more likely to have social and environmental value creation goals, and less likely to have economic value creation goals. Finally, we find that a strong post-materialist society moderates the relationship between gender and economic goals and social goals such that the negative effect of being a woman on economic value goals will be stronger in post-materialist societies and the positive effect of being a woman on social value goals will be stronger in post-materialist societies.

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# ADAPTABILITY IN NEW VENTURES – DYNAMIC CAPABILITIES AND PERFORMANCE IN DIFFERENT STAGES OF ENTREPRENEURIAL VENTURES

Tim Hecking, RWTH Aachen University, Germany

# **Prinicipal Topics**

It was shown that firms with pronounced dynamic capabilities (DCs) are intensely entrepreneurial and more effective in configuring and reconfiguring their portfolio of entrepreneurial competences in dynamic environments. DCs also play an important role in the evolution of young ventures, although it is recognized that their characteristics differ from DCs in established firms (Sapienza et. al 2006). As empirical studies on dynamic capabilities in new ventures and their development in later firm stages are rare (Autio, Georg & Alexy 2011; Zahra et al., 2013), we investigate the question: Which types of dynamic capabilities are employed in young successful entrepreneurial firms and how are these dynamic capabilities employed in established successful firms?

#### Methods

In this explorative study we employed an online survey that was sent to the founders/managing CEOs of over 3,000 small and medium enterprises in Germany. The key construct for dynamic capabilities was based on the conceptualization of Daneels (2008) and then adapted to entrepreneurial firms with input from current entrepreneurship literature (e.g., Sarasvathy, 2001; Gruber, 2004; Autio, 2011) as well as from interviews with expert entrepreneurs and research experts. We controlled for firm size, age and industry.

# **Results and Implications**

We found, that the investigated DCs in start-ups form 5 groups. These can be describe as "Challenge existing business assumptions", "Optimize internal processes and organization", "Develop new opportunities", "Improve interaction with regulatory bodies and competition" and "Improve customer interaction and service". For these groups a clear difference for companies with high vs. low firm performance existed. In companies with high performance all but the second groups of DCs were more developed. "Challenge"- and "Improve customer interaction"-DCs were more pronounced the later the phase the firm was in and "Improve regulatory/competition interaction"-DCs showed a u-shaped relationship with stronger DCs in very early and late firm phases. Finally, in companies with low firm performance "Develop opportunities"-DCs were less and "Improve customer interaction"-DCs were only slightly more pronounced the later the phase the firm was in. Besides extending theories on the development of DCs in new ventures, we help practitioners by giving account on successful combinations of DCs for different firm phases.

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# HOW ARE NEW VENTURES ABLE TO COPE EFFECTIVELY WITH UNCERTAINTY?

Keith M. Hmieleski, Texas Christian University, USA

# **Principal Topic**

Uncertainty can be both a potential source of opportunity and major stressor for entrepreneurs. The current study examines how new venture teams (NVTs) can maximize the benefits of uncertainty while minimizing its negative effects. Specifically, this research draws from the cognitive-relational theory of stress (Lazarus, 1991) to examine the moderating effects of shared humor and entrepreneurial team-efficacy within NVTs on the relationship between perceived environmental uncertainty and firm performance.

According to the cognitive-relational theory of stress, uncertainty is considered to be one of the most salient stressors faced by individuals and teams, particularly in situations where the stakes are high—such as in the development of new ventures (Baron, 1998). Two types of resources that are most effective for coping with such stressors are ones that promote feelings of positive affect (such as shared humor; Avolio et al., 1999) and ones that characterize a sense of domain-specific confidence (such as entrepreneurial team-efficacy; Stajkovic et al., 2009). Following this logic, it is predicted that shared humor and entrepreneurial team-efficacy will jointly moderate the relationship between environmental uncertainty and firm performance.

# Method

Surveys were sent to a national (USA) random sample of new ventures. Using a key informant procedure, CEOs of responding startups provided ratings about their NVTs and firms. Shared humor was measured with items adapted from Avolio et al. (1999), entrepreneurial team-efficacy was measured with items adapted from De Noble et al. (1999), and perceived environmental uncertainty was measured using items from Miller and Freisen (1982). Firm performance was measured as the amount of annual revenue per number of employees. Hierarchical moderated regression was used to examine the study hypotheses (Cohen et al., 2003).

# **Results and Implications**

Results support the proposed model. Shared humor and entrepreneurial team-efficacy each had a significant moderating effect on the relationship between environmental uncertainty and firm performance. Moreover, shared humor and entrepreneurial team-efficacy exhibited a joint interaction effect, such that the relationship between environmental uncertainty and firm performance was most positive when NVTs exhibited high levels of shared humor and entrepreneurial team-efficacy. Thus, it appears that shared humor and entrepreneurial team-efficacy are each important resources for NVTs operating under high environmental uncertainty.

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# WHY DO ENTREPRENEURS EXIT? THE EFFECT OF BUSINESS-TO-FAMILY SPILLOVER

Dan K. Hsu, Appalachian State University, USA Stella E. Anderson, Appalachian State University, USA Betty S. Coffey, Appalachian State University, USA

# **Principal Topic**

Many Entrepreneurs exit their business ventures (DeTienne and Cardon, 2012). Empirical evidence shows that more than 60% of practicing entrepreneurs have a family (Caliendo et al., 2009) and that family-related factors have a strong influence on the entrepreneur in the process of venture creation (Aldrich and Cliff, 2003; Altinay et al., 2012). When entrepreneurs face an exit decision in their entrepreneurial career, how would their family influence the decision?

Family influence in the process of entrepreneurship has been recognized by entrepreneurship scholars (Aldrich and Cliff, 2003). Building on theories of work-family enrichment (WFE) (Greenhaus and Powell, 2006), recent research has found that family factors are important to the entrepreneur's well-being (Eddleston and Powell, 2012) and business success (Powell and Eddleston, 2013). The current study aims to extend this literature to the domain of business exit by examining how two family-related factors rooted in WFE, enrichment (i.e., synergy) and interference (i.e., conflicts), affect the entrepreneur's business exit decision. More interestingly, while Eddleston and Powell's (2012; 2013) studies have focused on *family-to-business spillover* (i.e., the extent to which family resources can transfer to the business domain), our study examines *business-to-family spillover* and its effect on business exit. In doing so, we make important contributions to the entrepreneurship literature on both business exit (e.g., DeTienne, 2010) and family embeddedness (e.g., Aldrich and Cliff, 2003).

#### Method

The sample was obtained from the 2008 National Study of the Changing Workforce survey conducted for the Families and Work Institute by Harris Interactive, Inc.. We used the subsample of 736 respondents who worked for themselves. The sample was weighted in relation to the United States population.

# **Results and Implications**

The results show that when economic performance is controlled, business-to-family enrichment negatively ( $\beta$  = -.09, p < .05) affects and business-to-family interference positively ( $\beta$  = -.09, p < .05) relates to the entrepreneur's exit decision. Entrepreneurs who perceive more resources from their business to their family are more unlikely to exit, whereas entrepreneurs who perceive more family conflicts resulting from operating the business are more likely to exit.

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# UNDERSTANDING THE CAREER-LIFE DEVELOPMENT OF MOMPRENEURS AS A RELATIONAL PROCESS

Rebecca Hudson Breen, University of Lethbridge, Canada Aegean Leung, University of Sydney Business School, Australia

### **Principal Topic**

The influence of family systems on the entrepreneurial experience has been recognized for some time. This influence may be especially true for women entrepreneurs with children. Drawing on relational theories of career development, which acknowledge the role of relational contexts in shaping an individual's career-life, this paper represents an initial effort to understand the career-life development of mompreneurs – a sub-group of women entrepreneurs. In the present research we examine how the relational context shapes, and is shaped by, both the choices and outcomes of career-life development of mompreneurs, as well as focusing on when individuals transit from being employed to self-employment in relation to a broader career-life context.

#### Method

This research employs multiple case-study methods to capture common themes across cases and make more robust theoretical propositions. Cases were selected based on the following criteria: All participants had previous employment and transited to self-employment due to consideration of their mothering role, and ventures have been in operation for two or more years, allowing us to look beyond the entry point of their entrepreneurial pursuits. All participants identify with their roles as business woman and mother, and are motivated to choose entrepreneurship as a way of balancing life roles. Data sources included interviews, a demographic survey, as well as observational and archival sources.

#### **Results and Implications**

We propose a conceptual model that captures the influence of the mothering role in shaping the transition into entrepreneurship, illuminating the reciprocal relational processes of context, choice and outcomes. As an alternative and supplementary perspective to current literature on women's entrepreneurship, which focuses mainly on the constraining effects of gender role in entrepreneurial careers, our study offers a "choice" perspective in understanding the career development of mompreneurs. The relational lens takes into account the interconnectivity of multiple roles, and how changes in one area of a relational system impacts other areas, highlighting the complex and mutually influencing interactions involved in the career-life development and multiple role management of mompreneurs. These cases illustrate the influence of the family in shaping the transition into entrepreneurship, and the reciprocal relational processes shaping the evolution of the entrepreneurship career.

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#### A PSYCHOLOGICAL OWNERSHIP PERSPECTIVE OF CROWDFUNDING

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#### **Principal Topic**

Crowdfunding has emerged as a novel and effective way to fund creative projects and startups. One of the many interesting questions that the crowdfunding phenomenon spawned is the nature of the multiplex relationship between the backers and their backed venture. Backers of innovative projects can engage with their supported venture in such capacities as users, developers, and financial supporters. We adopt a psychological ownership perspective, to examine the nature of this multiplex relationship. Psychological ownership is defined as "the state in which individuals feel as though the target of ownership or a piece of that target is 'theirs'" (Pierce et al. 2003, 86). Three routes have been identified for the emergence of psychological ownership: controlling the object of ownership; coming to intimately know it; and investing one's self into the object (Pierce et al. 2001).

#### Methods

Given that the crowdfunding research stream is relatively young and rapidly developing, we undertake an inductive, theory-building process based upon a natural experiment. We examine the case of Oculus, a start-up that develops virtual reality headsets for gaming and entertainment. Founded in early 2012, the Irvine, California-based company successfully completed a crowdfunding campaign through Kickstarter in August, 2012, raising \$2.4M. The company was acquired by Facebook for \$2B in March, 2014. We use data from Kickstarter consisting of 9,500+backers and their 2,200+ comments posted on the Kickstarter website. Our data also includes funding amounts as well as other details pertaining to the crowdfunding campaign. Taken together, this information is used to inductively build a taxonomy of backers using qualitative and quantitative data to examine their level of identification with and psychological ownership of the venture over time.

#### **Results and Implications**

Our preliminary findings are 1) despite the absence of an equity stake, backers can develop high levels of psychological ownership of the ventures that they back; 2) these feelings can change over time, particularly when backers' perception of the venture's strategic direction changes drastically, diminishing their feelings of control; and 3) 'dis-ownership' of the crowd can induce tactical (e.g. 'damage control') responses from the venture to maintain better relationships with the crowd, long after the funding component is completed.

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### DISENGAGEMENT OF ENTREPRENEURS FROM THEIR VENTURES ALONG EQUITY AND MANAGEMENT DIMENSIONS

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#### **Principal Topic**

Entrepreneurial exit is a critical component and a distinctive domain of the entrepreneurial process (DeTienne & Chirico, 2013). Why, how, and when founder-managers leave their ventures have lasting implications for their subsequent undertakings, as well as the survival and performance of the venture they have left (Ucbasaran, Westhead, Wright, & Flores, 2010). Despite its important implications, researchers have only recently begun to systematically expound different exit pathways (Wennberg, Wiklund, DeTienne, Cardon, 2010; DeTienne, McKelvie, Chandler, 2015).

Although entrepreneurs have both founder (equity) and executive (management) stakes in their ventures, the different pathways in which they can disengage from their ventures have received very little attention (Robbie & Wright, 1995). Some founder-managers disengage from their firms as managers while retaining an equity stake (e.g. in growing startups), whereas others might be forced to dilute their equity stake disproportionate to their managerial involvement (e.g. for cash-strapped ventures that still have the potential for a future turnaround – Hellmann, 1998; Schwienbacher, 2007). Thus, we need to consider how an entrepreneur disengages from her venture along equity and/or management dimensions, as well as the different pathways that shape the disengagement process and the ultimate exit.

#### **Theoretical Model**

This paper advances a theoretical model of entrepreneurs' exit from their ventures by juxtaposing the entrepreneur's intentions (growth-oriented vs. independence-oriented) and the nature of the relationship between the entrepreneur and private equity investors (cooperative vs. conflicting). More specifically, I argue that perceptions of success of an entrepreneur's exit is conditioned by the extent to which the entrepreneur desires exit and is able to control the disengagement process, along equity and management dimensions of the entrepreneur's engagement with her venture, that leads to her ultimate exit.

#### **Contributions**

This paper contributes to the development of a nuanced view of exit. With few notable exceptions, different exit pathways have received scant attention in literature (DeTienne et al., 2015). To that end this paper makes two key contributions to exit literature: the proposed theoretical model of exit 1) incorporates private equity investors' attitudes as they pertain to the entrepreneurs' exit, as well as entrepreneurs' motivation; and 2) conceptualizes the entrepreneur's exit as an outcome of a disengagement process along equity and management dimensions.

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### THE INTERPLAY BETWEEN NOVELTY, PRIOR KNOWLEDGE AND RESOURCE INVESTMENTS IN NEW VENTURE EMERGENCE

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#### **Principal Topic**

Despite Shane & Venkataraman's (2000) call for studies on the interdependence of entrepreneurs and "opportunities", empirical research going beyond the individual to explore the non-actor part of the "entrepreneurship nexus", as well as the interplay between both, remains scarce (Davidsson forthcoming; Grégoire & Shepherd 2012). Replacing objective "opportunities" with subjective new venture ideas as the nexus partner, our study addresses this critical gap in the literature. Specifically, we investigate the contingent relationships through which the novelty of new venture ideas influences nascent ventures' ability to get established in the market. Highly novel new venture ideas represent a key source of economic development, as they imply greater potential for growth and high profits (Rosenbusch et al. 2011). However, novelty also increases the uncertainty, complexity and liabilities related to the venture creation process (Samuelsson & Davidsson 2009). This tension has recently led to a debate on the performance implications of novelty in the context of new ventures (e.g., Amason et al. 2006, Boyer & Blazy 2013). We advance this emerging stream of research by focusing on nascent ventures (avoiding survival bias) and by disentangling mediating and moderating contingencies pertaining to the novelty-performance relationship.

#### Method

Our study is based upon longitudinal data from the Comprehensive Australian Study of Entrepreneurial Emergence (CAUSEE), which is partly harmonized with PSEDII in the US (Reynolds & Curtin 2009). A sample of 625 nascent ventures was identified via 30,000+ screening interviews and subsequently tracked over a five-year period for annual data collection waves. Data were analyzed using bootstrapped logistic regression-based path analysis (Preacher & Hayes 2008).

#### Results and implications

Our analyses reveal that novelty exerts both direct and indirect influences on new venture performance, and that these operate in opposite directions, partially cancelling each other out. Specifically, we demonstrate that in addition to a negative direct effect on nascent venture outcomes, novelty also has a smaller positive influence through resource investments. Furthermore, we find empirical support for the compensating effects of founders' prior knowledge in the novelty-performance relationship.

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#### UNIVERSITY SPIN-OFF PERFORMANCE: AN EMPIRICAL STUDY

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#### **Principal Topic**

This paper concerns the contribution made by entrepreneurial teams to the commercialisation of new ideas within the context of university spin-offs and will address two questions. Specifically the paper investigates how the capabilities of founding teams influence the performance of university spin-offs and how the social networks of these teams contribute to this process. The analysis of the capabilities and networks of founding teams is undertaken in the 'creation' phase before the establishment of the business and this is assessed against performance measures of each spin-off in the 'growth' phase, post establishment.

#### Method

To analyse entrepreneurial capabilities the constructs of entrepreneurial technology, strategy, human capital, organizational viability, and commercial resources are employed through the lens of the resource-based view (Barney, 1991). The paper also considers the contribution of social networks to the development of entrepreneurial capabilities and investigates the nature of linkages based upon the structure, governance and content of their constituent elements (Tsai and Ghoshal, 1998; Uzzi, 1999; Amit and Zott, 2001; Hoang and Antoncic, 2003; Newbert and Tornikoski, 2013). This analysis will be employed to develop and test a theoretical framework linking the performance of a university spin-off to both social networks and capabilities of the founding teams. The results presented are based upon a sample of 181 Spanish university spin-offs based in 35 universities across all regions of Spain; each spin-off was created and developed by a founding team and responses were obtained from the members of the teams.

#### **Results**

The findings indicate that the capabilities of founding teams have a direct affect upon the performance of spin-offs' and that the social networks of founding teams have an indirect influence through their impact on the capabilities of the founding teams. The results of empirical tests show no direct relationship between a founding team's social networks and spin-off performance; however, this study has constructed an alternative model in which entrepreneurial capabilities of a founding team were shown to play a mediate role between social networks and a spin-off's performance. In this model, founding teams used social networks to enhance entrepreneurial capabilities which indirectly led to performance improvements. Thus, the paper has implications for universities in training and policy development to support spin-off's fundraising.

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### PERFORMANCE FEEDBACK AND RISK TAKING OF MICROFINANCE INSTITUTIONS: THE MODERATING EFFECTS OF INSTITUTIONAL FACTORS

Junyon Im, University of Missouri-Kansas City, USA

#### **Principle Topic**

Prior research on performance feedback has focused on the direct impact of performance feedback on risk taking (Lim & McCann, 2013) and paid little attention to the role of contextual factors. In particular, there are few empirical studies that examine how performance feedback and institutions interplay in risk taking of organizations. This study aims to fill this gap by investigating the role of organization-level institutional logics and state-level institutions in a microfinance industry. Institutions arise as a result of human beings' continuous efforts to deal with uncertain environments (North, 1990; Scott, 1995). Thus, individual and organizational actors are affected by institutions, and different institutions can be a source of heterogeneity of organizational behavior (Peng, 2003). This suggests that the impact of performance feedback on risk taking can be affected by institutional factors. And, microfinance industry provides a good setting to investigate this issue.

#### Method

For our empirical analyses, we used a data set of 2,802 organization-year observations from 806 MFIs across 90 countries between 2003 and 2010. Data about MFIs were collected from the Microfinance Information Exchange, Inc. (MIX). We also collected data for state-level variables from Worldwide Governance Indicators and the World Bank. We test our hypotheses using multilevel mixed models. To proxy MFIs' risk taking, we used insolvency risk following previous studies (Laeven & Levine, 2009). Also, we measured performance aspirations and performance discrepancies of MFIs using return of assets (ROA) (Greve 2003).

#### **Results and Implications**

Empirical results show that MFIs increase risk taking when performance negatively deviates from the historical aspiration level. We also find that social-welfare logic and governance quality strengthen the impact of negative attainment discrepancy on risk taking. However, MFIs do not increase risk taking when their performance is worse than other MFIs even with a higher level of social-welfare logic and governance quality. The findings suggest that institutions play important roles in a specific decision-making context such as responding to performance below the historical aspiration level. This study also suggests that different types of aspirations have different effects on organizational risk taking (Kim, Finkelstein, & Haleblian, 2014).

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## THE EFFECTS OF INITIAL FIRM CONFIGURATION AND VC INVOLVEMENT ON FUTURE FIRM GROWTH: A CASE OF PICKING OR FORMING WINNERS?

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#### **Principal Topic**

This study focuses on the long-term performance of new venture capital financed firms. Despite numerous studies on the value adding activities of VCs, few have actually managed to empirically confirm if and how VCs involvement in new firms actually has a positive effect on business performances, and especially on long-term firm performance. One can wonder whether the performance of VC financed new firms is an effect of skilled selection (picking winners) or good post investment management by the VCs?

The basic premise of "picking" is that it is possible for VCs to recognize the "best" new firms by looking at the initial firm configuration, and by this, select the most promising ones. As such, we could expect that (H1) the firm configuration at the time of VC initial funding have a long-term effect on its performance. Rather than just picking winners, VCs can form winners by taking an active governance role in the invested firms through active participation on the board of directors, acting as a sounding board, and monitoring financial performance. As such, we could also expect that (H2) VC involvement in a new firm during the investment period has effects on the long-term performance of a new firm.

#### Method

A population of 282 portfolio firms was generated from the database of Förvärv & Fusioner AB, which is a well-respected agency conducting research on mergers and acquisitions in Sweden. We collected data about these venture capital backed young firms using different methods over a tenyear period. Our final sample consists of over 100 entrepreneurial firms over their full venture capital cycle, that is, from the very early first investment to the exit.

#### **Results and Implications**

Our preliminary analysis seems to indicate support only for the H2, but in non-expected fashion: the more VCs are involved, the lower is the long-term performance of the firm. Contrary to our original argument, it might be that VCs have the "fire-fighter" role: VCs allocate their scarce time to funded firms with problems. When things go well, VC do not have to get so much involved.

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# IS THERE A SOCIOEMOTIONAL PARADOX IN FAMILY FIRMS? AN EXPERIMENTAL EXAMINATION OF THE THEORETICAL TENSIONS BETWEEN FAMILY FIRM MEMBERS' SOCIOEMOTIONAL WEALTH AND SOCIOEMOTIONAL SELECTIVITY

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#### **Principal Topic**

Family firms are often thought to pursue nonfinancial goals that provide socioemotional wealth (SEW) (Gómez-Mejía et al., 2007). However, with little consistent or direct measures of SEW, rival explanations and theoretical tensions, especially regarding the emotional nature of SEW's role across the lifespan of the family firm (Zellweger et al., 2012), are becoming increasingly apparent. Scholars suggest that a more direct understanding of family members' emotions and goal pursuits could potentially reconcile paradoxical findings regarding SEW's strength over time (Berrone et al., 2012). In this vein, socioemotional selectivity theory (Carstensen, 1995) speaks to how emotion and time perspective guides goal pursuits over time. By integrating SEW and socioemotional selectivity perspectives we seek to unravel paradoxical findings about whether SEW grows or diminishes over time, answering the question "to what extent do changes in family firm members' time perspective impact their SEW goal priorities and subsequent decisions?"

#### Method

We seek to conduct multiple 2x2 between-subjects experimental studies that manipulate SEW salience (high vs. low) and family firm time horizon (shorter vs. longer) to understand these independent variables' effects on family members' emotional responses, changes in goal priorities, and decisions. Using a cover story that they are demoing powerful small business decision-making software, family firm members will be randomly assigned to a single experimental condition. By using the software cover story, we aim to minimize confirmation bias while simultaneously trying to maximize both internal and external validity (Wilson, Aronson, & Carlsmith, 2010).

#### **Implications**

SEW theory argues that emotional attachment to the firm and persistence in SEW goal pursuits decline over the life span of a family firm. Yet, current research remains inconclusive on whether SEW diminishes or grows over time (Zellweger et al., 2012). Furthermore, the current family firm literature lacks a direct test of emotion's role in SEW. By integrating socioemotional wealth and socioemotional selectivity theoretical perspectives we hope to meet these theoretical needs, providing important implications for understanding emotion and motivation's role in SEW preservation over time.

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#### THE ENTREPRENEUR'S MASQUERADE: REFLECTING AND ENACTING IDENTITY

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#### **Principal Topic**

Over the last decade, there has been growing interest entrepreneurship, a movement supported by universities that develop programs, including the Student Business Plan Competitions (SBPCs), to encourage the development of entrepreneurs. According to the organizers, these programs should do more than develop technical skills. In fact, past research shows that to motivate students to explore entrepreneurial opportunities, they must first feel that they are entrepreneurs, i.e. have developed an entrepreneur identity. However, prior research has mostly focused on individuals already pursuing, and hence little is known about key factors that initially lead individuals to make that decision. In this paper, I aim to understand the factors that influence the individual – factors that encourage the enactment or acquisition of an entrepreneurial mindset as part of their identity. I will use an SBPC as my setting, and I analyze the journey that an aspiring entrepreneur undertakes. Along the journey, participants reflect on their own transition for assuming, developing or enriching an entrepreneurial identity.

#### Methods

I conducted a two-year ethnographic study of the NYU Stern SBPC to investigate the different actors, practices and activities. For the first year, I performed participant observations by joining a team and going through the competition's process. I coupled this with 63 interviews of various stakeholders. In the second year of my study, I followed four teams participating in the competition and held bi-monthly meetings with one of the competition's organizers. I also asked five participants to keep a weekly journal in order to understand their perspective.

#### **Results and Implications**

After an exploratory analysis of my data, I turned to the literature on identity and two conceptual frameworks seemed to be relevant: role transition and social identity theory. My study shows that SBPCs are designed to mimic the entrepreneurial field, thus, providing a safe place for participants to experiment with their identity. SBPCs not only provide access to typical resources that an entrepreneur needs, but also give access to actual entrepreneurs who as role models exert influence on their identities. Moreover, they interact with diverse actors, and these social interactions are key in helping them shape and understand their own identity.

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#### EXPLAINING THE CO-EXISTENCE OF EFFECTUATION AND CAUSATION

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#### **Principal topic**

Effectuation is an accepted and valued area of decision making research and practice, most notably in situations characterized by uncertainty (Chandler et al., 2011; Perry et al., 2012). An increasing amount of research supports effectuation as being employed by entrepreneurs (e.g. Chandler et al., 2011) and by managers facing uncertainty in their decision making (Brettel et al., 2011). Empirical studies have found that both effectual and causal logics are used by the same decision makers (e.g. Read et al., 2009b; Sarasvathy, 2001; Wiltbank et al., 2009). However, few studies examine the conditions (when, how and why) the two logics are used in a combined or sequential fashion. In this paper, we extend the effectuation literature by examining the temporal issues related to the use of both effectuation and causation and explore how task orientation and situational circumstances explain the combined use of effectual and causal logics.

#### Method

We use a multiple case study design including in-depth interviews with 35 decision makers in four different countries (Finland, Russia, Hungary and the Netherlands). We focus on the magazine industry, which offers an appropriate context to study entrepreneurial decision-making given the high level of uncertainty induced by the digital transformation of the media industry. The firms represent different cultural contexts but also varying stages of adoption of online technologies. Data are collected via semi-structured interviews covering the development processes of recent innovation projects.

#### **Results and implications**

Our empirical results reveal interesting patterns related to task orientation and situational issues. For example, causal thinking is primarily used for financial considerations and in the early stages of the development projects – with decisions characterized by a need to obtain legitimacy in the organization in order to be given "permission" to proceed. Later in the process, an action-oriented, effectual logic is applied to move the process forward given uncertain future circumstances. These decision making patterns help to better inform our understanding of the interplay of causal and effectual decision making including when and why the two are used in an established firm context.

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### RETHINKING LIABILITY OF NEWNESS AS A CATEGORIZATION PROBLEM: INSIGHTS FROM ANTI-TRAFFICKING ORGANIZATIONS

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#### **Principal Topics**

Attracting resources is arguably the ultimate priority for newly founded entities, including those organized with the aim of achieving a social objective (Frumkin, 2002). Obtaining these resources is particularly difficult due to the liability of newness, which must be overcome by establishing legitimacy from potential contributors' viewpoints, including employees, suppliers, and, either investors. For many social entities, resource providers also include grant-making organizations and donors (Singh, Tucker, & House, 1986). Yet "there has been limited empirical examination of the approaches used by social ventures to mobilize critical resources" (Desa & Basu, 2013). Our study demonstrates that an organization's ability to attract resources is affected by conformity with an evolving categorization of entities and establishment of moral and pragmatic legitimacy with potential resource providers (Dart, 2004; Miller, Grimes, McMullen & Vogus, 2012).

#### Method

We use the GuideStar database to identify a population of all 693 non-governmental organizations registered as anti-human trafficking and/or anti-modern day slavery organizations with the U.S. Internal Revenue Service (IRS). To evaluate *categorization's* impact on an organization's funding, we review the organization's artifacts (Hsu & Hannan, 2005), including mission statements, self-identified categories and Form 990s, to group the population by categories (National Taxonomy of Exempt Entities). Consistent with numerous studies, we use the inverse of *firm age* based on the reported founding date of each organization to calculate the expected *liability of newness. Moral legitimacy* is coded based on country and gender served (Agustín, 2003a; Agtustín, 2003b; Doezema, 2001), while *pragmatic legitimacy* is coded based on method of service. Using fixed effects regression, clustered by organization, we predict *grant-based* and *donor-based* funding received by anti-trafficking and anti-slavery organizations from 2008 to 2012.

#### **Results and Implications**

We find that categorization explains success in attracting financial resources from stakeholders, which has important ramifications for social enterprises. By doing so, we contribute toward understanding "the trade-offs faced by social actors in seeking public approval for their actions from diverse constituencies." (Rueff & Scott, 1998: 898). Our study has important societal implications because of its unique empirical context and the rapidly growing population of anti-human trafficking organizations.

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## TO INNOVATE OR NOT TO INNOVATE? – THAT IS THE QUESTION! ANTECEDENTS OF POST-SUCCESSION ENTREPRENEURIAL BEHAVIOR IN FAMILY FIRMS

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#### **Principal Topic**

Succession, defined as the transfer of leadership, and often concurrently ownership, from one individual to another is one of the most studied topics in entrepreneurship and family firm research. Succession has also been termed as one of the key events in the company's life as it has been argued that the transfer can both impede or foster the level of entrepreneurial behavior that is adopted within a company post-succession (Miller, Steier, & Le Breton-Miller, 2003). It is surprising, though, that little scholarly effort has been dedicated so far to exploring the relationship between succession events and subsequent organizational change and innovation (Quigley & Hambrick, 2012). In fact, the effect of succession on the company's level of entrepreneurship post-succession is ambiguous.

#### Method

To empirically study the relationship between family firm succession and innovation, in 2012, a total of 523 survey responses of owner-managers of SMEs were collected who have taken over ownership and management responsibility over their firm within the last decade. Firms with less than 250 employees were sampled using the D&B database. Moreover, building on extant literature, we gathered information on the type of succession, the incumbent's post-succession involvement into the firm, information on the temporal sequence of the takeover, as well as extensive information on individual characteristics of both, the predecessor and the successor (e.g., age, gender, education). We employ OLS regression to investigate the effect of post-succession entrepreneurial behavior on performance in family firms.

#### **Results and Implications**

Our study offers important theoretical contributions to entrepreneurship research as well as implications for practitioners. Prior studies have primarily focused on the succession process itself, however research has scarcely investigated the effects on the firm's post-succession (entrepreneurial) behavior. Our study extends this line of research in showing that also the post-succession period is an important part of the entrepreneurial process and that both the incumbent CEO (i.e., the predecessor) and the successor, play a vital role with regard to the firm's openness to innovation. Further, we show that the similarity and dissimilarity between the incumbent CEO and the successor impact the level of entrepreneurship.

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### FLEXIBLE LABOR AND INNOVATION PERFORMANCE OF R&D-ORIENTED START-UPS IN JAPAN

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#### Principal topic

Whether to make labor market flexible is a topic of political debate in most developed countries due to the positive impact of flexibility on economic growth (Nicoletti & Scarpetta, 2003). Using samples mostly from relatively large and old corporations in EU countries, firm-level analyses have revealed a significant relationship between flexible labor contracts and innovation through their influence on knowledge processes (e.g. Amabile et al., 1996; Guest, 1997; Trott, 1998). Functional flexibility is generally considered good for innovation, while the effect of numerical flexibility is rather mixed. Numerical flexibility will bring highly skilled workers to infuse the firm with new ideas and networks that may foster innovation (Malcomson, 1997; Matusik & Hill, 1998); whereas too much flexibility might not be good for generating firm-specific knowledge and accumulate knowledge for future learning (Belot et al., 2002). For start-ups, numerical flexibility can be an important means to innovate due to resources constraints (Gardon, 2003). Using a sample of R&D oriented Japanese start-ups, this paper aims to shed the light on the value of flexible labor contracts in the context of dual (flexicurity) labor market.

#### Method

Our empirical analysis is based on a sample of start-ups in the manufacturing and software industries derived from an original panel dataset of Japanese start-ups, covers four waves in the period of 2008 to 2011. Using the negative binomial regression model, we estimate the relationship between numerical flexibility (i.e. external labour turnover, share of part-time employees and share of dispatched employees) and subsequent innovation performance of start-ups in terms of the number of technological innovation and the number of patent applications.

#### Results and implications

We find a positive impact of external labor turnover on patent application. While using fixed-term/part-time employees has a negative effect on patent, temporary employees (fixed-term/part-time and dispatched employees) contribute positively to technological innovation output. We further discover that effects vary between high-tech and low-tech industries. Our findings indicate that numerical flexibility achieved using temporary employees may benefit start-ups to commercialize their ideas but not sufficient enough to promote firm-specific knowledge generation, which might benefit start-ups and consequently economic growth in the long term.

Our study supports the 3rd arrow of Abenomics and contributes a thought to Japanese economic reform via entrepreneurship.

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## NARRATIVE BOUNCING-BACK DISCOURSES IN ALLOCATING OPPORTUNISM IN ENTREPRENEURIAL PROJECT FAILURE IN THE ONLINE DATING BUSINESS FROM THE PERSPECTIVE OF SENSEMAKING

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#### **Principal Topic**

In this paper, we develop the concept of "bouncing back" from entrepreneurial project failure, that is, an association between entrepreneurs' failure narratives and their firms' subsequent performance (Wolfe & Shepherd, 2013a, 2013b). Prior research has established the above link, but there is an insufficient consideration of the boundary conditions of when an entrepreneurial project failure is experienced as a failure and why then, under specific narrative conditions, some experiences improve the subsequent performance while other narratives do not have this bouncing-back effect (see Kim & Miner, 2007). This study identifies those boundary conditions as sensemaking loops (e.g. Weick, Sutcliff & Obstfeld, 2005) and explains their narrative contents as public discourses of communication.

#### Method

We analyze publicly available empirical data on online dating businesses (i.e., newspaper and magazine articles, blog texts of venture capital investors, court cases, and patent documents). The online dating business represents a field marked by numerous project failures due to the outstanding gap between the entry costs to start this business (low) and the entrepreneurial activities required to make profits out of the websites (high). This is a typical effect in a high tech industry, because there are lots of players in the field with similar knowledge content (i.e., technology) (Cope, Cave & Eccles, 2004). We use the content analysis as our method (see Short, Broberg, Cogliser & Brigham, 2010). We analyze inductively narratives related to fake profiles used in the online dating business, representing the bouncing-back effect in this field.

#### **Results and Implications**

The results of our content analysis show that not only the entrepreneurs' failure narratives, but also the public narratives about opportunism – revealing the discourses about fake profiles – practiced in the business related to entrepreneurial projects affect firms' subsequent performance. This happens under the boundary conditions of whether these public discourses consider the monetary elements of failure experience or its transformative elements (e.g., emotions). We found that the discourse on monetary elements improves and the discourse on transformational elements decreases the subsequent performance of firms.

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### PERSIST OR ABANDON? THE INFLUENCE OF SOCIAL PRESSURE AND REGULATORY FOCUS ON ENTREPRENEURIAL ESCALATION OF COMMITMENT

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#### **Principal Topic**

One important decision in the entrepreneurship process is the exit decision, which involves the decision to sell the firm, close the firm due to poor performance, or sell one's stake in the firm (Shepherd, Williams, & Patzelt, 2014). Anecdotally, we know many entrepreneurs have difficulty with this decision as many underperforming firms continually persist in hopes of a turnaround. However, when entrepreneurs continually persist and "maintain commitment to a losing course of action, even in the face of quite negative news" (Sleesman et al., 2012: 541), persistence can devolve into escalation of commitment. Although there has been a substantial amount of research on escalation of commitment in the organizational behavior field, very few studies have explored how escalation of commitment applies to entrepreneurship (see DeTienne et al., 2008 and Holland & Shepherd, 2013 for recent exceptions). This study uses theories of self-control to explain the conditions under which entrepreneurs may be most or least likely to escalate their commitment.

#### Method

We use metric conjoint analysis combined with a post-survey questionnaire as our experimental design. First, we ask subjects to imagine a product or service that they are in the process of developing. Then based on a manipulation of financial and time investment, percent completion of the project, and team recommendation, the subjects are asked to indicate the likelihood that they would continue investing in their product or service (dependent variable).

#### **Results and Implications**

First, we demonstrate that the social pressure from an entrepreneur's team may be driving the escalation decision even more so then the fundamental psychological task. Second, by rooting the context in entrepreneurship in which entrepreneurs think about the decision to persist or abandon their own firm's new product development, we begin to empirically demonstrate how entrepreneurs are highly susceptible to escalation. Entrepreneurs face pressure not only psychologically in their attempts to preserve their own identity as a sound decision maker, leader, and creator of new ventures, but also socially, as they face pressure from their team to succeed in venture development.

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### YOU'VE GOT TALENT: BREAKING THE 'BARRIERS TO LEARNING' FROM EARLY ENTREPRENEURIAL EXPERIENCE

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#### **Principal Topic**

Entrepreneurship educators and practitioners alike often embrace the principle that experience automatically translates into improved performance in subsequent ventures. This experience-performance connection is not without any scientific basis: Research on learning curves points to a positive relationship between the two constructs, such that greater entrepreneurial experience should have a positive bearing on future performance. However, deeper investigations into this linkage have revealed more nuanced connections, such as the non-linear trajectory of entrepreneurial learning curves and the role that talent plays in translating experience into performance. As such, our research aims to uncover the specific barriers early-career entrepreneurs encounter, and to assess how and why entrepreneurial talent mitigates the negative transfer of learning. We focus on early-career entrepreneurs because their shorter careers help to both limit the unobserved heterogeneity from incomplete labor histories (often associated with inquiries into older populations) and make the initial impact of entrepreneurial experience and talent easier to identify.

#### Methods

To investigate our research question and test for the experience-talent effects, we analyzed two databases maintained by Statistics Sweden to assemble a balanced panel dataset for our study: RAMS, an annual registry of all firms in Sweden, and LOUISE, an annual census of all Swedish inhabitants. By linking these two datasets, we formed a rich, multi-level dataset covering an entire population of entrepreneurs from 1989 to 2002. Our analytical sample contains information on 766 individuals followed for up to 14 years after their college graduations in 1989 or 1990. These individuals started their initial ventures within three years of graduation and at least a second venture during the 14-year observation period. Our dependent variable is the financial performance of the founders' second venture. We used random-effects regression models to take advantage of the balanced panel structure of the data.

#### **Results and Implications**

While common wisdom suggests entrepreneurial experience should translate into improved performance in subsequent ventures, our research reveals that the experience-performance link is not straightforward. Barriers to learning arise from differences in prior venture duration, complexity, and similarity, and such constraints can hamper performance in future efforts. However, entrepreneurial talent can moderate the negative effects of these barriers. Learning requires time and effort from multiple founding experiences, but those with entrepreneurial talent are the most likely to benefit from their possession of a career-spanning perspective that avoids misappropriating lessons from prior experience.

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### A TALE OF ENTREPRENEURIAL IDENTITY: THE ROLE OF MICRO-IDENTITIES IN THE STORIES FOUNDERS TELL

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#### **Principal Topics**

Although many founders have multiple identities, these are often treated as potential sources of conflict, liabilities to be managed (Ashforth, Kreiner, & Fugate, 2001; Pratt & Foreman, 2000; Shepherd & Haynie, 2009). Since founders are viewed as integral to the venture, the perception is that identities associated with anything other than the business are incongruent. This study offers a different perspective. Multiple, *micro-identities* are assets, or resources, for entrepreneurs (Phillips, Tracey, & Karra, 2013). Specifically, this paper views identity as a mechanism for building authentic relationships. Through carefully constructed identity narratives, successful entrepreneurs build relationships and shape perceptions of themselves and their firms (Navis & Glynn, 2010; Navis & Glynn, 2011; Phillips, Tracey, & Karra, 2013). Just as savvy networkers learn how to relate to different people and adapt to situations, entrepreneurs learn how to build targeted relationships. Founders may not always be explicitly aware of this, but the proposal here is that their identity as a founder, inventor, mother, father, community member, or environmentalist facilitate the development of relationships that help them gain support and shape perceptions of their firm.

#### Method

Given the limited theory for this approach, I used a qualitative, multiple-case study design (Eisenhardt, 1989). Open-ended interviews with several entrepreneurs provided clues for how identities of founders help them build relationships. This approached allowed me to better understand the intricate mechanisms that facilitate this process and provided a foundation for future studies.

#### **Results and Implications**

Results of the interviews provided clues as to *how* identities act as a mechanism for building relationships. Several of the entrepreneurs did, in fact, view identities as an asset. It was also revealed that the identities acted as "connectors" by providing shared experiences and even created path dependencies due to the relationships they facilitated.

The present study extends research on entrepreneurial identities and proposes that micro-identities are a resource for building relationships associated with a venture. Beyond providing a deeper understanding of how identities are a mechanism for this process, the results present a different perspective on multiple identities. Viewing identities as an asset taps into the value that exists in micro-identities and helps advance the field of entrepreneurship research.

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### HUMAN CAPITAL AND NASCENT ENTREPRENEURSHIP – THE OPPORTUNITY COST OF A NEW JOB

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#### **Principal Topic**

It is well established in prior literature that the human capital of individuals is important for both shaping their decision to enter the entrepreneurial process and also the likelihood to succeed in starting a business. Yet the decision to become an entrepreneur is not made in isolation to other career options. Human capital not only influences an individual's prospects as an entrepreneur but also the chances of getting a better job (Gimone, Folta, Cooper, & Woo, 1997; Cassar, 2006; Shepherd et al., 2015). As such individual's face an opportunity cost of paid employment when they pursue entrepreneurial endeavors (Carnahan, Agarwal, & Campbell, 2012; Lofstrom et al., 2014). We draw on theory of consideration set and theory of opportunity costs to expand our understanding of how human capital impacts entry to entrepreneurship from an isolated vocational decision perspective to a more holistic process perspective that takes into account alternative job alternatives. We develop a two-stage model of entry to entrepreneurship

#### Method

Accordingly, in this study we investigate the relationship between and individual's human capital, the decision to become an entrepreneur and the nascent entrepreneurship progress, explicitly accounting for alternative job seeking. To empirically test our propositions, we construct a unique longitudinal dataset of individuals facing career transitions. Using an approach similar to the Panel Study of Entrepreneurial Dynamics (PSED), we screen the general population to identify nascent entrepreneurs (N=543). We additionally identify a sample of individuals who are looking for a new job (N=226). This allows us to compare nascent entrepreneurs to job seekers and, importantly, "dual nascent entrepreneur – job seekers" (N=140) who are simultaneously starting a business and looking for a job. We used multinomial regression analysis to test our hypotheses.

#### **Results and Implications**

As hypothesized, our empirical results show that individuals' human capital impacts the outcome of the startup effort in a two-stage process: (1) through an effect on the consideration set and (2) through an effect on entrepreneurial progress. Accordingly, we have identified an indirect human capital effect on entrepreneurial progress through its impact on the consideration set selection in addition to direct human capital effect.

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### THE INFLUENCE OF DIFFERENT TYPES OF LEGITIMACY ACROSS RESOURCE ACQUISITION STAGES IN ENTREPRENEURIAL FIRMS

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#### **Principal Topics**

Resource acquisition is an important part of venture development and growth, particularly in entrepreneurial settings (Aldrich & Martinez, 2001). However, due to lacking track records and information asymmetry between the ventures and resource providers, potential resource providers often rely on credible signals to make decisions (Spence, 1976). The majority of work on examining signaling effects on resource acquisition in new ventures investigates a single stage of resource acquisition (Connelly et al., 2011), despite the fact that many new ventures engage in resource acquisition activities multiple times, such as a series of funding. We argue that different firm characteristics such as founders' human capital and endorsement from prominent investors have positive effects on resource acquisition at different stages of firm development and that the different characteristics are sequentially linked in order to send signals of legitimacy. We therefore adopt a more dynamic approach to resource acquisition and look at different types of signals.

#### Method

We use data from a sample of 307 advertising ventures listed in Crunchbase. We combine data from VentureXpert, LinkedIn, and company websites to construct a robust dataset. Our dependent variable, resource acquisition, is operationalized by dollar amount of funding received per investment round. Founders' human capital is measured by education, and managerial, industry and startup experience. Investor's prominence is measured using the size of the investing firm in the first round of funding. We also control for location, firm age, number of founders, operating in an accelerator, and whether new investors were joined in in the second funding.

#### **Results and Implications**

We find that founders' human capital has a positive impact both on initial and subsequent resource acquisition. Specifically, founders' founding experience positively impacts initial funding and education positively influences second funding. However, endorsement from prominent investors has a stronger signaling effect than founders' human capital in the subsequent resource stage. Further, the endorsement effect mediates the importance of founders' human capital on subsequent resource acquisition. Our findings contribute to the role of signaling and legitimacy in new ventures by showing that different organizational characteristics have diverse temporal and sequential effects on resource acquisition.

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### HOW TO FOSTER EFFECTUATION IN THE CORPORATE CONTEXT? LEADERSHIP AS ANTECEDENT OF CORPORATE EFFECTUATION

Daniel Koch, RWTH Aachen, Germany René Mauer, RWTH Aachen, Germany

#### **Principal Topic**

Effectuation (Sarasvathy 2001) is primarily studied in the new venture context, but research also argued for its application in the corporate context (Wiltbank et al. 2006) and first empirical studies have identified positive performance consequences of effectuation there (Brettel et al. 2012; Berends et al. 2014). However, corporate governance is per se prediction-oriented, and entrepreneurial action does not come naturally to these structures. This creates a valid interest in the antecedents of effectuation in the corporate context. According to upper echelons theory, top managers exert influence on employees and thus shape corporate behavior (Hambrick & Mason 1984). In this paper we investigate the influence of top management leadership styles on effectual behavior in the corporate context.

#### Method

Using an empirical survey we acquired data from 375 top managers of established firms across all industries in Germany. Our independent variables are transformational-, transactional-(MacKenzie et al. 2001), and entrepreneurial leadership (Renko et al. 2014). As dependent variable we use effectuation orientation, a recently developed construct from Werhahn et al. (forthcoming) who conceptualized effectuation as a firm orientation that leads to effectual employee behavior. We control for instrumental leadership (Antonakis & House 2014), firm age, firm size, firm type (production or service) and differentiation focus. We treat effectuation as a multi-dimensional construct (Chandler et al. 2011). To test our hypothesizes we use regression analysis.

#### **Results & Implications**

We find a positive influence of transformational leadership on all sub-dimensions of effectuation orientation while transactional leadership showed no significant relation. These findings support our general argumentation that for effectual employee behavior to be possible, employees need a substantial degree of freedom to decide on their own, and not being ordered, what to do. Our study offers practical implications in line with a growing interest among managers in more entrepreneurial employees and firms. Choosing more entrepreneurial candidates in the hiring process certainly is one way. However, this does not imply that those employees can actually act entrepreneurially. This study shows how exhibition of specific leadership styles can influence effectual behavior and foster entrepreneurial activity in a corporate setting.

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#### TRANSGENERATIONAL LEARNING IN ENTREPRENEURIAL FAMILY BUSINESSES

Michael Konopaski, University of Ontario Institute of Technology, Canada Sarah L. Jack, Lancaster University, UK Eleanor Hamilton, Lancaster University, UK

#### **Principal Topic**

This study explores how family business members learn between and across generations. It draws on Lave and Wenger's (1991) concepts of communities of practice and legitimate peripheral participation to explore the relationship between family members and learning. This study shows learning in the family business context is about continuity but the process of learning in which family engage, is uneven, non-linear and unpredictable. To learn about continuity, family members participate in multiple ways, gradually over time. In this study gradual participation to build legitimacy is revealed as a multi-generational learning phenomenon. It involves multiple forms of co-participation influenced by family members from the past, present and future.

#### Method

Guided by the research question how do family members learn about entrepreneurship between and across generations in family business?, empirical material from 18 respondents from entrepreneurial family businesses in Canada, are examined using an interpretive and inductive approach. Through this approach we focus on understanding interactions associated with learning which take place within the family business context.

#### **Results and Implications**

This study shows how the patterns and nature of participation in the family business define possibilities for learning. Learning for continuity is a complex social process taking place in everyday situated practice and through patterns of co-participation between family members. Family members become part of the family business through participating in its everyday practice. Social context provides the structure and meaning for shared practice (Wenger, 1998). New family members become acquainted with the business through peripheral activities and learn through observing others. As their knowledge, experience and participation increases, so does their legitimacy with new family members gradually becoming more essential to the continuity of the family business. This study contributes to understanding how learning takes place in family business through complex patterns of participation in everyday practice, which lead to forms of legitimacy in which learning is implicated.

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### THE BEST, NOT THE REST: DIFFERENCES IN MEN AND WOMEN BUSINESS OWNERS' RELATIONS WITH THEIR MOST TRUSTED ADVISOR

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#### **Principal Topic**

Because women historically have had less developed professional networks, there has long been substantial research interest in possible gender differences in the networking behavior of nascent and active entrepreneurs. Some studies have reported that women entrepreneurs were more likely to rely on friends and family, whereas others have found negligible gender differences in usage of external sources of business advice when factors such as business size are taken into account. While entrepreneurs may seek help from a variety of network contacts, small business owners often rely heavily on one trusted resource. This study spotlights owner-managers' relationship with their most valued advisor as a way to add nuance to the debate on gender differences in entrepreneurial networking, focusing on the types of assistance they receive and how they communicate with this source.

#### Method

Surveyed small business owners in a Midwestern US state were asked to indicate which sources of public and private sector assistance they had utilized during the previous year, and to identify which was the best and most helpful. Of 528 respondents, 398 identified one source as the best. These respondents were asked to rate the extent to which this best source had provided advice and emotional support. They also indicated how much they used the internet to communicate with this advisor, from solely face-to-face/telephone to solely online.

#### **Results and Implications**

Men and women did not differ significantly in neither the extent of their networking activity nor in their selection of their most valuable advisor. Even after controlling for relevant demographic and business characteristics, however, men reported receiving more legal/regulatory advice from their best advisor and women reported receiving more emotional support. Almost half (46%) of men communicated with their advisor exclusively in person or by phone, whereas only 28% of women had no online-mediated communication with their best advisor source. Women relied more on online communication with their advisor than did men which presents something of a paradox, as women reported receiving more emotional support and more reliance on online communication, even though online communication was negatively associated with emotional support.

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### THE INFLUENCE OF BUSINESS MODEL DESIGNS ON THE PERFORMANCE OF ENTREPRENEURIAL FIRMS

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#### **Principal Topic**

Even though business model innovations are considered an important source for superior financial performance, little is known about which types of business models are likely to be more profitable than others. In their seminal work, Amit and Zott (2001) categorize business models along four dominant design themes that explain organizational performance: complementarities, efficiency, novelty and lock-in. While existing studies focus on the isolated analysis of singular design themes, our study introduces a set-theoretic approach investigating interdependencies between them.

#### Method

We apply fuzzy-set qualitative comparative analysis (fsQCA) to a unique dataset of 41 entrepreneurial firms that went public between 2009 and 2012 on the NASDAQ or NYSE. In a configurational theory context the fsQCA approach seems especially suitable as it bases upon the notion that a phenomenon can be explained by set-theoretic relations.

#### **Results and Implications**

Our study contributes to the emerging business model and organizational design literature in several ways. We answer the call for more empirical studies analyzing the relationship between business model and financial performance (Schneider & Spieth 2013, Zott, Amit & Massa, 2011). Most importantly, we can refute the concerns put forth by Zott and Amit (2007) who apprehend that the incorporation of more than one business model theme hampers financial performance due to suboptimal resource allocation and technological respectively organizational problems. In contrast, our study highlights the importance of three specific combinations adding to our understanding on how combinations of different business model design themes help to create and capture value. While most studies in the field (e.g. Zott & Amit, 2007, 2008) praise fundamentally new business models - depicted as novelty-centered design themes - as a new source of competitive advantage, our study further emphasizes the rather old-fashioned constructs of complementary offerings, the incorporation of switching costs and low transaction costs. These findings might give hope to those practitioners who are struggling to come up with a fundamentally new business model, as the lack of creative genius can be compensated by focusing on the remaining three dimensions.

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#### A SOCIAL COGNITIVE PERSPECTIVE ON OPPORTUNITY EVALUATION

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#### **Principal Topic**

Evaluation is at the center of the entrepreneurial process and yet we know very little of the factors informing evaluation decisions. Furthermore, research on the topic is limited in that it mostly examines either opportunity-based or individual-based factors in simple models. Of course, evaluation decisions are more sophisticated and include various factors (Shane & Venkataraman, 2000). Examining these factors is essential in studying entrepreneurship as a process (Choi & Shepherd, 2004). This study uses social cognitive theory as a basis to develop an integrative model of opportunity evaluation. Building on social cognitive theory's assertions that the *environment*, the *individual* and his/her *focal behavior* will interact to explain individual actions (Bandura, 1989), we propose a multilevel, integrative research model.

#### Method

We empirically test the theorized model using a conjoint experiment and hierarchical linear modeling on data from a sample of 120 entrepreneurs. The dependent variable in this study is the evaluation of the attractiveness of the opportunity. The independent and moderating variables include the decision attributes proposed by Haynie, Shepherd, and McMullen (2009), social capital relatedness, entrepreneurial experience, regulatory focus, age, gender, and education.

#### **Results and Implications**

The findings support social cognitive theory's assertions that the environment, the individual and his/her focal behavior will interact to explain individual actions. Results indicate that novice entrepreneurs might not put as much emphasis on inimitable resources. We also find that younger entrepreneurs put emphasis on valuable resources whereas older entrepreneurs put emphasis on resources that limit competitive response. These two findings have implications for the field of entrepreneurship, as they could be an explanation for the high failure rate of new businesses. Further, entrepreneurs will find opportunities that relate to entrepreneurs' stock of social capital more attractive. Data also indicates that this relationship is unchanged regardless of an entrepreneurs' experience, age, gender or education emphasizing the importance entrepreneurs place on how related an opportunity is to their social capital. Finally, there is evidence that entrepreneurs who are motivated by the need for security will rate opportunities as less attractive. Thus, this study offers new insights for the opportunity evaluation literature and strengthens our understanding of the importance of studying the joint effects of environmental, individual and behavioral factors playing a role on opportunity evaluation.

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#### CHALLENGING THE VALUE-PARADIGM OF CROSS-SECTOR PARTNERSHIPS

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#### **Principal Topic**

Organizations from the not-for-profit (NFP) sector, such as social enterprises, increasingly engage in partnerships with other organizations – either within or across sectors – to increase the social value created (Montgomery et al., 2012). Today, there is a dominant, but not empirically tested understanding of cross-sector partnerships to be more effective in creating joint social value than within-sector partnerships as the former are argued to add more different perspectives and complementary resources to an alliance than the latter (Koschmann et al., 2012). However, cross-sector partnerships are often complicated due to different priorities, practices and values, whereas partners in within-sector relationships share similar thought patterns, thereby increasing effectiveness (Di Domenico et al., 2009). Overall, a precise and empirically proven understanding of the success factors enhancing joint value created is still due (Provan et al., 2007). Our study, hence, addresses the following research questions: (1) Does partners' sector affiliation affect the partnership's performance? (2) Which are relevant success factors for increasing joint social value created in NFP partnerships?

#### Method and Data

Based on Austin et al. (2006) we investigate financial resources, knowledge, and opportunity costs as success factors of increasing joint value creation. We apply a dyadic perspective and analyze a proprietary dataset of 120 partnerships (73 within- and 47 cross-sector partnerships) between social enterprises and their most important partners. T-tests and ANOVAs as well as path-model analyses have been applied.

#### **Results and Implications**

As a result of our dyadic analysis, we challenge the dominant view of cross-sector-partnerships' superiority by providing empirical evidence that cross-sector partnerships do not perform any better than within-sector partnerships. Instead, we demonstrate the importance of complementary resources for partnership performance and highlight the key role of opportunity costs when evaluating each organization's social value created. In addition, we enrich research by empirically pointing out differences in the process of increasing joint social value created at the partnership-level as opposed to the organizational-level.

We conclude that scholars should investigate partnerships' performance in the NFP sector in a more differentiated manner success factors such as benefits and costs instead of advocating for cross-sector partnerships in general.

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#### THE ROLE OF SPIN-OFFS IN SME DYNAMIC CAPABILITIES DEVELOPMENT

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#### **Principal Topic**

Applying the dynamic capability perspective, this article takes two different views on spin-offs. Firstly, they are considered as developmental strategies not only to realign the assets but also to create, develop and rejuvenate assets through recombination. Secondly, we consider them in the context of SME where resources and managerial limitations limits slack for growth.

With such constraints, spin-offs are often viewed as risky processes leading to the loss of specific assets and skills. However, we argue that they can enable SMEs to create, extend and outreach assets and competencies outside their traditional scope but related to their core competencies.

Building on Teece's dynamic capabilities framework, we intend to contribute to the literature gap on small firm growth by conceptualizing how spin-offs can be a hybrid developmental mode rather than a divestment mode in the context of SME.

#### Method

Our analysis is a multi-case study of three SMEs that have generated several spin-offs with varied performance in terms of sales and profits during a 5-year period. Data was collected at different oments during this period from multiple sources: 40 interviews (16 top managers in the growing firms and 23 on the side of the spin-offs founders), archival data (Reports, Documents, etc.) and observations.

#### **Results and Implications**

Our results are structured around Teece's definition of the meta-competences for capability development: sensing, seizing and transforming. For each, we depict the microfoundations enabling such development via the spin-off.

Spin-offs are effective sensing mode to sense and shape opportunities based on potentially risky technologies and niche markets. The choice of spin-offs for sensing depends on management's perception of employees in terms of skills and experience and the perceived strategic nature of the assets.

Seizing occurs when there are several resources and incentives to capture value. Our cases illustrate financial participation (10-25% on average), advisory sessions and assets sharing such as common distribution channels, marketing campaigns, client-supplier contracts or technology or infrastructure co-investments.

Transforming occurs with a trial-and-error learning process is accepted along with a strong engagement at management level to build loyalty and commitment even if tensions and conflicts emerge. This leads the path for co-specialization of assets as tight linkages are established at management level between the two entities.

We discuss four common practices for managing spin-offs as an hybrid growth mode: Entrepreneurial Commitment; Human capital Nurturing; Consensus Building; Opening to intuitions and emotions.

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## BORN TO GROW? THE IMPACT OF ORGANIZATIONAL AND INDIVIDUAL IMPRINTING ON GROWTH INTENTION ACROSS GENDER

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#### **Principal Topic**

The paper aims at answering the following question: Why do companies that are run by women are smaller than companies that are run by males? While recent researches states that women entrepreneurs either do not really want to run big companies or do not have access to the same resources as their male counterparts, we assume that such a question can be solved through the concept of imprinting and its impact on growth intention. The imprinting effect refers to organizational characteristics as well as characteristics of the entrepreneurial team of the company at the early stage of its creation. Therefore, here, we aim at identifying the trace of any imprinting – individual or organizational - effect on the intention the entrepreneur has to make his / her company grow.

#### Method

Based on a sample of 846 French SMEs which have been set up during the last 20 years, regression analysis reveal that imprinting effects on growth intention differ from those of venture creation. Education and past experience remain significant while the network of the founder loses its importance. When focusing on growth intention, it is also important to include growth modalities. Imprinting does not explain incremental growth but influences radical growth.

#### **Results and Implications**

The paper contributes to existing entrepreneurship theory in three ways. First, it reveals the existence of a "gene" to grow that may influence the mental model of the entrepreneur or the way he/she organizes his/her business. Second, it emphasizes the difference between the determinants of growth and the determinants of creation: The intention to growth depends more on the organizational imprint than on the intrinsic individual characteristics of the entrepreneur. Third, it sheds light on the difference role of imprinting on growth intention and modes to growth. Focusing on sales growth may introduce noise in the analysis while focusing on radical growth intention highlights clear drivers.

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### IMPACT OF STIGMA OF FAILURE ON SOCIAL ENTREPRENEURSHIP ENTRY DECISIONS: A CROSS-COUNTRY ANALYSIS

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#### **Principal Topics**

One of the forces that has been shown in prior research to affect entrepreneurial entry decisions is the stigma of failure (Damaraju, Barney, & Dess, 2010). Prior stigma research, however, has tended to focus on commercial activity and there is relatively little work on how the institutions associated with entrepreneurial failure affect the social entrepreneurship (SE) entry decision. The aim of this research is to investigate the question, to what extent does the stigma associated with entrepreneurial failure influence the entry decisions of social entrepreneurs? Informed by a real options logic, we propose that as the attractiveness of the option to pursue commercial entrepreneurship decreases due to stigma, the attractiveness of the social entrepreneurship option increases.

#### Method

In order to test the effect of country-level stigma on individual-level SE entry decisions, we use multi-level logistic regression analysis with 50,349 individuals from 22 countries. For the dependent variable, individuals' engagement in SE activity, we rely on Global Entrepreneurship Monitor data. For the independent variable, we use a key indicator of entrepreneurial failure from prior research: the stigma associated with bankruptcy (Simmons, Wiklund & Levie, 2014). Stigma of bankruptcy is constructed from survey data collected by the European Commission. The moderating variable accessibility of credit information is constructed from the World Bank Doing Business database. We also control for various individual- and country-level factors.

#### **Result and Implications**

We find that the stigma of failure is positively associated with SE entry decisions and the impact of stigma gradually decreases as the level of stigma increases. The results also reveal that the stigma of failure is stronger in the presence of easier accessibility to credit information. Moreover, we find that the impact of stigma is valid only for revenue-generating type SEs, not for NGO-type SEs. This paper contributes to social entrepreneurship research by being the first to examine the stigma of failure in an SE context. Further, our study investigates the extent to which institutional forces may have different impacts depending on whether social entrepreneurs apply market-mechanisms or not. As such, it responds to recent calls for consideration of context in examining social entrepreneurial behavior (Short, Moss, & Lumpkin, 2009).

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## CORPORATE ENTREPRENEURSHIP IN A STRATEGIC CONTEXT: WHAT DETERMINES NEW VENTURING AND STRATEGIC RENEWAL IN SERVICE VERSUS MANUFACTURING INDUSTRIES?

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#### **Principal Topics**

Prior work conceptualizes corporate entrepreneurship strategy as a strategic-oriented, organization-wide reliance on entrepreneurial behavior in pursuit of sustained competitive advantage (Ireland et al., 2009). Little theory, however, predicts strategic orientation's effect on concrete behaviors that in turn beget corporate entrepreneurship (i.e., new venturing and strategic renewal) and whether begetting behaviors differ across contexts. This study develops theory associating entrepreneurial orientation with corporate entrepreneurship through two opportunity-identifying behaviors: responsive sensing (i.e., the identification of expressed yet underserved market needs) and active sensing (i.e., the unearthing of subliminal, unexpressed market needs). I examine industry context as a boundary condition because I expect the intangibility and relational cocreation of services visa-vis manufactured goods (Vargo & Lusch, 2004) to influence the effectiveness of mediating sensing behaviors.

#### Method

I use survey data on manufacturing and service organizations operating in innovation-intensive industries, as such contexts exemplify conditions that spur the adoption of a corporate entrepreneurship strategy (Ireland et al., 2009). Using established scales, I obtain the data from key informants (surveying one executive per organization); an approach routinely used in this research setting (e.g., Rauch et al., 2009). I use non-parametric partial least squares modeling in samples of 111 manufacturing and 110 service organizations, interpreting results from 5,000 bootstrap samples.

#### **Results and Implications**

I find that entrepreneurial orientation affects corporate entrepreneurship through responsive sensing in manufacturing, and through active sensing in services and manufacturing. Entrepreneurial orientation in isolation promotes corporate entrepreneurship only in services not in manufacturing, controlling for sensing behaviors. This study supports a shift in theoretical attention from isolated elements of a corporate entrepreneurship strategy to considering constituting elements in concert. Second, it offers insight on entrepreneurial orientation promoting corporate entrepreneurship. Prior work focused on entrepreneurial orientation's effect on generic performance (Rauch et al., 2009). Drawing on the marketing literature, this work also contributes to theory on opportunity identification by contrasting responsive and active sensing as concrete behaviors in corporate entrepreneurship strategies of manufacturers and service firms. The limited application of marketing theory in entrepreneurship research has been highlighted (Webb et al., 2011). Together, this study offers prediction of distinct corporate entrepreneurship strategies in manufacturing versus services.

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### ACTING FIRST, THINKING LATER: SENSATION SEEKING AS A LOGIC AND PSYCHOLOGICAL DETERMINANT OF ENTREPRENEURIAL ACTION

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#### **Principal Topic**

Extant literature almost ubiquitously presumes entrepreneurs acting on *deliberate* logics. Such logics are not limited to boundedly rational planning and financial decision calculus, but also include others such as effectuation, desires for autonomy or meaning, affect-as-information, and even biased heuristics. However, less deliberate, more impulse driven logics should be at least as important for nascent entrepreneurship. Entrepreneurship involves uncertainty, which is most extreme at the earliest stage (prior to entrepreneurial behavior) (McMullen & Shepherd, 2006). Such logics not only facilitate action under uncertainty (e.g. Wiklund, Patzel, & Dimov, 2014), but may impel it. Accordingly, such logic should predict early entrepreneurial action. This should especially be the case for acting on opportunities inherently outside the formal economy – given the uncertainty created by lacking rule-of-law and property-rights, and threat of detection.

#### **Hypotheses & Data**

Two studies were conducted exploring whether the less reasoned logic of impulsive sensation seeking (SS) positively predicted acting on formal economy opportunities (H1), acting on *necessarily* informal economy (i.e. underground) opportunities (H2), and was more strongly related to acting on underground opportunities (H3).

Based on prior entrepreneurship research (e.g. Nicolaou, Shane, et al. 2008), SS was measured with an abbreviated version of Zuckerman's (2002) impulsive sensation-seeking scale. For robustness, SS was separately operationalized with the BAS-F scale of Carver and White (1994). The two dichotomous dependent variables were whether the individual had acted in pursuit of opportunities in the formal economy, and on opportunities outside the formal economy (underground opportunities). This was operationalized with commonly used items as to whether an individual had begun a venture and questions on entrepreneurial behavior.

#### **Results & Conclusion**

Binomial logistic models found SS positively predicted acting on the two types of opportunities. Results were robust to the different operationalizations, and show large  $\chi^2$ s and odds ratios (all odds>11:1) (all p<.05). Based on probability estimation curves and on parameter estimates, the effect of SS was stronger in relation to acting on underground (versus formal economy) opportunities. Responses to open-ended questions further suggested an impulse driven logic. This research contributes to an emerging literature on less-reasoned logics befitting

entrepreneurship (Lerner, 2010; Lerner & Fitza, 2012; Verheul et al., 2015; Wiklund et al, 2014). It implies that after perception of opportunity, SS is a psychological resource for overcoming the "behavioral bounds" (Gavetti, 2012) inhibiting many from exploiting opportunities. The findings provide a basis for future research and advancing theory, offering an alternative to relatively *deliberate* logics of entrepreneurial action. The work also addresses a gap in understanding necessarily informal economy entrepreneurship (Webb et al., 2009) by individuals within the same developed economy and institutional environment, not acting out of economic necessity.

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### SOCIAL PSYCHOLOGY IN NASCENT ORGANIZING: WHAT DO WE INFER ABOUT AN ENTREPRENEUR, AND DOES IT MATTER?

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#### **Principal Topic**

Business venturing requires human organizing, and therefore involves social psychology. Following the perception of opportunity, entrepreneurial protagonists need to engage others – to transform an opportunity idea into a nascent firm (e.g., Aldrich & Martinez, 2001; Zander 2007). Given entrepreneurial uncertainty and negligible objective information early-on, how others perceive a potential founder and associated opportunity matter. Past research has examined financial investors' assessments of firm-founders and their opportunity pursuits (e.g., Clark, 2008). However, knowledge is lacking about potential followers' consideration of entrepreneurial protagonists and associated opportunities. This is an important gap since it relates to *if* there will even be a firm-founder/firm (e.g. for later research observation and theory).

#### **Research Question & Method**

This research focuses on potential followers' consideration of entrepreneurial protagonists and associated opportunities. It asks: What inferences are made about an entrepreneur's initially unobservable qualities? Do such inferences affect interest in following? Is the same opportunity judged differently (e.g. better) according to the entrepreneurial lead it's associated with?

A randomized experiment was conducted in which different entrepreneurs and opportunities were presented to 147 potential supporters/followers. Following prior research, the information provided was limited and modeled on what could be gathered from a short pitch. After each entrepreneur, potential followers evaluated: the business opportunity associated with the entrepreneur, the entrepreneur, and their interest in potentially following.

#### **Results & Conclusion**

The results shed light on an understudied area of nascent venturing – social cognition about potential founders and opportunities. The detailed results, available at BCERC 2015, help unpack complex and otherwise unobservable judgments made about entrepreneurs, potential spillover to judgments about entrepreneurial opportunities, and related interest in following. The significant results (SEM *p*-values<.01) contribute to entrepreneurship literature by helping bridge the gap between nascent entrepreneurial behavior and existence of nascent firms/firm-founders.

To theoretically understand the pursuit of opportunity (including nascent organizing), insight into the social psychology of early-stage supporters is necessary. Such insight helps span a rich literature that starts with firm-founders and organized firms, and a similarly rich literature focused on gestational entrepreneurial behavior. By bridging these literatures, enhanced theory and practice is possible by a more integrated tracing of the entrepreneurial process -- from individual opportunity perception to entrepreneurial behavior/action, through the initial nexus with potential supporters, to the occurrence (or non-occurrence) of nascent organizations.

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## THE MORE THE MERRIER: HOW OWNER-MANAGER TEAM SIZE INFLUENCES THE ECONOMIC CONTRIBUTION OF OWNER-MANAGED BUSINESSES ACROSS THE WORLD

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#### **Principal Topics**

Teams add diversity and strengthen capability to entrepreneurial ventures, while the commitment of managers is increased if they have an ownership stake. Yet most studies of venture performance that include team size treat it as a control variable. Capable entrepreneurial owner-managers should "flock together" (Bobrey, 2005) in teams, because they value human capital and have higher opportunity costs of entrepreneurship. Prior research in several countries and regions has demonstrated a link between team size and venture performance. But no study has studied whether this applies across a wide spectrum of environments. The effects of team homophily in terms of age and sex has been studied (e.g. Ruef et al, 2003; Steffens et al., 2012), but the link between between education level, team size and performance remains untested.

#### Method

We examine the relationship between team size and the potential economic contribution of early-stage and established businesses across 89 countries of the world, using Global Entrepreneurship Monitor data on 87,640 early stage entrepreneurs and 68,247 established owner-managers collected between 2003 and 2012. Entrepreneurial team size is measured by counting the number of individuals who both own and manage the same business. Potential economic contribution is captured with measures of growth expectation, export propensity, export intensity and product/market innovation. We use multilevel logistic regression techniques to demonstrate the effect of team size on economic contribution, controlling for national level factors (including population size and wealth per capita), firm level factors (business complexity) and individual owner-manager level factors (age, gender, education and income).

#### **Results and Implications**

The main findings are that larger team sizes tend to attract higher quality individuals and make greater potential economic contributions. The latter finding is strongest for more established ventures in complex business environments. However, lower quality teams gain more in terms of potential economic performance from larger team size than higher quality teams. This study brought team size to centre stage and showed how powerful it is as a predictor of economic contribution, with implications for policy, for investors and for entrepreneurs.

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# THE RELATIONSHIP OF ENTREPRENEURIAL INTENT AND START-UP BEHAVIOR TO THE GENERAL HEALTH PERCEPTIONS OF WOMEN AND MEN NASCENT NECESSITY ENTREPRENEURS DURING THE NEW VENTURE CREATION PROCESS

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#### **Principal Topic**

Good health is something that most people take for granted. Unfortunately, those in developing countries tend to demonstrate poorer health. Personal health can be both a significant negative antecedent that supresses entrepreneurial intent as well as a significant negative consequent flowing from the stresses associated with the new venture process. This research explores this latter issue in terms of to what extent entrepreneurial intent and start-up behavior are related to women and men nascent necessity entrepreneurs' general health perceptions in a developing country.

#### Method

Using a repeated-measures longitudinal design over 4.5 years with a 12 month entrepreneurship training intervention program during Year 1, we investigated the entrepreneurial intent, start-up behavior, and general health perceptions of 146 women nascent necessity entrepreneurs and 141 men nascent necessity entrepreneurs. Data was collected from townships surrounding Johannesburg at three points in time: T1 (baseline); T2 (after the intervention); and T3 (end-of-study).

#### **Results and Implications**

We identified significant differences between the two groups. We found, for example, that men had better general health perceptions than women immediately prior to commencement of the project (T1). This is consistent with the literature where women typically suffer from poorer health in developing countries. However, at T2, men's health perceptions significantly declined suggesting that their efforts in developing their new venture ideas had an adverse effect on their health perceptions. In contrast, women's health perceptions did not change from when they started at T1. At T3, men's health perceptions increased over T2 but were actually less than their health perceptions at baseline. Women' health perceptions at T3, however, had increased significantly over both T1 and T2. Women often are the most disadvantaged in developing countries. Even if they can gain employment, this is often of a low status which can cause stress. We interpret these results as women seeing upside in starting their own businesses as they perceive these will reduce stress, help to elevate their status, and provide them with a means for independence not previously possible.

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### ECONOMIC DEVELOPMENT LEVEL AND THE INSTITUTIONAL IMPACT ON NEW VENTURE EXPORTING

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#### **Principal Topic**

Common wisdom argues that the institutional environment matters more for performance in emerging market economies than in developed markets. The former have high-paced economic development and government policies favoring economic liberalization; the latter are considered safer and more stable for investment. Institutions mitigate uncertainty and establish stable structures that facilitate interaction between organizations. Environments with well-specified legal systems, clearly defined and impartial judiciaries, and attitudes towards business that encourage low-cost transactions (North, 1986; 1993) are critical for the functioning of economic systems. Such institutions are generally more robust in developed countries but underdeveloped in emerging ones, resulting in institutional voids and thin capital markets, inconsistent infrastructure, and political and economic instability with public suspicion of foreign firms (Hoskisson et al., 2000).

Young firms generally lack the tangible or intangible resources necessary to effectively construct or access informal networks and the means to engage in resource exchange or to insure themselves against default in exchanges. They often depend on the goodwill of institutional actors such as banks and governments to ease institutional constraints. Reliance on the publicly available markets results in higher than average transaction costs, placing them at a distinct disadvantage to mature firms. If young firms are unable to build internal markets for capital, their export costs will likely be insurmountable. Even if young firms are able to access financing, a low-quality regulatory structure may limit their ability to dedicate capital directly to export-related investments.

#### Methods

Institutional quality may affect young ventures' export intensity more profoundly in emerging economies than in developed economies. We study the export intensity of 7,989 firms in 56 countries from the World Bank's World Business Environment Survey (WBES) from 1998-2000. A two-stage Heckman (1979) procedure models exporting self-selection and evaluates how four dimensions of institutional quality along eight measures relate to export intensity, controlling for firm-, industry-, and country-level factors that might affect firm exports.

#### **Results and Implications**

Young emerging economy firms are less likely to export, but export more intensively if they do export. Government intervention, tax regulations, and financial access differentially affect companies in developed and emerging economies. Poor institutions for accessing finance severely decrease export intensity for young emerging market firms but increase export intensity for young firms in developed economies. Young firms from both emerging and developed countries need to be especially aware of developing and adapting strategies to local contexts.

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### HOW TO CONCENTRATE LESS: FOREIGN AND CORPORATE VENTURE CAPITAL INVOLVEMENT IN SYNDICATES

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#### **Principal Topic**

Corporate VC (CVC) and Foreign VC (FVC) exhibit different risk exposure and risk mitigating approaches, one of which is syndication. The participation of corporate VCs (CVCs) or foreign VCs (FVCs) in financing rounds may impact investor concentration by affecting how other investors evaluate their investment risks. CVCs strategic investing in sectors with greater technological opportunities and weaker IP regimes (Dushnitsky and Lenox, 2005), reduces their investment risk through low resource commitment. Such investments facilitate established firms' innovation efforts by exposing new technologies, risking expropriation of new ventures' intellectual property (IP) that CVCs may exploit for their corporate gain. Other syndicate investors may thus limit investments due to similar concerns about CVCs' expropriation of IP, creating more uncertainty and investment risk, and leading syndicate partners to eschew round dominance, thereby lowering investment concentration. As domestic markets become saturated with investors, VCs seek investment opportunities abroad, increasing cross-border investment contrasting with VCs home bias (Cumming and Dai, 2010). To mitigate foreign investment risks, FVCs usually participate in syndicates, but are less effective and less stringent than domestic VCs in selecting investments, leading to lower exit success. FVC participation may increase uncertainty in terms of venture quality for other syndicate investors. We thus test whether syndicates that include CVC or FVC investors have lower investor concentration in the round than syndicates without either.

#### Methods

Our sample consists of 1137 investing rounds for 354 companies founded from 1997-2003. *Investor concentration* is the Herfindahl index of individual round investors, and *CVC Participation* and *FVC Participation* are dummy variables indicating whether the round includes such investment. Controlling for venture, round, investor, and industry effects, we analyze the relationship between *CVC* or *FVC participation* and *Investor concentration* using a panel generalized least square regression analysis with random-effects.

#### **Results and Implications**

Investors are less concentrated in investment rounds when FVCs or CVCs participate, demonstrating that relational uncertainty resides both at the VC-venture dyad level and among the syndicate's VCs. We demonstrate the consequences of CVC or FVC affiliation for new ventures and enrich our understanding of the investments provided by different types of VCs and their impact on syndicate partners.

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### DIFFERENT STROKES FOR DIFFERENT FOLKS – A SELF-REGULATION PERSPECTIVE ON IDEA GENERATION

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#### **Principal Topic**

The purpose of the present paper is to add to the small but growing number of studies that investigate individual-level factors in corporate entrepreneurship (e.g., Baron & Tang, 2011). We shed light on the question how employees can be influenced to act entrepreneurially on behalf of their employer. Employees contribute to organizational innovation through the generation of original and potentially valuable ideas concerning products, services, and processes (Zhou & George, 2001). We hence focus on idea generation. In developing our argument, we build on recent developments in creativity research and add personality differences provided by PSI theory (i.e., action- vs. state-orientation). Specifically, we suggest that action-oriented employees benefit from high initial negative affect when asked to generate original ideas while state-oriented employees do not. When receiving feedback, we suspect state-oriented employees to benefit from positive feedback and action-oriented employees to benefit from negative feedback.

#### Method

We chose an experimental design with repeated measures with 328 full-time employees working in a creativity-relevant environment. Participants rated their momentary affect and proceeded with the first creativity test (t0). Subsequently, the participants were confronted with either a negative or a positive feedback, which was randomly assigned to them. The participants proceeded with the second creativity test (t1). We then asked them to evaluate the perceived feedback. We measured their action-orientation and controlled for age and sex. For both tests, two independent coders rated each unique idea for originality on a five-point Likert-scale. We applied various hierarchical linear regression models.

#### **Results and Implications**

As hypothesized, our results show that initial negative affect increases the originality for action-oriented employees but not for state-oriented employees. When receiving feedback, state-oriented employees benefit from positive feedback, whereas their action-oriented counterparts benefit from negative feedback. Hence, our results indicate that potential corporate entrepreneurs need considerably different organizational stimuli. We provide an understanding of how employees differ in their ability to handle their emotions and feedback reactions. Moreover, the patterns we identify provide a detailed understanding of how affective self-regulation determines the kind of feedback employees should get in order to fully unfold their creative potential.

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### GOING ABROAD TO WIN AT HOME: NEW VENTURE INTERNATIONALIZATION AS A LEGITIMATION STRATEGY

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#### **Principal Topics**

Recent research has established the importance of ventures' domestic circumstances for their internationalization (e.g., Milanov & Fernhaber, 2014). For example, Guler and Guillen (2010) showed that domestic network advantage helps in overcoming the lack of legitimacy in foreign markets. Surprisingly, fewer studies have explored the reverse effects – why and how an early international presence may support new ventures' domestic market positions. Scant extant work in this area focused mostly on learning arguments (e.g., Jones & Coviello, 2005). We seek to understand whether early internationalization may also act as a signal that improves ventures' legitimacy with domestic audiences.

#### Method

We study US-based venture capital firms (VCFs). Young VCFs face the same liabilities of newness as startups: they are known to pursue legitimation strategies (Gompers, 1996) and prior work explored the importance of early signals for newcomer VCFs (Milanov & Shepherd, 2013). Since VCFs predominantly invest locally and typically only more established VCFs invest in distant markets (Sorenson & Stuart, 2001), early internationalization could be an important legitimacy signal.

We use propensity score matching to construct a matched sample consisting of (1) 120 VCFs in the year of their first internationalization activity and (2) 120 nearest neighbor VC-firm-years that have never internationalized but are highly similar across several important observable characteristics. We employ three dependent variables to reflect the change in legitimacy with each of the key domestic audiences: institutional investors, syndication partners, and portfolio companies. Operationalization of all variables follows prior research in legitimation and venture capital literature.

#### **Results and Implications**

Our results confirm the legitimacy effects of early internationalization across three audiences. Specifically, VCFs that internationalized early were able to receive follow-on funding faster, build a stronger network position, and attain higher levels of portfolio company quality compared to a matched sample of VCFs that did not internationalize. Our study makes several contributions to the literatures on international entrepreneurship and strategic legitimation. In particular, we contribute to the research on the transferability of benefits in internationalization to a domestic market and add to the understanding of different types of legitimation strategies.

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### WORKING FOR DIVERGENT PRINCIPALS: EFFECTS OF PRIVATE EQUITY ON EMPLOYMENT LEVELS AND EMPLOYMENT TERMS IN FAMILY FIRMS

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### Principal topic

Corporate governance research generally rests on the assumption that ownership constituencies have homogeneous preferences. More recent, research on public firms highlighted that owners may also have varying interests (e.g. Connelly et al., 2010; Hoskisson et al., 2002). Interestingly, this issue of heterogeneous ownership preferences may also be applicable to an increasingly prevalent form of private business, namely private equity (PE) backed family firms. Whereas PE investors focus on medium-term value maximization, family owners generally have long-term objectives, which are not always economic in nature.

In this study, by adopting a principal-side perspective, we examined how the potentially conflicting interests of PE investors and family owners impact employment decisions in PE-backed family firms. While family members are concerned about maintaining long-term employee relationships in order to preserve socioemotional wealth, PE firms have been criticized for creating shareholder value at the expense of employees.

### Methods

Our empirical analyses are based on a sample of Belgian PE-backed family firms and several control groups comprising both family firms without PE backing and non-family firms (PE-backed and non PE-backed). The Belgian setting offers access to unique and detailed employment and employment term data at firm level that typically can only be accessed through surveys. We used propensity score matching with difference-in-differences as a modelling strategy.

### Results and implications

Results suggest that employment related decisions in PE-backed family firms are strongly related to ownership structures. While PE firms unleash unexploited growth potential when taking full control of family firms, employment growth remains unchanged when PE investors only acquire a minority shareholding. Furthermore, in contrast to expectations, PE control does not worsen employment security and wage levels in family firms.

Our results imply that, to understand decision making in private firms, one must consider that shareholders may have divergent abilities and goals. While several studies explored how varying preferences of shareholders impact executive decision making in public firms, there is a need to acknowledge that also in private firms, principals may have divergent interests influencing decision making. Further, our results inform policy makers, family firm owners and employees about the impact of PE on employment practices.

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### PAYING IT FORWARD?: THE IMPACT OF IDENTITY ON CO-OPETITION IN THE CRAFT BEER INDUSTRY

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### **Principal Topic**

Over the past decade, the concept of co-opetition, or simultaneous competition and cooperation between firms, has increasingly received scholarly attention. We address three important gaps in the literature on co-opetition in this study. First, current understanding of co-opetition is restricted to the innovation context. We examine co-opetition across all business processes, from raw material to sale of the finished product. Second, prior studies assume mutually-beneficial transactions between firms (Bengtsson & Kock, 2000). This has resulted in a lack of insight into collaborative actions where one firm benefits disproportionately over another. Third, research has explored co-opetition as a single, collaborative event, whereas we examine co-opetition as a set of on-going actions and interactions. Therefore, this study looks beyond innovation and mutually-beneficial contexts to examine what drives entrepreneurs' decisions to engage in co-opetition?

### **Methods and Key Propositions**

Given the relative paucity of research examining the factors driving co-opetitive actions (Hoffmann et al., 2014), we used an inductive, qualitative approach to study entrepreneurs in the craft beer industry across 2 countries (United States and Belgium) and 3 distinct US regions (rural, mid-sized market, and major metropolitan area). Specifically, we conducted semi-structured interviews and verbal protocols with approximately 30 founders and owners of craft breweries. We then employed content analysis techniques to analyze the interviews.

### **Results and Implications**

By drawing on identity theory to explain entrepreneurs' competitive and cooperative actions, we make three important contributions. First, we find that a shared collective identity fosters a *pay it forward* mentality in which established craft brewery owners help others because they too once benefited from cooperation. Second, we counter-intuitively find that craft brewery owners believe that *a rising tide lifts all boats*, and accordingly, they believe the growth and legitimacy of their industry will benefit from additional high-quality competitors. Finally, we extend recent efforts to understand the inter-relationship between entrepreneurs' social and role identities (Mathias & Williams, 2014; Powell & Baker, 2014). We find that the way entrepreneurs collaborate changes over time as dynamics within the social group evolve. Together, we further our understanding for how identity impacts co-opetition.

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## LIFTOFF? THE IMPACT OF ENTREPRENEUR AND VENTURE SOURCES OF LEGITIMACY ON FUNDING PERFORMANCE IN THE PRIVATE SPACEFLIGHT INDUSTRY

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### **Principal Topic**

Legitimacy is directly related to resource acquisition (Meyer & Rowan, 1977). Institutional theory has provided a strong framework for examining this process. Independent Venture Capital (IVC) has emerged as a major funding source in the past four decades and new ventures have traditionally relied on IVC firms to provide financial and managerial resources (Park & Steensma, 2011). Prior work has highlighted the role of media on the perceived status or reputation of ventures (Dimov et al., 2007) and IPO performance (Pollock & Rindova, 2003). However, research has yet to examine how other sources of legitimacy – including cognitive, regulatory, and industry – may interact with the media attention, a normative source of legitimacy, in impacting resource acquisition performance. Moreover, we focus on the role of media on new ventures' fundraising through various rounds over time.

### Method

We are constructing an event history study of 52 commercial space firms founded in 1994 or later with a focus on examining all legitimacy-determining events for the period 1994-2014. Our data is drawn from the Venture Expert, Lexis-Nexis and Census datasets as well as from proprietary data. We examine both capital acquisition and survival outcomes for a total of 6,384 firm-months. We examine variables accounting for a number of different types of legitimacy: cognitive (prior entrepreneurial experience of the venture founder), industry (board memberships of the venture founder, industry and venture success in meeting flight test competition goals), and normative (media volume and tenor).

### **Current Results and Implications**

We argue that an increase in the legitimacy based on media exposure will enhance VC probability of funding the venture and increase the probability of survival or merger. We also argue that tenor of media exposure matters and that greater overall positive exposure would make VCs more confident of the potential success of the venture (Pollock and Rindova, 2003; Suchman, 1995). The study is currently in process. We contribute to the literature by developing a theoretical connection between media bestowed legitimacy and fundraising performance in the presence of the moderating effects of other sources of legitimacy.

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# SOWING THE SEEDS TO SOLVE A "WICKED PROBLEM": EXAMINING HOW WOMEN AND MEN ENTREPRENEURS IN THE U.S. SUSTAINABLE AGRICULTURE INDUSTRY DIFFER IN THEIR EFFORTS TO COMBAT FOOD-RELATED SOCIAL INJUSTICE

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### **Principal Topic**

Research on gender differences in entrepreneurship has garnered much interest. Recently, studies have examined differences in the economic and social goals of women and men entrepreneurs (Meyskens, Brush and Allen, 2011). One particularly relevant social issue is the "wicked" problem associated with the U.S.'s institutionalized and highly processed food market. We integrate the topics of sustainability and gender in entrepreneurship and conduct an exploratory study about the ways women and men entrepreneurs create, build, and finance sustainable food-related ventures. As such our research contributes to and extends research on environmentally responsible entrepreneurship (Meek, Pacheco and York, 2010) and gender in entrepreneurship (Sullivan and Meek, 2012).

### Method

The sample for the study includes all successfully funded crowdfunding campaigns between 2009 and 2012 on sustainably-oriented businesses in the Food category on Kickstarter (n = 126). The data were compiled from secondary data sources including the Kickstarter websites, company websites, Facebook pages, news websites and other secondary sources. Variables collected include amount of funding raised, funding goal, size of the founder's social network, number of crowdfunding backers, quality signal data (press received), and individual founder data, etc.. Data were analyzed using frequencies and ANOVA.

### **Results and Implications**

Our findings suggest that women account for nearly half of all food-related sustainable crowdfunding campaigns. Results also revealed 1) the amount of money raised for social, green, and mixed social/green businesses does not statistically differ for businesses founded by women compared to men or mixed-gender teams, 2) no significant differences were found in the social network characteristics of women and men, 3) men have created and successfully crowdfunded more ventures with a mixed social/green component than women, 4) for social and mixed social/green firms men, are more likely to pursue product expansion than women. Overall, the results suggest gender differences are minimal for sustainable food-related ventures seeking crowdfunding. We believe this may suggest crowdfunding as a viable and gender-neutral financing instrument. Further, we believe these results may tentatively suggest women are increasingly leading the charge in launching and developing sustainable businesses.

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## THE PERFORMANCE OF SOCIAL VENTURES PURSUING MULTIPLE OPPORTUNITIES: UNCOVERING THE MODERATING EFFECT OF ORGANIZATIONAL TASK ENVIRONMENTS

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### **Principal Topic**

In their quest to create and scale social value to address social issues or catalyze social change, social ventures often pursue more than one opportunity simultaneously, which may hurt performance. At the same time, exploiting multiple opportunities may be necessary depending on the requirements of the specific social issue being solved. We propose that the performance of organizations exploiting multiple opportunities depends on the task environment in which the organizations belong. The organizational task environment is composed of other organizations that complement or compete for resources and markets with the focal organization. According to Dess and Beard (1984), organizational task environments consist of munificence, complexity, and dynamism. Given the complexity that pursuing multiple opportunities entails and the increased resource requirements, we predict that social ventures exploiting multiple opportunities will, in general, underperform those that exploit a single opportunity. Additionally, we predict that a munificent environment will weaken the negative relationship between exploiting multiple opportunities and performance. We further predict that complexity and dynamism will exacerbate this relationship. Finally, we propose another dimension of the organizational task environment, which we term environmental multiplicity. This dimension refers to the degree to which other organizations in the task environment pursue multiple opportunities. We expect environmental multiplicity to positively impact the relationship between pursuing multiple opportunities and organizational performance.

### Methods

The sample for this study is comprised of all registered charity organizations in Canada between the years 2005 and 2010. Data was obtained from the T3010 tax form, which includes questions relating to organizational programs, revenues, and expenditures. Our performance measure is organizational survival. Thus, we employ Cox proportional hazard models to test our hypotheses.

### **Results and Implications**

Preliminary results support our predictions, including the existence of, and variance within, the environmental multiplicity dimension. Our results contribute to the social entrepreneurship literature by uncovering the influence that the task environment exerts on the relationship between multiple opportunity exploitation and performance. We further contribute to social entrepreneurship by proposing modified measures of the organizational task environment dimensions that are more appropriate to the social venture context. Finally, we theoretically advance a novel and salient dimension of the organizational task environment that is applicable to social ventures.

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### A REVIEW AND META-ANALYSIS OF THE NOMOLOGICAL NETWORK OF BOOTSTRAPPING IN SMALL FIRMS

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### **Principal Topics**

One shared characteristic of emerging ventures is that they lack the resources needed for firm survival and growth. Accordingly, the pursuit of creative ways of acquiring resources in non-traditional ways—without borrowing money or taking on equity financing—is a defining entrepreneurial behavior in new and small ventures. This behavior is known, among researchers and practitioners alike, as bootstrapping. After nearly three decades of research, there is no quantitative synthesis of the literature. In the present work, we perform such a synthesis.

### Method

To identify relevant literature, we first searched computerized databases. Next we searched major journals in entrepreneurship, management, and strategy and relevant conferences. Then we used Google and Google Scholar to locate as many relevant articles as possible. Finally, we contacted bootstrapping scholars to request unpublished/working papers, raw data, and missing correlation matrices in their papers. Our initial search returned 1,037 articles. We then employ our inclusion criteria, which leaves 22 studies in the analysis. After coding all studies, we performed psychometric meta-analysis developed by Hunter and Schmidt (2004).

### **Results and Implications**

We find no significant overall relation between bootstrapping and small firm performance. However, we find a number of interesting relations. First, type of firm performance examined moderates the relation such that bootstrapping is negatively related to profitability. Also, type of bootstrapping moderates the relation. Customer-related, delay payment, and joint utilization bootstrapping are positively related to firm performance. Third, when percentage of male respondents is high, the relation between bootstrapping and small firm performance is lower relative to when percentage of female respondents is high. Fourth, when a firm is old, the relation between bootstrapping and small firm performance is lower and less negative relative to when a firm is young. Finally, firm age, entrepreneurial experience, management experience, education level, human capital, and social capital are all positively related to bootstrapping; while owners' age is negatively related to bootstrapping. In sum, we illustrate the nomological network, antecedents as well as consequences, of bootstrapping behavior in small firms.

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## BIOLOGICAL FACTORS, INDIVIDUAL TRAITS, AND ENTREPRENEURIAL INTENTIONS: THE MEDIATING ROLE OF ENTREPRENEURIAL SELF-EFFICACY AND NEED FOR COGNITION

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### **Principal Topic**

It is the individual who discovers opportunities and brings them to life. Before one decides to exploit an opportunity, he/she should have developed a psychological intention to determine whether opportunity exploitation is a desirable and feasible option. Entrepreneurial intention, defined as one's intent to start a business, is thereby regarded as an important construct because it is considered as the first critical step in the process of becoming an entrepreneur and intention is the single best predictor of planned behavior. Despite a plethora of research studies related to entrepreneurial intention, several research questions still remain unresolved. The present study addresses several of these unresolved questions and makes several contributions.

Drawing from literatures on the biological characteristics of individuals and individual differences, we propose the 2D:4D ratio and several individual traits such as emotional intelligence, cognitive ability, and rebelliousness are antecedents to entrepreneurial intentions. Our theoretical model also examines entrepreneurial self-efficacy and need for cognition as mediators between psychological traits and entrepreneurial intentions.

### Method

Our sample consists of business school students at a large, southeastern, urban university. In addition to collecting survey data on individual traits such as emotional intelligence, cognitive ability, rebelliousness, and entrepreneurial intentions participants' 2D:4D ratios were collected and the Wonderlic Classic Cognitive Ability Test was administered to measure participants' cognitive ability. We use structural equation modeling to analyze our proposed conceptual model and perform hierarchical multiple regression analyses to assess the incremental validity of observer ratings of individual traits relative to self-reported ratings of individual traits.

### **Results and Implications**

This paper makes several important contributions to the biological characteristics and individual differences literatures. First, we contribute to the extant literature by testing several understudied individual traits such as emotional intelligence, cognitive ability, and rebelliousness. Second, we test mediating mechanisms between individual traits and entrepreneurial intention. For entrepreneurs, this research begins to clarify biological and individual trait influences on individuals' intent to pursue entrepreneurial opportunities.

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### POPULAR MEDIA AND INDIVIDUAL OPPORTUNITY SEARCH BEHAVIORS

Doug Miller, Virginia Commonwealth University, USA David Noack, Weber State University, USA

### **Principle Topic**

The growing popularity of entrepreneurship focused television programs, such as Shark Tank and Dragon's Den, has contributed to a growing interest in entrepreneurship among the general public. Individuals may have never considered the possibility of starting their own business but are encouraged by the "everyday" stories which these programs present. This research is focused on identifying the factors which promote greater interest in entrepreneurship and an increase in opportunity identification behaviors. The success of the top down approach utilized by the US government has been questioned and many believe that the bottom up approach is much more successful. Despite a range of literature examining entrepreneurial intent and attempts to examine intent as an antecedent, very little has been done to offer a clear understanding of how intentions translate into actions. By identifying important general environment trends and demographic factors, we are able to better describe the ideal approach for promoting entrepreneurial search behaviors.

### **Theory**

Our arguments are based on past literature which has offered explanations for entrepreneurial intentions. Davidson and Wiklund (2001) suggested that entrepreneurial intentions are influenced by both organizational and individual factors, but studies have yet to adequately examine the interplay that these factors have. Sankar, et al. 1991 found that organizational factors have a distinct impact on individual perceptions concerning entrepreneurial intention, but there is little understanding concerning the inconsistent affects these factors have on individuals. According to Mitchell et al. (2002), entrepreneurial education, social context, and cultural values play a role in entrepreneurial intent. We argue, however, that by examining action rather than intention, we can better identify the factors which are most influential in the process.

### **Implications**

Our inquiry contributes to literature in several ways. First, we extend previous understanding of entrepreneurial intentions. Second, we empirically examine the influence that popular culture has on an individual opportunity search behavior. We also provide additional context to the debate concerning entrepreneurial education and new venture startup. Our results indicate that environmental factors have a significant influence on decisions to engage in entrepreneurial opportunity exploration. Last, our data indicate that SBA funding and job creation rates do not have as significant an impact on entrepreneurial intent as described by previous literature.

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### WHO RAISES FUNDS IN MARKETS DOMINATED BY GOVERNMENT INTERVENTION? EVIDENCE FROM THE FRENCH VENTURE CAPITAL INDUSTRY

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### **Principal Topic**

Research from the US venture capital (VC) market evidences that better performing VC firms raise larger funds (Kaplan and Schoar, 2005). Furthermore, VC partners' human capital characteristics which predict successful exits where found to also have a positive impact on the fund raising activity (Zarutskie, 2010). The French VC industry represents a particular environment with persistent negative returns and an increasing share of funding coming from the government and tax subsidized vehicles since the financial crisis. Apart from considering past experience and education of VC partners as accumulated human capital (Dimov and Shepherd, 2005), we can look upon them as a set of social networks developed in their previous organizations (Pennings, 1998). Although some types of social networks can be beneficial for VC fund performance (Hochberg et al., 2007), research has shown that they can also lead to major inefficiencies (Kuhnen, 2009). In a VC market which is not driven by performance, these ties can have a major role in fundraising activity.

### Method

This study is based on a hand-collected database of funds raised by French VC firms (N=430). The variables relating to VC partners' professional experience and networks are proportions as used by Dimov and Shepherd (2005) and Zarutskie (2010). Our dependent variable is the natural logarithm of raised funds in millions. We use the OLS regression. Standard errors are computed using Huber-White sandwich estimator and are clustered at VC firm level.

### **Results and Implications**

We run two separate regressions: first for funds raised from institutional investors and the second for tax-subsidized funds raised from private individuals. Our findings suggest that social ties of VC partners, such as networks from elite business and engineering schools in France as well as experience from the public sector, impact positively the size of raised institutional funds. When it comes to tax-subsidized vehicles, the major determinant of fundraising are the ties of VC firms with collectors of these funds, i.e. banks and insurance companies. Our research has important policy implications, as it points out that the government might improve performance of the VC industry by channeling funds to the most promising VC firms.

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### STAKEHOLDER THEORY AND THE EMERGENCE OF OPPORTUNITIES

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### **Principal Topic**

Somewhat implicit in the process of opportunity creation is the human interactive component of producing social constructs. To understand how these interactions shape the emergence of opportunities, we draw upon stakeholder theory and adopt an interaction as our level of analysis. In this paper we therefore seek to connect stakeholders to opportunity emergence. We do so by defining an opportunity emergence stakeholder to be: those actors, without whose participation, an opportunity would not come into existence. These stakeholders are not accounted for in current theory. We further define an opportunity emergence stake to be: the set of interactions that socially construct experiences which then become an opportunity emergence stake that enables a social actor to at least partially address supply or demand uncertainties associated with an opportunity.

### Methods

In this study we examine in-depth interviews with 17 biotech entrepreneurs who developed healthcare innovations that cater to the needs of the "bottom of the pyramid" (Prahalad, 2004). Interviews were carried out onsite, and followed up with emails for any clarification. We also interviewed individuals from industry associations, government agencies and incubators, with whom start-ups are expected to interact. We asked about motivations, prior experience, and interactions they had with other stakeholders.

### **Results/Implications**

From these interviews, we excerpt various relevant dialogue; and we present a rich and revealing narrative that enables scholars to begin to resolve the current need for a stakeholder-theory-based understanding of opportunity emergence. In doing so, we demonstrate that two types of "stakes" arise, due primarily to two types of linkage: (1) linkage to prior technological experience, or (2) linkage to prior marketplace experience, of the actors. Prior technological experience implies the existence of "supply"; and it further suggests that such actors can be expected to be "solution focused" (i.e. they have developed some means/ technology required to solve some problem). Prior marketplace experience implies the existence of "demand"; and it further suggests that such actors can be expected to be "problem focused" (i.e. they are aware of the problems within the marketplace which lack solutions). We suggest how these two types of stakes interact to effect opportunity emergence.

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### A SIGNALING THEORY OF ENTREPRENEURIAL VENTURE'S VALUATION: EVIDENCE FROM EARLY TERMINATION OF VENTURE CAPITAL INVESTMENT

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### **Principal Topic**

Entrepreneurs seek venture capital support not only for financial support; but also since the backing of VCs is a quality signal to the market. In this paper, we aim to draw from signaling theory to shed light into how the early termination of investment in an entrepreneurial venture by an existing investor conveys a negative signal, resulting in a "side-effect". We argue the side effect is a consequence of the presence of information asymmetry in entrepreneurial financing. Information asymmetry is a prevalent feature of entrepreneurial financing since entrepreneurial ventures have a short track record of performance and lack legitimacy. We find that the decision of potential investors is adversely affected if an investor gives up funding the subsequent rounds of financing, furthering adverse selection problems.

### Method

We construct a sample of 5,016 round of VC investment in 1,728 entrepreneurial ventures that received more than one round of investment. We apply the Heckman two-stage framework to control for the endogeneity of VC early termination and examine the impact of VC early termination on the financial terms and quality of potential investors in the next round of financing.

### **Results and Implications**

By controlling for quality of entrepreneurial ventures we find that early termination is associated with lower valuation in subsequent round of financing and also reduce the attractiveness of the venture by attracting lower quality potential VCs in its follow-on round of investment.

Our goal is two-fold in this paper; first, we reveal the manifest of negative signal in the subsequent valuation of the venture, which has experienced early termination of investment. We report results in entrepreneurial finance, consistent with Akerlof's prediction (1970). Akerlof (1970) uses the markets for used cars to demonstrate a discount in price is followed by exacerbated levels of information asymmetry. Second, we seek to examine the view held by economists that accreditation of party that originates the signal may moderate the (negative) perception of the signal, ceteris paribus. We find that the prominence of VC leaving the venture and stage specialization of VC are moderating the negative signal of early termination on venture's valuation to different degrees.

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### INSTITUTIONAL CHANGE AND VENTURE CAPITAL INVESTMENTS

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### **Principal Topic**

The institutional development of countries is an important determinant of venture capital (VC) investments (Guler & Guillen, 2010b; Khoury, Junkunc & Mingo, 2015). VC firms are more likely to invest in countries that provide certainty regarding the appropriability of economic returns on investments. The attention to the impact of the macro-environment on VC activity is a relatively recent phenomenon. In this study, we analyze the change in VC investments after a major institutional change. In particular, we look at the effect of the introduction of a common currency in Europe, the Euro, on the venture capital investments of VC firms based in Europe.

### Method

We collected data on VC firms from Euro and non-Euro countries that invested before and after the introduction of the Euro. We included VC investments from 1993 to 2004. Our sample contains 215 VC firms based in Europe: 100 of those are Euro VC firms and 115 are non-Euro VC firms. The investment data are obtained from Thomson ONE.

Following studies from the finance literature (Bris, Koskinen & Nilsson, 2006, 2009, In press), we implement a difference-in-difference analysis to estimate the effect of the Euro on VC activity. Specifically, we analyze the effect of the Euro in the amount and the number of investments made by VC firms. We define the year 1999 as the first year after the introduction of the Euro. In this design, the Euro VC firms are the treated group and the non-Euro VC firms are the control group. The treatment effect is determined by comparing what happened to the Euro firms before and after the treatment against what happened to non-Euro firms before and after the treatment.

### **Results and Implications**

We find that not all firms can make the most of the Euro. In particular, our results show that VC investments after the Euro increase as the size of the VC firm and the number of investment partners increase. We also find that having international experience prior to the Euro has a positive effect on VC investments after the introduction of the Euro. The results of this study can provide an explanation on how institutional change can foster entrepreneurial activity.

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## BOOSTING EARLY STAGE INNOVATIVE NEW VENTURES AND BUILDING ENTREPRENEURIAL ECOSYSTEMS: AN EVALUATION OF A PUBLIC ENTREPRENEURSHIP PROGRAMME IN TRENTINO (ITALY)

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### **Topic**

Although there is general agreement about the importance of assessing publicly supported entrepreneurship programmes, the design and implementation of reliable evaluations of such public interventions deserve further theoretical and empirical attention (Audretsch, Grilo and Thurik, 2007), especially in the case of those directed at early stage innovative ventures (Norrman and Bager-Sjogren, 2010). Moreover, although studies of new venture creation have shown that no single pattern of events is common to all new ventures (Carter, Gartner and Reynolds, 1996) our understanding of the venturing process remains highly fragmented (Moroz and Hindle, 2012). Therefore some scholars have argued that we have prematurely measured the impact of entrepreneurship policy initiatives without a good understanding of the actual venturing processes. In this paper we investigate how the design, implementation and evaluation of public initiatives that aim to improve entrepreneurial activity interact with the venturing processes in a specific system.

### Method

Using mixed methods we study a public initiative called 'Seed Money' started by the local government of Trento (Italy) to support the creation of new innovative ventures. We have collected primary and secondary data on the first two editions of the scheme for respectively 23 new ventures in 2009, 40 in 2011, and a 'control group' of 4 start-ups. To understand its impact and how venturing is contextually taking place we conducted a static analysis of the 67 ventures at significant points in time, and a dynamic analysis of 12 cases.

### **Results and Implications**

Our analysis shows how the scheme boosted the quantity and quality of local entrepreneurial activity. We find positive effects on the processes of new venture creation and early survival. The initiative is accelerating the growth of a few start-ups with stronger teams and organizational processes that were able to access knowledge within and outside the local ecosystem. These ventures appear smart enough to know 'what they do not know' and access and absorb better the external knowledge they need. By doing this they become key players in developing further the local entrepreneurial system. Overall, the paper reframes venturing and building entrepreneurial systems as interactive and contextual processes based on experimentation and learning.

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### BUILDING ENTREPRENEURIAL EXPERTISE: THE IMPORTANCE OF SELF-REGULATORY BEHAVIORS ON THE LONG ROAD TO MASTERY

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### **Principal Topic**

A common aim across many disciplines is to understand why it is that certain individuals attain unusually high levels of performance in their respective fields. The study of expertise in the field of entrepreneurship, however, is still in its infancy, as scholars strive to identify those personal, behavioral, and environmental characteristics that influence skill development. Prior expertise research indicates that the development of expertise is primarily driven by participation in intense, prolonged, and highly focused efforts of deliberate practice. The literature on deliberate practice suggests that individual self-regulatory characteristics are important components of long-term skill development. Consequently, this study seeks to explore the relationship between salient self-regulatory characteristics and the development of overall entrepreneurial skills. We hypothesize that there is a direct positive relationship between three different factors: (1) perseverance, (2) learning goal orientation, and (3) metacognition and entrepreneurial expertise. Additionally, we propose that the relationship between learning goal orientation and expertise is positively moderated by metacognition such that the relationship is more positive when entrepreneurs' metacognition is high than when it is low.

### Method

We collected survey data from 204 entrepreneurs with businesses located mostly across the midwestern United States. Most of the measures used in the study have been previously established and validated. The article's hypotheses were tested using hierarchical linear regression.

### **Results and Implications**

Results show that our model explains a significant amount of the variance in entrepreneurial expertise. In addition, the results support our hypotheses suggesting a positive relationship between the three self-regulatory factors (perseverance, learning goal orientation, and metacognition) and entrepreneurial expertise. In doing so, this study complements prior work in the expertise and deliberate practice domains by confirming the importance of self-regulation to ongoing skill development. Additionally, and in contrast to our hypothesis, we found that metacognition negatively moderated the relationship between learning goal orientation and expertise development. Our study holds important implications for entrepreneurs as they seek to improve their various skills, thereby improving the chances for new venture success.

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### COMPARING INITIAL FINANCING FORMS TO DETERMINE THE EFFECTS ON NEW VENTURE PERFORMANCE

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### **Principal Topic**

Financial capital is one of the fundamental resources needed to start and operate a firm (Cooper, Gimeno-Gascon, Woo, 1994), and is a main factor in the performance of new firms (e.g. Cressy, 2006; Parker & Van Praag, 2006). Many founders have to look externally for financial capital as they are personally constrained financially when trying to start and operate their firms due to a lack of personal wealth (e.g. Evans & Jovanovic, 1989). Debt and equity are two of the main forms of external financing that founders consider sing to finance the new firm's operations. These two forms of financing are readily used by a number of firms as they grow and mature (Berger and Udell, 1998). These financing options offer different benefits to new firms that could affect their performance, with prior studies finding that the amount of equity and the amount of debt used by the firm positively affects new firm performance (e.g. Astebro & Bernhardt, 2003; Cooper et al, 1994; Vanacker & Manigart, 2006).

Past research suggests obtaining any type of financing, as long as it is enough to fund the business, is the best way to improve new firm performance. However, some entrepreneurs prefer debt (e.g. De Meza and Southey, 1996; Hackbarth, 2004; Landier & Thesmar, 2009), while other entrepreneurs either desire to obtain equity financing to improve cash flow during the early years or have to obtain equity financing due to market constraints (e.g. Stiglitz & Weiss, 1981; Vanacker & Manigart, 2006; Parker, 2009). Thus, this study addresses the research question: *Does the form of financing (debt or equity) used in the first year affect later performance of the firm?* 

### Method

Using the Kauffman Firm Survey, a 6-year longitudinal study is performed to test the hypotheses and to answer the research question. Survival and growth curve analyses are performed on the data set. The dependent variables in the analyses are firm growth (revenue, number of employees) and survival over an 6-year period, with the independent variables based upon if a firm used equity first, used debt first, or used both during the first year. A robust set of control variables is used in the analyses, including variables related to the founding team, the business idea quality, type of business (product/service), and technology level. Additional analyses are performed to test the robustness of the results, including financing options used in the second and third year of a firm's existence.

### **Results and Implications**

Results indicate using one financing form before another during the first year does not affect the growth of the firm, as there is no statistical difference between the financing form and new firm growth in the general sample of firms. However, when only high-growth firms are examined, using external equity only in the first year of operations leads to a higher level of external funding in later years, and ultimately higher growth of the firm. This supports prior studies that only examined high-growth firms (e.g. Baeyens & Manigart, 2006; Vanacker & Manigart, 2006). In addition, robustness checks indicate the use of a combination of debt and equity in years two and three lead to a larger amount of external funding and higher growth, indirectly supporting the financial growth cycle theory (Berger & Udell, 1998). And, since new firms are able to complete the development of their products in years two or three, these firms have the ability to find a market that will buy their product. This supports the notion that a firm should find product-market fit before scaling (Zott and Amit, 2008).

The preliminary results also show the use of debt during the first year is associated with a firm closing quicker (firm failure). This suggests that having to pay creditors on a regular interval during the early years of a firm hinders the cash flow of the firm, and leads to firm closure (e.g. Cressy, 2006).

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### ATTRACTED BY FIRE: THE ROLE OF PASSION IN ANGEL INVESTING

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### **Principal Topic**

A litany of research testifies that venture investors look for passion among entrepreneurs. Sudek (2006) theorizes that investors seek passion because they believe the start-up process is difficult and that entrepreneurs require commitment and enthusiasm to succeed. Perhaps investors believe passion is linked to the concept of tenacity and thus, perseverance (Cardon & Kirk, 2015). Although this appears logical, we are careful to acknowledge that passion and tenacity are not equivalent constructs. Moreover, there are at least two different types of passion: harmonious and obsessive. Harmonious passions are engaged and disengaged willingly whereas obsessive passions compel rigid persistence which can interfere with other domains of one's life. Vallerand and Verner-Filion (2013) contend that many studies show harmonious passions lead to more adaptive outcomes than obsessive passions. Taken together these streams lead us to two research questions. First, do venture investors seek passion in entrepreneurs or do they use passion as a proxy for other characteristics like tenacity? Second, what type of passion do venture investors find most attractive: harmonious or obsessive?

### Method

We examine these questions in two separate studies. Study #1 is a qualitative analysis of 64 angel investors who discuss the importance of passion among entrepreneurs. Study #2 builds on Study #1 in two parts: a pilot conjoint study of 43 angel investors evaluating their preference for obsessive versus harmonious passion among entrepreneurs and a separate study of 53 angel investors in a different conjoint experiment evaluating the relative importance of tenacity versus obsessive passion.

### **Results and Implications**

Study #1 indicates that passion is important to angel investors because it leads to tenacity and because it is contagious. Analysis of the pilot results in Study #2 indicates angel investors overwhelmingly prefer obsessive to harmonious passion among entrepreneurs. Analysis of the conjoint experiment in Study #2 indicates angels are more likely to invest when entrepreneurs exhibit high levels of tenacity, and that this relationship is positively moderated by passion. Interestingly, the main effect of passion is not significant, which alludes to the possibility that passion without tenacity is not attractive to investors.

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### PERSUASION SEQUENCES: A PROCESS APPROACH TO UNDERSTANDING INFLUENCE IN CROWDFUNDING CAMPAIGNS

Alex Murray, University of Washington, USA Suresh Kotha, University of Washington, USA Greg Fisher, Indiana University, USA

### **Principal Topics**

Persuasion is fundamental to resource acquisition for entrepreneurial ventures. Prior research has examined the importance of specific persuasion mechanisms employed by entrepreneurs to acquire resources (e.g., storytelling, identity claiming, passion), yet most of this research examines a single persuasion mechanism in isolation. Surprisingly little is understood about whether and how persuasion mechanisms are combined over time in ordered ways to enhance the resource acquisition efforts of entrepreneurs. To address this issue we examine three interrelated research questions: (1) whether and how entrepreneurs utilize and combine persuasion mechanisms in their efforts to acquire resources, (2) whether the quality and quality of persuasion mechanisms employed by entrepreneurs appears to influence the amount of resources they are able to garner, and (3) what antecedents enable entrepreneurs to enact and strategically combine persuasion mechanisms to increase their chances of acquiring resources.

### Methods

We use case studies as a basis for theory building and theory elaboration. We analyze and contrast rich qualitative and quantitative data from four successful and four unsuccessful crowdfunding campaigns in four different product categories on Kickstarter. The individual project data are coded and analyzed to assess the nature, veracity, timing, and effects of the various persuasion mechanisms utilized on each crowdfunding campaign.

### **Results and Implications**

We find that the quality and quantity of persuasion mechanisms employed by entrepreneurs during a crowdfunding campaign significantly impacts the level of outside interest in their entrepreneurial project, which in turn impacts the level of resources acquired for the project. We also find that an entrepreneur's mindset about a project—whether they have a growth or fixed orientation—impacts the learning actions that they take—active versus passive learning—prior to launching a crowdfunding campaign, and those actions impact the quantity and quality of the persuasion mechanisms employed. Our central theoretical contribution is a holistic framework of a sequential process distinguishing between the perceptions and actions of entrepreneurs participating in successful and unsuccessful crowdfunding projects.

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### THE IMPACT OF FAMILY HOUSEHOLD HEALTH ON ENTREPRENEURIAL ACTIVITY IN AN IMPOVERISHED CONTEXT

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### **Principle Topic**

Changes in family health represent pervasive and disruptive life events (Cooper & Marshall, 1976), but are generally taken for granted in entrepreneurship research. Households and their firms in developing contexts are particularly susceptible to health risks (Rai & Ravi, 2011) due to poor sanitary conditions and weak health-related institutions (Banerjee & Duflo, 2009). The business risks of health changes are exacerbated due to deeply embedded relationships and fluid boundaries between family and business in developing environments (cf. Aldrich & Cliff, 2003; Gras & Nason, 2014

We draw on transition theory (Bridges, 2004; Van Gannep, 1960) to develop and test a theory of the role of family household health in impoverished entrepreneurial activity. Specifically, we suggest that households create, close, and grow firms to cope with the family household health events of birth, death and major illness/injury.

### Method

We employ a mixed method-approach in this study. We use a longitudinal sample of 6,800 randomly surveyed family households and their firms within roughly 100 slums in Hyderabad, India to empirically test the relationships. Our DVs are: 1) new business creation 2) business closure, and 3) performance changes in existing business. Our IVs are whether or not a family household member: 1) was born, 2) died, or 3) suffered a major injury/illness. We complement this dataset with 35 interviews of micro-enterprise entrepreneurs in the same areas of Hyderabad collected in February of 2015. This qualitative data is used to inform and explicate the underlying theoretical mechanisms driving the empirical relationships we test.

### **Results and Implications**

We make two primary contributions with this research. First, by addressing household health, we add to recent literature examining unique challenges faced by entrepreneurs in developing economies such as crime (Sutter et al., 2013) and political conflict (Anderson et al., 2010; Tobias et al., 2013). Second, we extend transition theory by developing it in the context of impoverished family economic activity and move from identifying individual strategies to collective coping mechanisms of a family household. This approach opens up new avenues of theorizing regarding the transitional phases of the entrepreneurship process more broadly.

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### MOTIVATION AND VENTURE CREATION SPEED: COMPARING SOCIAL AND COMMERICAL ENTREPRENEURS

Scott L. Newbert, Villanova University, USA Narda R. Quigley, Villanova University, USA

### **Principle Topic**

Given the fleeting nature of opportunities and the resource-poor state of most entrepreneurs, time is of the essence during the emergence phase. Because motivation is a primary driver of individual action, we maintain it will be a strong predictor of the speed with which entrepreneurs create their ventures. We conceptualize motivation as tenacity, the archetypal entrepreneurship trait, and self-efficacy, the predominant construct in social cognitive theory, and hypothesize that each will increase venture creation speed. Moreover, in response to a recent call to explore whether motivation affects social and commercial venture creation differently, we hypothesize that the positive relationship between each motivational factor and venture creation speed will be weaker for social entrepreneurs, due primarily to their lack of experience and the additional obstacles they tend to face.

### Method

We test our hypotheses with the Panel Study of Entrepreneurial Dynamics II. Drawing on prior research, we operationalize venture creation speed as the number of months from the time the entrepreneur conceived of the business idea until s/he achieved positive cash flow, tenacity with two items capturing the degree to which entrepreneurs are prepared to sustain goal-directed effort over time, self-efficacy with three items measuring entrepreneurs' beliefs that they can start new ventures, and social entrepreneurs as respondents who want to start ventures to help others/the community and/or aid in the economy/economic development. We analyze the data using a weighted Heckman sample selection model, controlling for gender, race, education, age, household income, retirement status, industry experience, and start-up experience.

### **Results and Implications**

Our main effect results are mixed, with venture creation speed negatively related to tenacity and positively related to self-efficacy. While the effect of tenacity was no different for social and commercial entrepreneurs, the effect of self-efficacy was significantly weaker for social entrepreneurs. Taken together, our results suggest that motivation may be a double-edged sword and (particularly for social entrepreneurs) may not be enough where venture creation speed is concerned. Thus, communities in which social problems tend to exist might benefit social entrepreneurs and themselves by investing in local institutions so as to reduce the challenges associated with conducting business there.

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### MEETING EXPECTATIONS – WHY SOCIAL SKILLS MATTER MORE IN STRONG RELATIONSHIPS

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### **Principal topic**

Compared to other support types, emotional support is much less tangible and sensitive thereby increasing the risk of discrepancies between the intention of the support provider and how the support is perceived by the nascent entrepreneur. In this study, we are interested in how differences in entrepreneurs' level of emotional support are dependent on the social skills of support providers. By integrating role theory, we argue that strong relationships between individuals carry with them a number of expectations of support pressuring support providers to meet these expectations. We demonstrate how this pressure stimulates the use of relevant social skills to ensure the best support possible.

### Method

This study has support providers as unit of analysis and thereby changes the unit of analysis from ego (entrepreneur) to alter (support provider) compared to traditional studies of entrepreneurs' social networks. We use data from the Danish Alter Study of Entrepreneurship (DASE) which is a dataset consisting of individuals who all know someone in the process of starting up a business (N=458). We use linear regression with *provided emotional support* as DV, *social skills* as IV and *strength of the relation* as moderator.

### **Results and Implications**

We find that social skills of support providers have a positive influence on the emotional support provided to the entrepreneur (H1). Furthermore, we also show that the closer the support provider feels to the entrepreneur, the more emotional support is provided (H2). Finally, we demonstrate how social skills are more important for providing emotional support in close relationships (H3). Our study provides insights into the traditional discussion of structure and agency in entrepreneurship research by adding the perspective of the support providers. With our results, we show that social skills are not just tied to entrepreneurs, but that social skills of the people in entrepreneurs' networks also determine the support they receive. Furthermore, we underline that this is not a universal effect, but instead one that is contingent upon the role relation between individuals and the expectations that are tied hereto.

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### EQUITY CROWDFUNDING: FINDINGS FROM EUROPEAN EXPERIENCE

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### **Principal Topic**

Equity crowdfunding is a potentially important, but contentious, means of facilitating access to finance for young businesses. Some countries have regulated crowdfunding such that it is legal; however, regulators in North America continue to debate frameworks that balance investor protection with facilitating access to capital. Based on the JOBS Act, the Securities Exchange Commission released proposed rules on equity crowdfunding for public comment, but they have not yet been implemented. This study seeks to further inform this debate by reporting an analysis of four Europe-based, internationally-operated, equity crowdfunding portals: Companisto (Germany), Crowdcube (UK), Invesdor (Finland), and FundedbyMe (Sweden).

### Method

The study first compares platforms in terms of two contentious dimensions: information disclosure requirements for listings and risk advisory-based investor protection systems, linking these dimensions to platform performance. Second, using data comprising salient aspects of all 296 companies listed on those platforms, the research estimates multivariate models of factors associated with fundraising success. This two-stage approach allows inferences as to the impact of key factors on fundraising success, including cross-platform differences.

### **Results and Implications**

Better fundraising performance is most likely for:

- 1. Firms listed on platforms with more stringent disclosure requirements and that provide explicit risk warnings (Companisto and Crowdcube);
- 2. Young companies, especially those that have realized measurable growth;
- Firms with environmentally friendly products or that are engaged in educational businesses.

The results suggest that credibility of the platform requires a minimum level of information disclosure although Guzik (2014) argues that overly stringent regulation may make equity crowdfunding too expensive. That 80 percent of the companies disclosed at least three-years of financial statements (one year historical and at least two years forward) might provide a guideline for a reasonable level of disclosure. Nevertheless, for investment decision-making investors appear to rely more on qualitative aspects of the business (firm characteristics and entrepreneur backgrounds) rather than on financial statement data disclosed by the company. This might imply, consistent with the widely held view, that target participants in equity crowdfunding, unaccredited investors, are inexperienced in early stage investments. Alternatively and arguably more likely, it suggests that market participants are skeptical of unaudited financial information and entrepreneurs' (typically optimistic) projections.

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## DOES SELF-EMPLOYED WORK MAKE INDIVIDUALS NOT ONLY MORE ENTREPREURIAL BUT ALSO MORE NARCISSISTIC AND ANTISOCIAL? A 15-YEAR LONGITUDINAL PERSONALITY-BASED ANALYSIS

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### **Principal Topic**

The socialization effect, through which entrepreneurial work may systematically shape one's personality, remains an understudied research field. Here we ask: Does self-employed work leave an imprint in the individual personality structure? In fact, the psychological literature deems occupational socialization an influential mechanism in human development in context across the lifespan (Frese, 1982). Indeed, psychological research revealed a socialization effect of work experiences on personality characteristics including specific and broad traits (e.g., the Big Five personality traits) (Frese et al., 2007; Roberts et al., 2003). We study both "dark traits" (i.e., paranoid, schizoid, schizotypal, antisocial, borderline, histrionic, narcissistic, avoidant, dependent, and obsessive-compulsive; De Fruyt, 2013a, 2013b; Wille et al., 2013) and an entrepreneurial personality profile (Obschonka et al., 2013).

### Method

We analyse a Belgian dataset widley used in work psychology: The longitudinal research program on personality and career unfolding in a Flemish undergraduate alumni sample (De Fruyt & Mervielde, 1999; Wille et al., 2013). In total, 934 final-year college students from various faculties enrolled in this research program completed personality questionnaires three months prior to graduation (T1). 15 years later (T2), a smaller follow-up (N = 366) of this sample was conducted with the main purpose of investigating alumni career progression over this substantial and pertinent time interval. We conducted hierarchical regression analyses to estimate the socialization effect of self-employed work.

### **Results and Implications**

Whereas self-employed work showed no socialization effect on the other aberrant personality profiles in both genders, we found a positive socialization effect on the narcissistic and antisocial traits in males. Moreover, the data revealed a positive socialization effect on the entrepreneurial profile in the total sample. Engaging in self-employed work was associated with an increase in these "dark traits" and in the entrepreneurial profile over time. We further found a mediation effect of job autonomy behind the socialization effect of the entrepreneurial personality profile. By generating longitudinal findings, this study delivers new insights regarding the interplay between self-employed work and personality. The results, which underscore an occupational socialization-perspective, have implications for research and practice.

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### TOWARD A RESOURCE-BASED MODEL OF THE INSTITUTIONAL ENTREPRENEURSHIP PROCESS

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### **Principle Topic**

Recent years have seen a growing body of studies about "institutional entrepreneurship" published in management and entrepreneurship journals. DiMaggio's (1988) seminal definition argues institutional entrepreneurs are actors with sufficient resources, who create new institutions or transform existing institutions that favor their interest. Despite this centrality of resources in institutional entrepreneurship, prior literature has not thoroughly explored the strategic implications of resources (Levy & Scully, 2007), being "vague as to what is meant by 'resources' as well as what is done with them" (Hardy & Maguire, 2008, p. 207). To address this gap, we conduct a systematic review of the institutional entrepreneurship literature and develop a resource-based process model of the institutional entrepreneurship.

#### Method

Our data collection employed the methodological technique of systematic review originally developed by David and Han (2004) and later adapted by Newbert (2007) and Wales, Gupta, & Mousa (2013) given its objective, scientific, and transparent nature (Briner, Denyer, & Rousseau, 2009). We also consulted prior systematic reviews (Battilana, Leca, & Boxenbaum, 2009; Pacheco, York, Dean, & Sarasvathy, 2010) and special issues (e.g., 2007 Organization Studies). Due to the dominance of qualitative methods in institutional entrepreneurship research, our data analysis involved a content analysis method via NVivo 10 (Keupp & Gassmann, 2009) paired with a qualitative thematic analysis (Lane, Koka, & Pathak, 2006).

### **Results and Implications**

Our search yielded a total of 139 articles, which formed the basis of our review. NVivo identified 50 terms used to define resource(s), which then were classified into various types of resources, including material resources, organizational resources, and discursive resources. In line with Dorado (2005) and Battilana & Leca (2009), we used the most frequently used terms along with resources (i.e., "access," "mobilize," and "leverage") to develop three implementation stages of resource mobilizations. Our analysis identified relationships between resource types and implementation stages. The findings support our overall predictions; for instance, in the initial microlevel stage, where initiatives to enact institutional change are launched, both material resources (e.g., finance) and intangible resources (e.g., cognitive resources) were critical, whereas symbolic resources became more actively utilized at a later, more macro-level stage.

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### CROWDFUNDING PERFORMANCE OF USER ENTREPRENEURS: SIGNALING, PASSION, AND SOCIAL IDENTITY THEORIES

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### **Principal Topic**

User entrepreneurs are individuals who create and commercialize innovative products in response to their own needs (Shah, Smith, & Reedy, 2012). Though both user entrepreneurship and crowdfunding have increasingly gained prominence as drivers of innovations and fund raising for founding new ventures, research has yet to focus on the crowdfunding performance of user entrepreneurs. Further, these areas have largely evolved as two separate streams and there are important gaps in our understanding of: 1) Whether user entrepreneurs are relatively more salient in the eyes of crowd-funders as compared to regular entrepreneurs such that their crowdfunding performance is superior, 2) What are some of the factors that influence crowdfunding performance of user entrepreneurs? Drawing on signaling, passion, and in-group favoritism perspectives, we compare and contrast fundraising performances of user entrepreneurs and other entrepreneurs in the context of crowdfunding. We propose that user entrepreneurs are able to send signals of richer experience, knowledge and quality to potential crowdfunders resulting in positive evaluation and subsequent funding. We then hypothesize that entrepreneurial passion will mediate the relationship between user entrepreneurship and crowdfunding as it signals intense feeling and commitment to project, persistence, potential for commercialization and success to crowdfunding backers. We build on social and shared identity perspectives to propose that shared identity mediates the relationship between user entrepreneurship and crowdfunding success. User entrepreneurs' embeddedness in the community garners potential crowdfunders' support and favor as they share similar interests and values.

### Method

We draw 300 random samples from ventures soliciting funding via Kickstarter, consistent with prior crowdfunding studies (Mollick, 2014). We employ content analysis with two independent raters to code our user entrepreneurs, passion, and group membership variables.

### **Results and Implications**

Our results indicate that user entrepreneurs are more likely to succeed in crowdfunding campaigns than other (i.e., non-user) entrepreneurs. We found that both passion and embeddedness-based in-group favoritism mediate the relationship. This study contributes by integrating the insights of user entrepreneurship and crowdfunding literatures to compare crowdfunding performance of user-entrepreneurs vis-à-vis regular entrepreneurs. This study highlights the role of passion and shared identity on the relationship between user entrepreneurship and crowdfunding performance, and contributes to strategic entrepreneurship and behavioral literatures.

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### UNDERSTANDING THE DETERMINANTS OF HYBRID ENTREPRENEURSHIP

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### **Principal Topic**

Hybrid entrepreneurs are individuals who start their new venture while keeping paid employment. Since hybrid entrepreneurship is a relatively new area in entrepreneurship research, we attempted to systematically examine a fundamental question that is key to developing understanding of this phenomenon: What are some factors (e.g., demographic, psychographic and financial) that influence an individual's decision to become a hybrid entrepreneur? Prior research shows that hybrid entrepreneurs are less likely to take risks compared to full-time entrepreneurs and generally maintain favorable relationship with employer and keep current paid employment (Raffiee & Feng, 2013). Thus, we draw on the underlying logic of entrepreneurial risk taking propensity to develop our hypotheses. We examine whether demographic factors such as age, education level, entrepreneurial experience, and industry tenure influence hybrid entrepreneurship. Similarly, we analyze whether psychological factors such as entrepreneurial commitment and abilities expectancy influence hybrid entrepreneurship. We investigate the influence of household net worth, a financial factor, on hybrid entrepreneurship. We propose that individuals with older age, higher education level, shorter industry tenure, less abilities expectancy, less commitment, and lower net worth are more likely to become hybrid entrepreneurs.

### Methods

We used data from 777 nascent entrepreneurs from the Panel Study of Entrepreneurial Dynamics II. We coded an individual as hybrid entrepreneur if he/she still works for others for pay while starting a new business. Measures for independent variables are established measures used by prior entrepreneurial studies that used the same dataset. As the dependent variable is dichotomous – hybrid or full time entrepreneurship, we used hierarchical logistic regression. We controlled for gender, numbers of dependents, and types of paid employment, and social norms, among other variables.

### **Results and Contributions**

Our findings indicate that individuals with higher educational level, less prior entrepreneurial experience, higher commitment to new venture, and lower household net worth are more likely to become hybrid entrepreneurs as compared to full time entrepreneurs. We also found an inverted U-shaped relationship between age and hybrid entrepreneurship. This study contributes to the entrepreneurship literature by identifying and empirically testing which demographic, psychographic, and financial impact individuals to become hybrid entrepreneurs.

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### ENTREPRENEURIAL ROUND TRIPPING: THE BENEFITS OF NEWNESS AND SMALLNESS IN MULTI-DIRECTIONAL VALUE CREATION

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### **Principal Topic**

In this study, we develop and empirically test the theory that new entrants hold an advantage over incumbents in multi-directional value creation. Sometimes called "round tripping" (Piotek 2009), multi-directional value pertains to profits generated from the development of solution sets allowing goods and services to flow in more than one direction (Beamon 1999). Existing theories related to incremental innovation suggest that incumbents hold an advantage over smaller, newer firms in extracting value from dominant designs through secondary inventions and efficient-scale replication of existing technologies (Tushman & Murmann 1998). However, once incumbents achieve profitability through efficient scale production, they often become "locked into" existing technologies (Arthur 1989). For this reason, a contrasting stream holds that entrepreneurs from outside existing industries possess a superior capacity to develop and commercialize new solution sets (Christensen 1998; Hunt 2013). Under this set of assumptions, the logic supporting incumbent supremacy is inverted, so that smallness and newness may be assets in extracting value from round tripping.

### Method

Our design employs a Cobb-Douglass production function, modified to take into account returns to innovation (Dixit & Stiglitz 1977; Kortum 1997), and applied to three contexts: steamships on western rivers (1810-1860), satellite-based Internet service (1965–2010), and food waste recycling (1995-2015). Our design establishes the component sources of economic gains, which we regress in an econometric model structured as a head-to-head comparison between newcomers and incumbents. Steamship data was drawn from accounts of 510 ships, operated by 203 companies. Satellite Internet data came from USPTO, SEC and D&B documents for 168 service providers. Food waste recycling data was gathered through a survey of 114 firms operating in the segment.

### **Results and Implications**

Our findings reveal that new firms are largely responsible for the technological and organizational migration from unidirectional to multidirectional value creation. Despite enjoying a significant head start, incumbent firms appear to rely upon existing structures and capabilities in addressing the round-trip problem. Conversely, innovating entrepreneurs, who are comparatively unencumbered by such biases, appear to capitalize on fresh perspectives by developing value-enhancing solution sets. Our findings have implications for emerging multi-directional frontiers: social networking, commercial space travel and medical treatment using nanoscale technologies.

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### INNOVATIVE PATHWAYS THROUGH ADVERSITY FOR NEW VENTURES: THE IMPORTANCE OF SUSTAINING R&D INTENSITY DURING CRISES

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### **Principal Topic**

R&D activity has long been considered an important internal organizational driver of innovation in new ventures, improving their growth and performance. Yet, research has shown that severe adversities in the external environment at the macro level (economy downturns, restrictive credit or lending conditions) can substantively hinder innovative activities of new ventures. This is unfortunate, given that research has shown that only stable investments in R&D allow the firms to develop and sustain capabilities underpinning their competitive advantage. We posit that any disruption in the flow of funds to R&D can have a detrimental effect on knowledge creation and implementation in the form of new commercial outputs from the firm. And this in turn has long-term negative consequences for revenue growth, market position, and also the ability to retain and attract the best people to work in R&D.

In the proposed study we demonstrate that maintaining (or even increasing) the R&D intensity during times of economic crisis can be a bold and highly effective way to weather economic and market adversity.

### Method

The model is tested using a panel data (Kauffman firm survey), scrutinizing the new ventures' behavior in the midst of the 2007-2008 financial crisis and their performance after it, contingent on their change in R&D intensity in 2008. The key *predictor variable* is change in R&D intensity in 2008 comparing to 2007; key *outcomes* are post-crisis growth rate, performance, and likelihood of survival.

### **Results and Implications**

Obtained results support the proposed theoretical framework: the negative change in R&D intensity during the crisis is associated with significantly lower profitability and growth after the crisis, at the same time having insignificant impact on the chances of surviving after the crisis.

Theoretically, we emphasize the importance of not disrupting the R&D activity of innovative companies, as these actions lead to detrimental consequences for the post-crisis performance. For practitioners, the study shows that – despite conflicting demands on managers' attention and firm scarce resources during crises – R&D activity of new ventures should not suffer. Once R&D is disrupted, the prior accumulated knowledge is, to a large extent, lost, depriving the company of the competitive edge.

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### HOW ARE WOMEN ENTREPRENEURS PORTRAYED IN MEDIA? FOCUS ON KENYAN AND OMANI NEWSPAPERS

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### **Principal Topic**

The socio-cultural context within which an entrepreneur operates has an important impact on entrepreneurial outcomes (Welter, 2012). Studies indicate that mass media has an impact on public discourse as well as society's perceptions (Achtenhagen & Welter, 2011). Media reinforces the female stereotype and subsequently society's perceptions of the female entrepreneurship phenomenon (Schulz & Achtenhagen, 2013). Additionally, the way in which journalists' frame their stories in the media has an impact on policy makers. It could be argued that framing may ultimately affect the policies implemented by decision-makers, based on their perceptions of female entrepreneurship (Entman, 2010). However, limited studies have been carried out on the impact of media on the entrepreneurship phenomenon (Hang & Van Weezel, 2005), and those focused on examining the socialization process of women entrepreneurs in developing economies are dearth (De Vita et al., 2013). This study contributes to both streams of knowledge, by analyzing media in diverse socio-economic and cultural contexts.

### Method

Content analysis was used to analyze online media articles of the two largest national newspapers in each country. A total of 224 online articles (125 articles from Kenyan newspapers and 99 articles from Omani newspapers) were used. Framing was also used to determine the patterns and characterizations of the articles. Articles were also classified based on overall frames, their focus, and the motivations for venturing into entrepreneurship.

### **Results and Implications**

We find that while the media focuses on promoting women entrepreneurship in both contexts, one country prioritizes articles focused on the portrayal of women entrepreneurs, while the other prioritizes the initiatives aimed at promoting women entrepreneurship. In addition, while the articles on government/institutional initiatives consistently portray women entrepreneurs as in need of assistance, the media portrayal of women entrepreneurs is inconsistent. This contradictory portrayal sends ambiguous messages that could either encourage or dissuade potential women entrepreneurs. We find a need for a more diverse discourse regarding the impact of entrepreneurship, as well as a change in discourse for initiatives promoting women entrepreneurship.

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## AUTONOMOUS MOTIVATION AND AUTONOMY SUPPORT AMONG STUDENTS: APPLYING THE TRANS-CONTEXTUAL MODEL IN AN ENTREPRENEURIAL EDUCATIONAL SETTING

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### **Principal Topic**

The aim of this research is to identify potential differences in the psychological processes leading to entrepreneurial intentions and actions between students with and without entrepreneurial education experience. In order to do so, we study the diverse psychological factors that determine students' motivation to engage in entrepreneurial activities inside and outside the University. Following the main tenets of the Theory of Planned Behaviour, Self Determination Theory, Vallerand's Hierarchical Model of Motivation, structural equation modelling analysis indicates that students' entrepreneurial intentions lead to entrepreneurial behaviours over time (six months) and that entrepreneurial intentions are influenced by norms, attitudes and control, while the last two are affected by students' autonomous motivation to create a new venture. Contrary, multi-group analysis shows that autonomous motivation to create a new venture determines entrepreneurial intentions only for students who have participated in entrepreneurial courses. Most importantly, findings provide evidence regarding the applicability of the Trans-Contextual Model in the entrepreneurial domain by indicating that autonomous motivation in the University entrepreneurial education context is transferred in the venture creation context. Particularly, entrepreneurial education in the form of students' perceived autonomy support from educators positively affects the formation of entrepreneurial intentions via first, autonomous motivation to participate in entrepreneurial courses within the University, next autonomous motivation in the venture creation, and finally via personal attitudes and perceived behavioural control. University policy can extensively use our findings in order to promote entrepreneurship in an out of University setting by adopting a teaching style based on autonomy support and creating specialised training courses for educators in entrepreneurship.

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## LANGUAGE OF BUSINESS VERSUS LANGUAGE OF KINDNESS: A COMPARISON OF CROWDFUNDING CAMPAIGNS OF FOR-PROFIT AND SOCIAL ENTREPRENEURS

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### **Principal Topic**

Crowdfunding is becoming an increasingly important source of funds for artists, innovators, and entrepreneurs alike. Extant studies have identified several factors leading to crowdfunding success, focusing mostly on non-verbal factors. However, according to the research in psycholinguistics, the words that we use reflect our attentional focus, emotional state, thinking styles and personal characteristics. There is even some evidence suggesting that the frequency with which individuals use certain word categories are linked to some performance outcomes, such academic or job performance. Our goal is to determine how entrepreneurs' linguistic style affects their crowdfunding success, and whether the successful linguistic style for for-profit crowdfunding campaigns differs from that of social entrepreneurs.

According to the language expectancy theory, people develop cultural and sociological expectations about linguistic style of the communicator and that compliance with these expectations results in desired outcomes. In the case of crowd-funding campaigns, linguistic styles reducing uncertainty and building rapport with the audience are generally rewarded. However, the expectations regarding linguistic style are likely to vary for different social groups. In this study, we propose that social entrepreneurs face greater communication challenges than for profit campaigns due to social campaigns 1) facing more complex expectations (both social and commercial orientation) and 2) producing less tangible outcomes (social good vs. a concrete product). Therefore, we expect that the social entrepreneurs have less linguistic freedom than for profit-entrepreneurs.

### Method

Our sample includes 412 crowd-funding campaigns listed on Kickstarter and Start Some Good platforms in 2013-2014. The linguistic style of crowdfunding campaign videos was analyzed using DICTION and LIWC software packages.

### **Results and Implications**

Our data confirms the prediction formed based on the language expectancy theory: Linguistic styles promoting uncertainty reduction and building rapport with the audience boost the success of social campaigns, but hardly matter for for-profit campaigns. From a theoretical point of view, this is one of the first studies drawing on the psycholinguistics and language expectancy theory in the context of entrepreneurial finance. From a practical point of view, our study helps entrepreneurs design more effective crowdfunding campaigns.

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### INTRAPRENEURIAL EXPERIENCE AND INDIVIDUALS' AGE AS DETERMINANTS OF CAREER MOBILITY

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### **Principal Topic**

Career mobility implies consecutive decisions by individuals on being or not being employed in the labor market. Intrapreneurial experience seems to inspire individuals for becoming entrepreneurs. Guerrero and Peña-Legazkue (2013) define intrapreneurial experience as a human capital attribute of employees who have a leading role in the development and implementation of re-generation activities within an organization under a proactive, innovative, and risk-oriented focus. Conventional wisdom also suggests that individuals' age is another influential factor of entrepreneurship (Parker, 2009). However, little is known on how the probability of re-engagement into "serial" entrepreneurship evolves with age, how similar (or dissimilar) is such a probability for different types of entrepreneurship (i.e., necessity and opportunity driven entrepreneurship) and how the intrapreneurial experience accumulated by individuals affect the choice of re-engagement into entrepreneurship. To further explore this complex issue, we draw upon both the Douglas–Shepherd model (2002) and Kautonen et al. (2014) model and test the effect of entrepreneurial and intrapreneurial experiences on individuals' engagement into serial entrepreneurship as they age.

### Method

Data was collected from the Global Entrepreneurship Monitor (GEM) Adult Population Survey (APS). Our database represents a sample of adult individuals who have closed (sold or shut down) a business in the past 12 months. This means that all the individuals of our sample had been entrepreneurs at least once along their lifetime, and face the choice of waged labor or re-engaging into (serial) entrepreneurship (as we excluded the possibility of non-occupability). We gathered information for 599 individuals from six countries and two periods (i.e., years 2008 and 2011).

We tested the effect of two dependent variables (i.e., necessity-driven serial entrepreneurship and growth opportunity-driven serial entrepreneurship) on two main independent variables (i.e., intrapreneurial experience and aging of individuals). Additionally, we controlled for individual (risk aversion, income, education) and contextual factors (unemployment and GDP). Since the dependent variables are dichotomous, we applied a binominal logistic regression analysis and also conducted several robustness checks.

### **Results and Implications**

While the declining pattern for (serial) entrepreneurship beyond a threshold age is similar for both necessity-driven and growth opportunity-driven entrepreneurs, the age that triggers entrepreneurship comes earlier and the decline starts quicker for the later. Moreover, having intrapreneurial experience seems to be particularly important to explain growth opportunity-driven serial entrepreneurship.

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### THE INFLUENCE OF FOUNDER IDENTITY ON ENTREPRENEURIAL IPO PERFORMANCE

Bo Peng, Cass Business School, City University London, UK Vangelis Souitaris, Cass Business School, City University London, UK Stefania Zerbinati, Cass Business School, City University London, UK

### **Principal Topic**

"Jack-of-all-trades" theory (Lazear, 2004, 2005) believes that successful entrepreneurs should be multifaceted, who have to hold a balanced skill set, while category studies argue that it is the categories guide audience's valuation and founders of generalists who fail to fit any established identity categories, will be less legitimate and appealing to the audience (Zuckerman et. al, 1999; 2003). For the external investors, founders' identity, built through a history of their career experiences, not only testifies their ability to manage businesses, but also help to legitimate the entrepreneurial firm and decrease the investment uncertainty (Delmar and Shane 2004). In this study, we want to test whether jack-of-all-trades or category imperative effect is valid for entrepreneur in the external resource acquisition and explore whether any interactions exist.

### Method

Our sample includes all the entrepreneurial firms IPO in the AIM in London Stock Exchange, from 2002 to 2013. The written prospectus that the firm must file provides us a certain way to assess the company and the founder (Martens and Jennings, 2007). In their resume, the founder presents his past professionals he highlights and identifies the industry he specialized in. We also control for relevant factors at personal level, company level, as well as market level.

### **Results and Implications**

We find that compared with founders specialize in specific occupational and industrial category, category spanners are devalued by investors, and with the width increasing of the category spanning, the negative effect is diminishing. However, specialized in one type of categories tend to reduce the negative effect of spanning another type of categories. Moreover, the length of lock-up period will moderate the negative effect of occupational spanning of founders. These findings improve the category studies by exploring the effect of crossed classification and also help to identify a moderator to reduce the negative effect of category spanning.

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### ENTREPRENEURSHIP AND THE ENERGY-ECONOMIC GROWTH NEXUS

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### **Principal Topic**

The availability of energy is important for the creation on new businesses (Winzer 2012). Thus, we expect a significant relationship to exist between energy usage and new business creation. We argue that the importance of this relationship differ between developed and developing countries. Furthermore, we argue that this difference may depend on whether energy is produced via large public plants (centralized energy), or via small privately owned methods (distributed energy). In fact, the reliability and costs associated with these two types of energy generation technologies have been shown to differ (Stern, 2011). Our rationale is that while in developed countries, large plants allow for the exploitation of economies of scale, in developing countries smaller scale methods deliver energy more reliably.

### Method

We test our hypotheses using a random effect model, with corrections for potential heteroskedasticity and autocorrelation, on an unbalanced panel for 31 countries. The dependent variable, *total early-stage entrepreneurial activity*, was obtained from the Global Entrepreneurship Monitor (GEM) database. The independent variables *total energy use per capita* within a country, and countries' *centralized energy infrastructure* – the ratio of public to self-owned electricity generation plants – were both obtained using United Nations Statistics Division data. We include controls for gross domestic product (GDP) per capita, unemployment, inflation, income taxes, the level of economic freedom, and a dummy for developing (see: Arin et al., 2014).

### **Results and Implications**

Findings support our arguments and suggest that 1) increased energy use is negatively related to new venture creation; 2) this effect is negatively moderated by countries' use of centralized energy generation technologies; and 3) the effect of centralized energy generation constrains new venture creation in developing economies. While the first result is consistent with the negative relationship observed between new business creation and per capita GDP, the second and third result contradict standard wisdom according to which, by exploiting economies of scale, a centralized system of energy distribution delivers energy in a more effective fashion. Indeed, our findings suggest that the promotion of more decentralized forms of energy production, as opposed to centralized energy generation technologies, may be more sustainable for both the environment and new business creation.

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### ADAPT OR DIE: OFFSETTING THE STRESS OF AGGLOMERATION DENSITY ON NEW FIRM SURVIVAL

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### **Principal Topic**

Dense urban environments increase entrepreneurial exit—the closure of new ventures. In this study, we argue that regional features that favor adaptation will offset the effect of urban densities on exits. Specifically, we focus on the effects of (1) knowledge spillovers and (2) regional industrial diversity.

The effect of new knowledge on entrepreneurial exit has received little scholarly attention. Building on the concept of knowledge spillovers, we argue that new venture adaptation is facilitated, and the pressure to close is eased, by a region's stock of new knowledge. Greater knowledge affords new ventures the ability to modify existing products and processes in response to market shocks. Similarly, the level of industrial diversity helps reduce the chances of exit by presenting a venture the opportunity to apply their products and expertise in a variety of downstream industries (Rosenthal and Strange, 2003). Finally, because the level of local knowledge is often determined by the level of industry diversity, we expect the effect of knowledge spillovers on exit is moderated by the level of diversity in the region. We test our hypotheses using a panel dataset of 356 United States metropolitan statistical areas (MSA) covering an eight-year period from 2003 to 2010. Using US Census data, we define the local rate of entrepreneurial exit as the number of young firms (age 5 years or younger) that close in year t divided by the total number of firms in the region in year t-1.

We find support for our hypothesis that greater industry diversity reduces entrepreneurial exit, but, contrary to prediction, we find that more new knowledge increases entrepreneurial exit. We also find that the effect of knowledge spillovers on entrepreneurial exit is indeed moderated by industry diversity. Specifically, we find that knowledge spillovers reduce exit when industry diversity is low and increase exit when industry diversity is high. Indeed, we find that the exit rate is lowest when knowledge levels are high and industry diversity is low. In addition to practice, policy and future research, our study also informs the ongoing diversity vs. specialization debate in the regional science literature (Beaudry & Schiffauerova, 2009). In essence, the indications are that diversity (specialization) is best when knowledge levels are low (high).

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### READY FOR THE TIMES TO GET BETTER? HOW RESPONSES TO ADVERSITY SHAPE RECOVERY IN FOUNDER-LED FIRMS

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### **Principal Topic**

We recently developed theory explaining how the structure of founders' multiple identities can strongly mold their firms' strategic responses to adversity (Powell & Baker, 2014). Because of the likelihood, timing and extent of improvements in environmental conditions – if, when and to what extent adversity subsides or reverses – it is difficult to say which of the three different strategic responses we discovered is most sensible for the long run. We are left to wonder, "what happens next?" Little theory exists to help understand how different strategies for weathering the storm of adversity shape firm's recovery trajectories if the adversity ends. Our research question is therefore: How and why do founder-run firms' strategic responses to adversity affect their later patterns of recovery?

### Method

During the period since our original study, both overall economic conditions and factors affecting the US textile industry have improved. We continued collecting data on the 11 surviving firms in order to observe and develop theory explaining differences in the recovery trajectories of the firms. As in the original study, we use systematic approaches to developing grounded theory (Glaser & Strauss, 1967) through cross-case analysis (Eisenhardt, 1989; Yin, 2009). Unlike the original study, we have been cognizant from the beginning about the possible effects of founders' identity structures and dynamics on the recovery process.

### **Results and Implications**

Our analyses suggest that some elements of theory we developed in the original study can be extended to explain responses to improving conditions and differential outcomes across firms. We explore three emergent themes: how identity dynamics involved in the process of trying to "sell" narratives to other stakeholders affected stakeholder commitment, why some founders who were on a trajectory of "transforming" their firms either continued or reversed these efforts and why some founders appear to be personally unable to recover from the effects of the adversity in order to take advantage of the improving environment. We develop a theory of responses to the end of adversity and beginnings of munificence that supports theoretical generalization of our prior work and contributes both to theories of founder identity and to our understanding of entrepreneurial strategy in changing environments.

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### DO WE ALL SEE THE SAME FUTURE? THE IMPACT OF ENTREPRENEURIAL TEAM MEMBERS' VISIONS ON TEAM AND VENTURE DEVELOPMENT

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### **Principal Topic**

Clear entrepreneurial visions are important for new ventures because they increase stakeholder commitment and venture success. Despite this importance, research has not sufficiently addressed the impact of entrepreneurial visions on the development of entrepreneurial teams and the opportunities they pursue. Thus, our study aims at understanding how entrepreneurial team members' initial visions and potential divergences in them shape the development of entrepreneurial opportunities, teams, and ventures.

### Method

Drawing on a longitudinal multiple case study approach, we theoretically sampled 12 entrepreneurial teams that we followed over 30 months. Within this period, we interviewed team members at least twice, resulting in 59 interviews. Additionally, we relied on field notes, press reports, and data from ventures' websites. Two coders coded the data in an iterative process. Within our final sample, seven teams showed convergent and five teams divergent visions.

### **Results and Implications**

Surprisingly, we found no clear performance differences between teams with *convergent* and *divergent* visions, but cases of venture success and failure in both groups to a similar extent. Further exploring these venture performance patterns we found that *opportunity development* differed depending on vision convergence: Teams with divergent visions developed their opportunities in a more proactive and open-minded way compared to teams with convergent visions. Our data revealed that teams with convergent visions failed because they were *reactive* in their opportunity development focusing on *incremental changes* rather than flexible adaptation to market needs and they tended to tie their survival to one partner early on. For teams holding divergent visions, we found that being proactive and open-minded is not sufficient for survival: These teams could only develop their opportunities successfully if they adopted a highly professional *decision making process* characterized by comprehensive preparation and rational choices.

The study contributes to the entrepreneurial team and opportunity development literature by showing how team members' vision convergence impacts opportunity development patterns. Our findings highlight the importance that teams with convergent visions are not too focused, while teams with divergent visions need to establish good decision making processes. Moreover, we add to work on entrepreneurial visions by integrating the team context.

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# INSTITUTIONAL CAPABILITIES' EFFECTS ON REGULATORY CONSTRAINT CHANGE AND THE PURSUIT OF ENTREPRENEURIAL OPPORTUNITY

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### **Principle topic**

Entrepreneurs, who uncover and exploit opportunities to create customer value through introducing innovative products and services (Choi, Levesque, & Shepherd, 2008; Shane & Venkataraman, 2000) are constrained by extensive and complex regulatory environments. Regulations shape the environment in which entrepreneurs are embedded and influence the variety of opportunities entrepreneurs may uncover as well as limit their means of exploitation (Meek, Pacheco, & York, 2010). Nevertheless, the regulatory constraints that entrepreneurs face are malleable (cf. Endicott, 2001; Phillips et al., 2004), which means entrepreneurs may be able to change regulatory constraints in order to pursue favorable outcomes. This study examines the role that firms' institutional capabilities may play in expanding or retracting regulatory constraints in order to either obtain access to a greater number of opportunities or to increase the value of opportunities they are already exploiting.

### Method

Relying on survey items developed in a prior study of institutional capabilities, I sent a surveys to 2,915 randomly selected commercial banks in the United States. The surveys included measures for three types of institutional capability (i.e., perception, interaction, and manipulation capabilities), measures for constraint expansion and retraction, and measures for two DVs, number of new opportunities and value of existing opportunities. Controls for bank age, number of lobbyists, bank size, and the years of experience of the respondent. The survey was sent in two phases in 2014, and 216 banks responded.

### **Results and implications**

The findings suggest that firms that develop and deploy institutional capabilities related to (a) perceiving their regulatory environment and (b) manipulating their regulatory environment were more successful than firms that do not develop and deploy these capabilities in obtaining constraint change. Moreover, findings link constraint expansion to the capture of a greater number of new opportunities and constraint retraction to the increased value of firms' existing opportunities. This study contributes to theory by, first, expanding our understanding of the types of capabilities firms may develop, and, second, by explicitly linking entrepreneurship outcomes (i.e., opportunities) to the pursuit of institutional entrepreneurship.

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# FLEXIBILITY OF NEW VENTURE TEAM STRUCTURE AND ITS INFLUENCE ON INNOVATIVENESS AND PERFORMANCE

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# **Principal Topic**

While flexibility is usually considered to be a competitive advantage in strategic management and organizational theory (Schreyögg and Sydow, 2010), debate exists in the field of entrepreneurship about the benefits of new venture flexibility. Some scholars argue that the excessive flexibility and lack of structure in new ventures may be harmful for survival (Stinchcombe, 1965; Davis et al., 2009). Other scholars have suggested that new ventures, which are operating in uncertainty and constantly making sense of and adjusting to their environments, can benefit from flexibility (Hmieleski and Corbett, 2008; Zahra et al., 2000). While flexibility takes a central place in the entrepreneurship field, few empirical studies have examined the effect of new venture structural flexibility on performance. To examine this issue we draw on research on teams and small group structures. We focus on two structural dimensions of entrepreneurial teams with relatively stable membership: (1) fluidity of power distribution in new venture teams and (2) fluidity of role distribution in new venture teams. We assessed these dimensions' relationship with new venture team innovativeness as well as new venture team performance.

## Method

We test our theory using a sample of 104 new ventures operating in Russia.

# **Results and Implications**

Our results suggest that both power and role fluidity facilitate innovativeness in new venture teams. Additionally, power and role fluidity in teams' structures leads to increases in both objective and subjective new venture performance but only in highly turbulent environments. This paper seeks to make several contributions to the field of entrepreneurship. First, our results indicate that new ventures benefit from teams' structural flexibility in turbulent environments. Thus, while efficiency may be preferable to flexibility, (Davis et al., 2009; Sine et al., 2006) efficiency may actually be more useful in stable environments while flexibility is useful in turbulent environments. Second, we conceptualize and demonstrate how power and role fluidity facilitate innovativeness in new ventures. In doing so, we address the calls to examine processes that allow for the transformation of individual team members' resources into new venture outcomes (Klotz et al., 2014).

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# THE DARK SIDE OF ENTREPRENEURSHIP: APPLYING REINFORCEMENT SENSITIVITY THEORY TO EXPLAIN ENTREPRENEURIAL BEHAVIOR

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### **Principal Topic**

We introduce Reinforcement Sensitivity Theory (RST) to entrepreneurship. RST conceptualizes relatively stable and typical patterns of regulating ones' responses to environmental cues that are genetically based and influenced by multiple physiological systems. RST constitutes a promising lens for studying the dark side of entrepreneurship because it suggests an association between behavioral inhibition (BIS), behavioral activation (BAS), and adjustment problems.

The theory differentiates between two neurological systems. The BAS, on the one hand, is located in the cerebral cortex, thalamus, and striatum and is sensitive to signals of rewards. The activation of BAS stimulates goal-directed behavior and causes feelings of happiness, hope, and joy. On the other hand, the BIS is located in the brain stem and involves neocortical projections to the frontal lobe and is sensitive to signals of punishment. BIS causes fear, anxiety, and inhibits behavior. Moreover, low BIS scores are associated with attention deficit hyperactivity syndrome and psychopathy. Whereas high BAS scores are associated with conduct disorder, low BAS scores relate to depression.

Entrepreneurial activity includes a number of cues suggesting non reward or punishment. Such cues would prime BIS. We assume that BIS is negatively correlated with entrepreneurial intentions and performance. Moreover, individuals with high BAS desire variety and novelty and prefer shorter tasks rather than one protracted activity. Entrepreneurial activity can be rewarding and shares some characteristics with high BAS sensitivity. Therefore, entrepreneurship is attractive for individuals with high BAS and, moreover, high BAS facilitates firm performance.

### Method

We conducted two studies. Study one consists of 1076 bachelor students. Study two examined 99 entrepreneurs managing newly founded small-scale enterprises.

### **Results and Implications**

We found that behavioral inhibition is negatively correlated with both entrepreneurial intentions (Study 1) and firm performance (Study 2). Thus, while low BIS has been associated with primary psychopathy, it is functional in the context of entrepreneurship. In case of setbacks and failures, entrepreneurs cannot give up, but rather must remain active and continuously learn. Moreover, behavioral inhibition is strong in novel situations. Consequently, with entrepreneurs operating in fast-changing contexts, their success depends on a low sensitivity to BIS.

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# SELF-IDENTITY CONFLICTS OF ACADEMIC ENTREPRENEURS: WHEN SCIENTISTS ARE ASKED TO DEFINE THEMSELVES BY WHO THEY ARE NOT (ENTREPRENEURS)

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### **Principal Topic**

Increasing the rate of technology transfer from universities and national laboratories through academic entrepreneurship has been identified as an important issue in creating and sustaining national competitiveness, yet these organizations struggle to achieve even modest technology transfer goals. We build theory to explain why scientists resist engaging in academic entrepreneurship despite incentives and other external programs that encourage their participation. We explore individual level processes of traditional scientists in university and federal lab settings and theorize that identity-based barriers to academic entrepreneurship explain their resistance to engaging in technology transfer activities.

### Method

Research participants are scientific researchers from a major research extensive university and a major US National Laboratory. Interviewees are randomly drawn from a complete list of the eligible population. In interviews, we use Repertory Grid Technique to elicit personal constructs (Gustafson & Reger, 1995; Reger et al., 1994; Reger & Huff, 1993) about the domain of interest: self-identities associated with the categories "scientist", "star scientist," "entrepreneur," and "academic entrepreneur." This method has been found to be a nonintrusive way to learn how the participant in a study thinks about a subject area without imposing the researcher's mental model and biases (Fransella, Bell, & Bannister, 2004) and is especially well suited for exploring beliefs about self-identities such as current, ideal and future desirable identities (Reger et al., 1994).

# **Results and Implications**

A primary contribution of our work is to develop a theory that integrates the various strands of identity literature and incorporates extant technology transfer literature for a more comprehensive picture of scientists' thought processes and behavior regarding academic entrepreneurship. Our paper fills a gap in current identity literature and examines how a lack of, or antipathy toward, identity with a particular group leads one to refuse to engage in entrepreneurial activities in the work place. We highlight the importance of recognizing scientists' dis-identification ("who we are not") in order for these important research organizations to construct meaningful and effective strategies to create alignment when organizational goals shift.

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# MENTOR OR TORMENTOR: UNDERSTANDING HOW MENTORS IMPACT ENTREPRENEURS' PERFORMANCE USING A CREATIVITY PERSPECTIVE

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# **Principal Topics**

Mentors benefit entrepreneurs by lending them expertise and access to rewards such as capital, contacts, etc. (Ozgen & Baron, 2007; Davidsson & Honig, 2003). In this paper, we use a creativity lens to explore how mentors who are also investors influence startup performance. Given startup teams' attraction to mentor-investor rewards and mentor-investors' need of control to manage risks, self-determination theory (Deci & Ryan, 1985) suggests mentor-investors may stifle entrepreneurial creativity increasing the likelihood of venture failure. In contrast, the learned industriousness theory (Eisenberger, 1992) suggests that rewards signal the importance of creativity, which guides individuals' behavior towards goals.

We suggest that choice control moderates the relationship between rewards and startup creativity. Choice control refers to aspects of the reward or context that offer or limit choice (Byron and Khazanchi, 2012). To generate creative ideas, startup teams must explore diverse alternatives (Amabile, 1996). Given choice, startups need to coordinate their team members' collaboration (Harrison & Rouse, 2013; Hackman, 1987). Coordination refers to the "temporary unfolding and contextualized process of input regulation and interaction articulation to realize a collective performance" (Faraj & Xiao, 2006: 1157). We propose that rewards convey information that helps startup teams coordinate their creative collaboration.

### Method

We conduct an experiment in which we manipulate reward choice and task choice. We also survey entrepreneurs and mentors who report on the extent to which mentors control startup choices.

# **Results and Implications**

We expect that startups use reward information to filter choices and coordinate their team members' collaboration. By heeding reward information, entrepreneurs narrow their consideration set of choices and simultaneously increase the likelihood that their creative ideas are well received my mentor-investors. As anticipated, initial results show that reward choice does not affect team creativity when reward choice does not provide information that can be used to filter choices. By examining the effects of extrinsic rewards on team creativity in the entrepreneurial context, we extend the literature on creativity rewards to entrepreneurship to better understand how mentor-investors impact entrepreneurial teams' performance.

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# ENTREPRENEURIAL ORIENTATION IN SOCIAL INVESTING: THE INFLUENCE OF FOUNDERS AND BOARD MEMBERS HUMAN CAPITAL DIVERSITY

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# **Principal Topic**

Social enterprises (SEs) have attracted attention (Short, Moss, and Lumpkin, 2009) as they adopt economic approaches to solve social problems (Austin et al., 2006). To support their development, a social investing market, potentially worth up \$1trillion by 2020 (JP Morgan, 2010), has developed. Social investing firms adopt entrepreneurial approaches by implementing venture capital practices (Scarlata and Alemany, 2010). These firms go beyond the deployment of short-term, donated capital and seek investments that ultimately create social and economic returns. The literature acknowledges the importance of individuals in starting these dual objectives firms (Mair and Marti, 2006; Scarlata, Zacharakis, Walske, 2015) and the multiple stakeholders they respond to (DiDomenico et al., 2010; Lumpkin et al. 2013). The research question this paper seeks to answer is: how does founder and stakeholder human capital influence the entrepreneurial orientation (EO) of social investment firms? To answer this question, we integrate the EO framework (Lumpkin and Dess, 1996) with a resource dependence perspective (Pfeffer and Salancick, 1978) along with human capital theory (Becker, 1964).

## Method

For the empirical analysis, social investing firms in Europe and the United States are considered. These were identified via the U.S. and European Associations (NVCA and EVPA), Morino Institute (2002) and John (2006), and only included firms that a) make direct investments in SEs, and b) are involved in managing their investments. Our sample includes firms started by individuals. Data were collected through semi-structured interviews with major social investing firms both in the U.S. and in Europe.

# Results/implications

Our work aims at uncovering the antecedents of firms that pursue social and economic objectives. By looking at founder and board member human capital, we identify the extent to which heterogeneity leads to increased EO. This is relevant for both academics and practitioners. At an academic level, we introduce and measure the EO construct when firms have double firm objectives (i.e., economic and social returns) and incorporate the effect that stakeholders have on it. At a practitioner level, our work identifies the best combination of education and professional experiences that facilitate the adoption of entrepreneurial strategies.

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# ENTREPRENEURIAL PERFORMANCE: DOES ENTREPRENEURS' PERSONALITY MODERATE THE IMPACT OF STRESS?

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### **Principal Topic**

A large body of research addresses work-related stress; yet, research on entrepreneurs' job stress is limited. Researchers have compared job stress of entrepreneurs and managers (Buttner, 1992) and examined antecedents (Schjoedt, 2012) and consequences of entrepreneurs' job stress (Wincent et al., 2008). Yet, no work has examined how entrepreneurs harness their individual differences to not only mitigate the effects of stress but also to improve venture performance.

Research has shown that high demands relative to a person's abilities and available resources can lead to stress (Jex, 1998). Given the nature and conditions of entrepreneurs' work, stress is particularly relevant in understanding entrepreneurs' behavior and venture performance.

Recently entrepreneurship scholars have showed that the Big Five personality factors distinguish entrepreneurs from non-entrepreneurs (Zhao & Seibert, 2006) and influence entrepreneurs' intentions and performance (Brandstätter, 2011) and venture performance (Ciavarella et al., 2004). The Big Five (Digman, 1990) constitute the predominant framework and provides a robust description of the personality construct (John & Srivastava, 1999).

In the context of job stress, neuroticism is of particular interest. People high on neuroticism have low tolerance for stress (Eysenck, 1967). Therefore, in our examination of the moderating effects the Big Five have on the job stress-venture performance relationship, we controlled for neuroticism.

### Methods

Entrepreneurs of 429 small private firms completed a survey that included a job stress measure (Judge et al., 1994); NEO-FFI (Costa & McCrae, 1992), and venture performance measures. Regression analysis was the principal method of data analysis. Comparison was made between novice and repeat entrepreneurs and robustness assessed (Chow, 1960).

# **Results and Implications**

We found support for the negative effect of entrepreneurs' job stress on venture performance and agreeableness, extraversion, and openness to experience weakened these effects, but we do not find support for moderation effects of conscientiousness. Results were not significantly different among novice and repeat entrepreneurs.

The results further the limited, but growing, body of research showing the importance of personality in entrepreneurship when considered as the Big Five personality factors (e.g., Brandstätter, 2011; Ciavarella et al, 2004). This body of research and our study indicate that the abandonment of personality in entrepreneurship may be premature as personality has important explanatory value in understanding entrepreneurs' stress.

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### GOAL STRIVING IN REAL TIME AMONG NASCENT ENTREPRENEURS

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### **Principal Topic**

Entrepreneurs take different paths in achieving the goal of creating a new venture. Entrepreneurship scholars acknowledge goals as important (Naffziger, Hornsby & Kuratko, 1994) since goals focus entrepreneurs' attention (Bird, 1989) and are a central aspect of human behavior. Based on the assumption that goals and intentions are the most immediate to behavior (Locke, Bryan & Kendall, 1968), researchers have focused on goal setting and intentions. Despite the potential research holds in explaining entrepreneurs' behavior, it is uncommon for scholars to examine how and why entrepreneurs take different paths to accomplishing their goal of venture creation (for an exception, see Davidsson, 1989). The present research addresses this gap by focusing on how entrepreneurs strive to accomplish their venture creation goal.

#### Methods

Two independent studies form the basis for this research. First, we used the PSED I data across multiple waves pertaining to the nascent entrepreneurs (Reynolds & Curtin, 2009). Specifically, we identified behavior-based performance measures (e.g., "Have you started any marketing or promotional efforts?") to determine when the behaviors took place. Second, we used a matched-pair case approach based on, fine grained, real-time, longitudinal research design to obtain richer insights into goal striving. Specifically, data from weekly student learning journals on the what, who and why regarding start-up activities are obtained from a masters-level program in venture creation to gain more nuanced insights into the goal striving process; the dynamic interactions between goal setting, striving, and attainment.

### **Results and Implications**

Our quantitative results suggest that the early goal setting focus predominantly on information gathering, personal investment, and raw material acquisition. As the goal striving progresses, attention remains on personal investment and begins to include planning the venture while it is lessened in regards to information gathering. Our qualitative results provide greater insight into the goal striving process. They suggest that highly specified sub-goals (what specifically should be accomplished and with who) are conducive for the goal striving progress and goal achievement, venture launch.

Our findings illustrate how entrepreneurs take many different paths towards accomplishing their common goal of venture creation. In doing so, they provide richer understanding of the dynamic goal striving process reflected in entrepreneurs' behavior and new venture creation.

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# THE IMPACT OF FIRM ENTRY DEREGULATION ON HYBRID ENTREPRENEURSHIP

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# **Principal Topics**

Hybrid entrepreneurship, which describes people who retain their wage employment while starting a business (Folta, Delmar, Wennberg, 2010), gives the possibility of testing a business idea without facing the whole income risk of full-time self-employment. Hybrid entrepreneurs play an important role in economic growth, because they represent a significant share of total firm entry across countries (Minniti, 2010). However, their responsiveness to reforms and their role in public policy has not yet been addressed. We evaluate the entry deregulation policy "System for Rapid Opening of Enterprises" (SARE) in Mexico, focusing on the responsiveness of both hybrid and full-time entrepreneurs.

### Method

We use data from the Mexican National Survey for Occupation and Employment (ENOE). Taking advantage of the staggered implementation of SARE throughout Mexico, we analyze its impact between 2009 and 2013 with a sample of 231,000 individuals from the labor force aged 20 to 65.

### **Results and Implications**

We find that after SARE, the increase in the odds of being an entrepreneur compared to not being an entrepreneur is three times higher for hybrid than for full-time entrepreneurs. Hybrid entrepreneurs are therefore more sensitive to entry regulation.

Splitting the effect up on educational attainment, we find positive effects of SARE for the most and least educated people for hybrid and full-time entrepreneurship. However, the strongest effect of the deregulation is found for highly educated hybrid entrepreneurs. Thus, the reduction of red tape possibly enhances lower-quality entrepreneurship by less educated people as found by Branstetter, Lima, Taylor and Venâncio (2014), but also and to a larger extent high-quality entrepreneurship by highly educated individuals pursuing hybrid entrepreneurship. Discouraging their entry by extensive entry regulation might therefore impede innovation and the creation of an entrepreneurial culture in a society, which is in turn a basis for economic growth. Our findings, therefore, suggest that researchers as well as policy makers need to account for the distinctiveness of hybrid entrepreneurs when evaluating and designing entrepreneurship policies.

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# AN ANALYSIS OF FOUNDER-CEOS' AND SALARIED CEOS' SHORT-TERM INVESTMENT BEHAVIOR UNDER CONSIDERATION OF ASPIRATION LEVELS

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# **Principal Topic**

Due to shorter CEO tenures, capital market pressure and highly frequented earnings reports, there are little incentives for salaried CEOs to pursue long-term strategies. In contrast to salaried CEOs, founder-CEOs normally have a longer decision horizon, higher ownership percentage and are more independent, e.g. in terms of their reputational status. According to their long-term personal affiliation to the company, they are intrinsically motivated and, likely, more emotionally attached. This raises the question whether founder-CEOs are more long-term- and value-oriented and, consequently, run companies less myopic than salaried CEOs.

"Managerial myopia" is regarded as the preference of managers to choose projects or strategies with immediate revenues over long-term oriented projects and strategies that will generate future earnings. It is mainly associated with cuts in R&D or other long-term related investments at the expense of the company's future value. CEOs have different motivations to behave myopically, e.g. to pursue companies' short-term goals or to maximize their own utility. In the latter, they have personal incentives to underinvest, e.g. signaling effects towards the job market, improvement of their negotiating position for salary, deterioration of the successor's position or other opportunistic reasons. We are focusing on the case of CEOs trying to achieve the company's earnings target by using last year's earnings as "aspiration level". Prior studies prove that managers try to avoid earnings decreases compared to last year.

# Method

Over a period of twenty years and on the basis of Standard & Poor's 1500, we analyze whether founder-CEOs invest less myopic compared to salaried CEOs. We use the databases Compustat for company financials and Execucomp for CEO and other company specific data. We hand-collect data on the CEO founder status. Of special interest for the analysis are cuts in R&D expenses whenever a company's performance falls below its own "aspiration levels". Following Bushee (1998), we divide the sample into three subsamples, depending on the relationship of earnings before taxes and R&D and prior R&D levels.

### **Results and Implications**

Our findings show that CEOs exhibit myopic investment behavior by cutting R&D expenses to meet short-term earning's goals. Founder-CEOs don't seem to be fully immune to managerial myopia in the case of low R&D cuts and small earnings decreases. Further research will be conducted on whether founder-CEOs behave less myopically when it comes to deeper and value diminishing cuts. Settings with other motivations to behave myopically could shed more light on differences in investment behavior of founder- and non-founder-CEOs.

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# CREDIBILITY IN CORPORATE VENTURING: EXAMINING RELATIONSHIPS BETWEEN ENTREPRENEURS AND CORPORATE VENTURE CAPITALISTS

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# **Principal Topics**

Dushnitsky and Shaver (2009) found that entrepreneurial ventures are less likely to partner and disclose their technology to corporate venture capitalists (CVC) in the same industry when that industry is characterized by a weak intellectual property regime. As a result, entrepreneurial ventures are caught in a paradox of whether to disclose or conceal their intellectual property when CVC support is needed. We propose that CVC programs can overcome this 'paradox of disclosure' (Arrow, 1962) with entrepreneurial ventures by establishing a credible commitment to a CVC program. Commitments are credible if they have been continuously demonstrated over time (North, 1993). We suggest that CVC programs can demonstrate a credible commitment based on their prior activity and continuity of their CVC program. Prior CVC activity and continuity would cultivate trust in otherwise fragile relationships characterized by lack of legal recourse and marginal intellectual property protection systems.

# Methods and Results

Consistent with previous research (Dushnitsky and Shaver, 2009), we examine industry-specific CVC and start-up venture data. We address a weak intellectual property regime sample as this sample experiences the 'paradox of disclosure' in an environment that provides little protection to the entrepreneur. Results show a significant relationship with all four hypotheses, indicating that the credible commitments made by the CVC not only have a direct effect on the emergence of a CVC-entrepreneur investment relationship, but also moderate the industry overlap to CVC-entrepreneur investment relationship even in a weak intellectual property regime.

## **Implications**

We extend the concept of credible commitments by demonstrating that firms can make non-partner specific credible commitments that create generalized trustworthiness. We submit that non-partnered firms, such as entrepreneurial ventures without a current CVC partner, can observe the credible commitments made by CVC programs in order to gauge the trustworthiness of the CVC. A sufficient investment into the activity and continuity of the CVC program augments the game to where the payoff of good behavior exceeds the payoff of opportunistic behavior.

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# CROSS-COUNTRY DIFFERENCES IN ENTREPRENEURIAL ACTIVITY: ADDING INSIGHT THROUGH SIMULATIONS

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# **Principal Topic**

Our study aims to explain the possible roles of social network structures (Dodd & Patra, 2002) and informal investors (Bygrave et al., 2003) in determining countries' new firm formation rates. It is difficult to capture informal investment activities (Mason & Harrison, 2008), and even more difficult to figure out their social network structure (Hoang & Antoncic, 2003). To overcome these difficulties, simulation can be a useful tool. Simulation is regarded as an effective way to elaborate on theories (Davis, Eisenhardt, & Bingham, 2007); furthermore, agent-based modelling and simulation (ABMS) can test lower-level mechanisms that produce stylized facts on the aggregate level (McMullen & Dimov, 2013). This study tries to explain the opportunity-driven new firm formation rates across countries by simulating nascent entrepreneurs' networking activities with informal investors, and to propose a new agent-based model (ABM) of venture creation process.

#### Method

We established our ABM to reproduce the venture creation process. The ABM is composed of two types of main actors: nascent entrepreneurs and informal investors. The numbers of main actors in each country were assigned according to the adult population survey (APS) of the GEM. Then, we implemented each country's social network structure by connecting every actor, considering the known features of social networks in each country (e.g. Dodd & Patra, 2002). To confirm the validity of the implemented social network structure, we used each country's social network-related response reported by the GEM. We then set several behavioral rules for the actors. During simulation experiments for each country, the virtual entrepreneurs try to network with informal investors on their social networks, and launch their businesses based on the behavioral rules.

# **Results and Implications**

Among the countries we have simulated, virtually half of the countries' new firm formation rates are within the confidence intervals of 95%, compared to the GEM survey. Moreover, this simulation approach explains the cross-country differences more effectively than the statistical approach. However, we also found that some countries' simulated results were below their GEM survey. Most of these countries' individualism indexes were relatively high by Hofstede's Culture Dimensions (Hofstede, Hofstede, & Minkov, 2010); therefore, this result may be associated with these countries' individualistic culture. In individualistic cultures, entrepreneurs prefer to gain resources by formal contracts rather than informal relations (Tiessen, 1997). Our simulation results trigger insights into the role of country culture as a moderating factor, and illustrate how simulation can guide theory elaboration.

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# ELEMENTS OF A PROCESS OF HUMAN CAPITALIZATION BY DEVELOPING-WORLD ENTREPRENEURS

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### **Principle Topic**

The human capital acquired through previous work experience and through formal education is critical to becoming an entrepreneur (Davidsson & Honig, 2003) and for subsequent venture performance (Unger, Rauch, Frese, & Rosenbusch, 2011). However, the institutional and economic constraints that typify developing countries make these long-term investments challenging or impossible. Despite this, rates of entrepreneurship in many developing countries are over 50%, compared to the 5-15% typically seen in the developed world (GERA, 2014). We therefore ask: *how do developing world entrepreneurs acquire human capital*?

### Method

We employ a qualitative theory elaboration methodology (Lee, Mitchell, & Sablynski, 1999) from three waves of data collection in Ghana consisting of two components: 92 broadly representative interviews with different entrepreneurs, and repeated interviews with 15 entrepreneurs, consisting of 47 interviews with 17 bouts of observation. To induce the underlying process, entrepreneurs were asked how they learned to run their business, what challenges they had and do encounter, and what sources of knowledge they rely on. The interviews were transcribed and systematically coded in NVivo 10, from which the underlying process of human capitalization was inductively drawn out.

# **Results and Implications**

We offer a process – human capitalization – that reveals the long and short-term processes facilitating human capital acquisition. This process builds upon existing human capital research by showing that in addition to the traditionally discussed process of education/experience  $\rightarrow$ HC  $\rightarrow$ use in venture, there is complimentary process that our informants heavily relied upon: signals from venture  $\rightarrow$ recognition of a lack of HC  $\rightarrow$ actively seeking out HC from different sources  $\rightarrow$ re-entry into traditional process. This feedback mechanism was heavily used when starting a venture, and when challenges arose. Furthermore, in this feedback loop, entrepreneurs heavily rely upon members of their social networks as sources of human capital.

Contrary to the received knowledge that human capital precedes and pre-conditions entrepreneurial start-up and success, we show that entrepreneurial activity helps entrepreneurs quickly acquire and even customize the skills they need to stay in business. Furthermore, our work has implications for governments and NGOs running entrepreneurial training programs in the developing world, as we show that entrepreneurs' learning heavily depends on a process outside of extant literature and conversation.

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# A LONGITUDINAL INVESTIGATION OF BUSINESS ANGEL RELATIONSHIP RISK MITIGATION STRATEGIES WITHIN INVESTMENTS: A THREE-DIMENSIONAL APPROACH

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### **Principal topic**

Business angel (BA) investing is associated with various types of risks, where relationship risk often is highlighted as being especially critical (Fiet, 1995). Three investor strategies for mitigating relationship risks associated with BA investing in young private firms can be traced in the literature: (i) indirect control through monitoring and rewarding/punishing entrepreneur behavior and output, (ii) direct control through active involvement, and (iii) relying on mutual trust (Van Osnabrugge and Robinson, 2000; Maxwell and Lévesque, 2011). While early research in the field adopted a rather static view on BA categorization (Coveney and Moore, 1998; Sørheim and Landström, 2001), more contemporary research shows that BAs change investment roles across investments (Avdeitchikova, 2008; Lahti, 2011). However, whether BAs behave differently regarding risk mitigation within investments is less explored. This explorative study contributes to the opening of the black box of how BAs may shift risk mitigation strategies over time within single investments.

### Method

Extensive iterative theory and cross-case comparisons from primary data, collected from 32 interviews with four matched BA-entrepreneur dyads, were carried out during the period of 2010-2013.

### **Results and implications**

We show that BAs do shift strategies over time within investments to overcome relationship risks associated with investing in young private ventures and that these are constituted by a mix of various degrees of direct, indirect and trust-based control mechanisms. Moreover, we argue that the triggers behind such shifts are context-specific, rather than determined by characteristic of the angels, the entrepreneurs or the investee firms. We also develop propositions for the two triggers that emerged particularly strong from the data, namely an angel's current perception of the entrepreneur's ability and the entrance of new investors.

Thereby the findings from this study improve our understanding of how BAs can respond to variations in relationship risks in single investments. Trust will vary over time due to personal expectations, the entrepreneur's behavior and external factors, whereby the investor can chose to increase or decrease the degree of direct and indirect control activities. For entrepreneurs the results may contribute to filling knowledge gaps about what to expect from angel investors.

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# EMOTIONAL SUPPORT AND PASSION MATTERS: HOW EMOTIONAL SUPPORT IMPACTS SURVIVAL THROUGH ENTREPRENEURIAL PASSION

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### **Principal topic**

Apart from a financial support effect, startup grants also have a secondary effect on survival through the perception of the grant as emotional support. The focus of this study is on how the emotions attached to receiving public subsidies encourage and enhance entrepreneurs' passion and how this subsequently influences survival. This is a move away from perceiving emotional support as a separate concept and instead focusing on how it is related to the very tangible concept of financial support and how it influences other emotions such as entrepreneurial passion. Therefore, by integrating theories on emotional support and entrepreneurial passion we gain deeper knowledge on how emotional support influences entrepreneurial survival through the mediating effect of entrepreneurial passion.

### Method

To test our hypotheses, we use survey data collected in early 2012 from Finnish entrepreneurs who had started new businesses between the years 2005–2010. The sample frame was all individuals (n=17,885) who had received a start-up grant from the government during the specified period of time. We include in our analyses those entrepreneurs who did no longer receive start-up grant during the time of the survey (n=2,469). We use structural equation modelling (SEM) with *entrepreneurial survival* as our DV, and *emotional perception of public start-up grant as IV* and *entrepreneurial passion* as mediator.

### **Results and Implications**

Our SEM partly supports our theoretical model. We are not able to empirically demonstrate a direct link between emotional support and survival, but we find that emotional support is positively associated with three different dimensions of entrepreneurial passion. Furthermore, we demonstrate how entrepreneurial passion is positively associated with entrepreneurial survival, which substantiates our expectation about entrepreneurial passion as the mediator between emotional support and survival. With this study, we demonstrate how a very tangible type of support such as a public start-up grant also carries an emotional meaning. This underlines the importance of studying emotional support in combination with other support types and not as single entities. Emotional support influences entrepreneurial survival through the effect on entrepreneurial passion, and is thus an important antecedent to entrepreneurial behavior. This substantiates the need to pay attention to the role of less structured and planned antecedents of entrepreneurial behavior as emotions are.

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# NOBLE CORRUPTION: DOES BRICOLAGE REDUCE UNETHICAL JUDGMENTS AGAINST ENTREPRENEURS?

Regan M. Stevenson, University of Central Florida, United States Shannon G. Taylor, University of Central Florida, United States Chaim Letwin, Suffolk University, United States

# Principal topic

Is corruption always viewed as immoral? Can it be noble? The entrepreneurship literature has noted that the entrepreneurial context is unique and that some corrupt acts are not only "accepted as part of entrepreneurship" but are in fact virtuous (Brenkert, 2009, p. 448). Building on these works, we hypothesize that when entrepreneurs use clever actions during rule-breaking activities, their actions will be regarded as more noble. In our study, we operationalize clever entrepreneurial actions by drawing on the concepts of improvisation and bricolage (Baker, Miner, & Eesley, 2003; Baker & Nelson, 2005). We propose that this relationship is conditional on the ethical orientation of the person viewing the rule breaking actions (i.e., utilitarianism, formalism). In this study, we also develop and validate a scale designed to assess the *nobility* of corrupt actions undertaken by entrepreneurial actors.

### Method

We presented 202 third-party observers a vignette featuring a corrupt action in an entrepreneurship context. To test our hypotheses we used a between-participant experimental design in which we manipulated the use of bricolage (high vs. low bricolage) and measured participants' ethical orientations (formalism and utilitarianism). We then assessed the bystander's ethical perceptions with regard to the actions of the actors in the entrepreneurship scenario. Specifically, using a scale developed and validated for this study we measured the extent to which participant observers rated actions as noble. Hypothesized relationships were analyzed with moderated multiple regression and a Wald post-estimation test.

# Results/Implications

Results indicate that corrupt entrepreneur acts that utilize clever bricolage techniques did not significantly increase the likelihood of the actions being viewed as noble. As expected, however, further analyses showed that formalists viewed clever rule breaking acts and the facilitation of such acts by a government official as exceptionally negative (i.e., as less noble). Our paper makes a contribution at the intersection of entrepreneurship and ethics. Specifically, we validate the construct of noble corruption. We also operationalize bricolage in an experimental study and explore entrepreneur rule-breaking behaviors that facilitate bystanders to simultaneously perceive certain entrepreneurial actions as corrupt but still ethical (i.e., noble).

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# ONE SIZE FITS ALL? THE ROLE OF COGNITIVE STYLES IN TEACHING ENTREPRENEURIAL DECISION-MAKING TO NOVICES

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# **Principal Topic**

Scholars have asserted that effectuation theory brings to focus the cognitive implications of uncertainty and consequent effects on entrepreneurial decision-making (Grégoire & Corbett, 2011; Sarasvathy, 2001). Cognitive styles account for the differences in the way individuals gather and evaluate information (Allinson & Hayes, 1996). Researchers have been successful in establishing notable relationships between cognitive styles of individuals and their entrepreneurial decision-making (Krueger and Kickul, 2006; Kickul et al., 2009). Given the cognitive underpinnings of effectuation theory we examine the relationship between cognitive styles of individuals and their preference to make effectual decisions in entrepreneurial situations. Once this relationship has been established, we make our case that entrepreneurship education to business school students that teach effectuation must also pay attention to individual differences in cognitive styles.

### Method

The Cognitive Style Index (CSI) by Allinson and Hayes (1996) was used for testing cognitive style of participants. Effectuation was measured by making use of scales of Brettel et al. (2012), combined with questions from the work of Chandler et al. (2011) and Wiltbank (2009). We obtained 400 usable responses of our survey instrument from university students in the Netherlands and Germany. We calculated the CSI score and divided the sample based on their score into 5 groups: 1) Intuitive decision-makers, 2) Quasi-intuitive, 3) Adaptive, 4) Quasi-Analyst and 5) Analyst. We performed ANOVA analysis between these groupings from the CSI score and the outcomes of the Causation and Effectuation. The results from the ANOVA are subsequently tested using post-hoc analysis.

# **Results and Implications**

Entrepreneurship education that yields appreciable results involves designing a curriculum that encourages participants with different backgrounds and cognitive profiles to engage in smart decision-making. Our results show the effect of individual differences in cognitive styles on the preference for causation and affordable loss. This leads us to argue that we might be able to identify individuals to whom teaching effectuation or similar non-prediction based entrepreneurial method might be more suitable. We contribute towards extending theory on entrepreneurial cognition (Mitchell et al, 2007; Krueger, 2003).

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# ENTREPRENEURIAL ECOSYSTEM DEVELOPMENT: A MEDIA EFFECTS PERSPECTIVE

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### **Principal Topic**

Given the critical role of high growth new ventures as engines of job creation and wealth (Konczal, 2013), community stakeholders increasingly focus on the formation and success of such ventures. Infomediaries are hubs for information about efforts to encourage entrepreneurial ventures, contributing to the knowledge of entrepreneurs about their environment and about the legitimacy of the pursuit. We sought to understand which media mechanisms influenced legitimacy and culture, leading to more entrepreneurial activity in ecosystems.

### Method

We sampled thirty ecosystems on the basis of business formation using data obtained from the US Census Bureau, the Small Business Administration, and the Kauffman Foundation. We combined this data with content analysis of over ten thousand entrepreneurship-related articles from the MSAs over a five year period. Using validated dictionaries of entrepreneurial orientation (EO) (Short, Broberg, & Cogliser, 2009) and affect (Pennebaker, Booth, & Francis, 2007) we identified the entrepreneurial culture and legitimacy in the ecosystems. The data were analyzed in Stata as a five year panel using business formation as the dependent variable, using ecosystem-level controls.

# **Results and Implications**

First, we found that EO predicted entrepreneurial activity in ecosystems, a possible link between conceptual entrepreneurial culture and activity. Second, more media coverage also increased business formation, some evidence for the role of media as a source of legitimacy. Finally, a positive tenor of media coverage increased. Three mechanisms for media influence on business formation have been identified: volume, content, and tenor. Effect sizes were small in the study, bout our results suggest EO may be a launching point for much-needed efforts to develop measures of entrepreneurial culture (Audretsch & Keilbach, 2004).

Our contribution to entrepreneurship literature is two-fold. First, we tested propositions about the ways in which media effects influence entrepreneurs' efforts and lead to stronger entrepreneurial ecosystems. Notably, media helps create legitimacy of the institution of entrepreneurship through coverage of the topic (Aldrich & Yang, 2012). We also added a new level of analysis, the ecosystem, to the literature on entrepreneurial legitimacy, building on previous work focused at the industry level (Navis & Glynn, 2010). Practically, we also offer insight on how communities can improve their efforts to build successful entrepreneurial ecosystems.

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# THE EFFECTS OF PROFESSIONAL CORPORATE ENTREPRENEURSHIP PRACTICES ON LISTED AND NON-LISTED FAMILY FIRMS IN DEVELOPING ECONOMICS

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### **Principal Topics**

We investigate the mediating effect of entrepreneurship orientation (EO) as one explanation of the inconsistent relationship between professionalization and family firm performance (J. Dekker, Lybaert, Steijvers, & Depaire, 2013). We use employee engagement as a proxy for firm performance due to its consistent positive effect on firm performance (Harter, Schmidt, Agrawal, & Plowman, 2013). Furthermore, responding to Sharma, Chrisman, & Gersick's (2012) recent call, we test our model in the developing economy context. Finally, following Fang et al.'s (2012) arguments regarding the impact of institutional environment on professionalization effects, we compare the results for listed and non-listed family firms.

### Methods

Our respondents are 189 employees of Indonesian listed (50) and non-listed family firms. Employee perception on firm professionalization, as independent variable, is measured by adopting three factors proposed and used by Dekker et al. (2012, 2013), i.e. decentralization of authority, financial and human resource control systems. To measure our mediating variables, we adapt the nine items developed by Covin & Slevin (1989) to measure employee perception on firm EO, i.e. innovativeness, risk-taking, and pro-activeness. Finally, we use 12 items from the Gallup Workplace Audit (Buckingham & Coffman, 1999) to measure Employee Engagement (EE) as dependent variable.

### **Results and Implications**

Our findings indicate that professionalization has a greater impact in less formal institutional environments, such as non-listed firms. In addition, different aspects of professionalization have different effects. While human resource control has positive direct and indirect impact on EE in both listed and non-listed family firm, financial control only directly affects EE in non-listed family firm. This finding support Fang et al.'s (2012) argument that family firm's professionalization in less formal institutional environments results in more proactive strategic and long-term goals, rather than reactively conforming to the prevalent institutional norms (Oliver, 1991). In this way, professionalization might provide unique resources that are not easy to imitated and substituted by competitors (Barney, 2001).

Secondly, considering that all EO constructs partially mediate human resource control – EE relationship, we argue that the degree of organizational EO might determine the impact of professionalization on firm performance.

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# FOLLOW YOUR PASSION: HOW ENTREPRENEURIAL PASSION MOTIVATES ALERTNESS TO OPPORTUNITIES

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### **Principal Topic**

Opportunity identification has been recognized as a crucial first step in the entrepreneurial process. Before an entrepreneur can move towards exploiting an opportunity he or she must be alert to information that, when coherently tied together, suggest the existence of a new business opportunity. Consequently, understanding how and why certain individuals are more alert to the presence of entrepreneurial opportunities than others represents one of the core intellectual questions in the domain of entrepreneurship. Prior work in psychology indicates that performance of most tasks is a function of motivation and ability. Entrepreneurship scholars have made significant progress in extending our understanding of how certain entrepreneurs are more able to identify opportunities – identifying and exploring the underlying cognitive frameworks and processes that enable alertness. However, work focusing on the motivational antecedents to alertness has been sparse. This study explores how passion, a motivational construct of growing importance in the entrepreneurship literature, may help to drive entrepreneurial alertness. Utilizing social cognitive theory, we identify the mechanisms by which passion leads to higher levels of alertness. We hypothesize that entrepreneurial passion indirectly strengthens an entrepreneur's alertness by nature of its positive relationship with proaction, creativity, and learning goal orientation.

### Method

Data were collected, through a survey, from 204 entrepreneurs with businesses located in twenty-six states of the United States. The measures used in the study have been previously established and validated. The article's hypotheses were tested using structural equation modeling.

### **Results and Implications**

Our model explained a significant amount of the variance in entrepreneurial alertness, with results confirming that passion indirectly heightens entrepreneurial alertness by motivating proaction, creativity, and a learning goal orientation. In other words, passion drives entrepreneurs' motivation to proactively pursue new information, creatively integrate that information, and continuously learn from new information in order to identify new venture opportunities. Our results suggest that an entrepreneur's passion is an important motivational antecedent to alertness. Additionally, the relationship between passion and creativity suggests that motivation may play an important role in helping to develop or enable the cognitive frameworks and processes that are crucial to the opportunity identification process.

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# MAJOR FAMILY EVENTS, OVERCONFIDENCE, AND NEW VENTURE SUCCESS: A COGNITIVE RESOURCES PERSPECTIVE

Alex Tan, University of Western Australia, Australia Terence Fan, Singapore Management University, Singapore Thierry Volery, University of St. Gallen, Switzerland

# **Principal Topics**

The context of entrepreneurs' families is inextricably intertwined, and plays an important role in new venture creation (Aldrich and Cliff, 2003; Carter, 2010; Steier, 2007). In particular, major family events, both prospective and retrospective are perceived as beneficial or harmful, and accordingly have the potential to create situations of inner disequilibrium which afford or deplete entrepreneurs' *cognitive resources*. Cognitive resources refer to the capacity of entrepreneurs to mentally process and frame situations in an opportunistic manner (Alvarez and Busenitz, 2001). Because mental processing resources are highly valued (and inherently limited), overconfident entrepreneurs attempt to save time and effort in making judgments by using heuristics (Bernado and Welch, 2001; Busenitz and Barney, 1997; Cooper et al., 1988), increasing the likelihood that their ventures will fail (Hayward et al., 2006). In this perspective, this article investigates how major family transitions—birth, death, marriage, divorce, illness, and financial status affect the success of new ventures.

### Method

Drawing from the Household, Income and Labor Dynamics in Australia (HILDA) survey, we track a sample of 154 entrepreneurs-firms from inception in 2005 until time of failure or study censor in 2010, which reflects the critical development stage of a venture. We use failure rates (survival) as a baseline measure of new venture 'success', defined as a firm regardless of other performance remains being developed by the founder (Gordon and Davidsson, 2013). Our event history model includes family events that were found to have the greatest impacts on an individual (see Holmes and Rahe, 1967). Overconfidence is measured against the 95% confidence interval around entrepreneurs' expectations that the new venture will succeed. We also control for environmental complexity and dynamism, entrepreneurial experience, firm size, and founder demographics.

## **Results and Implications**

We find that entrepreneurs who experience death in the family are less likely to succeed in their new ventures. Death and illness events also magnify the negative impact of entrepreneurial overconfidence, which further reduces the likelihood of success. However, among overconfident entrepreneurs, the birth of a new child, receipt of a windfall, and to a lesser degree, getting married, mitigates overconfidence to the extent that their ventures are more likely to succeed. Consistent with social cognition literature, these findings provide support to the idea that catastrophic as well as positive family events can have a significant effect on entrepreneurs' capacity to coordinate venture-related tasks. To that end, we enhance understanding of how the entrepreneurial family is related to new venture creation.

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# COMBINING CLOSENESS AND CULTURE: PARENT-VENTURE SIMILARITY AND PERFORMANCE IN INTERNAL CORPORATE VENTURES

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# **Principal Topic**

Scholars generally agree that internal corporate ventures (ICVs), defined as firm-level entrepreneurial activities which develop new businesses for an organization (Burgelman, 1983), are important for organizational renewal and strategic innovation. Yet, there is much less agreement on how to configure ICVs for optimal outcomes (Burgers, Jansen, Van den Bosch & Volberda, 2009; Garrett & Covin, 2013). We contribute to this ongoing discussion in two ways. First we investigate whether a curve-linear, inverted U-shape describes the relationship between parent-venture similarity and ICV outcomes beyond what previous scholarship has found. Second, we analyze how organizational entrepreneurial culture moderates this relationship. We are testing our hypotheses with novel primary employer-employee data from Spanish organizations.

We find initial empirical support of an inverted U shaped relationship between parent-venture similarity and ICV outcomes. Moderately distinct structural and operational setups favor ICV outcomes whereas configurations stressing large degrees of either similarity or difference suppress ICV output. We also find that the nature of this relationship differs under distinct organizational entrepreneurial cultures, as expressed through tighter and looser management structures.

Theoretically, our differentiated (curve-linear) and large scale understanding complements and extends findings on operations independence in ICVs (Garrett & Covin, 2013; Burgers et al. 2009; Briody et al. 2004). Further, we newly introduce organizational entrepreneurial culture into the discussion. The latest data from our survey work suggest that culture plays an extensive role in ICV outcomes. Our data highlight that culture (beyond management structure) is perceived to be critical to ICV development and execution. This indicates an important stream of research between organizational culture and ICVs which should be explored in the future.

# **Results and Implications**

For practitioners, our study provides two actionable outcomes. First, we advise corporate decision makers on how to design ICV configurations that complement entrepreneurial cultures in their organization. We explain the need to be similar, without being identical and clarify how much similarity is productive in which cultural setting. Second, this study leads to improved diagnosis and guidance for organizations on the potential impact their existing culture will have on ICVs. For example, rigid processes and procedures may suggest the need for cultural intervention before ICVs are undertaken. Otherwise efforts and resources are wasted when focusing on the operational components of ICVs alone. Our study then helps organizations improve their approach to ICVs and their overall performance.

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# DO ASPIRATIONS INFLUENCE COMMITMENT TO EXTERNAL VENTURING? A BEHAVIORAL THEORY APPROACH

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# **Principal Topic**

When do firms commit to their venturing activities? Of the three main forms of external corporate venturing (ECV), acquisitions require more commitment than JVs, which require more commitment than CVC investments. There is a robust literature examining the drivers of these ECV modes individually, but this literature remains fragmented, providing no clear answer as to *why* firms take on greater overall commitment through ECV. We utilize the behavioral theory of the firm (BTOF) to investigate when a firm changes its commitment to ECV activities. We posit that firms performing below their aspirations will increase commitment to ECV, whereas firms performing above their aspirations will decrease commitment to ECV. Further, we posit that this performance-commitment relationship is contingent on both the dynamism of the external environment as well as the internal risk taking proclivity of the firm's managers.

#### Methods

We constructed a panel of publicly traded U.S. firms engaged in equity-based external venturing between 2000-2008 in three industries: information and communication technologies, chemicals, and medical and laboratory equipment. We utilize the SDC Platinum and VentureXpert databases to collect data on ECV activities, COMPUSTAT to gather financial and industry-level data, and firm 10-K reports to analyze risk-taking proclivity. The final sample contained 1,340 firm-year observations from 279 companies.

### **Results and Implications**

Results from fixed-effect panel estimation indicate that performance above aspirations decreases a firm's commitment to ECV, consistent with the BTOF. Dynamism moderates this relationship such that firms performing above aspirations increase their commitment to ECV in dynamic environments, while below-aspiration performance prompts decreased commitment. Risk taking moderates the relationship such that firms high on risk taking increase their commitment, regardless of whether they are above or below aspirations. Collectively, our study makes three contributions. We contribute to the BTOF literature by exploring conditions under which BTOF predictions manifest, and provide an alternative theoretical perspective—threat rigidity—for when they do not. Second, we contribute to the BTOF literature by investigating the contextual element of environmental dynamism. Finally, we contribute to the ECV literature by extending the nascent discussion on the influence of aspirations on external venturing.

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# WISDOM OF THE CROWD? SOCIAL INFLUENCE STRATEGIES AND RISK ASSESSMENT IN MICROLENDER CROWDFUNDING PLATFORMS

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### **Principal Topic**

The rapid emergence of peer-to-peer crowdfunding platforms around the world leverages the interdependent collective action of market participants to raise capital for individuals and firms. Recently, criticisms have emerged that crowdfunding platforms will generate suboptimal returns for investors since market outcomes are driven not by individual choice but rather by the strategic actions of groups of individuals (Griffin, 2012). Furthermore, these critics contend that the interdependent nature of these platforms reduces instrumental motivations and encourages free-riding by participants, herding behaviors will create insolvable social dilemmas and negatively impact investor decision-making (Zhang and Liu, 2012; Agrawal, Catalini, and Goldfarb, 2011).

#### Method

To examine the empirical basis for these competing perspectives, we developed a dataset of 6,045 entrepreneurs who solicit funding through Kiva – an online crowdfunding platform. In our dataset, the 6,045 ventures seeking capital are located in 39 developing countries and are funded by 63,028 unique lenders making 149,543 different investments. The total loan amount provided to these 6,045 ventures ranged from USD \$50 to USD \$5,000, with an arithmetic mean of \$612.78.

### **Results and Implications**

Consistent with our hypotheses, our results show significant, positive effects of deal risk on hours to funding, meaning that it takes longer for riskier deals to get funded. We also see that stronger investor reputations increase funding time suggesting these participants act with considerable prudence and caution, and that emotional appeals – discussion of the tribulations the entrepreneur has faced in the entrepreneurial narrative – shorten funding time.

We also find that investor reputation moderates the relationship between deal risk and Hours to Funding. We also find that stronger emotional appeals appear to decrease the amount of time taken to complete funding when deal risk is high thereby suggesting that the emotional appeal contained in the entrepreneur's solicitation for funding at least partially masks the objective deal risk inherent in their appeal.

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# TMT IMPROVISATION, RESOURCE MANAGEMENT AND FIRM PERFORMANCE: A MEDIATED MODEL

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## **Principal Topic**

Team improvisation - or the collective "creative and spontaneous process of trying to achieve an objective in a new way" (Vera and Crossan, 2005) - has the potential to improve organizational learning and help firms adapt to change and innovate (Barret, 1998). Despite the benefits associated with improvisation, studies examining the effect of improvisation on organizational performance produced mixed results. More specifically, the mechanisms through which improvisation influences firm outcomes remain unclear. This paper extends current research on improvisation, by exploring the underlying mechanisms through which TMT improvisation impacts SME performance. We direct attention to two resource management behaviors: financial bootstrapping and entrepreneurial bricolage. Bootstrapping provides a low-cost alternative to traditional external resource acquisition, while bricolage gives companies the opportunity to develop resources internally and combine existing resources in unconventional ways. We propose that the improvisational skills of the TMT influence the way resources are managed within the organization, which in turn impacts SME performance.

# Method

Our study uses data collected during spring 2014 as part of a research project in the Netherlands. Our sample includes responses of 294 TMT members from 147 SMEs (for each firm, the CEO and a 2<sup>nd</sup> TMT member) operating in the Netherlands in different industries. To mitigate commonmethod bias concerns, we take the dependent variables (i.e., bricolage, bootstrapping and SME performance) from the CEO surveys and the independent variables (i.e., TMT improvisation, controls) from the (management) team member surveys.

### **Results and Implications**

Our findings show that TMT improvisation plays a fundamental role in how firms manage their resources; teams that score higher on improvisation make use of bricolage and bootstrapping to a greater extent. In turn, we find that bricolage has a positive effect on SME performance, whereas bootstrapping has a negative effect. TMT improvisation improves SME performance, through its indirect effect via entrepreneurial bricolage and decreases SME performance via bootstrapping. Overall, our study sheds light on how management teams can use their improvisations skills to improve firm performance, by influencing the way resources are managed within the firm.

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# DO ENTREPRENEURS ACT ON WHAT THEY KNOW OR WHAT THEY BELIEVE? TESTING COMPETING COGNITIVE THEORIES OF ENTREPRENEURIAL ACTION

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### **Principal Topic**

In order to create a new firm, entrepreneurs need to take action and commit resources under conditions of uncertainty (Knight, 1921). Studies have shown that entrepreneurial action could stem from distinct cognitive origins and two overarching themes arise. One theme is the set of learning-action theories (e.g. Corbett, 2005; McMullen and Shepherd, 2006; Shane, 2000) and the other theme comprises of the conviction-based theories (e.g. Åstebro et al., 2007; Cardon et al., 2009; Dushnitsky, 2010). They do not axiomatically contradict each other; nevertheless, in spirit they emphasize different challenges and offer very different explanations of the observed commitment action. In this study, we extend these alternative cognitive theories of entrepreneurial action and test them concomitantly using purely cognitive measures of subjective judgment on key success factors. We theorize that learning-based mechanisms are substitutes of conviction-based mechanisms. Further, we hypothesize the moderating roles of perceived uncertainty and entrepreneurial self-efficacy in these cognition-action relationships.

### Methods

We use the Panel Study of Entrepreneurial Dynamics II dataset to examine the effects of entrepreneurs' refinement of venture-specific knowledge (vs. conviction) on their financial investment in the venture. Further, we investigate their substitution effects and the moderating effects of perceived uncertainty and cognitive attributes while controlling for various founder-specific and venture-specific fixed effects. In particular, we develop and utilize two new measures of entrepreneurs' cognitive mechanisms that capture two contrasting cognitive origins of entrepreneurial action: refinement of knowledge or discernment and strength of belief or conviction concerning relative importance of price, quality, niche, timing, marketing, location, design, knowhow, innovation, and intellectual property in the chosen business.

## **Results and Implications**

Initial test results are consistent with our theory and hypotheses as we find that our measures of the founders' venture-specific knowledge and conviction are positively related with and precede their own financial investment in the new venture. We also find that entrepreneurs' knowledge refinement and conviction substitute each other as competing cognitive mechanisms of entrepreneurial action. This study contributes to research on opportunity exploitation and venture development both theoretically and empirically, by disentangling the relationships between nascent entrepreneurs' venture-specific knowledge, conviction, and commitment.

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### GROWTH EXPECTATIONS AND TYPES OF ENTREPRENEURS

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### **Principal topic**

The (un)willingness to grow a firm may be a deliberate individual choice, based on the desire to grow and the perceived capabilities to achieve this growth. Having a small firm may be an intentional start-up strategy that could increase future survival probabilities. The present paper aims at disentangling "the ambitious entrepreneur" by distinguishing between four types of entrepreneurs: solo self-employed individuals, solo entrepreneurs, team entrepreneurs, and employer firms. By measuring ambitions in terms of the business owner's growth expectations this paper investigates the relationship between the four entrepreneurial types and ambitions.

### Method

The Global Entrepreneurship Monitor (GEM) data from 2012 are used. Our dependent variable captures growth expectations and is measured as the absolute difference between the expected number of employees 5 years from now and the current number of employees. The main explanatory variable is the type of entrepreneur. The GEM data allow a distinction between firm size (in terms of the number of employees), the number of business owners, and the specific industry in which the business is active. The following types of business owners are distinguished: *solo self-employed*, *solo entrepreneurs*, *team entrepreneurs* and *employer firms*. Next to control variables (e.g., business owner characteristics and motivations) we include the OECD indicator of employment protection (2011). It is an indicator for the strictness of regulation of individual dismissal of employees on regular/indefinite contracts. Linear regressions are performed with absolute growth expectations as the dependent variable.

### **Results and Implications**

The regressions show that team entrepreneurs have significantly higher growth expectations than solo self-employed or solo entrepreneurs. Owners of employer firms have even higher expectations. Employment protection legislation is significantly negatively associated with job growth expectations, but this only holds for the solo self-employed. The results suggest that a small start-up size is not considered as a deliberate growth strategy for most of the business owners who start without employees except for team entrepreneurs. We therefore conclude that the group of business owners is a heterogeneous group and that one should be careful in generalizing findings from studies that focus on business owners without employees because ambitions in terms of expected firm size are different for team entrepreneurs.

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# DECOMPOSING THE PERFORMANCE OF U.S. METROPOLITAN ENTREPRENEURIAL ECOSYSTEMS

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# **Principal Topic**

Extant research has primarily focused on characterizing *input elements*, typically referred to as pillars, of metropolitan entrepreneurial ecosystems (e.g., Isenberg, 2010; Vogel, 2013). In comparison, we know far less about the *performance* of ecosystems. The few studies that do exist are limited in that they are: a) descriptive and not based on statistical analyses, b) usually cross-sectional in nature and c) are case-based and hence hard to generalize. In this study, we aim to overcome these issues by conducting a historical assessment of U.S. metropolitan ecosystems, with archival data from 1998-2012.

#### Method

We assess the performance of metropolitan entrepreneurial ecosystems using two methods well suited for input-output analyses of complex systems, stochastic frontier analysis (e.g. Aigner et al., 1977) and qualitative comparative analysis (QCA) (e.g. Fiss, 2011). Stochastic frontier methods allow us to estimate a *production frontier* across all metro regions. We are therefore able to identify which metropolitan regions use their input resources (e.g. labor, finances, R&D, infrastructure, entrepreneurial culture) most *efficiently* to generate entrepreneurial outcomes of interest (e.g. startup creation, job growth). In comparison the QCA approach allows us to identify stable underlying configurations, that is sets of input resources that act in either a substitutive or complementary fashion, to generate outcomes of interest. We combined data from a variety of sources such as the Census Bureau, Harvard Cluster Mapping Project, National Business Incubator Association, Small Business Administration, and VentureXpert for these analyses.

# **Study Implications**

We offer a number of contributions through this study. First, rather than focusing on ecosystem inputs, we examine the drivers of performance heterogeneity between ecosystems. Second, our analytical methods allow us to offer useful policy insights. In particular, using frontier analyses techniques we are able to identify sources of inefficiency within systems and thus offer guidance on how metropolitan regions can optimize their entrepreneurial outputs given the resources (i.e. inputs) at their disposal. Similarly, QCA approaches provide insights on ecosystem inputs that are complementary, that can either perfectly or imperfectly substitute for one another, and that are most important at different stages of ecosystem evolution. In combination, our results should therefore help decision makers better understand which sets of input factors to focus on when attempting to build new ecosystems or revitalize existing ones.

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# WHAT DO PARTICIPANTS LEARN IN A MOOC ON EFFECTUATION? IMPACT STUDY ON SELF-EFFICACY AND SELF-DIRECTED LEARNING IN ENTREPRENEURIAL EDUCATION

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# **Principle Topic**

Even if we know that most entrepreneurship education programs have an impact on knowledge about entrepreneurship, entrepreneurial intentions, nascent behaviors or start-up performance (McNally et al., 2013), there is still a lack of understanding of which teaching and learning philosophy leads to what results (Fayolle, 2013). Although research on MOOCs is still in its infancy regarding their pedagogical characteristics and their efficacy, recent research suggests that the more open the MOOC is regarding the learner's choice and the more control she has over her learning process, the more ready she is to use a self-directed capacity of learning (Kennedy, 2014). Self-directed learning (Knowles, 1975) can be considered a key competence with regards to effectuation. Using data of a MOOC based on effectuation teaching, this research aims to analyze its impact in terms of self-directed learning and self-efficacy. The MOOC, which was in French language, ran in October, 2013 during five weeks. 9,200 participants registered online. Of these, 2,700 participants finished the course and 2,500 obtained the certification. The teaching model of this MOOC is an open course, based on a connexionnist pedagogy (c-Mooc). In this teaching model, self-directedness has theoretically a central role.

### Method

We analyzed a set of data collected based on one pre and one post questionnaires on Two paired samples (N1=781, N2=149). Questionnaires were based on recognized measure instruments regarding self-directed learning readiness scale (Knowles, 1975; Guglielmino, 1977) and entrepreneurial self-efficacy scale (McGee et al., 2009). We also built ad hoc measures regarding the specific knowledge acquisition objectives of the course and used a few qualitative open questions to capture nascent behaviors.

### **Results and Implications**

Results with the first sample of participant (N1=781) show that there is a significant link between self-directed learning readiness and entrepreneurial self-efficacy [ $\chi^2$ (max. right.)=223.69, dll=16, p=.00 / V Cramer=.270]. Regarding the results of participants who completed the MOOC (N2=149), 85% state that they have made progress: 64% of them developed their entrepreneurial self-efficacy and 54% their self-directed readiness. And among these, 81% completed the MOOC. Our results suggest that time spent, collaboration, active involvement of the teacher and the learners' perseverance are the four pillars of success in a c-MOOC about effectuation. We draw theoretical and practical implications for future MOOC research and development.

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# THE EFFECTS OF IDENTIFICATION BY THE ENTREPRENEUR TO THE FIRM VERSUS TO THE PROCESS

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### **Principal Topic**

Individuals such as entrepreneurs are regarded as identifying strongly with the firm they create (Cardon et al., 2009). It is not uncommon for entrepreneurs to refer to their venture as their "baby". If the business subsequently fails, the level and strength of the entrepreneur's identification to their firm influences their attitudes and reactions to the failure. Alternatively, many entrepreneurs are rational actors that negotiate entrepreneurial failure without developing any identifiable emotional attachment to their business. To explore entrepreneurial identification further we examine entrepreneurs' business failure experiences. We draw upon the dualistic model of passion to argue that the type of identification formed is a precursor to the form of passion experienced, be it harmonious or obsessive.

### Method

We adopted a qualitative, phenomenological approach and conducted in-depth interviews with entrepreneurs identified using the Bureau van Dijk database— FAME. All 14 entrepreneurs experienced business failure in the Irish Information and Communication Technology sector within five years of start-up. Every effort was made to eliminate potential retrospective biases— we engaged secondary data gathered from the FAME database and various online sources in order to create a timeline of the business' evolution, signposting key events and utilizing those events as recall prompts in the interviews. We subsequently analyzed the data using thematic analysis.

### **Results and Implications**

The findings uncovered evidence of both harmonious and obsessive passion; it was clear that each passionate type is related to a particular form of identification. Individuals experiencing harmonious passion identified with the entrepreneurial process rather than the business idea. They were psychologically flexible and adaptive to the onset of failure, pivoting their energy into other projects in order to continue their flow of work. A rational, clinical perspective is maintained, preserving the entrepreneurs personal identity as separate from that of the firm and allowing for strategic decision-making unbiased by emotion. Conversely the entrepreneurs that displayed obsessive passion identified with the firm itself. They were emotionally and psychologically invested in their business to the extent that their own individual identity was tied to that of the firm, thus making the firm failure a personal failure. Energy was invested in ensuring longevity regardless of viability. Consequently the entrepreneur's personal life is affected and strategic decision-making inhibited.

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# COPYCAT OR INNOVATOR? LEARNING STRATEGIES OF SPIN-OUT FOUNDERS AND FIRM GROWTH

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# **Principal Topic**

Spin-outs—start-ups by ex-employees—are said to start with a partial copy of their parent firms' knowledge base. This knowledge "legacy" can be a key advantage over de novo start-ups but "piggybacking" on parent's knowledge can also result in key disadvantages, such as insufficient spin-out differentiation, lawsuits over intellectual property, and retaliation by the parent. This raises the important questions of whether and, if so, when spin-outs should exploit their knowledge "legacy" or explore their own ways of doing business. While a mix of exploitation and exploration has been suggested for established firms, surprisingly little is known about organizational learning in a spin-out context. We argue that spin-outs' sales growth suffers from exploitation (H1) but benefits from exploration (H2) because exploration helps develop competitive advantage via a differentiated knowledge base, whereas exploitation is susceptible to structural inertia. Moreover, networking by the spin-out moderates the learning-performance relationships: collaboration with the parent mitigates the negative performance effect of exploitation (H3a) and reduces the positive effect of exploration (H3b). Network development increases the negative effect of exploitation (H4a) and the positive effect of exploration (H4b).

### Method

We used survey data collected in face-to-face interviews with founders of spin-outs in Germany, resulting in a usable sample of 130 spin-outs. Measures were extracted from the extant literature, where possible, and included sales growth, exploitation (alpha = .80), exploration (alpha = .81), parent collaboration (composite), and network development (composite), besides important control variables.

# **Results and Implications**

Sales growth suffered from exploitation (H1 supported), whereas exploration per se had no significant effect (H2 not supported). Parent collaboration mitigated the negative effect of exploitation (H3a supported) and reduced the positive effect of exploration (H3b supported). Network development enhanced the positive effect of exploration (H4b supported) but no moderating effect was found with regards to exploitation (H4a). A key insight of this study is that relying on inherited knowledge can be counterproductive for spin-outs and knowledge "legacies" can turn into knowledge "liabilities". The development of the spin-out seems to depend on their ability to emancipate from the parent firm and differentiate their knowledge bases.

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# PATENTING BY ACADEMIC ENTREPRENEURS IN WEAK AND STRONG ORGANIZATIONAL REGIMES

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# **Principal Topic**

Legal reforms in many countries, such as the Bayh-Dole act in the US, have resulted in a shift from a 'weak organizational regime' (the inventing employee holds the property rights in own inventions) to a 'strong organizational regime' (the employer holds property rights in employee inventions during work time). This seems to have drastically changed the way academic entrepreneurs, who create technology ventures to commercially exploit their discoveries, deal with their intellectual property. However, to date, we know little about why academic entrepreneurs seek patents, both before and after such reforms, since prior research on patenting has focused on scientists in general and established firms. In this paper, we suggest that founder characteristics, including entrepreneurial orientation and expert knowledge, and organizational characteristics, including publication norms, patenting norms, and patenting quality enhance patent propensity. Moreover, organizational characteristics are suggested to prevail in strong organizational regimes, founder characteristics in weak organizational regimes. Put differently, the regime shift has, as we argue, led to an (over)emphasize of organizational norms and capabilities at the expense of founder motivation and capabilities.

### Method

Data were collected via a survey of from academic entrepreneurs in Germany and from EPO's Patstat database. Matching a sample of 79 spin-offs from public universities (founded prior to 2002) with 79 spin-offs from public research organizations allowed us to explore weak and strong organizational regimes, respectively. The latter group was governed under Germany's version of the Bayh-Dole Act since 1957, the prior only after 2001. Measures were extracted from the extant literature, where possible.

## **Results and Implications**

Founder characteristic were positively related to the number of patent applications, but only in weak organizational regimes. Among the organizational characteristics, only patenting norms had a significant, positive effect, but only in strong organizational regimes. An intriguing finding of this study is that, in strong regimes, organizational norms are the single most important driver of patent applications. Thus, organizations governed under Bayh-Dole-like acts seem to create rigid patenting routines that ignore organizational patenting capabilities and interests of academic entrepreneurs.

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# HYBRID TIES, ENTREPRENEURIAL OPPORTUNITIES, AND ENTREPRENEURS' ACTIONS: A STUDY OF ONLINE SOCIAL NETWORK RELATIONS

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### **Principal Topics**

A phenomenon in recent years reveals that entrepreneurs are increasingly creating a new form of social ties enabled through social media, attracting a community of strangers with whom the entrepreneurs would share personal aspirations, opinions, problems as well as solutions about their new ventures. This presents a new process of entrepreneurial resource acquisition, which has not been examined by entrepreneurship scholars (Fischer & Reuber, 2011). To address the gap, we investigate the factors that drive entrepreneurs to engage in online networking activities and the circumstances under which the entrepreneurs will benefit from such ties with strangers. We propose that entrepreneurs in online communities form a new type of "hybrid ties", through which the participants obtain both fine-grained and novel information. Using affective events theory and discourse experience theory, we build a framework to explain the experiential factors which create and maintain hybrid ties, and how cognitive and emotional factors can facilitate the entrepreneurs' acquisition of information.

#### Method

We studied an online community of entrepreneurs in Wechat (a mobile social network hosted in China), and obtained 31, 927 messages from Oct 2014 to Feb 2015. The community is known as "Alliance of Chieftain of Small & Beautiful Stuff", and has about 150 members who are mostly start-up entrepreneurs of small and medium-sized businesses. We adopted discourse analysis methodology (Jorgensen & Philips, 2002) to examine the nature of the text messages and regression analysis to test the hypotheses regarding how these ties are formed and influence the entrepreneurs' acquisition of information via a social media platform.

### **Results and Implications**

Our study shows that hybrid ties are distinct from weak ties by rendering fine-grained information and emotional support, and from strong ties by providing novel rather than redundant information. Besides the direct effects, the influence of hybrid ties is also mediated by competence-based trust and affect-based trust. The competence-based trust is built on entrepreneurs' prior knowledge and professional background, whereas the affect-based trust comes more from the discourse interactions via social media. In summary, by investigating a novel research context, our study fills an important gap in entrepreneurship literature and provides new insights into the behavioral theory and social psychology of entrepreneurial process via a social media platform. Our study also contributes to social network theory by defining a new form of social ties that are prevalent in our digital world.

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# PASSION FOR ENTREPRENEURSHIP OR PASSION FOR THE VENTURE'S DOMAIN?: A CONJOINT ANALYSIS OF INVESTORS' DECISION-MAKING

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## **Principal Topics**

Do start-up investors care about entrepreneurs' passion? Their experience? Both? We investigate the role that an entrepreneur's passion, experience, and humility play in angel investors' assessment of whether to invest in the entrepreneur's venture. In doing so, we unpack the passion construct, testing the importance that investors place not only on entrepreneurial passion, but also the entrepreneur's passion for activities relevant to the venture's domain. We also unpack experience, investigating the importance of both start-up experience and domain experience. Finally, we provide a better understanding of the role that an entrepreneur's humility plays in the investment decision and how the investee characteristics of passion and experience interact with humility.

### Method

With a sample of angel investors in the United States, we use conjoint analysis to decompose their decision criteria. We present the angel investors with a series of hypothetical investment opportunities based on five characteristics of the entrepreneur presenting the opportunity: (1) passion for starting and developing new businesses (entrepreneurial passion), (2) passion for activities relevant to the business's domain (domain passion), (3) experience starting up and developing new businesses (entrepreneurial experience), (4) knowledge and experience in the industry or a related industry (domain knowledge), and (5) receptivity to feedback from investors, the market, and other stakeholders (humility). We also measure investor-level differences including start-up investment experience, personality, and the investors' entrepreneurial passion.

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# CONSULTANTS, OUTSIDE BOARD MEMBERS, OR BOTH? AN EMPIRICAL INVESTIGATION OF THE IMPACT OF EXTERNAL KNOWLEDGE SOURCES ON NEW FIRM GROWTH

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### **Principal Topics**

The knowledge based view of the firm states that knowledge is the foundation for the rent earning potential of all resources. In the context of start-ups, several authors mention the existence of a knowledge gap, which can be filled by using external sources of knowledge. In this study, we consider two important sources of external knowledge: (1) external advisory services (EAS) such as lawyers and consultants and (2) outside members in the board of directors of the firm (OBM). We argue that the impact of external advisory use on start-up growth will dominate the impact of the presence of OBM due to the higher accuracy and timeliness of the EAS. In addition, we introduce two contingencies, rooted in organizational learning theory: absorptive capacity (AC) and congenital learning (CL). Higher AC allows the firm to use external knowledge more effectively. As a result, AC will increase the impact of EAS on new firm growth. CL is the firm's stock of knowledge at founding. We expect that the relationship between EAS and firm growth will be stronger when the level of CL is low.

This study builds on a cross-sectional survey of start-ups located in Flanders, Belgium. The survey data was supplemented with publicly available financial data.

Using hierarchical regression modeling ,we find a positive significant effect of the use of EAS on firm employment growth, contrary to the presence of OBM, which turns out not to be significantly related to employment growth in new firms. The analysis of the interaction effects shows that the impact of EAS on firm growth is *higher* when AC is high and *lower* when CL is high.

This investigation leads to the conclusion that, when compared to the use of EAS, the role of OBM as providers of advice and counseling in start-ups is not as crucial as frequently argued in corporate governance research. Our results further show that AC and CL are important contingencies. These findings have important implications for entrepreneurs and policy makers.

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### INVESTMENT AND RETURNS IN SUCCESSFUL ENTREPRENEURIAL SELL-OUTS

Robert Wiltbank, Willamette University, USA Nicholas Dew, Naval Postgraduate School, USA Stuart Read, Willamette University, USA

### **Principal Topic**

The assumption of capital constraints on entrepreneurs frames much entrepreneurship research with the general expectation that in a new venture more cash is better. But owing to limited availability of data on the terminal liquidity value of new ventures, empirical examinations of the ultimate merits of this assumption are scarce.

### Method

We assembled a unique hand-gathered dataset comprising the entire universe of 3,160 private firms acquired by U.S. publicly-traded entities during the years 1996-2006. Combining data from SEC 8K Filings, Thomson & Reuter's Done Deals database, 50 different state incorporation databases, the US Census Longitudinal Business Database, the PriceWaterhouseCoopers Moneytree and NVCA database, and the US Government Environment, Health and Safety database, we analyze financial outcomes of:

- Revenues and assets in order to assess venture growth
- Years to liquidity
- Transaction price
- Total cash out
- Total profit generated in the transaction

# **Results and Implications**

We find that increases in equity significantly accelerate venture growth and increase firm valuation at acquisition. We further exploit variation in the total amount of equity invested in ventures in our data to show that equity displays a pattern of significant diminishing marginal returns to growth, exit speed, terminal venture value, total cash extracted from the venture and profit to the entrepreneur. Following these main effect analyses, we split the sample into two groups representing two alternative financing strategies. Termed Earners and Burners, members of the former group fund growth with money from sales revenue, while the latter group funds growth with equity capital. We find that Burners grew and exited faster, but their overall use of capital significantly reduced their rate of return.

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#### COGNITIVE CONSEQUENCES OF ENTREPRENEURIAL INACTION

Matthew Wood, Baylor University, USA David Williams, University of Tennessee USA Will Drover, University of Oklahoma, USA

#### **Principal Topic**

Entrepreneurship scholarship is intently focused on theories of action (McMullen and Shepherd, 2006). However, there are countless examples of situations where entrepreneurs do not act when action is warranted or expected. Thus, entrepreneurial inaction is likely a common, but understudied, phenomenon, and it remains unclear the extent to which the 'road not traveled' influences the entrepreneurship process.

Hence, we build and test a theory of *entrepreneurial inaction*—defined as a conscious, deliberate, and articulable decision not to act on a perceived opportunity. Our theory flows from cognitive science research on inaction inertia (Tykocinski et al., 1995) and we advance that not acting on an initial opportunity becomes a source of inertia in entrepreneurs' subsequent opportunity judgments. We then theorize that the outcome of the initial inaction decision and the similarity of the technological domain between the initial and subsequent opportunity, exacerbate the inertia effect.

#### Methods

We deployed a multiple judgment scenario experiment. We first conducted an expert survey of entrepreneurs to gain phenomenological insight (Zikmund, 2003) regarding past inactions and then developed and administered the experiment to 143 experienced entrepreneurs. Participants had the choice to act, or not act, on a business opportunity derived from a university-held technology. We then provided the outcome of the decision (net profit or a net loss) after which participants indicated the extent to which they would act on two subsequent opportunities—one in a related domain and one in an unrelated. Data was analyzed using multilevel-modeling.

### **Results and Implications**

Entrepreneurs who choose not to act on the initial opportunity were significantly less likely to act on the subsequent opportunities, indicating entrepreneurial inaction does serve as a source of inertia. We then considered the interactive effect of decision outcome, which was not significant. Opportunity similarity was significant such that entrepreneurs who did not act and then evaluated an opportunity in a similar domain were less likely to act on the subsequent opportunity. Finally, the three-way interaction indicated that for those who missed the initial opportunity, inertia becomes stronger when the subsequent opportunity is in a similar domain, but mitigated in a dissimilar domain.

Our findings document entrepreneurial inaction as an influential inertial force affecting entrepreneurial decision-making. This has important implications for the future applicability of extant models of opportunity classification and pursuit because it challenges the assumption that entrepreneurs can pass on opportunities without incurring costs.

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# COGNITIVE ANTECEDENTS TO FINANCIAL ESCALATION OF COMMITMENT IN SMALL, FAMILY-OWNED ENTREPRENEURIAL FIRMS

Jeremy A. Woods, California State University Bakersfield, USA

#### **Principal Topics**

The tendency of decision-makers to "stay the course" and continue with a course of action that is failing to accomplish optimal financial results is a phenomenon known as financial escalation of commitment (Staw, 1976, 1981; Staw & Ross, 1978). Persevering with an initially unsuccessful course of action sometimes leads to eventual financial success, but it often leads to chronic financial under-performance (DeTienne, Shepherd, & Castro, 2008) and/or bankruptcy (Daily & Dalton, 1994). It is surprising how often different decision-makers facing the same type of decision – subject to the same constraints and privy to the same information – come to different conclusions about what course of action is most likely to produce optimal financial results. This research presents new empirical results which demonstrate how certain cognitive antecedents help to explain why some small, family-owned entrepreneurial firms are more profitable than others.

#### Method

This study is based on a sample of 219 small, family businesses all across the United States contacted in cooperation with several industry associations and with the help of a survey research vendor. It applied stepwise hierarchical regression analysis, along with backward stepwise Wald logistic regression analysis, to test its hypotheses.

#### **Results and Implications**

Respondents who demonstrated more open-mindedness to different opinions, assistance, advice, and possibilities (r = -.412, p < .001), who demonstrated more recognition of base rate frequency (r = -.224, p < .002), or who demonstrated more recognition of mean regression (r = -.382, p < .001) also demonstrated lower levels of financial escalation of commitment in the study's decision-making scenarios. Respondents who were more involved with their industry associations also demonstrated less financial escalation of commitment in the decision-making scenarios (r = -.129, p < .053). This second result was only the case if respondents also demonstrated more recognition of mean regression. Firms in which respondents demonstrated a preference for ownership, control, and family involvement in their dominant logic showed above average revenue growth for their industries (Wald = 4.755, P < .029, B = -.841, Exp(B) = .431). This final result was only the case if respondents ignored the loyalty of a handful of key customers. If they fixated on this loyalty, they showed *below* average revenue growth for their industries.

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 $<sup>^{1}</sup>$ The dependent variable was financial escalation of commitment, operationalized as below average revenue growth. Thus, Exp(B) values below 1 indicate *above* average revenue growth

# AMIT & ZOTT REVISITED – REFINING THE MEASUREMENT OF BUSINESS MODEL DESIGNS AND THEIR PERFORMANCE IMPLICATIONS

Johann-Peter Wulf, RWTH Aachen University, Germany Tessa Christina Flatten, TU Dortmund, Germany

#### **Principal Topic**

Business models (BM) have come to great popularity recently in the practitioner-oriented as well as the academic literature. However, there is a lack of clarity what a BM actually comprises and thus confusing guidelines on how to ideally design a BM. One of the most rigorous and theoretically grounded BM conceptualizations is the perspective by Amit & Zott (2001) who identify design themes as the key value drivers behind BM designs. This conceptualization lends itself well for large scale comparisons of frameworks. However, it has several improvement areas: First, the design themes were derived in an exploratory analysis of firms from the dot-com era, and thus "therefore might not explain all the variation in the dependent variable [firm performance] due to BM design themes" (Zott & Amit, 2007: 195). Second, the conceptualization was so far studied separately from other concepts. Third, it has only been applied in entrepreneurial contexts and the generalizability is only assumed. In the paper, we attempt to overcome these criticisms by reviewing the design themes and proposing a synthesized framework for BMs.

#### Method

This study employs a multi-method approach. Based on an explorative analysis of 71 BM patterns, we develop new measurement scales for five updated or entirely new design themes following guidelines by DeVellis (2003). Subsequently, we test their value creation potential conducting a regression analysis setting the themes as well as their pairwise interactions in relation to firm performance.

#### **Results and Implications**

Our refined framework includes the following dimensions: *Efficiency*-centered BMs aim to create value through the reduction of transaction costs within the BM. *Complementarities*-centered BMs aim to increase the customers' willingness to pay by leveraging complementarities among strategic assets or participants in the BM network. *Premiumization*-centered BMs aim to achieve the same through establishing a long-term relationship based on trust, high quality-offerings, or brand image. In *sponsor-based* BMs, the focal firm tries to attract and retain 'primary customers' – even without an economic intention – to earn money from 'sponsors' who want to get access to the primary customers. *Digitization*-centered BMs aim to create value by enhancing the value proposition through the usage of digital technologies. Our regression model showed full support for the positive performance effect of *efficiency*, *premiumization*, and *digitization*. For *complementarities* and *sponsor-based* BMs we find insignificant or significant negative effects, respectively. This can be partially explained by the effects of combining design themes: *Complementarities* should be ideally combined with *efficiency* and *sponsor-based* BMs with *digitization*.

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# BUSINESS MODEL ORIENTATION: HOW CAN FIRMS CULTIVATE A PREPAREDNESS FOR BUSINESS MODEL CHANGE?

Johann-Peter Wulf, RWTH Aachen University, Germany Tessa Christina Flatten, TU Dortmund, Germany

#### **Principal topic**

Business model innovation (BMI) is a key topic on CEOs' agendas nowadays. However, the academic literature can so far give only limited advice to managers on how to undertake it. Among the different approaches to de-mystify BMI, the proposed application of the dynamic capabilities framework (Teece, Pisano, & Shuen, 1997; Teece, 2007, 2010) to guide CEOs on what skills firms need to prepare for business model change has been the most promising one. However, little is known on how the development of such capabilities can be influenced. Based on configuration theory, we conceptualize a theoretical framework of intertwined relationships between business models, dynamic capabilities, and organizational structure. Focusing on the connection between organizational structure and dynamic capabilities, we analyzed the effects of structural organicity (captured through centralization, formalization, specialization, and administrative intensity) on the unfolding of 'capabilities for business model change'.

#### Method

Following DeVellis (2012), we developed reflective measurement scales for the two dimensions of capabilities, the sensing and seizing of business model change opportunities. Subsequently, we collected data through an online survey that was sent to CEOs of SMEs within dynamic and technology-intensive industries in Germany (n=214). The firms were randomly selected from Bureau van Dyck's Orbis database. To test our hypotheses regarding effects of selected subdimensions of structural organicity (measured using established scales (Aiken & Hage, 1966, 1968; Blau & Schoenherr, 1971; Olson, Slater, & Hult, 2005) on the single capability dimensions as well as an overall business model change capacity, we computed a structural equation model controlling for firm size, firm age, and industry volatility.

### **Results and Implications**

We advance the entrepreneurship and strategic management literature by explicating dynamic capabilities required to evolve, adapt, or innovate a BM. We find strong empirical evidence that structural organicity generally incites business model development capacity. However, on a detailed level, significant differences exist: While specialization and administrative intensity have a positive impact on both sensing and seizing of BM change opportunities, the picture is twofold for centralization and formalization: Centralization has an overall negative effect resulting mainly due to a negative impact on seizing; formalization has an overall positive impact, however hindering sensing capabilities.

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# OPTIMISTIC ENTREPRENEURS AND STRATEGIC CHANGE IN HIGH-TECH NEW VENTURES: AN EXAMINATION BASED ON THE BEHAVIORAL THEORY OF THE FIRM

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#### **Principal Topics**

We apply behavioral theory of the firm (BTOF) to high-tech new ventures and examine how performance feedback affects new strategic initiatives (i.e., new product introductions), and the role of entrepreneurial optimism in this processes.

#### Methods/Key Propositions

According to BTOF, firms adjust their behaviors in response to favorable and unfavorable performance feedback (Cyert & March, 1963, Greve, 1998). Low performance relative to aspirations is taken to be a problem and to raise performance above the aspiration level, firms search for alternative solutions such as introducing new products. High performance relative to aspirations, on the other hand, causes firms to maintain the current operations and may limit new strategic initiatives. Thus: H1: For high-tech new ventures, the probability of introducing a new product is higher when past performance is below aspirations than when past performance is same as or above aspirations.

We also argue that strategic responses to performance feedback is moderated by entrepreneurial optimism such that optimistic entrepreneurs tend to respond to performance shortfalls with continuing efforts to solve problems and try new things while pessimist entrepreneurs would tend to deny or disengage themselves from the problems instead of trying to solve them (Papenhausen, 2010). Thus: *H2: For high-tech new ventures, the level of founder optimism moderates the relationship between past performance and new product introductions such that when performance falls short of aspirations, new ventures founded by more optimistic founders are more likely to introduce new products relative to those founded by less optimistic founders.* 

Our data came from Kauffman Firm Survey (KFS), large panel data set of new firms that were all founded in 2004 in the US. Our sample consists of 333 high technology new ventures, 173 of which have introduced at least one new product. We employed logit regression to test our hypotheses.

#### Results/Implications

Our preliminary results show that when past performance is below aspirations, the probability of introducing a new product is higher for optimistic entrepreneurs relative to non-optimistic entrepreneurs. When past performance is above aspirations, on the other hand, entrepreneurs being optimistic or not does not have significant effect on new product introductions.

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# ANTECEDENTS AND CONSEQUENCES OF ENTREPRENEURIAL ORIENTATION: A LONGITUDINAL STUDY OF TECHNOLOGY-BASED SMES

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### **Principal Topics**

Entrepreneurial orientation (EO), reflecting an organization's innovative, proactive and risk-taking behavior, may enhance firm competitiveness and performance. Although prior studies proposed a number of contextual influences such as internal and external factors as antecedents to EO, a growing body of research has tended to only examine the relationship between EO and firm performance, and less attention has been given to the investigation of the antecedents of EO. Further, due to methodological difficulties, research results examining the impact of EO on firm performance have generally been less robust than the normative view suggests. In this study we examined both the antecedents and consequences of entrepreneurial orientation among a sample of technology-based SMEs employing longitudinal approach.

#### Methods

Data were collected from a sample of technology-based SMEs that participated in the initial survey conducted in 1999 and the follow-up survey in 2004. Of the 277 firms that participated in the 1999 survey, 217 firms were resurveyed in 2004. A total of 112 firms participated in both the 1999 and 2004 studies. Multiple regression analysis was employed to examine 1) the direct effect of growth intention and environmental turbulence on EO; 2) the longitudinal effect of EO on firm performance; and 3) the moderating effect of environmental turbulence on the EO-performance linkage, controlling for prior levels of firm performance, environmental turbulence, and overall EO.

#### **Results and Implications**

A firm's growth intention and environmental turbulence were major antecedents of EO as both variables showed positive effects on EO. The longitudinal effect of EO on firm performance and the moderating effect of environmental turbulence on EO-performance were also supported after controlling for prior levels of EO, firm performance and environmental turbulence. A first implication of this study is that managers should adopt a long-term perspective in developing, managing, and evaluating EO as it may take time to fully pay off. A second implication is a dual effect of the environment in which EO is practiced. Although environmental turbulence was found to be an antecedent to EO, it also moderated the effect of EO-performance as firm performance decreased moderately over time in turbulent environments. Environmental context must be regarded as a variable that may either enhance or stifle EO and the effect of EO on firm performance. Managers are advised to not only employ EO with a long-term perspective, but to adopt other strategic postures in order to compliment EO and thus enhance firm performance and competitiveness in turbulent environments.

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# NASCENT VENTURE TEAM DIVERSITY AND NASCENT VENTURE PERFORMANCE: AN INVESTIGATION OF BUSINESS PLAN AND OPPORTUNITY TYPE

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### **Principal Topic**

As new ventures are being formed, magazines and textbooks encourage entrepreneurs to build diverse teams, ensuring that relevant competencies are represented. There is, however, little scholarly support for this notion. Instead, it seems that team diversity is a double-edges sword, which can bring informational benefits but also informational challenges (Dahlin, 2005). In this paper, we propose that the effectiveness of team diversity depends on whether mechanisms are in place that allow team members to exchange, discuss and integrate task-relevant information and perspectives (Pieterse et al., 2013). The business plan can serve as such a mechanism of information elaboration, which provides a platform for team members to interact and integrate their perspectives. The nature of the tasks also influence the relationship between team diversity and performance. When tasks are complex and uncertain, diverse and extensive information processing seems more beneficial than when tasks are simple and routinized (Horwitz & Horwitz, 2007). We therefore suggest that teams can benefit more from diversity when it pursues innovative business ideas than imitative ideas.

#### Method

We used six waves of panel data collected through the Panel Study of Entrepreneurial Dynamics (PSED II). The dataset contains 362 teams that allows us to compute a rich set of diversity. Considering censoring problem, we rely on event history analysis to predict how business plan and opportunity type can moderate the relationship between team functional diversity and venture success. We also control for bio-demographic diversity, industry, team size and prior total start-up experience.

### **Results and Implications**

We find that having an effective business plan and pursuing an innovative opportunity enhances the informational benefits while at the same time reducing the informational challenges imposed by diversity. Specifically, a business plan enhances the benefits of educational level diversity, and pursuing an innovative opportunity enhances the influence of general work experience diversity on venture success. This study moves beyond assuming direct relationships between team characteristics and performance and thus provides important explanations to the mixed results in the literature. In addition, our conceptualization of the business plan and opportunity type within theories on team performance provides insights into the causal mechanisms that translate these factors into performance.

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#### LINKING MANAGERIAL COMPETENCE TO SMALL ENTERPRISE PERFORMANCE

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#### **Principle Topics**

The main objective of this study is to test the explanatory power of a model of how the management competencies of owner/managers are related to the performance of their small enterprise. It focuses on the role entrepreneurial orientation and willingness-to-change play as mediators between managerial competencies and small enterprise performance.

#### Method

We use structural equation modeling to test a theoretical model based on a data set from owners and managers of small enterprises within the UAE. Data were gathered from 250 respondents from 125 small enterprises, with less than 50 employees, located in all seven emirates of the United Arab Emirates (UAE). The same survey instrument was used to obtain responses from the owner of the enterprise and a senior manager within the same enterprise. We collected data from multiple respondents (owners and managers) in order to overcome the common problems associated with single source bias. The data analysis assesses measurement models using confirmatory factor analysis (CFA), then assesses path relationships using structural equation modeling (SEM) (Anderson and Gerbing, 1988). The SEM statistical software program AMOS 6.0 was employed with the maximum likelihood estimation method. As suggested by James, Mulaik, and Brett (2006) and Craig, Dibrell, and Davis (2008) we estimated a structural equations model (SEM) to assess the mediating effects shown in Figure 1.

### Results

The results show that willingness-to-change acts as a key mediating factor between management competence and performance as well as between EO and performance. Suggesting that willingness-to-change reinforces the effect of managerial competence and EO on performance and is a key parameter in explaining why firms differ in its performance. More specifically, managerial competence and EO indirectly influences performance by influencing willingness-to-change. Additionally, the study shows that EO plays a partial mediating role through which managerial competence benefits willingness-to-change.

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# DO I HAVE A SAY IN IT? THE FOUNDERS' ROLE IN VENTURE CAPITAL SYNDICATE FORMATION

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#### **Principal Topic**

Venture capital (VC) firms often syndicate to reduce risk, improve screening and monitoring of ventures, and enhance the chance of successful exits, etc. Research on VC syndicate formation, consistent with the current literature on network formation in general, has largely been focused on partnership formation from the perspective of partners. Despite being the ones who solicit VC funding, the founders' influence on VC syndicate formation has been neglected in the current literature. This paper fills this gap by comparing serial and novice entrepreneurs. It adds value to entrepreneurship literature by examining how founders may have an influence on the composition and attributes of VC syndicates. Unlike previous research in entrepreneurship that often assumes a passive role of startup companies in VC financing, this paper demonstrates that the founders' influence on financing is more than just signaling; indeed, founders may actively exert influence on the composition of VC syndicates.

#### Method

This paper examines U.S.-based startup companies in the industry segment of "Internet Specific" that received investments from VC syndicates during 1995–2008. Based on a choice-based sampling approach, we construct hypothetical syndicates and test our hypotheses using conditional logit model.

#### **Results and Implications**

We find that a syndicate with lower prior tie density is more likely to be formed by serial entrepreneurs. However, this effect only holds when collaboration challenges are less of an issue. In the case of multi-VC syndicates, serial entrepreneurs are more likely to form a syndicate with lower tie strength dispersion to ensure a supportive syndicate. This paper informs a dilemma constantly faced by entrepreneurs. On the one hand, entrepreneurs want to hold more control by creating a division in the syndicate. On the other hand, entrepreneurs want a well-functioning syndicate in order to make sure that it provides the best assistance to the startup company. The analysis in this paper suggests that the first priority of entrepreneurs is still to have a supporting VC syndicate that can help develop the startup company. When collaboration challenges are smaller and the functioning of a VC syndicate is not jeopardized, serial entrepreneurs will then try to keep more control of the company.

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# THE INFLUENCE OF VENTURE CAPITAL SYNDICATES ON STARTUP COMPANY PERFORMANCE: A NETWORK STRUCTURE PERSPECTIVE

Lei Zhang, University of South Florida, U.S. Justin Tan, York University, Canada

#### **Principal Topic**

Venture capital (VC) firms often syndicate to back up start-up companies. VC syndication can help to select startup companies with better quality; add value to startup companies through monitoring and nurturing; help share risks in VC investment; and also boost VC reputation by investing in successful startup companies. Although empirical studies have already confirmed the positive impact of using VC syndication, how attributes of VC syndicates may influence startup company performance is still underexplored. One of the important attributes is syndicates' network structure. Since prior research has demonstrated that network structure is critical to firm performance, it is important to understand how the network structures of VC syndicates may influence the performance of startup companies. To fill the gap, we investigate the impact of both internal network density within a syndicate and the external structural hole position of the syndicate in the overall VC network. By doing so, this paper makes important contributions to the entrepreneurship literature. As the earliest efforts to investigate network influence at the inter-firm group level, this paper also sheds light on the consequences of network formation behaviors.

#### Method

This study uses quantitative analysis. Our sample contains 1978 startup companies with first-round syndicates formed by U.S. VC firms during 1985–2000. Because our dependent variable is a dummy variable indicating whether a company went to public or was acquired by 2010, we use a probit model to test the hypotheses. To check the sensitivity of our analyses, we also conduct a few robustness tests.

#### **Results and Implications**

The analyses show that both internal syndicate density and external structural hole of a syndicate are positively associated with the startup company performance. The positive impact of syndicate density will be greater in those syndicates that are larger in size and/or have greater heterogeneity in experience. This paper suggests that there is merit in the VC firms' preference for prior partners. Prior ties among syndicate partners are especially important in larger syndicates or in syndicates with greater experience heterogeneity. Syndicating with prior VC partners may actually help form syndicates that span more structural holes, which will also help to improve startup company performance.

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# DISENTANGLING THE AUTONOMY – JOB SATISFACTION RELATIONSHIP FOR SMALL BUSINESS OWNER-MANAGERS: EXPLORING THE ROLE OF WORK-LIFE BALANCE AND COPING STRATEGIES

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#### **Principal Topic**

Autonomy is one of the most popular motivations for individuals to start their own business (Carter, Gartner, Shaver, & Gatewood, 2003) and it has been found to increase business owner-managers' job satisfaction (Benz & Frey, 2008). The entrepreneurial process, however, requires owner-managers to work long hours, assume multiple roles to conduct challenging tasks, and meet different stakeholders' expectations (Buttner, 1992; Wincent & Ortqvist, 2009). This demanding process thus is likely to give rise to stress (Harris, Saltstone, & Fraboni, 1999), which reduces owner-managers' job satisfaction (Buttner, 1992) and offsets the positive impact of autonomy on job satisfaction. Therefore, it is valuable to explore the boundary conditions for the autonomy – job satisfaction relationship to understand how the positive impact of autonomy on job satisfaction can be sustained over time.

#### Method

We conducted semi-structured interviews with thirty Canadian small business owner-managers to explore the reason for starting their own businesses, the perceived benefits (including autonomy) and challenges brought by the entrepreneurial process, owner-managers' degree of job satisfaction and strategies for coping with the challenges and difficulties involved in the entrepreneurial process.

#### **Results and Implications**

Two types of autonomy emerge from the data: work-related autonomy (e.g., being able to decide what to do and how to do the job) and life-related autonomy (e.g., flexible personal time; being able to spend time with families). These two types of autonomy affect owner-managers' job satisfaction through a sense of control and accomplishment and work-life balance, respectively. Furthermore, we find that different coping strategies work with different types of autonomy to sustain job satisfaction. Coping strategies that work with life-related autonomy include making time for family, partitioning roles, rotating attention between roles, integrating roles, and eliminating roles. In contrast, coping strategies that work with work-related autonomy to sustain job satisfaction include hardworking and enhancing business skills and competencies.

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# WHAT HELPS AND HINDERS CORPORATE ENTREPRENEURS IN THEIR QUEST FOR FUNDING?

Siwei Zhu, Stevens Institute of Technology, USA Heidi Bertels, City University of New York - College of Staten Island, USA Peter Koen, Stevens institute of Technology, USA Murad Mithani, Stevens institute of Technology, USA

### **Principal Topic**

Previous studies have identified innovation champions as key to obtaining resources for new projects in organizations, but several studies suggest that champions may actually discourage risky ideas (Howell & Shea, 2001; Markham, 1998; Shepherd, Haynie, & Patzelt, 2013). Using self-categorization theory, we argue that champions closely identify with the top management. This is likely to invoke a cognitive frame where proposals consistent with prevailing strategies are more likely to be supported and ideas that challenge the status quo are discouraged. Thus, we propose that champions may in fact be a source of the propagation of inertia by filtering out ideas that are too risky for the organization.

#### Method

We investigate our hypotheses in the context of low-risk and high-risk project proposals. Employees from companies, executive MBA students enrolled in a corporate entrepreneurship course, tried to obtain funding for a new product or service which was not already in the company's product pipeline and were asked to assess their perception of the riskiness of the project and the degree of champion support. Start-up funding from \$1,500 to \$5,000,000 was approved for 49 out of the 78 projects. Baron and Kenny (1986)'s three-step method was employed to investigate the mediation effect.

### **Results and Implication**

The results shows that champions perform a lower-order screening in which they tend to eliminate high-risk proposals that are unlikely to be accepted and raise the likelihood of success for proposals that are more aligned with the corporate view. Champion support is likely to enhance funding for low-risk projects but to diminish funding for high-risk projects, however, the effect is weaker for high-risk projects. Our findings validate that rather than a catalyst for change, champions function as a mechanism for the institutionalization of organizational inertia.

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# INTERNATIONAL ENERGY ENTREPRENEURSHIP: THE CASE STUDY OF SPANISH FIRMS IN RENEWABLE ENERGY INDUSTRY

Meysam Zolfaghari, Autonomous University of Barcelona (UAB), Spain Alex Rialp, Autonomous University of Barcelona (UAB), Spain

#### **Principal Topics**

Body of knowledge about international entrepreneurship (IE) and its contribution to the development of new technologies in emerging industries like renewable energy is still narrow and need further development in both theoretical and empirical aspects. Furthermore, the notion of energy entrepreneurship (Wüstenhagen & Wuebker, 2011) and current practical and theoretical advancements under the name of sustainable entrepreneurship (Schaltegger & Wagner, 2011; Dean & McMullen, 2007), eco-entrepreneurship (Holt, 2011) and environmental entrepreneurship (York & Venkataraman, 2010) have made significant and diverse contributions to address challenges associated with fossil fuels and fostering sustainable energy development. Due to the paramount importance of energy entrepreneurship and its development toward the new international markets, the main objective of this paper, is to explore the linkage between IE and international development and commercialization of renewable energy as emerging industry.

#### Method

Given the novelty of subject about energy entrepreneurship and the scarcity of empirical research about the entrepreneurial internationalization of firms from renewable energy industry, we adopted an approach to gather reach and in-depth data. Therefore, we employed multiple-case design with six cases of entrepreneurial companies in renewable energy industry from Spain. Drawing upon triangulation principle (Yin, 2009), we triangulated our data and informants. We have also used several sources of secondary data, apart from the interview data. The interviews are based on semi-structured questions. These interviews are specially designed concerning entrepreneur, company's structure and resources, industry's structure and policy schemes in Spain.

### **Results and Implications**

Results of this study highlight that internationalization process in renewable energy industry differ from other industries in terms of entrepreneur, firm, industry and policy. Entrepreneur's motives and philosophical perspective differentiate them from conventional entrepreneurs, because of the non-financial motives like sustainability and environmental issues and forging solution in global scale to confront environmental degradation and global warming. Internationalization is a common practice for companies to overcome financial, technological and commercialization constraints and challenges. At the industry level, it is already a globally integrated industry and technological maturity is a significant factor that affects the internationalization of the firms positively. Finally, this industry is policy-driven and supportive policy scheme seems to be the most significant factor in entrepreneurial internationalization of renewable energy companies from Spain.

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**AUTHORS AND TITLES** 

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BCERC - Lead	Author	Session Presentation	Publishing Title	Publishing Author(s)
Sondos G.	Abdelgawad	Thursday, 12:30 - 1:00 pm	Organizational Practices, Strategic Variety, and Performance	S. G. Abdelgawad; IE Business School, Madrid, SPAIN.
Mujtaba	Ahsan	Friday, 8:30 - 8:45 am	Factors Influencing Opportunity Recognition: An Empirical Study	M. Ahsan; San Diego State University, San Diego, CA.
Mujtaba	Ahsan	Friday, 9:15 - 9:30 am	Nascent Networks in Embryonic Firms: Factors Influencing Network Development and Success	M. Ahsan, A. F. DeNoble, M. Musteen, C. Zheng; San Diego State University, San Diego, CA.
Naveed	Akhter	Saturday, 11:00 - 11:30 am	If We Cannot Have It then No One Should Have It: Business Exit and Re-Entry	N. Akhter; Jonkoping International Business School, Jönköping, SWEDEN.
Musab	Almutawa	Friday, 9:15 - 9:30 am	A Tale Of Two Masters: CEO Succession in Dual- family Firms	M. Almutawa; IE Business School, Madrid, SPAIN.
Dalal	Alrubaishi	Thursday, 12:30 - 1:00 pm	Family Firms, Socio-emotional Wealth and Entrepreneurial Orientation: Evidence from Saudi Arabia	D. Alrubaishi, H. Haugh, P. Robson, R. Doern; School of Management, Royal Holloway University of London, Egham, UNITED KINGDOM, Cambridge Judge Business School, University of Cambridge, Cambridge, UNITED KINGDOM, Institute of Management Studies, Goldsmiths University of London, London, UNITED KINGDOM.

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Gry A.	Alsos	Thursday, 2:45 - 3:15 pm	Characteristics of Opportunities and Exploitation in Closed and Open Innovation	G. A. Alsos, T. H. Clausen, K. Wigger; University of Nordland Business School, Bodø, NORWAY.
Brian S.	Anderson	Thursday, 11:30 am - 12:00 pm	Firm Growth, Strategic Adaptability, and Entrepreneurial Orientation	B. S. Anderson, Y. Eshima; University of Colorado, Boulder, CO, Osaka University of Economics, Osaka, JAPAN.
Petra	Andries	Thursday, 2:45 - 3:15 pm	Social Enterprises and Innovation Performance: The Mediating Effects of R&D Activities and External Knowledge Sourcing	P. Andries, A. Daou, U. Stephan; Ghent University, Ghent, BELGIUM, KU Leuven, Ghent, BELGIUM, Aston Business School, Birmingham, UNITED KINGDOM.
Anne	Annink	Thursday, 10:00 - 10:30 am	Can Entrepreneurs Have a Better Work-life Balance?: A Cross Country Analysis	A. Annink, J. E. Amorós, L. den Dulk; Erasmus University Rotterdam, Rotterdam, NETHERLANDS, Universidad del Desarrollo, Santiago, CHILE.
Elham	Asgari	Saturday, 10:30 - 11:00 am	The Curious Case of Corporate Spin-ins: Generating Profits or Problems?	E. Asgari, R. Hunt; Virginia Tech, Blacksburg, VA.
Sophie C.	Bacq	Friday, 12:00 - 12:30 pm	A Social Cognitive Perspective of How Entrepreneurial Munificence Benefits Entrepreneurship Career Intentions	S. C. Bacq, J. R. Kickul, L. K. Gundry, L. F. Ofstein; Northeastern University D'Amore-McKim School of Business, Boston, MA, New York University Stern School of Business, New York, NY, DePaul University, Driehaus College of Business, Chicago, IL, Western Michigan University, Department of Management, Kalamazoo, MI.

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Sophie C.	Bacq	Friday, 8:45 - 9:00 am	The Economic, Social and Environmental Goal Prioritization of Entrepreneurs: An Empirical Exploration	S. Bacq, M. Dejardin, O. Giacomin, F. Janssen; D'Amore-McKim School of Business Northeastern University, Boston, MA, Université de Namur, Namur, BELGIUM, European Business School Paris, Paris, FRANCE, Université Catholique de Louvain-Louvain School of Management, Louvain-la-Neuve, BELGIUM.
Tae Jun	Bae	Saturday, 8:30 - 9:00 am	An Investigation of the Centrality of Competing Institutional Logics for Social Enterprises	T. Bae; Hofstra University, Hempstead, NY.
Sandhya	Balasubramanian	Thursday, 12:00 - 12:30 pm	Impact of Entrepreneurial Orientation on University Performance	S. Balasubramanian, Y. Yang; University of Massachusetts Lowell, Lowell, MA.
Artur	Baldauf	Friday, 9:15 - 9:30 am	Does High Innovativeness Always Lead to High Performance? A Longitudinal Investigation of the Necessary Conditions	A. Baldauf, T. Romanova Stettler, University of Bern, Bern, SWITZERLAND.
Artur	Baldauf	Saturday, 8:30 - 9:00 am	New Venture Team Composition - A Configurational Approach	A. Baldauf, A. M. Wuethrich; University of Bern, Department of Management, Bern, SWITZERLAND.
Linda	Bergset	Thursday, 4:45 - 5:15 pm	Access to Finance in Green Start-ups and Young Green Companies - A Three Country Study	L. Bergset; Oldenburg University, Berlin, GERMANY.

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Fabio	Bertoni	Friday, 11:30 am - 12:00 pm	Board Leadership and Independence in Entrepreneurial Venture IPOs	F. Bertoni, M. Meoli, S. Vismara; EM-LYON Business School, Écully, FRANCE, University of Bergamo, Dalmine (BG), ITALY.
Gael	Bertrand	Saturday, 11:00 - 11:30 am	Survival Factors For French Newly Founded Firms Between 2002 and 2005: Are they Varying Over the Time?	G. Bertrand; ESG Management School, Paris, FRANCE.
Julia K.	Binder	Friday, 4:45 - 5:15 pm	The Process of Recognizing and Developing Complex Opportunities	J. K. Binder, F. Belz; Technische Universität München, Freising, GERMANY.
Miriam	Bird	Friday, 10:30 - 11:00 am	Moving In or Moving Out: The Impact of Entrepreneurship on Immigrants' Economic Integration	M. Bird; University of St. Gallen, St. Gallen, SWITZERLAND.
Ekaterina	Bjørnåli	Friday, 12:30 - 1:00 pm	What Constitutes an Effective Board: Exploring Board Composition, Roles and Behavioral Integration in High-tech Start-ups	E. Bjørnåli, A. Ellingsen; Norwegian University of Science and Technology, Trondheim, NORWAY.
Annelies	Bobelyn	Saturday, 10:30 - 11:00 am	Learning from Failure and Success: The Role of Diversity of Experiences	A. Bobelyn; Technical University Eindhoven, Eindhoven, NETHERLANDS.

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Monique I.	Boddington	Saturday, 11:30 am - 12:00 pm	Entrepreneurial Self-efficacy as a Measurement of Entrepreneurship Education - Understanding Programme Affects and Demographic Variability	M. I. Boddington, S. Barakat; Centre for Entrepreneurial Learning, Judge Business School, University of Cambridge, Cambridge, UNITED KINGDOM.
Daniela	Bolzani	Thursday, 10:30 - 11:00 am	Motivations to Internationalize: The Role of Entrepreneurs' Values	D. Bolzani, M. Foo; University of Bologna, Bologna, ITALY, 2National University of Singapore, Singapore
Andrew	Boysen	Saturday, 8:30 - 9:00 am	Effects of Health Insurance Policy on Entrepreneurship	A. Boysen; The Wharton School, University of Pennsylvania, Philadelphia, PA.
Oana	Branzei	Friday, 10:00 - 10:30 am	Give-and-Take Rituals: How Informal Entrepreneurs Elevate their Status	O. Branzei, P. D. Shulist; Ivey School of Business, Western University, London, ON, CANADA.
Timo	Braun	Friday, 8:30 - 8:45 am	A Post-Heroic View on Entrepreneurial Creativity: The Underestimated Role of Employees and Network Intermediaries	T. Braun, A. Ferreira, T. Schmidt, J. Sydow; Technische Universität Kaiserslautern, GERMANY, ISCTE — Instituto Universitärio de Lisboa, Lisboa, PORTUGAL, Freie Universität Berlin, Berlin, GERMANY.
Jan	Brinckmann	Friday, 2:45 - 3:15 pm	Of Those Who Plan: A Meta-analysis of the Relationship between Human Capital and Business Planning	J. Brinckmann, N. Dew, K. Mayer-Haug, S. Read, D. Grichnik; ESADE, Barcelona, SPAIN, Naval Postgraduate School, Monterey, CA, WHU - Otto Beisheim School of Management, Vallendar, GERMANY, Atkinson Graduate School of Management, Willamette University, Salem, OR, University of St Gallen, St Gallen, SWITZERLAND

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Katja	Bringmann	Friday, 9:15 - 9:30 am	Venture Capital Investment and Firm Performance: A Spatially-informed Social Network Approach	K. Bringmann, T. Vanoutrive, A. Verhetsel; University of Antwerp, Antwerp, BELGIUM.
Hans	Bruining	Friday, 8:45 - 9:00 am	Levels of Corporate Entrepreneurship Intensity, Longer Term Performance and Ability to Recover	H. Bruining, A. Saly; RSM Erasmus University, Rotterdam, NETHERLANDS, Ernst & Young Advisory, Amsterdam, NETHERLANDS.
Candida	Brush	Thursday, 11:30 am - 12:00 pm	To Pivot or Not to Pivot: Why do Nascent Ventures Change their Business Models?	C. Brush, L. F. Edelman, T. Manolova; Babson College, Wellesley, MA, Bentley University, Waltham, MA.
Candida	Brush	Thursday, 9:30 - 10:00 am	Venture Capital Investing: Are Women Entrepreneurs Perceived as Riskier Investments?	C. Brush, L. Balachandra, A. Davis, P. Greene; Babson College, Babson Park, MA.
Garry	Bruton	Friday, 10:00 - 10:30 am	Entrepreneurship at the Base-of-the-Pyramid: Examining the Role of Trust	G. D. Bruton, I. Pryor, J. W. Webb, S. A. Zahra; Texas Christian University, Fort Worth, TX, Oklahoma State University, Stillwater, OK, University of North Carolina at Charlotte, Charlotte, NC, University of Minnesota, Minneapolis, MN.
Philipp	Bubenzer	Friday, 9:15 - 9:30 am	Opportunity Identification and Identification with Opportunities: Expanding the Motivational Dynamics of Entrepreneurial Action	P. Bubenzer, D. A. Grégoire, N. Nyffeler; HEG – School of Management Fribourg, Fribourg, SWITZERLAND, HEC Montréal, Montréal, QC, CANADA, Département HEG - Filière Economie d'entreprise, Yverdon-les-Bains, SWITZERLAND.

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Jonathan	Butler	Thursday, 3:45 - 4:15 pm	The Dark Triad, Employee Creativity, and Performance in the New Venture Context	J. C. Butler; Oklahoma State University, Stillwater, OH.
William	Bygrave	Friday, 8:30 - 8:45 am	Determinants of the Flows of Venture Capital in the USA	W. Bygrave, J. Lange, E. Marram; Babson College, Wellesley, MA.
Janice	Byrne	Thursday, 10:30 - 11:00 am	The Lenses of Gender: A Narrative Analysis of Succession in Family Business	J. Byrne, S. Fattoum; IESEG School of Management, Paris La Defense Cedex, FRANCE, INSEEC Business School, Lyon, FRANCE.
Gabriella	Cacciotti	Thursday, 4:45 - 5:15 pm	Entrepreneurial Fear of Failure: Scale Development and Validation	G. Cacciotti, J. Hayton, R. Mitchell, D. G. Allen; The University of Warwick, Coventry, UNITED KINGDOM, Ivey Business School, London, Ontario, ON, CANADA, University of Memphis, Memphis, TN.
Melissa S.	Cardon	Friday, 4:15 - 4:45 pm	Do You See What I See? A Multi-method Examination of the Emotional Sincerity of Entrepreneurs	M. S. Cardon, R. Franklin, A. S. Gabriel, J. E. Coombs, M. Glauser; Pace University, Pleasantville, NY, Memorial University of Newfoundland, St John's, NL, CANADA, Virginia Commonwealth University, Richmond, VA, Virginia Commonwealth University, Richmond, VA, My New Enterprise, UT.
Elsa	Chan	Friday, 8:30 - 8:45 am	Self-Regulation, Learning and Advancement: Effects of Entrepreneurial Self-Efficacy and Coping Behaviors on Learning and Venture Goal Progress	E. Chan, S. Sun, S. Saleh; University of Colorado Boulder, Boulder, CO, Maastricht University, Maastricht, NETHERLANDS.

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Vallari	Chandna	Friday, 2:15 - 2:45 pm	Virtual Community Correlates of Mutually Beneficial Entrepreneurial Behavior	V. Chandna, M. S. Salimath; University of North Texas, Denton, TX.
Farzana	Chowdhury	Friday, 8:30 - 8:45 am	Formal Institutions and Entrepreneurships: Moderating Role of Corruption	F. Chowdhury, M. Belitski, S. Desai; Indiana University, Bloomington, IN, University of Reading, Reading, UNITED KINGDOM.
Michael P.	Ciuchta	Friday, 8:45 - 9:00 am	Faculty Founders and the Multi-generational University Spinoff□	M. P. Ciuchta, A. Vestal; University of Massachusetts Lowell, Lowell, MA, Oregon State University, Corvallis, OR.
Michael P.	Ciuchta	Friday, 8:30 - 8:45 am	Staying With The Team: Identification and Switching Costs in the Entrepreneurial Process	M. P. Ciuchta, J. O'Toole; University of Massachusetts Lowell, Lowell, MA, Georgia State University, Atlanta, GA.
Daniel R.	Clark	Thursday, 10:00 - 10:30 am	Entrepreneurs Going Global: The Role of Experience and Perceived Knowledge in the Selection of Internationalization Destinations	D. R. Clark; Indiana University, Bloomington, IN.
Samuel L.	Clarke	Friday, 2:15 - 2:45 pm	Equity Crowdfunding's Role in Reducing Information Asymmetries and Increasing Entrepreneur Success	S. L. Clarke, J. E. Butler; University of Hawaii at Manoa, Honolulu, HI.

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Veroniek	Collewaert	Thursday, 12:00 - 12:30 pm	You Never Get a Second Chance to Make a First Impression: A Study on Entrepreneurial Pitches	V. Collewaert, S. Boros, C. Mitteness, Z. Imhof; Vlerick Business School, Gent, BELGIUM, Northeastern University, Boston, MA.
Michael	Conger	Friday, 8:30 - 8:45 am	"B the Change": Hybrid Social Enterprise and the Problem of Identity Correspondence	M. Conger, J. York; Miami University, Oxford, OH, United States, University of Colorado, Boulder, CO, United States
G. Christopher	Crawford	Friday, 4:45 - 5:15 pm	The Emergence of Outliers in Entrepreneurship: A Self-Organized Criticality Framework	G. Crawford; Ohio University, Athens, OH.
Steven	Creek	Saturday, 10:30 - 11:00 am	Crowdfunding: A Moral Legitimacy View of the Impact of Founder and Project Characteristics on Funding Performance	S. Creek, A. Sahaym; Washington State University, Pullman, WA.
Michael D.	Crum	Friday, 8:30 - 8:45 am	The Use of Cluster Analysis in Entrepreneurship Research: Review of Past Research and Future Directions	M. D. Crum, T. Nelson; Northern Michigan University, Marquette, MI, University of Cincinnati, Cincinnati, OH.
Pourya	Darnihamedani	Friday, 12:30 - 1:00 pm	Start-up Costs, Taxes and Innovative Entrepreneurship	P. Darnihamedani, J. H. Block, J. Hessels, A. Simonyan; Erasmus University Rotterdam, Rotterdam, NETHERLANDS, National Academy of Science of the Republic of Armenia, Yerevan, ARMENIA.

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Sven-Olov	Daunfeldt	Friday, 8:45 - 9:00 am	Are High-growth Firms Overrepresented in High-tech Industries?	S. Daunfeldt, N. Elert, D. Johansson; HUI Research, Stockholm, SWEDEN, Research Institute of Industrial Economics (IFN), Stockholm, SWEDEN, Örebro University, Örebro, SWEDEN.
Robin	De Cock	Thursday, 12:00 - 12:30 pm	How Young Resource constrained Start-ups Exploit Opportunities: A Resource Management Perspective	R. De Cock, J. Bruneel; Ghent University, Ghent, BELGIUM, KU Leuven Kulak, Kortrijk, BELGIUM.
Lien	Denoo	Friday, 8:45 - 9:00 am	The Impact of Business Model Change on New Ventures' Survival	L. Denoo, H. Yli-Renko, B. Clarysse; Ghent University, Gent, BELGIUM, University of Southern California, Los Angeles, CA.
Tobias	Deutschmann	Friday, 9:00 - 9:15 am	Antecedents of Change: Analyzing the Change of Exit Intentions and Exit Strategy	T. Deutschmann, J. Goesswein; RWTH Aachen, Aachen, GERMANY.
Tobias	Deutschmann	Saturday, 9:00 - 9:30 am	This Is My Firm! The Influence of Psychological Ownership on Entrepreneurial Exit Intention and Exit Strategies	T. Deutschmann, M. Brettel; RWTH Aachen, Aachen, GERMANY.
Jenni	Dinger	Friday, 3:45 - 4:15 pm	Entrepreneurial Contagion within Crowdfunding: Social Learning Among Kickstarter Backers	J. Dinger, B. Fund; University of Colorado, Boulder, CO.

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Anne	Domurath	Friday, 8:30 - 8:45 am	Dynamite or Fishhook Fishing: Strategic Approaches to Venture Internationalization	A. Domurath, T. van der Linden, H. Patzelt, N. Rosenbusch; Wilfrid Laurier University, Waterloo, ON, CANADA, Technische Universitaet Muenchen, Muenchen, GERMANY.
Raffi	Duymedjian	Thursday, 4:15 - 4:45 pm	An Entrepreneurial Theory of Encountering: Using Deleuzian and Linguistic Analysis to Grasp the Role of the Encounter in Entrepreneurial Narrative	R. Duymedjian, M. Lavissière, G. Ferrante, O. Germain; Grenoble Ecole de Management, Grenoble, FRANCE, Université Paris- Sorbonne – Paris 4, Paris, FRANCE, Ecole de Management de Normandie, le Havre, FRANCE, Université du Québec à Montréal, Montréal, QC, CANADA.
Raffi	Duymedjian	Thursday, 3:45 - 4:15 pm	Domesticating Bricolage A Second Time: What does the way by which Bricolage is Appropriated by Entrepreneurship Research tell us about the Field?	R. Duymedjian, F. Janssen, G. Ferrante; Grenoble Ecole de Management, Grenoble, FRANCE, Université Catholique de Louvain, Louvain-la-Neuve, BELGIUM, Ecole de Management de Normandie, le Havre, FRANCE.
J.P.	Eggers	Thursday, 2:45 - 3:15 pm	What Makes Venture Capitalists Look Beyond Common Practices? Re-examination of Organizational Antecedents through the Behavioral Theory Lens	J. Eggers; V. Gerasymenko; New York University, Stern School of Business, New York, NY, College of Business, Oregon State University, Corvallis, OR.
Marcus	Erken	Friday, 8:30 - 8:45 am	Entrepreneurs' Dispositional Affect as Antecedent of Network Size and Quality: What's Affect got to do with it?	M. Erken; RWTH Aachen University, Aachen, GERMANY.
Kerstin	Ettl	Thursday, 2:45 - 3:15 pm	Listening to How Women Entrepreneurs View Success: A Contextual Explanation of Entrepreneurial Behavior	K. Ettl, L. Black, F. Welter; Universität Siegen, Siegen, GERMANY, Jake Jabs College of Business and Entrepreneurship, Montana State University, Bozeman, MT, Institut für Mittelstandsforschung Bonn, Bonn, GERMANY.

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Catherine	Faherty	Saturday, 11:00 - 11:30 am	A Closer Examination of Innovation and Value Creation in Family Firms: The Role of Values	C. Faherty, V. Diaz, E. Clinton, J. B. Craig; Dublin City University, Dublin 9, IRELAND, Northeastern University, Boston, MA.
David	Feierabend	Friday, 12:00 - 12:30 pm	Entrepreneurial Exit - It's Time to Measure Success	D. Feierabend, P. Gebhard; RWTH Aachen University, Aachen, GERMANY.
James	Fiet	Friday, 8:45 - 9:00 am	Do the Venture Ideas of Repeat Entrepreneurs Change after their Discovery?	J. O. Fiet, S. Kerrick, V. Kosmidou, S. Naskar; University of Louisville, Louisville, KY.
James	Fiet	Thursday, 2:45 - 3:15 pm	Specific Knowledge as a Key to Launching Successful New Ventures	J. O. Fiet, S. Kerrick, V. Kosmidou, S. Naskar; University of Louisville, Louisville, KY.
Denise	Fischer	Thursday, 10:30 - 11:00 am	Entrepreneurial Motivation in Sustainable Entrepreneurship: How Motivation Factors Impact the Entrepreneurial Process	D. Fischer, R. Mauer; RWTH Aachen University, Aachen, GERMANY.
Rebecca J.	Franklin	Thursday, 4:15 - 4:45 pm	What Leads to Effective Self-Regulation? Origins and Outcomes of Entrepreneurs' Grit	R. J. Franklin; Memorial University of Newfoundland, St John's, NL, CANADA.

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Arjan	Frederiks	Thursday, 3:45 - 4:15 pm	Using Imagination to Create Better Business Opportunities? An Experimental Study	A. Frederiks, M. L. Ehrenhard, A. J. Groen; University of Twente, Enschede, NETHERLANDS.
Casey J.	Frid	Friday, 11:30 am - 12:00 pm	The Effects of Wealth on Entry into Entrepreneurship	C. J. Frid, D. M. Wyman, B. G. Coffey; Pace University, New York, NY, College of Charleston, Charleston, SC, University of South Carolina, Columbia, SC.
Yingzhu	Fu	Friday, 9:15 - 9:30 am	When Copycats Can Succeed? Business Model Imitation and the Legitimacy of New Ventures in Emerging Economies	Y. Fu, M. Tietz; IE Business School, Madrid, SPAIN.
Bret R.	Fund	Saturday, 9:30 - 10:00 am	Crowding Out Effects of Well-Intended Environmental Policies	B. R. Fund; University of Colorado - Boulder, Boulder, CO.
Craig	Galbraith	Friday, 10:00 - 10:30 am	The Impact of Form and Content on Reviewer Assessment: An Examination of a Department of Defense Funded Consortium Grant Program	C. Galbraith, D. Miller, A. DeNoble; University of North Carolina, Wilmington, Wilmington, NC, San Diego State University, San Diego, CA.
Robert	Garrett	Thursday, 10:30 - 11:00 am	Opportunity Evaluation Differences between Corporate Entrepreneurs and Independent Entrepreneurs: The Effects of Product-market Relatedness, Risk, and Slack Resources	R. Garrett, J. Hornsby, S. Mattingly; University of Louisville, Louisville, KY, UMKC, Kansas City, MO, Boise State University, Boise, ID,

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BCERC - Lead	Author	Session Presentation	Publishing Title	Publishing Author(s)
Elizabeth J.	Gatewood	Friday, 10:30 - 11:00 am	Career Reasons and Financial Performance of SMEs in a Developing Economy	E. J. Gatewood, A. Patel, K. G. Shaver; Wake Forest University, Winston Salem, NC, College of Charleston, Charleston, SC.
Mario	Geissler	Friday, 8:45 - 9:00 am	When Success Is Bad: The Dark Side of Successful Media Role Models for the Formation of Entrepreneurial Self-efficacy	M. Geissler, P. Munzert; Chemnitz University of Technology, Chemnitz, GERMANY.
Paul	Geuvers	Friday, 8:30 - 8:45 am	Growth Momentum: What Entrepreneurial CEOs do to Achieve High Organic Growth	P. Geuvers, L. Dana; Open Universiteit, Heerlen, NETHERLANDS, Montpellier Business School, Montpellier, FRANCE.
Michael	Gielnik	Saturday, 9:00 - 9:30 am	Does Passion Lead to Business Creation or is it the Other Way Around? A Test of Two Alternative Theoretical Models in a Randomized Field Experiment	M. M. Gielnik, M. A. Uy, R. Funken, K. M. Bischoff; Leuphana University of Lüneburg, Lüneburg, GERMANY, Nanyang Technological University, Singapore, SINGAPORE.
Antonio	Giuliani	Friday, 12:30 - 1:00 pm	The Role of Narrative Identity Work in Serial Entrepreneurship: A Longitudinal Study	A. P. Giuliani, A. Monti; University of Illinois at Chicago, Chicago, IL, Bocconi University, Milan, ITALY.
Aineias	Gkikas	Friday, 8:45 - 9:00 am	Entrepreneurial Dynamism and Innovation Capacity: Evidence from an Uncompetitive Regional Economy	A. Gkikas, D. Jones-Evans, R. Huggins; Cardiff School of Planning and Geography, Cardiff University, Wales, UNITED KINGDOM, University of the West of England, Bristol, UNITED KINGDOM, Cardiff University, Wales, UNITED KINGDOM.

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BCERC - Lead Author		Session Presentation	Publishing Title	Publishing Author(s)
Julia	Goesswein	Friday, 10:00 - 10:30 am	A Matter Of Trust. The Influence of Entrepreneur- Investor Trust on Founders' Exit Intention and Exit Strategy	J. Goesswein; RWTH Aachen, Aachen, GERMANY.
Melissa	Graebner	Friday, 8:45 - 9:00 am	Blurred Lines: Familial and Entrepreneurial Logics in a Family Technology Venture	M. Graebner, S. Han, P. Roundy; University of Texas-Austin, McCombs School of Business, Austin, TX, University of Tennessee at Chattanooga, Chattanooga, TN.
Francis	Greene	Thursday, 4:45 - 5:15 pm	If, When and for how Long Should Formal Planners Plan their Nascent Venture	F. Greene, C. Hopp; RWTH Aachen, Aachen, GERMANY, Birmingham University, Birmingham, UNITED KINGDOM.
Geoffrey	Gregson	Friday, 10:30 - 11:00 am	Towards the Development of an Entrepreneurial Scorecard: Which Factors Influence Public Funding Decisions on New Venture Business Plans?	G. Gregson, L. Sanchez Barrios, E. Montoya, G. Andreeva, J. Ansell; Northern Alberta Institute of Technology, Edmonton, AB, CANADA, University of Edinburgh, Edinburgh, UNITED KINGDOM.
Nathan S.	Greidanus	Friday, 12:00 - 12:30 pm	Economic Inequality and Entrepreneurial Activity	N. S. Greidanus, E. Shi, Z. Wu; University of Manitoba, Winnipeg, MB, CANADA.
Jian	Guan	Saturday, 10:30 - 11:00 am	Identifying the Intellectual Core in Entrepreneurship Research: A Latent Semantics Analysis Based Approach	J. Guan, Y. Hua, B. Dos Santos, R. P. Garrett; University of Louisville, Louisville, KY.

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Orhun	Guldiken	Saturday, 10:30 - 11:00 am	CEO Risk Bearing and Internationalization Strategy of IPO Firms	O. Guldiken; Old Dominion University, Chesapeake, VA.
Orhun	Guldiken	Friday, 9:15 - 9:30 am	Finance Committees and Short-, Medium- and Long- term IPO Performance Firms	O. Guldiken; Old Dominion University, Chesapeake, VA.
Carolin	Haeussler	Saturday, 9:30 - 10:00 am	Founder Involvement in Research and Development: Implications for Firm Survival and Growth	C. Haeussler, M. Hennicke, E. Mueller; University of Passau, Passau, GERMANY, Frankfurt School of Finance & Management, Frankfurt/Main, GERMANY.
Maria	Halbinger	Friday, 10:00 - 10:30 am	Motivations, Creativity and Entrepreneurial Activities	M. A. Halbinger; Baruch College's Zicklin School of Business, New York, NY.
Markko	Hamalainen	Thursday, 2:15 - 2:45 pm	The Life Cycle of an Entrepreneurial Project	M. Hamalainen; Aalto University, Helsinki, FINLAND.
Colvia	Hamilton	Thursday, 4:45 - 5:15 pm	A Meta-analysis of University Technology Transfer Empirical Research	C. Hamilton, T. R. Crook; University of TN, Knoxville, TN.

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Jürgen	Hanssens	Thursday, 3:45 - 4:15 pm	The Dynamics of Financial Slack in Young Ventures	J. Hanssens, M. Deloof, T. Vanacker; Ghent University, Gent, BELGIUM, University of Antwerp and Antwerp Management School, Antwerp, BELGIUM.
Richard	Harrison	Friday, 8:30 - 8:45 am	Women on the Edge of a Breakthrough? Towards a Theory of Women Angel Investing	R. Harrison, T. Botelho, C. Mason; University of Edinburgh Business School, Edinburgh, UNITED KINGDOM, University of Glasgow, Glasgow, UNITED KINGDOM.
Isabella	Hatak	Thursday, 12:00 - 12:30 pm	Doing Well By Being Well: The Interplay of Physical Well-being, Burn-out Symptoms and Firm Performance of Necessity-, Rationality- and Opportunity-driven Entrepreneurs	I. Hatak, A. Rauch, M. Fink, A. Baranyi; WU Vienna University of Economics and Business, Vienna, AUSTRIA, University of Groningen, Groningen, NETHERLANDS, JKU Johannes Kepler University Linz, Linz, AUSTRIA, Medical University of Graz, Graz, AUSTRIA.
Diana M.	Hechavarria	Saturday, 9:30 - 10:00 am	Financing Social Entrepreneurship: Evidence from the Panel Study of Entrepreneurial Dynamics	D. M. Hechavarria, M. Renko, J. Kickul; University of South Florida, Tampa, FL, University of Illinois, Chicago, IL, New York University, New York City, NY.
Diana M.	Hechavarria	Thursday, 2:15 - 2:45 pm	Taking Care of Business: The Impact of Culture on the Blended Value Creation Goals of Female Entrepreneurs	D. M. Hechavarria, S. A. Terjesen, A. E. Ingram, M. Renko, R. Justo, A. Elam; University of South Florida, Tampa, FL, Indiana University, Bloomington, IN, Clemson University, Clemson, SC, University of Illinois, Chicago, IL, IE Business School, Madrid, SPAIN, North Carolina State University, Raleigh, NC.
Tim	Hecking	Friday, 9:00 - 9:15 am	Adaptability In New Ventures - Dynamic Capabilities and Performance in Different Stages of Entrepreneurial Ventures	T. Hecking; RWTH Aachen, Aachen, GERMANY.

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Keith M.	Hmieleski	Thursday, 12:30 - 1:00 pm	How Are New Ventures Able to Cope Effectively with Uncertainty?	K. M. Hmieleski; Texas Christian University, Fort Worth, TX.
Dan K.	Hsu	Saturday, 10:30 - 11:00 am	Why Do Entrepreneurs Exit? The Effect of Business-to- family Spillover	D. K. Hsu, S. E. Anderson, B. S. Coffey; Appalachian State University, Boone, NC.
Rebecca	Hudson Breen	Friday, 9:15 - 9:30 am	Understanding The Career-life Development of Mompreneurs as a Relational Process	R. Hudson Breen, A. Leung; University of Lethbridge, Lethbridge, AB, CANADA, University of Sydney Business School, Sydney, AUSTRALIA.
Muharrem N.	Huvaj	Friday, 4:45 - 5:15 pm	A Psychological Ownership Perspective of Crowdfunding	M. N. Huvaj, R. S. Smith, A. Darmody; Suffolk University, Boston, MA.
Muharrem N.	Huvaj	Friday, 8:45 - 9:00 am	Disengagement of Entrepreneurs from their Ventures Along Equity and Management Dimensions	M. N. Huvaj; Suffolk University, Boston, MA.
Annelore	Huyghe	Friday, 8:30 - 8:45 am	The Interplay between Novelty, Prior Knowledge and Resource Investments in New Venture Emergence	A. Huyghe, P. Davidsson, D. Semasinghe; Queensland University of Technology, Brisbane, AUSTRALIA, University of Kelaniya, Kelaniya, SRI LANKA.

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Thanh	Huynh	Thursday, 4:15 - 4:45 pm	University Spin-off Performance: An Empirical Study	T. C. Huynh, D. Patton; Bournemouth University, Bournemouth, UNITED KINGDOM.
Junyon	Im	Friday, 8:30 - 8:45 am	Performance Feedback and Risk Taking of Microfinance Institutions: The Moderating Effects of Institutional Factors	J. Im; University of Missouri - Kansas City, Kansas City, MO.
Anders	Isaksson	Thursday, 2:15 - 2:45 pm	The Effects of Initial Firm Configuration and VC Involvement on Future Firm Growth: A Case of Picking or Forming Winners?	A. Isaksson, E. T. Tornikoski; Chalmers University of Technology, Gothenburg, SWEDEN, Grenoble Ecole de Managment, Grenoble, FRANCE.
David	Jiang	Friday, 9:00 - 9:15 am	Is There a Socioemotional Paradox in Family Firms? An Experimental Examination of the Theoretical Tensions between Family Firm Members' Socioemotional Wealth and Socioemotional Selectivity	D. Jiang, T. Munyon, F. Kellermanns, M. Morris; University of Tennessee, Knoxville, TN, University of North Carolina Charlotte & WHU, Charlotte, NC.
Bertha	Jimenez	Friday, 9:15 - 9:30 am	The Entrepreneur's Masquerade: Reflecting and Enacting Identity	B. T. Jimenez; NYU Polytechnic School of Engineering, Brooklyn, NY.
Anette	Johansson	Thursday, 9:30 - 10:00 am	Explaining The Co-existence of Effectuation and Causation	A. Johansson, H. Ellonen, A. McKelvie, A. Tarkiainen; Jönköping School of Engineering, Jönköping, SWEDEN, Lappeenranta University of Technology, Lappeenranta, FINLAND, Whitman School of Management, Syracuse University, Syracuse, NY, Lappeenranta University of Technology, Lappeenranta, FINLAND.

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Matthew	Josefy	Thursday, 4:15 - 4:45 pm	Rethinking Liability of Newness as a Categorization Problem: Insights from Anti-trafficking Organizations	M. Josefy, S. Deer; Texas A&M University, College Station, TX.
Nadine	Kammerlander	Friday, 9:00 - 9:15 am	To Innovate Or Not To Innovate? - That is The Question! Antecedents of Post-succession Entrepreneurial Behavior in Family Firms	N. Kammerlander, M. Bird; University of St. Gallen, St. Gallen, SWITZERLAND.
Masatoshi	Kato	Saturday, 11:30 am - 12:00 pm	Flexible Labor and Innovation Performance of R&D Oriented Start-ups in Japan	M. Kato, H. Zhou; Kwansei Gakuin University, Nishinomiya, JAPAN, University of Groningen, Groningen, NETHERLANDS.
Antti J.	Kauppinen	Friday, 12:30 - 1:00 pm	Narrative Bouncing-Back Discourses in Allocating Opportunism in Entrepreneurial Project Failure in the Online Dating Business from the Perspective of Sensemaking	A. J. Kauppinen, M. T. Wolfe, D. A. Shepherd; Oulu Business School, Oulu, FINLAND, Ball State University, Muncie, IN, Kelley School of Business, Bloomington, IN.
Alex S.	Kier	Thursday, 9:30 - 10:00 am	Persist or Abandon? The Influence of Social Pressure and Regulatory Focus on Entrepreneurial Escalation of Commitment	A. S. Kier, J. S. McMullen, D. F. Kuratko; Indiana University, Bloomington, IN.
Phillip H.	Kim	Friday, 3:45 - 4:15 pm	You've Got Talent: Breaking the 'Barriers to Learning' from Early Entrepreneurial Experience	P. H. Kim, K. Wennberg, R. Toft-Kehler; Babson College, Babson Park, MA, Stockholm School of Economics, Stockholm, SWEDEN, Copenhagen Business School, Frederiksberg, DENMARK.

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Jessica	Kirk	Saturday, 8:30 - 9:00 am	A Tale Of Entrepreneurial Identity: The Role of Micro- identities in the Stories Founders Tell	J. Kirk; University of Colorado-Boulder, Boulder, CO.
Kim	Klyver	Friday, 9:15 - 9:30 am	Human Capital and Nascent Entrepreneurship - The Opportunity Cost of a New Job	K. Klyver, C. Lomberg, P. Steffens; University of Southern Denmark, Kolding, DENMARK, University of Bern, SWITZERLAND, Queensland University of Technology, Brisbane, AUSTRALIA.
Eun-Jeong	Ко	Saturday, 8:30 - 9:00 am	The Influence of Different Types of Legitimacy Across Resource Acquisition Stages in Entrepreneurial Firms	E. Ko, A. McKelvie; Whitman School of Management, Syracuse, NY.
Daniel	Koch	Friday, 8:45 - 9:00 am	How to Foster Effectuation in the Corporate Context? Leadership as Antecedent of Corporate Effectuation	D. Koch, R. Mauer; RWTH Aachen University, Aachen, GERMANY.
Michael	Konopaski	Thursday, 11:30 am - 12:00 pm	Transgenerational Learning in Entrepreneurial Family Businesses	M. Konopaski, S. Jack, E. Hamilton; University of Ontario Institute of Technology, Oshawa, ON, CANADA, Lancaster University Management School, Lancaster, UNITED KINGDOM.
Kristine M.	Kuhn	Friday, 2:45 - 3:15 pm	The Best, Not The Rest: Differences in Men and Women Business Owners' Relations with their Most Trusted Advisor	K. Kuhn, T. Galloway, M. Collins-Williams; Washington State University, Pullman, WA, Illinois State University, Normal, IL, University of Northern Iowa, Cedar Falls, IA.

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Christopher	Kulins	Thursday, 10:30 - 11:00 am	The Influence of Business Model Designs on the Performance of Entrepreneurial Firms	C. Kulins, H. Leonardy, C. Weber; University of Hanover, Hannover, GERMANY.
Trayan	Kushev	Thursday, 4:15 - 4:45 pm	A Social Cognitive Perspective on Opportunity Evaluation	T. Kushev, M. Ahuja, E. S. Mattingly; California State Polytechnic University, Pomona, Pomona, CA, University of Louisville, Louisville, KY, Boise State University, Boise, ID.
Kathrin	Lambrich	Thursday, 2:15 - 2:45 pm	Challenging the Value-Paradigm of Cross-Sector Partnerships	K. Lambrich, A. Kroeger, C. Weber, J. Wallace; Leibniz University Hanover, Hannover, GERMANY, Bradford University School of Management, Bradford, UK.
Eric M.	Laviolette	Saturday, 11:00 - 11:30 am	The Role of Spin-offs in SME Dynamic Capabilities Development	E. M. Laviolette; Novancia Business School, Paris, Cedex 15, FRANCE.
Séverine	Le Loarne	Thursday, 11:30 am - 12:00 pm	Born To Grow? The Impact of Organizational and Individual Imprinting on Growth Intention Across Gender	S. Le Loarne, V. Mangematin; M. Belkhouja; Grenoble Ecole de Management, Grenoble, FRANCE.
Chong Kyoon	Lee	Saturday, 9:00 - 9:30 am	Impact of Stigma of Failure on Social Entrepreneurship Entry Decisions: A Cross-Country Analysis	C. Lee, G.T. Lumpkin, R.R. Bangar; Syracuse University, Manlius, NY, Syracuse University, Syracuse, NY.

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Marc J.	Lerchenmueller	Thursday, 2:15 - 2:45 pm	Corporate Entrepreneurship in a Strategic Context: What Determines New Venturing and Strategic Renewal in Service Versus Manufacturing Industries?	M. J. Lerchenmueller; Yale University, New Haven, CT.
Daniel A.	Lerner	Friday, 9:00 - 9:15 am	Acting First, Thinking Later: Sensation Seeking as a Logic and Psychological Determinant of Entrepreneurial Action	D. A. Lerner; Deusto Business School, Bilbao, SPAIN.
Daniel A.	Lerner	Friday, 8:30 - 8:45 am	Social Psychology in Nascent Organizing: What do we Infer about an Entrepreneur, and Does it Matter?	D. A. Lerner, K. M. Hmieleski; Deusto Business School, Bilbao, SPAIN, Texas Christian University, Fort Worth, TX.
Jonathan	Levie	Friday, 9:00 - 9:15 am	The More The Merrier: How Owner-Manager Team Size Influences the Economic Contribution of Owner- Managed Businesses Across the World	J. Levie, M. Hart, S. Gaklis; University of Strathclyde, Glasgow, UNITED KINGDOM, Aston University, Birmingham, UNITED KINGDOM.
Noel J.	Lindsay	Friday, 10:30 - 11:00 am	The Relationship of Entrepreneurial Intent and Start- Up Behavior to the General Health Perceptions of Women and Men Nascent Necessity Entrepreneurs during the New Venture Creation Process	N. J. Lindsay, W. A. Lindsay, P. Balan, E. Balan-Vnuk, F. Kropp; Entrepreneurship, Commercialisation, & Innovation Centre, The University of Adelaide, Adelaide, AUSTRALIA, Centre for the Development of Entrepreneurs, University of South Australia, Adelaide, AUSTRALIA, Middlebury Institute of International Studies at Monterey, Monterey, CA.
Joseph A.	LiPuma	Friday, 9:15 - 9:30 am	Economic Development Level and the Institutional Impact on New Venture Exporting	J. A. LiPuma, C. Prange; EMLYON Business School, Lyon, FRANCE, EMLYON Business School, Ecully, FRANCE.

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Joseph A.	LiPuma	Friday, 8:45 - 9:00 am	How to Concentrate Less: Foreign and Corporate Venture Capital Involvement in Syndicates	J. A. LiPuma, S. Park; EMLYON Business School, Ecully, FRANCE, University of Bath, Bath, UNITED KINGDOM.
Carina	Lomberg	Thursday, 10:00 - 10:30 am	Different Strokes for Different Folks - A Self- Regulation Perspective on Idea Generation	C. Lomberg, K. Klyver; University of Bern, Bern, SWITZERLAND, University of Southern Denmark, Kolding, DENMARK.
Benedikt E.	Maissenhaelter	Thursday, 9:30 - 10:00 am	Going Abroad to Win at Home: New Venture Internationalization as a Legitimation Strategy	B. E. Maissenhaelter, H. Milanov; Technische Universität München, Munich, GERMANY.
Sophie	Manigart	Friday, 2:15 - 2:45 pm	Working for Divergent Principals: Effects of Private Equity on Employment Levels and Employment Terms in Family Firms	S. Manigart, M. Meuleman, J. Neckebrouck; Vlerick Business School, Ghent, BELGIUM.
Blake	Mathias	Friday, 8:45 - 9:00 am	Paying It Forward: The Inpact of Identity on Co- opetition in the Craft Beer Industry	B. Mathias, C. Frid, T. Galloway, A. Huyghe; University of Tennessee Knoxville, Knoxville, TN, Pace University, New York, NY, Illinois State University, Normal, IL, Queensland University of Technology, Brisbane, AUSTRALIA.
Josh	Maurer	Friday, 9:15 - 9:30 am	Liftoff? The Impact of Entrepreneur and Venture Sources of Legitimacy on Funding Performance in the Private Spaceflight Industry	J. Maurer, A. Sahaym; Washington State University, Pullman, WA, USA

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William	Meek	Friday, 10:00 - 10:30 am	Sowing The Seeds to Solve A "Wicked Problem": Examining how Women and Men Entrepreneurs in the U.S. Sustainable Agriculture Industry Differ in their Efforts to Combat Food-related Social Injustice	W. Meek, D. Sullivan; University of Dayton, Dayton, OH.
Karla	Mendoza-Abarca	Friday, 8:45 - 9:00 am	The Performance of Social Ventures Pursuing Multiple Opportunities: Uncovering the Moderating Effect of Organizational Task Environments	K. Mendoza-Abarca, D. Gras; Worcester Polytechnic Institute, Worcester, MA, Texas Christian University, Fort Worth, TX.
Chao	Miao	Friday, 4:45 - 5:15 pm	A Review and Meta-Analysis of the Nomological Network of Bootstrapping in Small Firms	C. Miao, M. W. Rutherford, J. M. Pollack; Virginia Commonwealth University, Richmond, VA, North Carolina State University, Raleigh, NC.
Chao	Miao	Friday, 11:30 am - 12:00 pm	Biological Factors, Individual Traits, and Entrepreneurial Intentions: The Mediating Role of Entrepreneurial Self-efficacy and Need for Cognition	C. Miao, J. Coombs; Virginia Commonwealth University, Richmond, VA.
Douglas	Miller	Thursday, 4:45 - 5:15 pm	Popular Media and Individual Opportunity Search Behaviors	D. Miller, D. Noack; University of North Carolina Wilmington, Wilmington, NC, Weber State University, Ogden, UT.
Miona	Milosevic	Friday, 11:30 am - 12:00 pm	Who Raises Funds In Markets Dominated by Government Intervention? Evidence from the French Venture Capital Industry	M. Milosevic, J.; ESCP Europe Business School, Paris, FRANCE.

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Rob	Mitchell	Friday, 8:30 - 8:45 am	Stakeholder Theory and the Emergence of Opportunities	J.R. Mitchell, R. Mostafa, R. Mitchell, C. Liao, C. Chatterjee; Ivey School of Business, London, ON, CANADA, Texas Tech University, Lubbock, TX, Indian Institute of Management Bangalore, Bangalore, INDIA.
Ali	Mohammadi	Friday, 9:15 - 9:30 am	A Signaling Theory of Entrepreneurial Venture's Valuation: Evidence from Early Termination of Venture Capital Investment	A. Mohammadi, M. Shafizadeh, S. Johan; KTH Royal Institute of Technology, Stockholm, SWEDEN, Politecnico di Milano, Milan, ITALY, York University,, Toronto, ON, CANADA.
Francisco	Morales	Friday, 9:00 - 9:15 am	Institutional Change and Venture Capital Investments	F. Morales, S. Mingo; University of Colorado Boulder, Boulder, CO, Universidad Adolfo Ibáñez, Santiago, CHILE.
Piera	Morlacchi	Friday, 3:45 - 4:15 pm	Boosting Early Stage Innovative New Ventures and Building Entrepreneurial Ecosystems: An Evaluation of a Public Entrepreneurship Programme in Trentino (Italy)	P. Morlacchi; University of Sussex, Falmer, UNITED KINGDOM.
Brandon	Mueller	Friday, 4:15 - 4:45 pm	Building Entrepreneurial Expertise: The Importance of Self-regulatory Behaviors on the Long Road to Mastery	B. Mueller, R. Baron, M. Wolfe; Oklahoma State University, Stillwater, OK, Miller College of Business, Ball State University, USA
John M.	Mueller	Friday, 9:00 - 9:15 am	Comparing Initial Financing Forms to Determine the Effects on New Venture Performance	J. M. Mueller; Western Michigan University, Kalamazoo, MI.

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Charles	Murnieks	Thursday, 12:30 - 1:00 pm	Attracted by Fire: The Role of Passion in Angel Investing	C. Murnieks, M. Cardon, R. Sudek, D. White, W. Brooks; Oregon State University, Corvallis, OR, Pace University, Pleasantville, NY, University of California, Irvine, Irvine, CA, University of Tennessee, Knoxville, Knoxville, TN, Willamette University, Salem, OR.
Alexander	Murray	Friday, 4:15 - 4:45 pm	Persuasion Sequences: A Process Approach to Understanding Influence in Crowdfunding Campaigns	A. Murray, S. Kotha, G. Fisher; University of Washington, Seattle, WA, Indiana University, Bloomington, IN.
Robert S.	Nason	Friday, 2:45 - 3:15 pm	The Impact of Family Household Health on Entrepreneurial Activity in an Impoverished Context	R. S. Nason, D. Gras; Concordia University, Montreal, QC, CANADA, Texas Christian University, Fort Worth, TX.
Scott L.	Newbert	Thursday, 12:30 - 1:00 pm	Motivation and Venture Creation Speed: Comparing Social and Commerical Entrepreneurs	S. L. Newbert, N. Quigley; Villanova University, Villanova, PA.
Mette S.	Nielsen	Friday, 3:45 - 4:15 pm	Meeting Expectations - Why Social Skills Matter More in Strong Relationships	M. S. Nielsen; University of Southern Denmark, Kolding, DENMARK.
Miwako	Nitani	Friday, 4:45 - 5:15 pm	Equity Crowdfunding: Findings from European Experience	M. Nitani, B. He; The University of Ottawa, Ottawa, ON, CANADA.

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Martin	Obschonka	Friday, 11:30 am - 12:00 pm	Does Self-employed Work Make Individuals Not Only More Entrepreneurial but also More Narcissistic and Antisocial? A 15-year Longitudinal Personality-based Analysis	M. Obschonka, F. Lievens, B. Wille, F. De Fruyt; Department of Psychology, Saarland University, Saarbrücken, GERMANY, Department of Personnel Management, Work & Organizational Psychology, Ghent University, Ghent, BELGIUM, Department of Development, Personality and Social Psychology, Ghent University, Ghent, BELGIUM
Tamaki	Onishi	Thursday, 3:45 - 4:15 pm	Toward a Resource-based Model of the Institutional Entrepreneurship Process	T. Onishi, W. J. Wales; University of North Carolina at Greensboro, Greensboro, NC, James Madison University, Harrisonburg, VA.
Pyayt	Oo	Friday, 2:45 - 3:15 pm	Crowdfunding Performance of User Entrepreneurs: Signaling, Passion, and Social Identity Theories	P. Oo, S. Juasrikul, A. Sahaym, T. H. Allison; Washington State University, Pullman, WA.
Pyayt	Oo	Thursday, 9:30 - 10:00 am	Understanding the Determinants of Hybrid	P. Oo, Z. Rahman, N. Kim; Washington State University, Pullman,
			Entrepreneurship	WA.
Lauren	Ortiz-Hunt	Thursday, 11:30 am - 12:00 pm	Entrepreneurial Round Tripping: The Benefits of Newness and Smallness in Multi-Directional Value Creation	L. Ortiz-Hunt, R. Hunt; SWA, Superior, CO, Virginia Polytechnic Institute, Blacksburg, VA.
Oleksiy	Osiyevskyy	Friday, 8:45 - 9:00 am	Innovative Pathways Through Adversity for New Ventures: The Importance of Sustaining R&D Intensity During Crises	O. Osiyevskyy, M. Meyer, M. Zargarzadeh; Northeastern University, Boston, MA, University of Calgary, Calgary, AB, CANADA.

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Beldina	Owalla	Thursday, 10:00 - 10:30 am	How are Women Entrepreneurs Portrayed in Media? Focus on Kenyan and Omani Newspapers	B. Owalla, A. Al-Ghafri, C. Holmquist, T. E. Brown; Stockholm School of Economics, Stockholm, SWEDEN, KTH Royal Institute of Technology, Stockholm, SWEDEN.
Eftychia	Palamida	Friday, 4:15 - 4:45 pm	Autonomous Motivation and Autonomy Support among Students: Applying the Trans-contextual Model in an Entrepreneurial Educational Setting	E. Palamida, S. Papagiannidis, D. Xanthopoulou, G. Trainer; University of Huddersfield Business School, Huddersfield, UNITED KINGDOM, Newcastle University Business School, Newcastle upon Tyne, UNITED KINGDOM, Aristotle University of Thessaloniki, Department of Psychology,, Thessaloniki, GREECE, Newcastle University, Newcastle upon Tyne, UNITED KINGDOM.
Annaleena	Parhankangas	Saturday, 11:30 am - 12:00 pm	Language of Business Versus Language of Kindness: A Comparison of Crowdfunding Campaigns of For- profit and Social Entrepreneurs	A. Parhankangas, M. Renko; University of Illinois at Chicago, Chicago, IL.
Iñaki	Peña	Friday, 10:30 - 11:00 am	Intrapreneurial Experience and Individuals' Age as Determinants of Career Mobility	I. Peña, M. Guerrero; Basque Institute of Competitiveness. Deusto Business School, Donostia-San Sebastián, País Vasco, SPAIN.
Во	Peng	Friday, 2:15 - 2:45 pm	The Influence of Founder Identity on Entrepreneurial IPO Performance	B. Peng, V. Souitaris, S. Zerbinati; Cass Business School, London, UNITED KINGDOM.
Kiven E. B.	Pierre	Saturday, 9:00 - 9:30 am	Entrepreneurship and the Energy-Economic Growth Nexus	K. E. Pierre, M. Minniti, T. Moss; Syracuse University, Syracuse, NY.

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Larry	Plummer	Thursday, 4:15 - 4:45 pm	Adapt or Die: Offsetting the Stress of Agglomeration Density on New Firm Survival	L. Plummer, S. Parker; S. Reyes; Ivey Business School, London, ON, CANADA.
Erin	Powell	Saturday, 9:30 - 10:00 am	Ready For The Times To Get Better? How Responses to Adversity Shape Recovery in Founder-led Firms	E. Powell, T. Baker; Clemson University, Clemson, SC, North Carolina State University, Raleigh, NC.
Rebecca	Preller	Saturday, 9:00 - 9:30 am	Do We All See the Same Future? The Impact of Entrepreneurial Team Members' Visions on Team and Venture Development	R. Preller, N. Breugst, H. Patzelt; Technische Universität München, München, GERMANY.
Christopher	Pryor	Friday, 9:00 - 9:15 am	Institutional Capabilities' Effects on Regulatory Constraint Change and the Pursuit of Entrepreneurial Opportunity	C. Pryor; High Point University, High Point, NC.
lana	Pryor	Saturday, 9:30 - 10:00 am	Flexibility of New Venture Team Structure and its Influence on Innovativeness and Performance	I. Pryor, F. Aime, S. Humphrey; Oklahoma State University, Stillwater, OK, The Pennsylvania State University, University Park, PA.
Andreas	Rauch	Thursday, 10:00 - 10:30 am	The Dark Side of Entrepreneurship: Applying Reinforcement Sensitivity Theory to Explain Entrepreneurial Behavior	A. Rauch, I. Hatak; University of Groningen, Groningen, NETHERLANDS, WU, Vienna University of Economics and Business, Vienna, AUSTRIA.

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Rhonda	Reger	Friday, 9:00 - 9:15 am	Self-identity Conflicts Of Academic Entrepreneurs: When Scientists are Asked to Define Themselves by who they are not (Entrepreneurs)	R. Reger, E. Williams, D. White; University of Tennessee-Knoxville, Knoxville, TN.
Sid H.	Saleh	Friday, 2:15 - 2:45 pm	Mentor or Tormentor: Understanding How Mentors Impact Entrepreneurs' Performance Using a Creativity Perspective	S. H. Saleh, M. Foo, D. Hekman; University of Colorado Boulder, Golden, CO, National University of Singapore, Singapore, SINGAPORE, University of Colorado Boulder, Boulder, CO
Mariarosa	Scarlata	Friday, 9:00 - 9:15 am	Entrepreneurial Orientation In Social Investing: The Influence of Founders and Board Members Human Capital Diversity	M. Scarlata, A. Zacharakis, L. Alemany; Surrey Business School, Guildford, UNITED KINGDOM, Babson College, Wellesley, MA, ESADE, Barcelona, SPAIN.
Leon	Schjoedt	Thursday, 10:30 - 11:00 am	Entrepreneurial Performance: Does Entrepreneurs' Personality Moderate the Impact of Stress?	L. Schjoedt, P. C. Patel; Indiana University South Bend, South Bend, IN, Ball State University, Muncie, IN.
Leon	Schjoedt	Friday, 3:45 - 4:15 pm	Goal Striving in Real Time among Nascent Entrepreneurs	L. Schjoedt, T. Karlsson, M. T. Schenkel; Indiana University South Bend, South Bend, IN, Lund University, Lund, SWEDEN, Belmont University (TN), Nashville, TN.
Matthias	Schulz	Saturday, 9:00 - 9:30 am	The Impact of Firm Entry Deregulation on Hybrid Entrepreneurship	M. Schulz, V. Procher, D. Urbig; Jackstädt Center of Entrepreneurship and Innovation Research, University of Wuppertal, Wuppertal, GERMANY.

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Charlotte L.	Schuster	Friday, 9:00 - 9:15 am	An Analysis of Founder-CEOs' and Salaried CEOs' Short-term Investment Behavior Under Consideration of Aspiration Levels	C. L. Schuster, J. Halberstadt, A. T. Nicolai; University of Oldenburg, Endowed Chair of Entrepreneurship, Oldenburg, GERMANY, University of Lüneburg, Centre for Sustainability Management, Lüneburg, GERMANY.
Josh	Sears	Friday, 8:45 - 9:00 am	Credibility in Corporate Venturing: Examining Relationships between Entrepreneurs and Corporate Venture Capitalists	J. Sears, M. S. McLeod, R. Evert, G. T. Payne; Texas Tech University, Lubbock, TX.
Jaehu	Shim	Friday, 2:45 - 3:15 pm	Cross-country Differences in Entrepreneurial Activity: Adding Insight through Simulations	J. Shim, P. Davidsson; Australian Centre for Entrepreneurship Research, Brisbane, QLD, AUSTRALIA.
Patrick D.	Shulist	Saturday, 11:00 - 11:30 am	Elements of a Process of Human Capitalization by Developing-world Entrepreneurs	P. D. Shulist, O. Branzei; Ivey School of Business, Western University, London, ON, CANADA.
Anna	Söderblom	Thursday, 2:15 - 2:45 pm	A Longitudinal Investigation of Business Angel Relationship Risk Mitigation Strategies within Investments: A Three-dimensional Approach	A. Söderblom, M. Samuelsson, P. Mårtensson; Stockholm School of Economics, Stockholm, SWEDEN.
Pekka	Stenholm	Saturday, 8:30 - 9:00 am	Emotional Support and Passion Matters: How Emotional Support Impacts Survival through Entrepreneurial Passion	P. Stenholm, M. Søgaard Nielsen; University of Turku, School of Economics, Turku, FINLAND, University of Southern Denmark, Kolding, DENMARK.

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Regan M.	Stevenson	Friday, 9:15 - 9:30 am	Noble Corruption: Does Bricolage Reduce Unethical Judgments Against Entrepreneurs?	R. M. Stevenson, S. G. Taylor, C. Letwin; University of Central Florida, Orlando, FL.
Martin	Stienstra	Friday, 3:45 - 4:15 pm	One Size Fits All? The Role of Cognitive Styles in Teaching Entrepreneurial Decision-making to Novices	M. Stienstra, R. Singaram, M. Ehrenhard; University of Twente, Enschede, NETHERLANDS.
Jason A.	Strickling	Friday, 4:15 - 4:45 pm	Entrepreneurial Ecosystem Development: A Media Effects Perspective	J. A. Strickling; University of Tennessee, Knoxville, TN.
Eko	Suhartanto	Friday, 9:00 - 9:15 am	The Effects of Professional Corporate Entrepreneurship Practices on Listed and Non-Listed Family Firms in Developing Economics	E. Suhartanto, E. Monsen, N. MacKenzie; HCE – Strathclyde Business School, UK, Vermont University, USA, HCE – Strathclyde Business School, UK.
Imran	Syed	Friday, 9:00 - 9:15 am	Follow Your Passion: How Entrepreneurial Passion Motivates Alertness to Opportunities	I. Syed, B. Mueller; Oklahoma State University, Stillwater, OK.
Alex	Tan	Friday, 12:00 - 12:30 pm	Major Family Events, Overconfidence, and New Venture Success: A Cognitive Resources Perspective	A. Tan, T. Fan, T. Volery; University of Western Australia, Crawley, Western Australia, AUSTRALIA, Singapore Management University, Singapore, SINGAPORE, University of St. Gallen, St. Gallen, SWITZERLAND

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Matthias A.	Tietz	Friday, 8:30 - 8:45 am	Combining Closeness and Culture: Parent-venture Similarity and Performance in Internal Corporate Ventures	M. A. Tietz, M. A. Wong; IE Business School, Madrid, SPAIN, Ivey School of Business, Western University, London, ON, CANADA.
Varkey K.	Titus	Friday, 2:45 - 3:15 pm	Do Aspirations Influence Commitment to External Venturing? A Behavioral Theory Approach	V. K. Titus, O. Parker, J. Covin; University of Nebraska, Lincoln, NE, Indiana University, Bloomington, IN.
David	Townsend	Saturday, 11:00 - 11:30 am	Wisdom of the Crowd? Social Influence Strategies and Risk Assessment in Microlender Crowdfunding Platforms	D. Townsend, T. Allison; Virginia Tech, Blacksburg, VA, Washington State University, Pullman, WA.
Roxana	Turturea	Friday, 2:15 - 2:45 pm	TMT Improvisation, Resource Management and Firm Performance: A Mediated Model	R. Turturea, J. Jansen, I. Verheul; RSM, Rotterdam, NETHERLANDS.
Ugur	Uygur	Friday, 12:00 - 12:30 pm	Do Entrepreneurs Act on What They Know or What They Believe? Testing Competing Cognitive Theories of Entrepreneurial Action	U. Uygur, S. Kim; Loyola University Chicago, Chicago, IL.
Peter	van der Zwan	Thursday, 12:00 - 12:30 pm	Growth Expectations and Types of Entrepreneurs	P. van der Zwan, N. de Vries; Erasmus School of Economics, Erasmus University Rotterdam, Rotterdam, NETHERLANDS, Panteia, Zoetermeer, NETHERLANDS.

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Siddharth	Vedula	Thursday, 3:45 - 4:15 pm	Decomposing the Performance of U.S. Metropolitan Entrepreneurial Ecosystems	S. Vedula, P. Vogel, A. Robb; University of Colorado at Boulder, Boulder, CO, University of St. Gallen, St. Gallen, SWITZERLAND.
Caroline	Verzat	Friday, 4:45 - 5:15 pm	What do Participants Learn in a MOOC on Effectuation? Impact Study on Self-Efficacy and Self- directed Learning in Entrepreneurial Education	C. Verzat, M. Jore, O. Toutain, P. Silberzahn; Novancia Business School, Paris, FRANCE, ESC Dijon Business School, Dijon, FRANCE, EMLYON Business School, Ecully, FRANCE.
Grace S.	Walsh	Friday, 10:30 - 11:00 am	The Effects of Identification by the Entrepreneur to the Firm Versus to the Process	G. S. Walsh, J. Cunningham; University of Deusto, Bilbao, SPAIN, National University of Ireland Galway, Galway, IRELAND.
Sascha G.	Walter	Friday, 9:00 - 9:15 am	Copycat Or Innovator? Learning Strategies of Spinout Founders and Firm Growth	S. G. Walter, S. Heinrichs, A. Walter; Lancaster University Management School, Lancaster, UNITED KINGDOM, Hermes Fulfilment GmbH, Hamburg, GERMANY, Christian-Albrechts- University Kiel, GERMANY.
Sascha G.	Walter	Saturday, 9:30 - 10:00 am	Patenting by Academic Entrepreneurs in Weak and Strong Organizational Regimes	S. G. Walter, A. Schmidt, A. Walter; Lancaster University Management School, Lancaster, UNITED KINGDOM, Senvion SE, Osterrönfeld, GERMANY, Christian-Albrechts-University, Kiel, GERMANY.
Тао	Wang	Friday, 4:15 - 4:45 pm	Hybrid Ties, Entrepreneurial Opportunities, and Entrepreneurs' Actions: A Study of Online Social Network Relations	T. Wang, P. Soh; Simon Fraser University, Vancouver, BC, CANADA.

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Benjamin J.	Warnick	Thursday, 2:45 - 3:15 pm	Passion for Entrepreneurship or Passion for the Venture's Domain?: A Conjoint Analysis of Investors' Decision-making	B. J. Warnick, J. S. McMullen, C. Murnieks, W. T. Brooks; Indiana University, Bloomington, IN, Oregon State University, Corvallis, OR, Willammette University, Salem, OR.
Stephan	Weemaes	Friday, 12:00 - 12:30 pm	Consultants, Outside Board Members, or Both? An Empirical Investigation of the Impact of External Knowledge Sources on New Firm Growth	S. Weemaes, A. Gaeremynck, J. Bruneel, A. Verriest, J. Debrulle; KU Leuven KULAK, Kortrijk, BELGIUM, KU Leuven, Leuven, BELGIUM, KU Leuven KULAK, Kortrijk, BELGIUM, EDHEC, Roubaix, FRANCE, IÉSEG School of Management, Lille, FRANCE.
Robert	Wiltbank	Saturday, 11:30 am - 12:00 pm	Investment and Returns in Successful Entrepreneurial Sell-outs	R. Wiltbank, N. Dew, S. Read; Willamette University, Salem, OR, NPS, Monterey, CA.
Matthew	Wood	Friday, 11:30 am - 12:00 pm	Cognitive Consequences of Entrepreneurial Inaction	M. Wood, D. Williams, W. Drover; Baylor University, Waco, TX, University of Tennessee, Knoxville, TN, University of Oklahoma, Norman, OK.
Jeremy	Woods	Friday, 9:15 - 9:30 am	Cognitive Antecedents to Financial Escalation of Commitment in Small, Family-Owned Entrepreneurial Firms	J. Woods, California State University Bakersfield, USA
Johann-Peter	Wulf	Thursday, 9:30 - 10:00 am	Amit & Zott Revisited - Refining the Measurement of Business Model Designs and their Performance Implications	J. Wulf, T. C. Flatten; RWTH Aachen, Innovation and Entrepreneurship Group, Aachen, GERMANY.

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Johann-Peter	Wulf	Thursday, 10:00 - 10:30 am	Business Model Orientation: How can Firms Cultivate a Preparedness for Business Model Change?	J. Wulf, T. C. Flatten; RWTH Aachen, Innovation and Entrepreneurship Group, Aachen, GERMANY.
Rukiye I.	Yavuz	Thursday, 12:30 - 1:00 pm	Optimistic Entrepreneurs and Strategic Change in High-tech New Ventures: An Examination Based on the Behavioral Theory of the Firm	R. I. Yavuz, D. Dutta, M. Soytas; Ozyegin University, Istanbul, TURKEY, University of New Hampshire, Durham, NH.
So-Jin	Yoo	Friday, 9:00 - 9:15 am	Antecedents and Consequences of Entrepreneurial Orientation: A Longitudinal Study of Technology- based SMEs	S. Yoo, O. Sawyerr, D. V. Brazeal; University of Wales, CARDIFF, UNITED KINGDOM, California State Polytechnic University, Pomona, CA.
Wei	Yu	Friday, 9:15 - 9:30 am	Nascent Venture Team Diversity and Nascent Venture Performance: An Investigation of Business Plan and Opportunity Type	W. Yu, J. Wiklund; Syracuse University, Syracuse, NY.
Robert	Zacca	Friday, 9:15 - 9:30 am	Linking Managerial Competence to Small Enterprise Performance	R. Zacca, M. Dayan; Al Faisal University, Riydh, KSA, SAUDI ARABIA, United Arab Emirates University, Al Ain, UNITED ARAB EMIRATES.
Lei	Zhang	Friday, 9:00 - 9:15 am	Do I Have a Say in It? The Founders' Role in Venture Capital Syndicate Formation	L. Zhang; University of South Florida, Tampa, FL.

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Lei	Zhang	Friday, 12:30 - 1:00 pm	The Influence of Venture Capital Syndicates on Startup Company Performance: A Network Structure Perspective	L. Zhang, J. Tan; University of South Florida, Tampa, FL, York University, Toronto, ON, CANADA.
Fei	Zhu	Thursday, 11:30 am - 12:00 pm	Disentangling the Autonomy-job Satisfaction Relationship for Small Business Owner-managers: Exploring the Role of Work-life Balance and Coping Strategies	F. Zhu, T. W. Man, T. Y. Huang; Nottingham University Business School China, Ningbo, CHINA.
Siwei	Zhu	Friday, 8:30 - 8:45 am	What Helps and Hinders Corporate Entrepreneurs in their Quest for Funding?	S. Zhu, H. M. Bertels, P. A. Koen, M. A. Mithani; Stevens Institute of Technology, Hoboken, NJ, City University of New York - College of Staten Island, Staten Island, NY.
Seyed Meysam	Zolfaghari Ejlal Manesh	Friday, 9:00 - 9:15 am	International Energy Entrepreneurship: The Case Study of Spanish Firms in Renewable Energy Industry	S. Zolfaghari Ejlal Manesh, A. Rialp; University Autonoma De Barcelona, Bellaterra (Barcelona) SPAIN.