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AN EMPIRICAL INVESTIGATION OF ENTREPRENEURIAL MARKETING DIMENSIONS

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ABSTRACT

Although entrepreneurial marketing (EM) behaviors are widely reported within marketing practice today, there is no common agreement on how many dimensions are underlying EM behaviors. When investigating firms' EM behaviors, researchers use different elements to represent dimensions of EM behaviors. The current study aims to identify dimensions underlying EM behaviors and to examine the existence of these EM dimensions using empirical data. Based on the literature review, we propose six dimensions underlying EM behaviors, namely growth orientation; opportunity orientation; total customer focus; value creation through networks; informal market analysis; and closeness to the market. These EM dimensions are quantitatively confirmed based on survey data and confirmatory factor analysis. Results show that a proposed model fits well with the data and fits better than other feasible alternative models. We believe that the empirically verified dimensions of EM behaviors should provide a foundation upon which researchers can build and test for a broader theory.

Keywords: Entrepreneurial Marketing, Marketing Behavior, Confirmatory Factor Analysis

INTRODUCTION

Marketing as practiced by firms today has significantly evolved during the past four decades. Once thought to be an act of selling and advertising, marketing has been pushed into this new direction by shifts in various elements (Day and Montgomery, 1999). Today, marketing is no longer seen as a function in a firm, but as a broader activity that can be applied not only to products, but also to other offerings, such as services, places, persons, ideas, and causes (Kotler, 2011). The American Marketing Association (AMA) has recently defined marketing as "the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large (AMA, 2013)."

This shift to the modern view of marketing has been accompanied by major developments in the academic marketing field, and marketing behaviors found in these developments share same spirit with entrepreneurial behaviors. Firstly, marketing has transformed from a transactional approach to a relational approach (Gronroos, 1990; Webster, 1992). Rather than focusing on marketing activities leading to immediate sale, firms emphasize establishing long-term relationships with customers in order to also bring in repeated purchase (Gummesson, 2002; Ravald & Gronroos, 1996). Secondly, marketers have embraced the co-creation concept and empowered their customers by integrating them into their new product development process (Prahalad & Ramaswamy, 2004). They give customers an opportunity to contribute and select elements of new product offerings, with the belief that doing so can increase the likelihood of their new products' success (Hoyer, Chandy, Dorotic, Krafft, & Singh, 2010). Thirdly, marketers recognize a need to be flexible in the environments where customer preferences and technology are constantly shifting. While cherishing the traditional view that a marketing plan is an important guide to follow, firms also develop an ability to integrate, build, and reconfigure internal and external competencies to address rapidly-changing environments (Teece, Pisano, & Shuen, 1997). Researchers found that marketers had dynamic capabilities at several levels, such as the NPD unit and network level (Eisenhardt & Martin, 2000; Pavlou & El Sawy, 2011; Rothaermel & Hess, 2007). The rise in entrepreneurial behaviors within marketing practice suggests that entrepreneurial behaviors may be the essence of marketing in the modern era. Therefore, it is an objective of this study to empirically examine entrepreneurial behaviors in marketing or entrepreneurial marketing.

Entrepreneurial marketing (EM) has emerged as a marketing practice recommended for firms operating in highly dynamic environments. The focus of an EM perspective is on marketing undertaken using entrepreneurial, innovative, and opportunity-driven approaches (Fiore, Niehm, Hurst, Son, & Sadachar, 2013; Morrish, Miles & Deacon, 2010). Prior research identified several characteristics of EM behaviors, such as calculated risk-taking (Carson & Grant, 1998), decisions based on intuition and experience (Siu & Kirby, 1999), inherent focus on recognition of opportunities (Hills & Singh, 1998), flexible approaches to markets (Sashittal & Jassawalla, 2001; Shaw, 1999), and exploitation of smaller market niches (Stasch, 1999). Evidence of EM practices is documented both in business practice (Buskirk & Lavik, 2004; Magretta, 1998; McKenna, 1991; Rigby, Christensen, & Johnson, 2002), and in academic research (Coviello, Brodie, & Munro, 2000; Eggers, Hansen, & David, 2012; Gilmore & Carson, 1999; Glazer & Weiss, 1993; Jones, Suoranta, & Rowley, 2013a)

Although EM behaviors are widely reported, there is no common agreement on how many dimensions are underlying EM behaviors. When investigating firms' EM behaviors, researchers use different elements to identify dimensions of EM behaviors. The elements used by researchers vary from one study to another, both in content and in number of their dimensions (Gruber, 2004; Jones et al., 2013a; Mort, Weerawardena, & Liesch, 2012; Shaw, 2004). In a prior study that contributed to identifying underlying dimensions of EM behaviors (Morris, Schindehutte, & LaForge, 2002a), the EM concept is examined in detail and seven dimensions of EM are proposed. Those dimensions are proactive orientation, opportunity focus, customer intensity, innovativeness, calculated risk-taking, resource leveraging, and value creation. Although Morris et al. delineated those EM dimensions, the researchers did not test or confirm their EM dimensions empirically.

In recent years, there has been an increasing number of studies empirically investigating EM dimensions and the literature can be categorized into two research streams. Studies in the first stream of research have focused on confirming the seven dimensions of EM proposed by Morris et al. (2002a) (Fiore et al., 2013; Kocak, 2004; Schmid, 2012). To date, however, no study has confirmed a construct that fully corresponds with Morris et al.'s framework. The EM dimensions confirmed by the researchers varied across studies. While Kocak (2004) confirmed five dimensions of EM in a study of small firms in Turkey, Schmid (2012) confirmed four dimensions in a study of SMEs in Austria, and Fiore et al. (2013) confirmed four dimensions in a study of the US firms, respectively.

Studies in the second stream of research have developed new EM frameworks by analyzing data from various contexts such as born global firms (Mort et al., 2012), and SMEs (Jones & Rowley, 2009). The EM dimensions identified in this research stream also differ in terms of number and content. Jones and Rowley (2009) developed a framework called "EMICO", which comprises fifteen EM dimensions based on firms' levels of entrepreneurial orientation (EO), innovation orientation (IO), market orientation (MO), and customer orientation (CO). Mort et al. (2012), on the other hand, identified four dimensions of EM in Australian firms that are not categorized by such orientations.

With an increasing acceptance of the EM concept in marketing and entrepreneurship academic fields, and with more than six hundred researchers researching EM globally (Sethna, Jones, & Harrigan, 2013), there is a need for research scholars to move toward a more unifying concept regarding the EM construct in order to advance the field and make more progress.

The objective of this study is twofold. First, we contribute to the research regarding the EM construct by identifying dimensions underlying EM behaviors. This is based on an extensive review of literature in marketing and entrepreneurship journals, and on the characteristics of EM behaviors suggested by Hills and Hultman (2006). Although prior research used to treat EO as a dimension of EM, in this study, we treat EM as a separate construct from EO. With an increasing number of studies suggesting that a firm's level of entrepreneurship can affect firms' marketing activities (Covin, 1991; Eggers et al., 2012; Fiore et al. 2013; Hills & Hultman, 2006; Qureshi & Kratzer, 2011), we believe that EO should be not be treated as an EM dimension. Rather, it should be treated as an antecedent of EM behaviors. That is, firms with a higher level of EO should exhibit higher levels of EM behaviors. As a result, we do not include EO in our EM dimensions and plan to investigate the relationship between the two constructs in the near future.

Secondly, we examine the existence of these EM dimensions using empirical data. We believe that empirically verified dimensions of EM behaviors in this study should provide a foundation upon which researchers can build and test for a broader theory. Since this study is an attempt to empirically confirm dimensions of EM behaviors from a large data set, the results should complement findings from prior research.

This study proceeds as follows. In the next section, we summarize literature regarding the EM concept. We define EM and then introduce six dimensions of EM behaviors. In the methodology section, we provide a description of our data set and data analysis. Results of our confirmatory factor analysis are reported in the section that follows and we conclude by discussing implications.

LITERATURE REVIEW

Entrepreneurial Marketing: Marketing at the Interface

Entrepreneurial marketing is an interface between marketing and entrepreneurship and it integrates marketing and entrepreneurship through the concepts shared by the two fields (Morris et al., 2002a). Both fields are reported to be innovative in their approach to management (Collinson & Shaw 2001), have customers as their focal point (Hisrich, 1992), and require the assumption of risk and uncertainty (Hills & LaForge, 1992). Due to these similarities, researchers suggest that EM can help entrepreneurs cope with change, identify viable opportunities, and develop their innovative skills (Collinson, 2002).

The EM concept has evolved significantly over the past three decades. In the early days, EM primarily focused on marketing practice in small firms, young firms, and entrepreneur-operated firms. As a result, researchers usually focused on investigating theories and practices that apply to those contexts (For example, Carson & McCartan-Quinn, 1995; Stasch, 1999; Teach, Schwartz, & Tarpley, 1990). Later on, the EM concept was expanded to cover several types of marketing activities, such as marketing that deviates from mainstream marketing (Morris et al. 2002a), marketing activities in firms aiming toward growth (Bjerke & Hultman, 2002), marketing activities in highly successful firms (Buskirk & Lavik, 2004), and entrepreneurial marketing activities in larger firms (Miles & Darroh, 2006).

With these developments, Hills and Hultman (2006) proposed that EM should be viewed as an umbrella strategy which acknowledges three broad areas of research including marketing in new ventures or SMEs, entrepreneurship activities within larger organizations, and innovative and cost-effective marketing strategies that provoke market change. More recently, evidence of differences in EM practice between firms in different countries are reported (Jones et al., 2013a), and researchers suggested that research scholars should also incorporate the impact of ethnicity and culture into their contexts when investigating EM (Sethna, 2013).

Entrepreneurial Marketing Behaviors and their Dimensions

This study identifies underlying dimensions of EM behaviors based on a review of empirical studies published in marketing and entrepreneurship journals, and on the characteristics of EM behaviors suggested by Hills and Hultman (2006). We found that EM behaviors can be categorized into six categories, including growth orientation, opportunity orientation, total customer focus, value creation through networks, informal market analysis, and closeness to the market. All dimensions are closely related and they encompass all important elements that were suggested in prior research as essential elements of EM behaviors. As a result, we propose that there are six dimensions of EM behaviors. We now elaborate on each EM dimension.

Growth Orientation

Entrepreneurial marketing is often related to growth. Marketers usually have long-term goals in their marketing activities, and aim to create growth of sales through long-term relationships. In the literature, an intention to grow often distinguishes entrepreneurs from non-entrepreneurs (Carland, Hoy, Boulton, & Carland, 1984; Stewart & Roth, 2001). While small firms generally start small and stay small, entrepreneurial firms often grow and strive to grow even further. Therefore, it is acknowledged that EM is the marketing of small firms growing through entrepreneurship (Bjerke & Hultman, 2002).

Entrepreneurs' ambitions to grow their firms are usually captured by the firm's business model. According to Morris, Schindehutte, and Allen (2005), entrepreneurs who aim to grow will choose to make "a significant initial investment and also a substantial reinvestment in an attempt to grow the value of the firms to the level that generates a major capital gain for investors". In addition, firms can adopt several means to expand their business.

They can use word-of-mouth, increase repeat business, and/or create communities of customers who are dedicated and loyal to the products (Hill & Rifkin, 2000). Firms that actually grow are those that can translate the characteristics needed for growth into the capability to grow (Chaston & Mangles, 1997). Researchers suggest the characteristics that seem to encourage growth to be a carefully and fully defined target market, a niche market of limited size, and a balanced product-market orientation (Hills & Hultman, 1999).

It is important to note that firms' marketing strategies are influenced by individuals who manage the firms, and the strategies pursued by these individuals affect firm growth (Feeser & Willard, 1990). Firms that are operated by individuals who have a low level of entrepreneurial orientation may just work toward positive cash flow in order to remain in business rather than working to maximize their financial performance (Runyan, Droge, & Swinney, 2008).

Opportunity Orientation

Entrepreneurial marketing places an emphasis on pursuing opportunities. Entrepreneurial marketers are not limited by the available resources, but pursue opportunities in the belief they can obtain the needed resources (Morris, Schindehutte, & LaForge, 2002b). They respond to emerging opportunities by continually improvising and redeploying their available resources (Sashittal & Jassawalla, 2001), and reformulating the concept of the market and creating different market definitions (Read, Dew, Sarasvathy, Song, & Wiltbank, 2009).

Although opportunities can arise randomly, entrepreneurial marketers are known for proactively searching for new opportunities and reshaping their environment (Santos & Eisenhardt, 2009; Zeithaml & Zeithaml, 1984). Successful marketers are opportunistic, enjoy thinking about new opportunities, and have a long-term orientation toward opportunity creation and exploitation (Hills, Hultman, & Miles, 2008). Constantly searching for opportunities that are ignored by other firms makes entrepreneurial marketers able to serve unsatisfied needs before their competitors.

In addition, Morris, Schindehutte, and LaForge (2002a) acknowledge that firms that practice EM take an innovative and creative approach to marketing. They focus on creating a new category of products and seek to lead their customers through discontinuous innovation. Instead of being driven by the market, entrepreneurial marketers are market drivers who constantly lead the market with innovation and explore new markets with new products (Schindehutte, Morris & Kocak, 2008). Marketers' innovative ideas can be about their products and their marketing strategy. While McGowan and Rocks (1995) reported innovative ideas in promotional media, Stasch (1998) found several innovative ideas in marketing strategies, such as logistics, distribution, and customer service.

Total Customer Focus

Marketers have come afar, when customers were only treated as an external source of intelligence and feedback. Marketers now integrate their customers into their operations and receive recommendations from the customers on regular basis (Bharadwaj, Nevin, & Wallman, 2012; Griffin & Hauser, 1993). They treat customers as active participants in their firms' marketing decision processes, and their innovations are considered customer-centric. To gain a deep understanding of customers' needs, marketers go beyond traditional market research methods, such as surveys and focus groups, to use more advanced research methods, such as ethnographic market research (Goffin, Vanes, Hoven, & Koners, 2012).

To entrepreneurial marketers, customers are their top priority and marketers are known to be flexible, adaptive, and able to improvise in order to keep up with changes in customers' preferences. Flexibility helps them to provide a timely reaction to changes in customer preferences and enables them to deliver superior quality products to customers. Previous studies report evidence of entrepreneurial marketers adapting or adjusting their products and strategies to suit their customers' preferences (Hultman & Shaw, 2003; Jones, Suoranta, & Rowley, 2013b; Shaw, 1999).

According to Schindehutte, Morris, and Pitt (2008), entrepreneurial marketers establish dyadic relationships with their customers. These relationships benefit both customers and firms in several ways. Firstly, the relationships help customers to receive a product that satisfies their most current needs (Geursen & Conduit, 2001), and to provide firms with specific information about their environments. Secondly, the relationships help firms to prepare for unmet needs that may arise in the future (Magretta, 1998), and to obtain first-hand information about desirable products (Athaide, Stump, & Joshi, 2003). The importance of direct customer contacts cannot be emphasized more than in a study by Deshpande, Farley, and Webster (1993), which found that there is a positive correlation between customer assessment and firm performance.

Value Creation through Networks

Marketing through networks is an important concept in entrepreneurial marketing. Marketers rely on networks to obtain information that can be used to identify untapped sources of customer value. They can create new value by using existing technology to serve customers in an unconventional manner (Kumar, Scheer, & Kotler, 2000) or using emerging technology to better satisfy customers' current needs (Hamel & Prahalad, 1991).

Entrepreneurial marketers gather market information and gain access to potential customers through their networks (McGowan & Rocks, 1995; Tolstoy, 2009). Networks can help firms to deliver superior quality products to their customers and create entrepreneurial capital and a competitive advantage over their competitors (Erikson, 2002; Webster, 1992). Researchers reported that marketers focused on forming networks with several parties involved, such as customers, suppliers, and the public, in order to stay connected with the customers (Achrol & Kotler, 2012; Rindfleisch & Moorman, 2001). Under the effectuation logic proposed by Sarasvathy (2001), firms are encouraged to use strategic alliances as a way to eliminate uncertainty and build barriers to entry.

Resources from networks can help entrepreneurial marketers overcome their resource constraints (Miles, Preece, & Baetz, 1999; Reijnders & Verhallen, 1996). This is especially true for small firms and new firms whose marketing activities are constrained by their lack of resources. Resources from a firm's network can help manage risks and allocate resources more efficiently (Street & Cameron, 2007). The networks are not limited to suppliers and customers, but also include competitors (Gilmore, Carson, & Grant, 2001). Working with competitors benefits firms because competitors can provide skills and resources that the firms do not have (Brown & Butler, 1995). A study by Rao, Chandy, and Prabhu (2008) also finds that new firms can obtain legitimacy by forming alliances with established players in the market.

Informal Market Analysis

Marketing decisions often rely on a formal plan which specifies goals and decision rules. Marketing decisions under EM, on the other hand, often do not rely on a formal planning process. According to Sashittal and Jassawalla (2001), firms' marketing strategies can be emergent and are adjusted at the time of implementation (p.53). The use of informal marketing planning is encouraged by the fact that many entrepreneurial firms operate in turbulent environments (Matthews & Scott, 1995).

Prior research shows that marketers often follow their instincts in making marketing decisions and consider intuitive judgment to be an extremely important part of judging market potential (Hills & Singh, 1998). A study by Hills and Hultman (1999) showed that only a small number of business owners carried out formal market research. Although they indicated that market research is of value, most of those business owners did not think that market research is worth its cost (Spitzer, Hills, & Alpar, 1989). Hills and Hultman (1999) suggest that the tendency to not conduct formal market research may come from the fact that marketers gain intuitive and rich understanding of their markets through constant direct contact with customers. Prior studies provide evidence of entrepreneurial firms acquiring valuable market information through information sharing and informal discussions with their customers (Lindh, 2005). By paying close attention to customers' perceptions during the interactions, marketers are able to identify viable market opportunities.

Closeness to the Market

Since finding the best way to deliver their products to customers is vital to firms' success (Pine & Gilmore, 1998), entrepreneurial marketers have to thoroughly understand the problems their customers are facing and to identify solutions that the customers seek. As a result, they are immersed in the market and behave as if they live in the customer's world. Marketers usually have a vision regarding customer preferences in their minds, and constantly think of how to improve customer value (Atuahene-Gima & Ko, 2001; Hills et al., 2008). Information regarding customers' latent needs obtained through constant contact with the market can be very helpful.

Entrepreneurial marketers do not always behave in a rational and sequential manner, but instead have an informal decision making process that is closely linked to customers and markets. Marketers make decisions regarding new products or services based on customer feedback or information received during direct interactions, or face-to-face conversations with their alliances. Through connections with their alliances, such as those with suppliers and trade partners, marketers can gather information regarding the market and changes in customer preferences (Stokes, 2000). The information also helps them to better understand the norms and values of the target market and enables them to implement their marketing and communication strategies more effectively. Yet, some entrepreneurial marketers rely on their experience when making decisions regarding new products and services because they believe that their experience with the customers can help them project what solutions for the customers could be. According to Carson and Grant (1998), entrepreneurs acquire experience regarding marketing mix elements over time and believe that their experience helps them to make effective and competent marketing decisions.

METHODOLOGY

Data Source

This study uses a sample developed under the direction of the authors. The dataset was collected for the National Federation of Independent Business (NFIB) Research Foundation by the executive interviewing group of The Gallup Organization. Individual interviews were conducted using a national sample of 752 business owners. Business owners were defined as the owner of a business that employs at least one individual in addition to the owner(s) and no more than 249. The Research Foundation drew a sampling frame for the survey from the files of the Dun and Bradstreet Corporation. A random stratified sample was used to compensate for the highly skewed distribution of business owners by employee size of firm. Using a list-wise (casewise) missing data deletion, 673 observations remained for our analysis. Key characteristics of the sample are shown in Table 1.

Item	Category	Percentage
a. Size	1 - 9 employees	45.6
	10 - 250 employees	54.4
b. Age	< 1 year old	1.5
	1- 6 years old	23.0
	> 6 years old	75.1
c. Growth Rate	Decreased	11.9
(change in sales over 3 years)	1- 10 percent growth	63.7
	> 10 percent growth	18.9
d. Sector	Commodity/Construction/ Transportation	17.1
	Manufacturing	9.4
	Wholesale/ Retail	17.8
	Financial Services	8.5
	Professional Services	20.7
	Other Services	26.3

Note: The percentage is based on the sample of 673 observations and may not sum up to 100 due to missing values.

Table 1. Key Characteristics of the Sample.

Measures

This study builds on a major qualitative study with 59 tape recorded and analyzed interviews in the US and Sweden. In this quantitative study, firms' EM behaviors are measured using twenty variables. Five-point Likert scales anchored by "Strongly disagree" (1) and "Strongly agree" (5) were developed for these variables. Each question was broadly framed as follows: "Please tell me if you strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, or strongly disagree with the following statements about marketing as it is done in your business." The variables are categorized according to the EM behaviors that they measure. Growth orientation, value creation through networks, informal market analysis, and closeness to the market are each measured by 3 variables, while opportunity orientation and total customer focus are each measured by 4 variables. A complete list of all variables is shown in Table 2.

Entrepreneurial Marketing Dimensions	**Measures**
Growth Orientation	(G1) Long-term growth is more important than immediate profit.
(α=0.49)	(G2) Our primary objective is to grow the business.
	(G3) We try to expand our present customer base aggressively.
Opportunity Orientation	(O1) We constantly look for new business opportunities.
(α=0.51)	(O2) Our marketing efforts lead customers, rather than respond to them.
	(O3) Adding innovative products or services is important to our success.
	(O4) Creativity stimulates good marketing decisions.
Total Customer Focus	(T1) Most of our marketing decisions are based on what we learn from day-to-day customer contact.
(α=0.45)	(T2) Our customers require us to be very flexible and adapt to their special requirements.
	(T3) Everyone in this firm makes customers a top priority.
	(T4) We adjust quickly to meet changing customer expectations.
Value Creation through	(V1) We learn from our competitors.
Networks (α=0.50)	(V2) We use our key industry friends and partners extensively to help us develop and market our products and services.
	(V3) Most of our marketing decisions are based on exchanging information with those in our personal and professional networks.
Informal Market Analysis	(I1) Introducing new products or services usually involves little formal market research and analysis.
(α=0.45)	(I2) Our marketing decisions are based more on informal customer feedback than on formal market research.
	(I3) It is important to rely on gut feeling when making marketing decisions.
Closeness to the Market	(C1) Customer demand is usually the reason we introduce a new product and/or service.
(α=0.32)	(C2) We usually introduce new products and services based on the recommendations of our suppliers.
	(C3) We rely heavily on experience when making marketing decisions.

Table 2. Measures for Entrepreneurial Marketing Dimensions.

Data Analysis

Our data analysis contains two steps. In the first step, we perform a confirmatory factor analysis (CFA) to determine the fit between a hypothesized model and the sample data. In the second step, we compare the six-factor model with theoretically-feasible five-factor and seven-factor models. Confirmatory factor analysis has an advantage over other analytic techniques, such as regression analysis, in that it allows the researcher to specify causal relationships between observed variables and latent factors taking into account measurement error.

The CFA model for EM behaviors hypothesizes a priori that (a) EM can be explained by six factors, including growth orientation, opportunity orientation, customer intensity, value creation through relationships and alliance, informal marketing research, and market immersion, (b) each item-pair measure has a non-zero loading on the entrepreneurial factor that it was designed to measure (target loading), and a zero loading on all other factors (nontarget loadings), (c) the six EM factors are correlated, and (d) the error/uniquenesses associated with each measure are uncorrelated. A schematic representation of this model is shown in Figure 1.

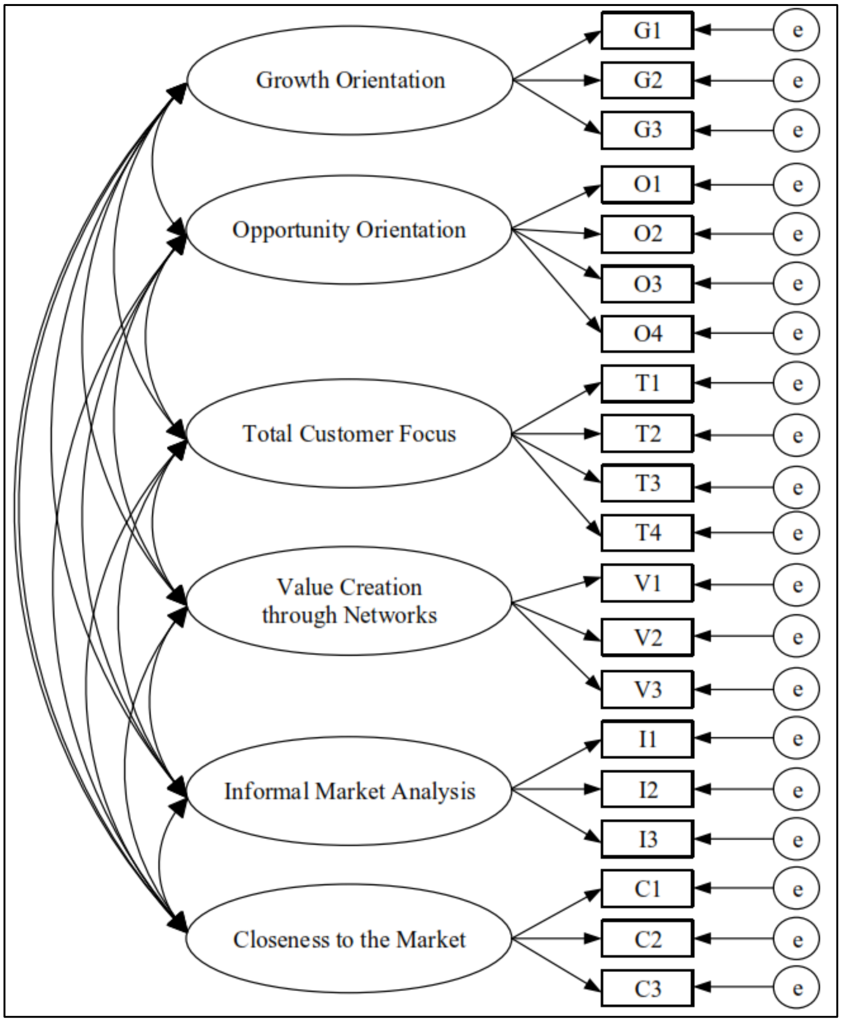

Figure 1: The Proposed Six – Factor Model of Entrepreneurial Marketing

In order to determine whether the proposed model fits well with the data and whether it fits better with the data than other models, we need criteria to evaluate the models. There are several goodness-of-fit indices that researchers use to evaluate the model fit. This study utilizes the widely used goodness-of-fit indices including BIC, RMR, CFI, NNFI, RMSEA, and Chi-square statistics. Below is our brief introduction of these indices as elaborated in Byrne (2010).

The root mean square residual (RMR) represents the average residual value derived from the fitting of the variance-covariance matrix for the hypothesized model to the variance-covariance matrix of the sample data. Since these residuals are relative to the sizes of the observed variance and covariances, the standardized RMR is used. The standardized RMR represents the average value across all standardized residuals, and ranges from zero to 1.00. In a well-fitting model, the value will be 0.05 or less. The Normed Fit Index (NFI) is an incremental index that researchers usually use, but it underestimates fit in small samples. Therefore, it is suggested that researchers should use the Nonnormed Fit Index (NNFI) or Comparative Fit Index (CFI) which takes sample size into account. Values for NFI, NNFI and CFI range from zero to one and are derived from the comparison of a hypothesized model with the independence model. A value close to 0.95 is considered representative of a well-fitting model. The root mean square of approximation (RMSEA) takes into account the error of approximation in the population and identifies how well the model would fit the population covariance matrix if it were available. An RMSEA value of less than 0.05 indicates a good fit. The Chi-square statistic represents the discrepancy between the unrestricted sample covariance matrix and the restricted covariance matrix. The higher the probability associated with the Chi-square, the closer the fit between the hypothesized model and the perfect fit. Although it is one of the most widely used index, the Chi-square statistic is known to be statistically significant even when the model fits well with the data. As a result, researchers typically use other alternative goodness-of-fit indices as adjuncts to the Chi-square statistics.

RESULTS

The Six-factor Solution

We analyze the variance-covariance matrix of the sample data using a maximum likelihood estimation function. Twenty items measuring EM behaviors are categorized into six EM dimensions based on the hypothesized model. The latent factors of EM were allowed to be correlated, based on a previous study which suggested that the components of EM are not independent (Morris et al. 2002a). As for the first step of our analysis, we examine the fit of the hypothesized model with the sample data. Results are shown in Table 3.

Model	χ^2(df)	$\Delta\chi^2$(df)	CFI	NFI	NNFI	RMSEA	RMR	BIC
Hypothesized (Six-factor)	227.18(155)	-	0.94	0.84	0.93	0.026	0.048	585.33
Five-factor	282.70(160)	45.52(6)	0.90	0.80	0.88	0.034	0.059	608.29
Seven-factor	303.73(151)	76.19(4)	0.87	0.78	0.84	0.039	0.065	687.93

Table 3. Goodness of Fit Indexes Confirmatory Factor Analysis.

The goodness-of-fit indices of the six-factor model are shown in the first row of Table 3. These goodness-of-fit indices suggest that the six-factor solution has a good fit with the data with CFI = 0.94, NNFI = 0.93, RMSEA = 0.026, and RMR = 0.048. All of the factor loading estimates are statistically significant ($p< 0.001$) as shown in the Appendix. As a result, we conclude that the hypothesized model of six-factor solution fits well with the data.

Model Comparison

As for the second step of our analysis, we compare the hypothesized model with other alternative models. To confirm a hypothesis stating that EM is a six-factor construct, this study has to show also that the model with six factors of EM behaviors fits the sample data better than other alternative models. In this section, we compare the proposed six-factor model with two alternative models, a five-factor model and a seven-factor model. In particular, we test the hypothesis that EM is a six-factor construct comprised of six dimensions, against alternative hypotheses that a) EM is a five-factor construct comprised of five dimensions and b) EM is a seven-factor construct comprised of seven dimensions.

Figure 2 shows the schematic representations of the five- and seven-factor models. Note that these two alternative models are constructed based on major characteristics of EM behaviors frequently reported in prior literature (Morris et al. 2002; Hills and Hultman, 2006). In the five-factor model, the twenty items measuring EM behaviors are categorized into five factors, namely growth orientation, opportunity orientation, value creation through networks, total customer focus, and informal market analysis. In this model, three items measuring closeness to the market dimension (C1, C2, and C3) are categorized under three dimensions including total customer focus, value creation through networks, and informal market analysis. (See the left panel of Figure 2 for an illustration of the model.)

In the seven-factor model, the twenty items are categorized into seven factors, namely growth orientation, opportunity orientation, value creation through networks, total customer focus, closeness to the market, informal market analysis, and informal decision-making. In this model, items C3: "We rely heavily on experience when making marketing decisions" and I3: "It is important to rely on gut feeling when making marketing decisions" are measuring a new dimension called informal decision making. (See the right panel of Figure 2 for an illustration of the model.)

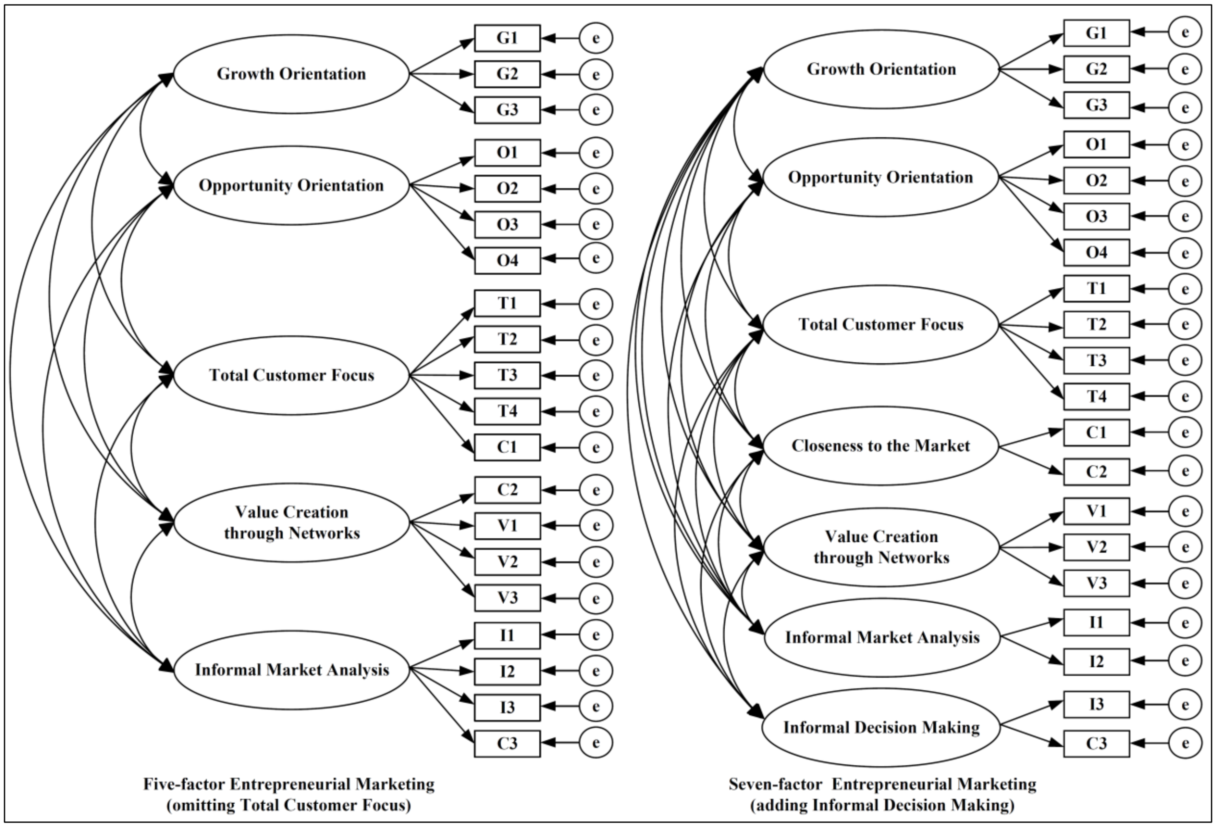

Figure 2: The Alternative Five - and Seven - Factor Model
(The covariances between Informal Decision Making and Opportunity Orientation and between Informal Decision Making and Informal Market Analysis are dropped from the seven-factor model for the covariance matrix to be positive definite.)

Table 3 shows the fit indices of the five- and seven-factor models along with those from the proposed six-factor model. Compared to the five-factor and the seven-factor models, all of the fit indices suggest that the six-factor model has a better fit, with the highest CFI, NNFI, and the lowest RMSEA and BIC. The CFI is 0.90 when the EM is modeled with five factors, 0.94 when modeled with six factors, and 0.87 when modeled with seven factors. The NNFI is 0.88 with five factors, 0.93 with six factors, and 0.84 with seven factors. The RMSEA is 0.033 with five factors, 0.026 with six factors, and 0.039 with seven factors.

The Chi-square, and the BIC also decrease substantially when the EM behaviors are modeled with six factors rather than five or seven factors. According to the Chi-square difference tests shown in Table 3, each of the alternative models is a worse fit ($p< 0.001$). (It is worth noting that the Chi Square comparisons in this study are not the traditional nested Chi Square and therefore do not directly test for significance of specific parameters.) When comparing the BIC values for two competing models, the model with the lowest BIC value reflects the best-fitting model. In line with the Chi-square difference test, the BIC value for the six-factor model is lowest at 585.33, thereby suggesting a better fit with the sampled data.

Based on results from both steps of our analysis, our model is supported by the data. As a result, we conclude that EM behaviors have six underlying factors, namely growth orientation, opportunity orientation, total customer focus, value creation through networks, informal market analysis, and closeness to the market. In other words, EM behaviors are identified by six underlying dimensions.

DISCUSSION AND IMPLICATIONS

Once thought to be of importance in different contexts, entrepreneurial marketing (EM) and mainstream marketing seem to converge. Several recent developments in marketing share the same spirit with EM behaviors. Although the EM concept is widely researched and progress has been made, researchers do not yet have a consensus on how many dimensions are underlying the EM construct. This study contributes to knowledge in the fields of entrepreneurship and marketing in that it identifies factors underlying the EM construct, based on an extensive review of marketing and entrepreneurship literature, and empirically confirms these dimensions.

We believe that the empirically verified dimensions of EM behaviors should provide a foundation upon which other researchers can build and test for a broader theory. Future study may use the EM dimensions confirmed in this study to examine a relationship that has not been fully established in the EM literature: For example, the relationship between EM practice and firm performance. Although researchers often report EM behaviors in high-growth firms, they have not established a causal relationship to show that EM practice has a statistically significant positive impact on firm growth. The confirmation of EM dimensions in this study, therefore, should provide a basis for researchers to investigate the relationship in the future.

The confirmation of six dimensions of EM behaviors in this study also has implications for practitioners. Since these EM behaviors are reported to be found in entrepreneurial firms, EM dimensions identified in this study can be a guideline to firms of how to be more entrepreneurial in their marketing. Firms can adjust the way they practice their marketing in six different ways according to the six EM dimensions identified in this study. That is, they should have a long-term perspective on their marketing, constantly seek new opportunities, embrace changes and flexibility when dealing with their customers, engage their networks in their marketing decisions, collect market information using informal research methods, and stay close to the markets.

This study is not without limitations. Firstly, the confirmation of the six EM dimensions in this study is based on a sample of business owners in only one country. Findings from prior research (Jones et al., 2013a; Mort et al., 2012) imply that firms that operate in different cultures, or different contexts, may emphasize different EM strategies. As a result, our findings need to be replicated in order to test for an equivalency of the factor structure of EM behaviors across different samples. Secondly, the measurements used to identify EM behaviors in this study, although they are currently best available, help us to systematically link common characteristics reported by prior studies, they possess rather low reliability coefficients. Future refinement and test of the measurements would be beneficial to the field of entrepreneurial marketing. Future research should also investigate further whether there are any other dimensions of EM that should be added into the proposed six dimensions, in order for the model to be more generalizable across various contexts.

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APPENDIX

Standardized coefficients under the six-factor model.

EM Dimensions	Growth Orientation	Opportunity Orientation	Total Customer Focus	Value Creation through Networks	Informal Market Analysis	Closeness to the Market
G1	0.28					
G2	0.54					
G3	0.70					
O1		0.65				
O2		0.28				
O3		0.54				
O4		0.41				
T1			0.46			
T2			0.33			
T3			0.35			
T4			0.55			
V1				0.40		
V2				0.62		
V3				0.47		
I1					0.40	
I2					0.48	
I3					0.52	
C1						0.44
C2						0.36
C3						0.34

Authors Biographies

Gerald E. Hills held endowed Chairs in Entrepreneurship at the University of Illinois at Chicago and at Bradley University over a span of more than 30 years. He is a pioneer in the development of the entrepreneurship discipline, having hosted a Research Symposium on marketing and entrepreneurship annually since 1987. He also carried out some of the earliest research regarding opportunity recognition and published more than 100 refereed articles. He also served as cofounder and first President of USASBE, and President of the International Council for Small Business. He developed highly ranked entrepreneurship programs at UIC and Bradley University.

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INCORPORATING INTERNATIONAL ENTREPRENEURSHIP INTO FIRM INTERNATIONALIZATION: AN INTEGRATIVE RESEARCH MODEL

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ABSTRACT

The purpose of this article is to review the existing literature in entrepreneurship and international entrepreneurship (IE) and propose an integrative research model of internationalization. In this conceptual paper we first present a comparative analysis of common research themes in entrepreneurship and IE and propose a unifying framework for IE research. Building on findings from entrepreneurship and their implications for IE, the paper integrates both process and outcome-oriented network perspectives not often seen in both fields. The paper provides a starting point for further theoretical and empirical refinement and advancement in IE.

1. INTRODUCTION

Entrepreneurial activities and their contribution to the global economy has continually interested researchers and has been the focus of a number of scholars over the past few decades (Chandler and Lyon, 2001; Ireland Reutzel and Webb, 2005; Rauch, Wiklund, Lumpkin and Frese, 2009). With globalization and the readily available information and communication technologies, it is easy for entrepreneurs to quickly go global with their business. The increasing importance of entrepreneurship in international business (IB) has also led to the new academic field of international entrepreneurship (IE) (McDougall, 1989) with initial emphasis on a particular type of international firms, known as Born Globals (BGs) or International New Ventures (INVs).

BGs are firms that internationalize soon after inception or within three years. Studies on BGs confirm that such firms possess a strong entrepreneurial orientation (EO) characterized by pro-activeness, risk taking, and innovativeness (Freeman, Edwards and Schroder, 2006). It is therefore appropriate to examine internationalization of BGs by using a number of concepts from entrepreneurship. Johanson and Vahlne (2009: p.1423) also acknowledge that 'internationalization has much in common with entrepreneurship'. However, with an overwhelming focus on IB, IE researchers have not integrated entrepreneurship theory into their frameworks. While IE's explicit focus on the role of the entrepreneur supplements the research on export behavior and the internationalization process of firms, little is known about the entrepreneurial process of internationalization. In doing so, the core concepts of entrepreneurship, especially entrepreneurs' capabilities and skills, entrepreneurial orientation (EO) and opportunity recognition (OR) need to be addressed in IE. Furthermore, IE as a socially embedded activity should also be studied from a network perspective.

In this paper we intend to contribute to the development of IE theory by integrating the most influential concepts and perspectives from the entrepreneurship literature where network is at the core. We present a comparative analysis of the common research themes in entrepreneurship and IE fields by addressing the research gaps then propose a unifying framework by combining antecedent factors and performance outcomes of network in the IE context. We then discuss the research gaps and future research directions for the IE field.

2. COMMON RESEARCH THEMES ADDRESSED IN ENTREPRENEURSHIP AND IE LITERATURES: A COMPARATIVE ANALYSIS

Entrepreneurship involves the nexus of two phenomena: the presence of lucrative opportunities, and the presence of enterprising individuals (Venkataraman, 1997) who recognize and acknowledge these opportunities through resources at their disposal to establish a new firm (Delmar, 2005). Therefore, three components of entrepreneurship theory have been identified: the characteristics of the entrepreneur, the opportunities, and the resources to exploit opportunities (Elfring and Hulsink, 2003). These components have often been analyzed from a network perspective which assumes that entrepreneurs or entrepreneurial firms being embedded in a social network essentially maintain relationships with and receive information, ideas and knowledge from their network partners, which help them to recognize and exploit opportunities to establish new firms. Thus network approach has become a dominant theoretical perspective in entrepreneurship. IE also recognizes the importance of these three components and theoretical perspectives in entrepreneurship but to what extent still remains a big question. In the following sections we attempt to discover this by first analyzing the core concepts and dominant perspectives in entrepreneurship and then by investigating their extent of adoption in IE.

2.1 Individual Approach to Entrepreneurship: The entrepreneur

The entrepreneur is the main actor in the entrepreneurial process and firm formation. Entrepreneurship literature has a long tradition of research that focuses on the entrepreneur's traits whereby an entrepreneur is seen as a set of personality traits and characteristics (Gartner, 1989). Entrepreneur characteristics, including demographic and personality factors have been found to play important roles in new venture creation (Shook, Preim and McGee, 2003) and influence the outcomes of the firm (Hambrick and Mason, 1984). There is also evidence of a significant relationship between personality traits and start-up formation, survival and success (see Rauch and Frese, 2007 for a meta-analytic review). This personality traits-performance relationship was also found to be mediated by EO (Poon, Ainuddin and Junit, 2006). In addition, personality traits were found to be related to network relationships (Lee and Tsang, 2001) and EO (Poon, et al. 2006).

Some scholars use 'human capital' (HC) as an umbrella concept rather than personality traits or behaviors alone because of its absorptive capacity to accommodate a large spectrum of variables such as formal education, training, employment experience, start-up experience, owner experience, parent's background, skills and knowledge. There exists significant relationship between HC and entrepreneurial success (Unger, Rausch, Freese and Rosenbusch, 2011) for a meta-analytic review). In addition, the relationships between HC and OR (Arenius and Clercq, 2005; Ko and Butler, 2004), HC and network relationships (Brüderl and Preisendörfer, 1998; Donckels and Lambrecht, 1997) as well as between HC and EO (Birley and Westhead, 1994) were also found. Arenius and Clercq (2005) found that entrepreneur's education positively influences opportunity recognition whereas Ko and Butler (2004) found that entrepreneur's prior knowledge is related to opportunity recognition and Fuentes et al. (2010) found the link with opportunity exploitation. Other scholars (e.g., Brüderl and Preisendörfer, 1998; Donckels and Lambrecht, 1997) reported that human capital is positively related to network relationships.

The ability of the entrepreneur to start and develop an international firm is an important research focus in IE (Rasmussen and Madsen, 2002). The characteristics of entrepreneurs are often cited in the literature as a key factor differentiating BGs from traditional internationalizing firms (Madsen and Servais, 1997). It is the entrepreneur's global vision that drives the formation and growth of a BG firm by identifying and exploiting opportunities in international markets. Therefore, the background and characteristics of international entrepreneurs, have a large influence on the speed of learning, internationalization and development of BGs (Madsen and Servais, 1997; Oviatt and McDougall, 1997). Additionally, the entrepreneur's international experience is a source of prior knowledge that helps them identify overseas market opportunities and exploit them optimistically (Evangelista, 2005).

Despite entrepreneurial behavior being a common denominator of the entrepreneurial approach to internationalization in IE (Onetti, Odorici and Presutti, 2008), research investigating the role and characteristics of individual entrepreneurs is not comprehensive (Andersson and Evangelista, 2006; Wright, Westhead and Ucbasaran, 2007). Among the entrepreneur characteristics that has most interested researchers are prior entrepreneurial, industry and international experience which does not typify the BG entrepreneur. Therefore, further investigation is needed to more fully recognize and understand the role and characteristics of the entrepreneur in IE (Mort and Weerawardena, 2006).

2.2 Firm Level Approach to: Entrepreneurial Marketing Orientation (EMO)

Although individual approach to entrepreneurship has dominated the field for several decades, a group of scholars proposed a firm level orientation of entrepreneurship research (e.g., Covin and Slevin, 1991; Lumpkin and Dess, 1996; Miller, 1983; Wiklund, 1999). This concept of organizational level entrepreneurship is called entrepreneurial orientation (EO). EO is a combination of three dimensions: innovativeness, pro-activeness, and risk-taking. EO has received a considerable amount of theoretical and empirical attention and has become a central concept in entrepreneurship. In a meta-analytic review Rauch *et al*. (2009) found strong support for EO-performance relationship. The relationship between EO and firm performance was found to be moderated by firm size, industry and national culture (Rauch et al., 2009), firm strategy (Wang, 2008), strategic processes (Covin, Greene and Slevin, 2006), knowledge of suppliers and regulatory agencies (Griffith, Noble and Chen, 2006), network capability, inter-organizational networks (Walter, Auer and Ritter, 2006), intra and extra-industry networks (Stam and Elfring, 2008) and external environment (Covin and Slevin, 1989; Zahra and Covin, 1995).

While EO performance literature is large, there is relatively little that deals with the question of mediation, an exemption of which is the indirect relationship between EO and firm performance through information acquisition and utilization (Keh, Nguyen and Ng, 2007), learning orientation (Wang, 2008), and knowledge creation process (Li, Huang and Tsai, 2009).

In addition to EO, scholars have also highlighted the significance of marketing activities and there is a good body of literature referring to Market Orientation (MO) and their effect on firm growth (Blankson and Stokes, 2002; Carson, 1990; Carson, Cromie, McGowan and Hill 1995). Lately, there is a widespread recognition among mainstream MO researchers that firms adopting other strategic orientations such as EO combined with MO are likely to perform better than firms adopting only a market orientation (Grinstein, 2008; Morrish, 2011). For example, being market oriented is an essential requirement for knowledge-intensive firms to bring products and services to market that create value for customers. Technology firms also need to be entrepreneurially oriented, investing in R&D and being proactive in the marketplace. The application of entrepreneurship in a marketing context has been proposed by many scholars but the reverse should also be considered. Marketing covers a huge domain, whether as a discipline, concept, activity, process or any other manifestation of description (Carson, Gilmore and Grant 2001). Thus it is essential that marketing needs to be observed, from an academic, practitioner as well as researcher position and should reflect the different applications to suit various requirements and not just from a single perspective (Carson et al., 2001).

Current EM theory is largely based on aspects of Morris, Schindehutte and La Forge's (2002) EM dimensions and some of the characteristics of EM identified by Hills, Hultman and Miles (2008). These elements emphasize the notion that entrepreneurs are inherently customer focused. Morris, et al. (2002) proposed seven core dimensions of entrepreneurial marketing. These are: opportunity-driven, pro-activeness, innovation-focused, customer intensity, risk management, resource leveraging and value creation. In presenting EM as an interface, EM researchers agree that entrepreneurship researchers can benefit from application of more sophisticated marketing concepts and methods, and in the same token, the reverse also holds. Therefore, much value can be derived from looking to the other discipline in developing research in entrepreneurship and marketing including aspects of internationalization (Morrish, 2011).

The relationship between international EO and firm performance has only been explored to a limited extent since there are a limited number of empirical studies which have investigated EO using all three widely accepted dimensions in an international setting (Ibeh and Young, 2001; Lyon, Lumpkin and Dess, 2000; Mostafa, Wheeler and Jones, 2006; Yeoh and Jeong, 1995) as such. Most international EO research in IE falls under the original EO research for the fact that they only employ an internationalization-related dependent variable. Although international EO is a subcategory of EO sharing the same core elements of the broader EO construct, it includes an additional distinguishing element- an international context (Covin and Miller, 2014). Hence, more attention should be paid to EO construct development in international milieu. Further, Ibeh (2003), McAuley (1999) and Robertson and Chetty (2000) found that EO-performance relationship exist even in low technology industries challenging the current convention towards high-tech and knowledge-intensive firms in IE literature. In their conceptual model, Yeoh and Jeong (1995) recognize the importance of contextual variables, i.e. external environment and export channel structure which have moderating effect on the relationship between a firm's EO and export performance.

2.3 Opportunity Based Approach to Entrepreneurship: Opportunity Recognition (OR)

Opportunity discovery or recognition is an initial step in the entrepreneurial process which forms the research focus of the classical school of entrepreneurship (Cunningham and Lischeron, 1991). Singh (2001) defines entrepreneurial opportunity as a feasible, profit-seeking, potential venture which a) provides an innovative new product or service to the market, b) improves on an existing product/service, or c) imitates a profitable product/service in a less-than-saturated market. Entrepreneurial opportunities are situations in which new goods, services, raw materials, markets, and organizing methods can be introduced for profit (Casson, 1982; Shane and Venkataraman, 2000). According to Venkataraman (1997), an entrepreneurial opportunity consists of a set of ideas, beliefs, and actions that enable the creation of future goods and services in the absence of current markets for them. Sarasvathy, Dew, Velamuri, and Venkataraman (2010) elaborated on the ideas, beliefs and actions that denote opportunity: (1) New idea(s) or invention(s) that may or may not lead to the achievement of one or more economic ends that become possible through those ideas or inventions; (2) Beliefs about things favorable to the achievement of those possible valuable ends; and, (3) Actions that generate and implement those ends through specific (imagined) new economic artefacts (the artefacts may be goods such as products and services, and/or entities such as firms and markets, and/or institutions such as standards and norms). Christensen, Madsen, and Peterson (1989, p.3) define opportunity recognition as, "either a) perceiving a possibility to create new businesses, or b) significantly improving the position of an existing business, in both cases resulting in new profit potential." This definition extends the scope of opportunity exploration to the post-birth period of a firm's life span, thus cancelling out the conventional start-up perception of an opportunity. The consideration of profit potential in an opportunity has raised much debate because this is not only profit for which entrepreneurs explore and exploit an opportunity. Entrepreneurship cannot be explained by monetary terms alone because entrepreneurs receive substantial non-monetary rewards such as greater autonomy, broader skill utilization, and the possibility of pursuing one's own ideas (Benz, 2009). Although it is possible to measure non-monetary rewards an entrepreneur receives, the success of a firm can only be determined by some monetary or financial terms. What non-financial rewards an entrepreneur receives (as stated before) might not equally be perceived by the employees and other stakeholders involved in the organization. Therefore, to determine firm-level outcomes (which can be compared with that of other firms) a consideration of financial and monetary terms is essential.

From a content analysis Faroque and Takahashi (2011) found that empirical research in entrepreneurship generally investigated three different perspectives of OR: 'quality', 'quantity', and 'process'. In the first perspective, OR is operationalized as the number of opportunities identified and exploited; the second deals with the nature of the opportunities that are explored and exploited and finally, the process of OR is presented as a sequence of several stages. The process perspective represents opportunity recognition having several stages, for example, elaboration and evaluation of opportunities (Hills, Schrader and Lumpkin, 1999), conception, development and execution of opportunities (Craig and Lindsay, 2001).

Although OR has received much attention in mainstream entrepreneurship literature, researchers in IE have ironically overlooked this important issue in their research (Zahra and George, 2002). As a result, IE as a field of study is still in its infancy (Muzychenko, 2008). Several models of IE have been proposed by scholars, yet very few have deliberately considered OR in the proposed framework. For example, Madsen and Servais (1997) proposed a model of BGs which includes entrepreneur, firm, and environmental aspects, but excluded OR. Likewise, Jones and Coviello (2005) have proposed a conceptual entrepreneurial process model for empirical testing. This model comprises (a) entrepreneur, (b) firm, (c) internationalization behavior, and (d) performance. While they name it 'entrepreneurial process model', this does not include the critical initial step of the entrepreneurial process: OR. Nevertheless, a few studies have found that networks can assist in recognizing first time international opportunities in international markets (Chandra, Styles and Wilkinson, 2009; Vasilchenko and Morrish, 2011) and should be worth investigating further.

Since IE involves opportunity recognition and exploitation of international markets (Zahra, Korri and Yu, 2005), future IE research incorporating entrepreneurial opportunity might help researchers gain insights into how entrepreneurial firms search, discover, evaluate, and exploit international opportunities (Dimitratos and Jones, 2005).

2.4 Resource Based View: Knowledge

The entrepreneurship literature is dominated by new technology-based (NTBFs) and knowledge-intensive firms (NKIFs) (Lautenschläger, 2015; Wu, Wang, Chen, and Pan, 2008; Xiao, 2015). Since NTBFs deal with technology, knowledge is a critical component for such firms to develop new technologies or to capitalize on already existing technologies. Therefore, knowledge has been at the forefront of entrepreneurship research recently investigating NTBFs such as the high-tech companies of Silicon Valley. Knowledge is particularly important in order to recognize technology- and knowledge-based opportunities in the market. Shane and Venkataraman (2000) emphasized the importance of the entrepreneur's knowledge base in the opportunity recognition process and Kor, Mahoney and Michael (2007) have advocated that entrepreneurial knowledge often originates from the entrepreneurs' experiences in the firm, the management team, and the industry. Such knowledge can profile a firm's productive opportunity set. In addition, Oakey (2003) recognizes that a complex mix of both managerial and technical expertise is necessary for the success and subsequent growth of high-tech firms.

Empirical research in entrepreneurship has investigated the relationship between prior knowledge (of markets, ways to serve markets, and customer problems) and OR (Ardichvili, Cardozo and Ray, 2003; Shane, 2000; Ko and Butler, 2004), knowledge (of customers, competitors, suppliers, and regulatory agencies) and market responsiveness (Griffith *et al*., 2006). In addition, how prior knowledge is related to market and technological knowledge (applicable to OR) and firm performance has also been reported (Wiklund and Shepherd, 2003). The moderating influence of EO between market and technological knowledge and firm performance was also established (Wiklund and Shepherd, 2003).

Likewise, knowledge or technology based BGs dominate the field of IE research. These companies ideally possess an intangible knowledge-based advantage which help them establish in foreign markets in a relatively short time (Kuivalainen, Sundquist and Servais, 2007). Knowledge plays an important role in both the 'stage' theory (Johanson and Vahlne, 1977) and BG theory of internationalization (Autio, Sapienza and Almeida, 2000). While 'stage' theory highlights market knowledge, BG theory accentuates knowledge-intensity (Faroque and Takahashi, 2012). However, Yli-Renko, Autio and Tontti (2002) found that both types of knowledge are important in internationalization of technology- based BGs. For BG firms, foreign market knowledge tends to emanate from the innovative and proactive pursuit of entrepreneurial opportunities across national borders, rather than from incremental accumulation of experience in foreign markets that happens in the traditional gradual internationalizing of firms.

Empirical research in IE explored the relationship between network and the acquisition and creation of knowledge and growth of technology-based BGs (Yli-Renko *et al*., 2002). Studies have specifically investigated the relationship between knowledge acquired from networks and international performance of low-tech BGs (Faroque and Takahashi, 2012; Presutti, Boari and Fratocchi, 2007); knowledge intensity and growth of high-tech BGs (Autio *et al*., 2000), and foreign market knowledge and BG internationalization (Zhou, 2007).

2.5 Network Approach to Entrepreneurship

Studying entrepreneurship through the social network lens offers a fruitful perspective on entrepreneurship (Greve, 1995). Research into entrepreneurial networks falls into two principal categories: inter-organizational network and the entrepreneur's personal or social network (O'Donnell, Gilmore, Cummins and Carson, 2001; Vasilchenko and Morrish, 2011). Networking is not only an entrepreneur's activity; rather it can also become part of a company's activity and structure (Dubini and Aldrich, 1991) especially at a later stage of firm formation whereby other employees are expected to engage in networking as a matter of course.

In the literature, network has been used as either independent or dependent variable, lacking an integration of both process and outcome-oriented research (Hoang and Antoncic, 2003). Research integrating network as an independent variable tried to show how it affects the entrepreneurial process and outcomes. By contrast, network as a dependent variable focused on how network development is facilitated by entrepreneurial processes. For a review of network research in entrepreneurship please see Slotte-Kock and Coviello (2010), Hoang and Antoncic (2003), and O'Donnell *et al*. (2001).

Network analysis has recently emerged as a powerful framework in IE research (McDougall and Oviatt, 2003). The importance of networks in IE, especially in BGs, has been emphasized by Andersson and Wictor (2003), McDougall and Oviatt (2003), and Sharma and Blomstermo (2003). Networks in IE are also identified as either social or inter-organizational.

Past research in IE explored direct relationship between industry networks and market entry (Moen, Gavlen and Endresen, 2004); social networks and strategy, market knowledge and market access (Harris and Wheeler, 2005); networks and firm performance (Yli-Renko et al., 2002); networks (with government and non-government entities) and BG export performance (Faroque and Takahashi, 2012); entrepreneur and network development (Andersson and Wictor, 2003; Rasmussen, Madsen and Evangelista, 2001).

From the preceding discussion it appears that IE acknowledges the importance of the core concepts and perspectives from entrepreneurship literature, however empirical investigation embracing them is minimal. Entrepreneurship literature has come a long way to establish itself as a fruitful and legitimate academic pursuit through recurring trial and error. It is anticipated that IE would not take longer to make much headway in academia because it can heavily draw upon already established core concepts and theoretical underpinnings in entrepreneurship literature. However, such process of interaction and integration has been observed as rather slow in IE (Dimitratos and Jones, 2005; Keupp and Gassmann, 2009). Adopting the core concepts from entrepreneurship literature as key constructs linked to international business, would help advance the field.

3. CONCEPTUAL FRAMEWORK

To answer the most important question in entrepreneurship research raised by Rumelt (1987): 'Where do new businesses come from?' we look to the entrepreneur (the main actor in the entrepreneurial process) and networks (in which complementary actors reside) because we find that these two are the most important elements in entrepreneurial activities. From the entrepreneurship and marketing literature we have also adopted EMO and OR. In addition, from IB literature we have adopted three very influential concepts which are foreign market knowledge, knowledge intensity and internationalization. The entrepreneurship literature often covers the knowledge of domestic markets, ways to serve those markets, and customer problems (Ardichvili *et al*., 2003) whereas IB involves knowledge intensity for high-tech firms as well as foreign market knowledge which comprises foreign institutional knowledge, foreign business knowledge and internationalization knowledge (Eriksson, Johanson, Majkgard and Sharma, 1997). Internationalization is the most used performance measurement in IB and IE (Keupp and Gassmann, 2009).

Our proposed framework (Figure 1) includes entrepreneur-related factors because research suggests that the entrepreneurs, embedded in their businesses' external environment, are the actual creators of the network elements (Donckels and Lambrecht, 1997). Entrepreneurs' skills and capabilities help recognize international opportunities to achieve international performance. According to Kirzner (1973; p.14), entrepreneurs are "able to perceive opportunities for entrepreneurial profits" thus implying that opportunities generate profits for the entrepreneur. Moreover, these opportunities are derived from imperfect knowledge, i.e., exactly from the subjective differences in knowledge of time and place (Hayek, 1945). Entrepreneurs also influence EO especially in small firms (Zahra, 1993; Birley and Westhead, 1994). EO represents an organizational culture that fosters network development, market knowledge and firm internationalization (Frishammar and Andersson, 2009; Zhou, 2007; Zhou, Barnes and Lu 2010). In combination with MO, EMO takes a cross disciplinary approach combining the essential strategic elements of both orientations (Morrish, Miles and Deacon, 2010).

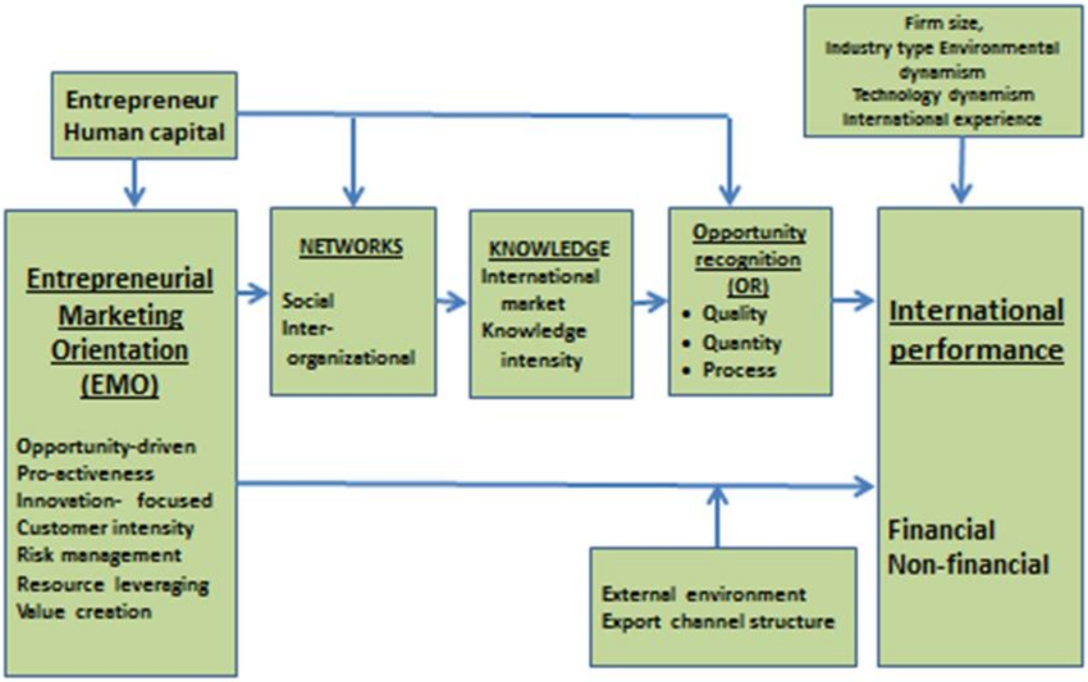
IE as a socially embedded activity requires interaction with different network partners at home and abroad. Scholars in IE have suggested several theories to understand the internationalization, competitive advantage and how this advantage is turned into business performance. Network perspective has positioned itself as the single most important theoretical framework in IE (Gassmann and Keupp, 2007; Sharma and Blomstermo, 2003). The importance of network lies in its ability to integrate all other fragmented components of IE. For example, opportunities are created within and among existing organizations as a product of ongoing network relationships (Low and MacMillan, 1988). Furthermore, the entrepreneurial process itself is embedded in networks that facilitate linkages between entrepreneurs, resources (market knowledge) and opportunities (Aldrich and Zimmer, 1986). In addition, market knowledge as an important facilitator of internationalization essentially originates from knowledge-sharing networks (Casillas, Moreno, Acedo, Gallego and Ramos, 2009). Thus network bridges the gulf between and among all the uncoupled elements involved in IE for the ultimate purpose of achieving entrepreneurial success. Entrepreneurial success in IE is conventionally measured in terms of firm or venture export performance and used as dependent variable (Keupp and Gassmann, 2009). We also posit that performance is the best indicator of success which can be achieved by entrepreneurial capabilities and activities. We suggest that researchers use some non-financial measures of international performance too.

Network research in entrepreneurship and IE has significant and similar gaps. Integration of process and outcome-oriented network research is scarce in entrepreneurship (Hoang and Antoncic, 2003). The same is true in IE despite its potential to advance theory development in both fields. Past research in IE has also failed to examine networking activity in a unifying framework incorporating antecedent factors and performance outcomes (Mort and Weerawardena, 2006). Our proposed model includes both, as the model can contribute to close this significant gap in IE. Whereas most entrepreneurship and IE research focus on either social or inter-organizational networks, our model has included both of these network types.

Inherent in our proposed model is the theoretical reasoning and empirical enquiry suggesting moderating and mediating influences on the relationship between entrepreneurial phenomena. The mediation is evident in the framework with some moderating factors. We intentionally did not include all the moderators in the framework to make the model less complex. Different moderators are involved in different relationships. For example, the relationship between EO and network is moderated by firm size whereas price competitiveness moderates the relationship between foreign market knowledge and international performance (Zhou *et al*., 2010). Therefore, researchers should consider specific moderators while investigating their own research of interest.

The lack of control variables is a weakness in recent research in IE; therefore our model suggests using some control variables (e.g., firm size, industry type, technology and environmental dynamism international experience, etc.) to produce stronger results. These variables reflect both organizational and foreign market characteristics that are conceptually related to organizational knowledge, network and entrepreneurial activities (Sapienza, Autio, George and Zahra, 2006) thus underlying the international growth and survival of firms and offering a more valid examination of the proposed research (Zhou *et al*., 2010).

Figure 1: An Integrative Research Model of International Entrepreneurship



Our proposed model is an attempt to represent the 'entrepreneurial process of internationalization' (Keupp and Gassmann, 2009; p. 613). Such a complex process can only be captured by multi-level analyses which recognize causal associations among entrepreneurs' social behavior, the provision of resources, firm capabilities, and entrepreneurial success (Gassmann and Keupp, 2007). These multi-level causal relations have been well-reflected at individual, network and firm levels in our framework.

4. CONCLUSION

The purpose of this article is to review the existing literature on several important building blocks of entrepreneurship theory and their adoption in IE. Building on findings from entrepreneurship and their implications in IE we propose a model of IE, contributing to entrepreneurship in general and IE in particular, as well as internationalization and network literatures. This paper integrates both process and outcome-oriented perspectives on entrepreneurial network relationships and attempts to decipher the ambiguities in IE regarding this phenomenon. The nexus of entrepreneurship-internationalization and entrepreneurship-IE hold substantial promise for future research. This paper provides a starting point for further theoretical and empirical refinement and advancement into that direction by using concepts from main- stream entrepreneurship and IB literatures simultaneously.

The model in Figure 1 incorporates six very important components which, in combination, offer a broad and integrative entrepreneurial perspective by which IE can be understood. The authors do not claim that this model integrates all the necessary components involved in IE. However, we assert that this model includes the most influential and important concepts for both researchers and practitioners. At the least, we suggest that this model is only the beginning and hence brings opportunities for future researchers to further improve upon this model. Those who are interested in OR can only consider relevant components that suit their research interests. Likewise, the researchers interested in EO or in networks can eventually focus on their individual interests ignoring others. Thus this model can be positioned as a guide within which other precise models may fall and fit (Slotte-Kock and Coviello, 2010).

There is room for opportunities with future IE researchers. For example, general entrepreneurship literature exhibits that networks foster EO (Manev, Gyoshev and Manolova, 2005; Ripolles and Blesa, 2005) whereas IE shows that EO influences networks (Zhou *et al*., 2010). This difference can be explained by the differences between domestic entrepreneurship and IE. In the absence of unique or new resources, young firms with high level of international EO are often more inclined and actively build and upgrade their network relationships than their domestic counterparts. Additionally, adopting EMO will improve their performance. Such interesting investigation and comparative findings can benefit IE to be a unique field of research.

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THE ROLE OF MARKETING CAPABILITIES AND ENTREPRENEURIAL ORIENTATION ON SME PERFORMANCE

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ABSTRACT

Significant research has shown entrepreneurial orientation (EO) has direct and positive effect on firm performance with large firms. This study endeavors to determine whether there are other factors (e.g., marketing capability) through which EO might influence SME performance. SME firms (< 200 employees) within a four state radius are surveyed. Results show that in SMEs an EO has both a direct and indirect effect (through marketing capability) on SME performance. Further, that marketing mix capability (MMC) exerts a greater influence on SME performance than market information management capability (MIC). Results are discussed and directions for future research offered.

INTRODUCTION

Significant research has been undertaken to explore the various strategic orientations which serve to influence firm performance. To this end, market orientation, learning orientation, technology orientation, and entrepreneurial orientation have all been found linked to firm performance and competitive advantage (Day, 1994; Gatigon & Xuerb 1997, Grinstein, 2008; Lukas & Ferrell, 2000; Zhou & Li, 2010). Among these critical strategic orientations, entrepreneurial orientation (EO) has been a central topic in research for a number of years now (Covin & Wales, 2011). EO has been proven to play as one of essential internal drivers for firm performance, especially for small- and mid-size firms (Eggers, Kraus, Huges, Laraway, & Snycerski, 2013; Lonial & Carter, 2015; Wiklund & Shepherd, 2003). Wiklund and Shepherd (2003) clearly find that the internal firm environment, which includes EO, strengthens the positive relationship between performance and knowledge-based resources. Some studies have found a weaker relationship between EO and firm rents (Lumpkin & Dess, 2001; Zahra, 1991), whereas other studies suggest a strong correlation between EO and business performance (Covin & Slevin, 1986; Hult, Snow, & Kandemir, 2003; Wiklund & Shepherd, 2003). Lumpkin and Dess (1996) contend that external and internal factors influence the strength of the EO-performance relationship, which may explain why some researchers find a weak association between EO and firm performance.

There are possibly other variables that may influence the EO and firm performance relationship. For SMEs, an area that has not been investigated in detail concerns understanding factors that may serve to mediate the EO-firm performance relationship. Although investigated within the context of large firms, there is a gap in the extant research with regards to identifying factors that may serve to impact the EO-firm performance relationship in the SME's environment. The role of the SME global economies cannot be overstated. In the U.S. alone, SMEs accounted for 99.9 percent of businesses and 46 percent of nonfarm GDP in 2008 (Small Business and Entrepreneurship Council, 2015. Further, according to the Small Business Administration's Office of Advocacy, small firms accounted for 63 percent of net new jobs created between 1993 and 2013 and 48.5 percent of private sector payrolls. In terms of innovation, small business produce 16 times more patents per employee than large patenting firms do (Small Business and Entrepreneurship Council, 2015). In addition, according to the OCED, SMEs account for over 95 percent of firms and 60-70 percent of employment and generate a large share of new jobs in OCED economies (OCED, 2000). As such, identifying factors that may serve to influence EO-firm performance relationship should be of particular import to researchers especially as it relates to the SME. One such factor, marketing capability, may help explain some of the varied results found with regards to EO-firm performance relationship.

Due to highly competitive forces and the economic recession, among small and medium firms only those firms which have successfully created and managed close relationships with precisely targeted customers appear to survive. In such an environment, an entrepreneurial spirit and culture and the adroit marketing effort of the SME becomes crucial. Drawing from resource-based theory, marketing capability (MC) has been studied extensively to explain heterogeneity in firm performance for large-size companies. Shin and Aiken (2012, p. 661) specified this important organizational capability as "an organization's repeatable patterns of applying the resources of the firm to the market-related needs of the business that become embedded a routines over time (Amit & Shoemaker, 1993; Day, 1994; Grant, 1996; Su, Tsang, & Pang, 2009). Previous research concerning marketing capability (within the context of large firms) has found a positive relationship exists between MC and firm performance (e.g., Chang, Park, & Chaiy, 2010; Morgan, Zou, Vorhies, & Katsikeas, 2003. Small firms seem to start to recognize the importance of marketing capability in doing business and becoming prosperous, but few studies have explored what role this capability plays and how it influences better firm performance. We propose to extend our understanding of firm performance within SMEs by investigating whether this relationship portends to SMEs.

A within subjects research design using an online survey was administered to entrepreneurs from SMEs across four industries (manufacturing, construction, research and development, and service) investigating the constructs of interests. The survey data were elicited from small business owners located in the northwest U.S. Business owners were identified using the U.S. Small Business Administration's (SBA) Central Contractor Registry (CCR). The CCR is a self-certifying database of all firms who wish to do business with any branch of the U.S. federal government. Data were extracted from the CCR database using the CCR's web-based Dynamic Small Business Search tool, which allows users to search the CCR database for firms who meet the SBA's criteria for small business. Small business definitions vary according to each firm's NAICS code and are summarized in the SBA's "Table of Small Business Standards" (SBA, 2006). Only those firms registering 200 or fewer employees were included in the study. Multiple regression analysis was used to evaluate the hypotheses.

In this study, we try to make three contributions. First, we test the positive relationship between EO and firm performance within SMEs in a Northwestern context. Although this link has been explored extensively for large-sized organizations, we retest to confirm the findings of relevant prior studies in the SMEs. Second, and most importantly in this study, we explore the role of MC in the relationship between EO and firm performance. Specifically, two distinct dimensions of marketing capabilities - market information management capability (MIC) and marketing mix capability (MMC)-are tested as pivotal drivers for firm performance and as mediators for EO linking firm performance. Third, based on the findings, we try to provide managerial implications to SMEs both in local and international markets. Thus, this paper includes literature review, hypotheses development, methodology, and finding and results of the analysis. Discussions and conclusions are provided along with the limitations of the study and the future directions.

BACKGROUND

Entrepreneurial Orientation

Entrepreneurial Orientation (EO) has been an important research focus for a number of years (Covin & Wales, 2011). The EO concept and definition were first addressed within the research concerning business and strategy development processes (Mintzberg, 1973; Khandwalla, 1976, 1977). Over time several definitions of EO have emerged. For instance, Covin and Slevin (1989) state that, "entrepreneurial firms are those in which top managers have entrepreneurial management styles, as evidenced by the firms' strategic decisions and operating management philosophy" (Covin & Slevin, 1989, p. 77). Miller and Friesen (1982) posit that the EO concept catches the innovative strategy of a company, which is often determined by a firm's leadership based on its temperaments and goals. Miller (1983) was first to take into account a collection of different organizational behaviors into the EO definition. Miller (1983, p.771) maintains that "an entrepreneurial firm is one that engages in product-market innovation, undertakes somewhat risky ventures, and is first to come up with 'proactive' innovations, beating competitors to the punch." In other words, EO is a multi-dimensional construct which involves firms engaging in innovativeness, risk taking and pro-activeness. Lumpkin and Dess (1996) extend EO to add competitive aggressiveness and autonomy to the construct. Rauch, Wiklund, Lumpkin, and Frese (2009, p. 764-65) describe these five dimensions:

"Innovativeness is the predisposition to engage in creativity and experimentation through the introduction of new products/services as well as technological leadership via R&D in new processes. Risk taking involves taking bold actions by venturing into the unknown, borrowing heavily, and/or committing significant resources to ventures in uncertain environments. Pro-activeness is an opportunity-seeking, forward-looking perspective characterized by the introduction of new products and services ahead of the competition and acting in anticipation of future demand. Competitive aggressiveness is the intensity of a firm's effort to outperform rivals and is characterized by a strong offensive posture or aggressive responses to competitive threats. Autonomy refers to independent action undertaken by entrepreneurial leaders or teams directed at bringing about new venture and seeing it to fruition."

As most studies so far have focused on the first three dimensions (Rauch et al., 2009), this paper uses Covin and Slevin's (1991) definition adopting a Miller and Friesen (1982) focus. Covin and Slevin (1991) citing Khandwalla (1977) state that, "firms with entrepreneurial postures are risk taking, innovative, and proactive. Entrepreneurially oriented firms are willing to take on high-risk projects with chances of very high returns, and are bold and aggressive in pursuing such opportunities. As such we operationalize entrepreneurial orientation (EO) as an organizational mindset characterized by a firm's strong proclivity for risk-taking, innovativeness, and proactiveness. Consequently, an entrepreneurial firm "engages in product-market innovation, undertakes somewhat risky ventures, and is the first to come up with "proactive" innovations beating competitors to the punch," (Miller 1983, p. 771 as cited in Wang 2008). Entrepreneurial organizations often initiate actions to which competitors then respond, and are frequently first-to-market with new product offerings. In support of this strategic orientation, entrepreneurial firms characteristically emphasize technological leadership and research and development (Miller & Friesen, p. 7-8). It emerges from a strategic-choice perspective (Child, 1972), which asserts that new-entry opportunities can be successfully undertaken by "purposeful enactment" (Van de Ven & Poole, 1995). Thus EO involves the intentions and actions of the key players in an organization functioning in a dynamic generative process aimed at new-venture creating.

There have been numerous studies that have shown a relationship between having an EO and increased firm performance (Chow, 2006; Lumpkin & Dees, 1996; Rauch et al., 2004; Rauch et al., 2009; Shepard and Wiklund, 2005). It has been argued that organizations benefit from demonstrating newness, degree of boldness and responsiveness. Lumpkin and Dess (1996) discussed those benefits extensively. Especially in today's turbulent environment where rapid changes occur, product and business model life-cycles are shortened and future profit streams are uncertain from existing operations, businesses need to constantly look for new opportunities. Thus, firms may be able to benefit from adopting an entrepreneurial orientation. Entrepreneurial organizations innovate on a frequent basis while taking calculated risks. Entrepreneurial firms try to anticipate demand and position their new products/services aggressively in the market which often leads to improved firm performance. Consequently, an EO leads to a higher performance (Rauch et al., 2009).

In the extant research some studies have found strong correlations between EO and firm performance (Covin & Slevin, 1986; Hult, Snow, & Kandemir, 2003; Wiklund & Shepherd, 2003), while other studies have found weaker correlations (Lumpkin & Dess, 2001; Zahra, 1991). Still other research has found that other factors in a firm's external and internal environment also exert an influence on performance (e.g. Covin & Slevin, 1989; Zahra & Covin, 1995). For example, Zahra and Covin (1995) contend that innovation helps companies to stay ahead of competition and proactive firms introduce new products/service before the competition does, resulting in a competitive advantage contributing to better financial performance. Likewise, Wiklund and Shepherd (2003) argue that a firm's internal environment also has an influence on performance. They show that EO strengthens the positive relationship between performance and knowledge-based resources. Lumpkin and Dess (1996) add that external and internal factors influence the strength of the entrepreneurial orientation-performance relationship.

Although there are been some mixed results about the EO-performance relationship, Rauch et al. (2009) found in a meta-analysis across previous EO studies that EO has a positive effect on performance. Their analysis found moderately large correlation between EO and performance. Their findings suggest that any business will most likely benefit from adopting EO. However, they also agree with other research (e.g., Lumpkin & Dess, 1996) that there are other variables that may influence the EO and firm performance relationship. Factors such as firm size, national culture, financial resources, network capability and learning orientation have all been shown to influence the EO-performance relationship (Rauch, Wiklund, Frese, & Lumpkin, 2004; Walter, Auer, & Ritter;

Wang, 2008; Wiklund & Shepard, 2005). Nevertheless, for most organizations it is expected that an EO posture will positively influence firm performance.

Marketing Capability

The resource-based view of firm performance has tended to focus upon the internal factors that serve to explain firm performance. Thus, the resource-based theory explains performance heterogeneity as a result of valuable, inimitable, rare, and non-substitutable resources and capabilities possessed by different firms (Amit & Shoemaker, 1993; Barney, 1991; Penrose, 1971; Shin & Aiken, 2012; Vorhies & Morgan, 2005). There have been attempts to distinguish capabilities from firm resources or assets, and conceptualize capabilities as a "special" type of resource that is embedded within organizations, and further as a deployment system between resources and firm performance (Ahn & York, 2011; Makadok, 2001; Shin & Aiken, 2012). Many argue that capabilities directly enhance the productivity of the firm's other resources, and in particular, marketing capabilities are considered essential in driving firm performance (Day, 1994; Morgan, Slotegraaf, & Vorhies, 2009a; O'Cass & Weerawardena, 2010; Ramaswami, Srivastava, & Bhargava, 2009).

Marketing capability has been gaining in popularity and is increasingly being operationalized in research (Day, 1994; Moorman & Slotegraaf, 1999; O'Cass & Weerawardena, 2010, Srivastava, Shervani, & Fahey, 1999; Vorhies & Morgam, 2005). Of particular interest to this research is the view of marketing capabilities outlined by Vorhies and Morgan (2005). Vorhies and Morgan describe marketing capability as consisting as two subsets of capabilities–specific marketing capabilities (hereafter referred to as marketing mix capabilities (MMC) and architectural marketing capabilities. Marketing mix capabilities (MMC) are used to transform resources into valuable outputs based upon the classic marketing mix (e.g., pricing capability). Architectural marketing capabilities are used to coordinate marketing mix capabilities (MMC) and relate to market information management, marketing strategy development, and implementation (Capron & Hulland, 1999; Vorhies & Morgan, 2005). Of the various capabilities within architectural marketing capabilities, market information management capability (MIC) is our interest in this study, because it is considered to be fundamental and essential to firms with limited capital, as characteristic in small firms. SMEs need to understand their customers, know the competition and applicable regulations in the market they compete in, and assess relevant market information to stay in the game. Therefore, its marketing research efforts and systematic information management capabilities can be critical, and the structured process of market information management of the firm can guide what particular marketing actions should be implemented in the market with regards to the marketing mix.

Marketing capabilities is defined for this study as adopted from Shin and Aiken (2012) as "an organization's repeatable patterns applying the resources of the firm to market related needs of the business that become embedded as routines over time" (cited as Amit & Shoemaker, 1993; Day, 1994; Grant, 1996; Su et al., 2009). Vorhies and Morgan (2005) show that both market information management capabilities (MIC) and marketing mix capabilities (MMC) have been positively linked to superior performance and that firms are required to have both types of marketing capabilities to realize superior firm performance. Although this dichotomous approach - specific and architectural –to marketing capabilities has garnered a more prominent role in current research concerning marketing strategy and firm performance than any other approaches such as market-based capability or market-sensing capability, very little research has been undertaken to date to see if this holds true within SMEs. Nevertheless, we should expect that firms with superior marketing capabilities (MIC and MMC) to have a sustainable advantage over those that do not and as such and enjoy superior performance (Morgan et al., 2003; Vorhies & Morgan, 2005; Shin & Aiken, 2012). The abilities to obtain and utilize market information and to execute marketing actions with balanced marketing mix tools are something that all firms regardless of size should be able to develop. Firms equipped with not only creative and entrepreneurial spirit but also essential marketing capabilities should enjoy improved firm rents, regardless of a firm's age or size.

HYPOTHESES

The literature reviewed has shown that there is a positive relationship between entrepreneurial orientation (EO) and firm performance. We expect that this relationship would hold true for SMEs. However, research has also shown that, at least with large firms, that organizations require more than just EO to positively affect firm performance. In addition to EO, firms must have organizational capabilities as a resource deployment system to implement the benefits of EO. As such, firms require marketing capabilities in order to mediate the positive effects of EO and firm performance. Based upon the previous discussion we propose the following hypotheses:

H1: There is a positive relationship between entrepreneurial orientation (EO) and market information management capability (MIC) in SMEs.

H2: There is a positive relationship between entrepreneurial orientation (EO) and marketing mix capability (MMC) in SMEs.

H3: There is a positive relationship between market information management capability (MIC) and firm performance (FP) in SMEs.

H4: There is a positive relationship between marketing mix capability (MMC) and firm performance in SMEs.

H5: Marketing capabilities, a) market information management capability (MMC) and b) marketing mix capability (MIC) will mediate the relationship between entrepreneurial orientation (EO) and firm performance (FP) in SMEs.

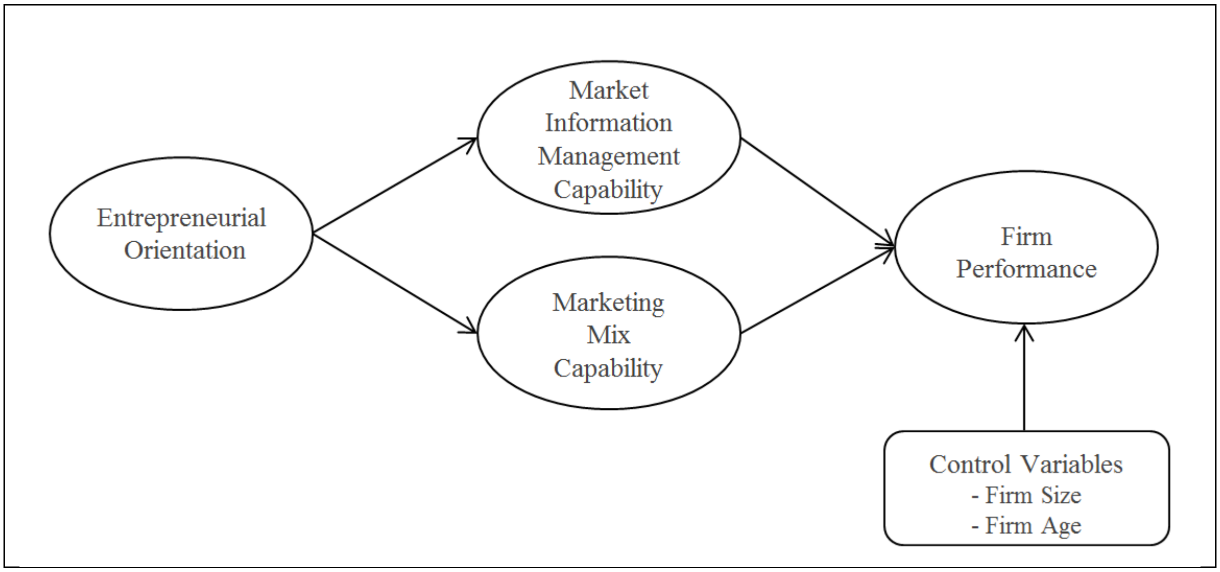
METHODOLOGY

Sampling and Data Collection

Online survey method was used in this study. The participating firms were restricted to small-sized firms in Northwestern states including Washington, Montana, Oregon, and Idaho in U.S. Only one participant per organization joined in the survey, and the sizes of the corporations were strictly controlled to fall into the designed sample characteristics. Data were elicited from small business owners located in the Northwest United States. Business owners were identified using the U.S. Small Business Administration's (SBA) Central Contractor Registry (CCR). The CCR is a self-certifying database of all firms who wish to do business with any branch of the U.S. federal government. Data were extracted from the CCR database using the CCR's web-based Dynamic Small Business Search tool, which allows users to search the CCR database for firms who meet the SBA's criteria for small business. Small business definitions vary according to each firm's NAICS code and are summarized in the SBA's "Table of Small Business Standards" (SBA, 2006). Only those firm's registering 200 or fewer employees were included in the sample. A description of the research objectives and a request for participation along with the online survey link were sent to the contact email addresses identified through the CCR.

The linked survey was designed in two sections with a cover page. The cover page included an invitation from the author, an assurance of confidentiality of the information, and contact methods for any questions and comments related to the research. First section included the main survey part with the measure items of the focal constructs, and the second section included questions related to the general information of the firms and the demographic information of the respondents. There were two follow-up/reminder emails to encourage their participations. Data collection occurred over three weeks and resulted in a sample of 108. After discarding 34 unusable questionnaires, total 74 (68.5%) were determined to use for analysis. Many of the surveys were discarded because only the cover page was visited and viewed. Descriptive information of the samples is in Table 1.

Figure 1 Research Model



Measures

All of the measures used in this study were drawn from the existing literature. Throughout the survey, 7-point, Likert-type scale was used. For entrepreneurial orientation (EO), market information management capability (MIC), and marketing mix capability (MMC), 7-point scale was used where 7 = Strongly agree and 1 = Strongly disagree. For firm performance measures, i.e., customer satisfaction, profitability, and adaptability, 7-point scale was also used where 7 = “much better than competitors” and 1 = “much worse than competitors” based on the firm’s business performance over the past year relative to the major competitors.

Entrepreneurial orientation (EO) was measured with five items. The measures were adopted with little modification from the prior studies by Lumpkin and Dess (1996) and Luo, Sivakumar, and Liu (2005). Market information management capability (MIC) was measured with five items and all the measures were adopted from Vorhies and Morgan’s (2003) study. Marketing mix capability (MMC) was measured by six items, and all the measures were adopted from Vorhies, Morgan, and Autry (2009).

Firm performance was measured through ten items; customer satisfaction in 4 items, profitability in 3 items, and adaptability in 3 items adopted from the previous studies. Customer satisfaction represents the effectiveness of the organization in delivering value to its customers (Day & Wensley, 1988; Kaplan & Norton, 1996). Profitability, using perceptual scales related to the firm’s financial performance over the past twelve months (Morgan, Clark, and Gooner, 2002). Lastly, adaptability was measured as the ability of the firm to respond to changes in its environment (Ruekert, Walker, & Roering, 1985; Shin, 2012).

For further analysis, firm-specific questions were included such as industry type, firm size, and firm age. Firm size is captured by the number of employees, and firm age is gauged as the number of years of operation in business. These two measures were particularly important to observe in our study because other research discussed meaningful relationships between these two variables and resources, and firm rents (e.g., Gu, Hung, & Tse, 2011). Respondents’ working years in the current-working firm and their professional functions were also recorded as control variables.

Table 1. Statistical information of samples

Respondents		No.	%	Company		No.	%
Owner	Yes	63	85.1	Firm age	.5-5 years	14	18.9
	No	11	14.9		5.1-10 years	18	24.3
Function	President/CEO	62	16.1		10.1-20 years	23	31.1
	Marketing/Sales	26	12.2		20.1-41 years	19	25.7
	Finance/Accounting	17	23.0	Firm size	0-1 employee	8	12.2
	R&D	11	14.9		2-5 employees	21	28.3
	Operation	16	21.6		6-10 employees	16	21.7
	IT	11	14.9		11-20 employees	14	18.9
	Other	4	5.4		21 or more	15	10.6
	Senior Team Staff	57	31.7	Industry	Manufacturing	11	14.9
Working years	.5-5 years	20	27.0		Construction	9	12.2
	5.1-10 years	23	31.1		R&D	3	4.1
	10.1-20 years	19	25.7		Services	26	35.1
	20.1-41 years	12	16.2		Retail	3	4.1
					Other	22	29.7

Notes: N = 74.

RESULTS

Scale Validation

Reliability, means, and standard deviations are presented in Table 2, and inter-construct correlations are presented in Table 3. A test of reliability using Cronbach's coefficient alpha showed that all of the focal constructs (entrepreneurial orientation: .811; market information management capability: .815; marketing mix capability: .889; customer satisfaction: .897; profitability: .968; adaptability: .917) exceeded Nunnally's (1978) standard of .70. Therefore, the authors established support for convergent validity (Bagozzi, Yi, & Phillips, 1991) of the constructs, exhibiting good measurement properties.

The validity of the scale items used was assessed via principal-axis factoring which completed using an eigenvalue of 1.0 and factorings of .50 as the cut-off point suggested by Zaichkowsky (1985). For one of the items of marketing mix capability (MMC) i.e., pricing, showed isolated and was loaded on its own, and therefore, it was deleted. All items were loaded significantly on the corresponding latent construct except two items of marketing mix capability (MMC). These two items showed slightly below the cut-off value (.477 and .489), but however the authors decided to keep these items. There was no evidence of cross-loading of any item values. The factor analysis of all variables resulted in a solution that accounted for 75.435% of the total variance. The summed means of all the measures were used in the hypotheses testing.

Table 2. Measure Characteristics

	Measures	*M*	*SD*	Cronbach's α
	Entrepreneurial Orientation (EO) (all)	**5.39**	**.957**	**.811**
1	Our company has higher propensity to take risks	5.24	1.373	
2	Our company has higher tendency to engage in strategic planning activities	5.23	1.319	
3	Our company has higher ability to identify customer needs and wants.	5.57	1.111	
4	Our company has higher ability to persevere in making our vision of the business a reality.	5.49	1.274	
5	Our company has higher ability to identify new opportunities.	5.45	1.251	
	Market Information Management Capability (MIC) (all)	**4.46**	**1.181**	**.815**
1	Gathering information about customers and competitors.	4.57	1.356	
2	Using market research skills to develop effective marketing programs.	4.16	1.481	
3	Tracking customer wants and needs.	5.00	1.414	
4	Making full use of marketing research information.	4.09	1.416	
5	Analyzing our market information.	4.32	1.491	
	Marketing Mix Capability (MMC) (all)	**4.53**	**1.118**	**.889**
1	Advertising and promotion	3.81	1.488	
2	Public relations	4.23	1.477	
3	Personal selling	4.95	1.632	
5	New product/service development	5.32	1.413	
6	Channel management	4.36	1.355	
	Customer Satisfaction (all)	**6.03**	**.972**	**.897**
1	Customer satisfaction	5.96	1.060	
2	Delivering value to customers	6.12	.912	
3	Delivering what customers want	6.05	1.026	
4	Retaining valued customers	5.97	1.394	
	Profitability (all)	**4.81**	**1.417**	**.968**
1	Business unit profitability	4.86	1.503	
2	Return on investment (ROI)	4.79	1.481	
3	Return on sales (ROS)	4.78	1.446	
4	Reaching financial goals	4.82	1.507	
	Adaptability (all)	**4.69**	**1.200**	**.917**
1	Time to market for new products/services	4.69	1.283	
2	Number of successful new products/services	4.65	1.196	
3	Revenues from new products/services (less than 3 years old)	4.75	1.401	

Notes: N = 74; *SD*: Standard Deviation; Answers were recorded on a 7-point Likert scale where 7 = *Strongly agree* and 1 = *Strongly disagree* for Entrepreneurial Orientation, Market Information Management Capability, and Marketing Mix Capability. For firm performance measures, i.e., Customer Satisfaction, Profitability, and Adaptability, answers were recorded on a 7-point Likert scale where 7 = *"much better than competitors"* and 1 = *"much worse than competitors"* based on the firm's business performance over the past year relative to the major competitors.

Table 3. Correlation coefficients and descriptive statistics

	1	2	3	4	5	6	7	8
1. EO	1							
2. MIC	.587**	1						
3. MMC	.477**	.453**	1					
4. CS	.260*	.257*	.284*	1				
5. Prft	.403**	.360**	.302**	.431**	1			
6. Adpt	.471**	.339**	.595**	.453**	.445**	1		
7. SizeLn	.158	.232*	.192	.050	.199	.100	1	
8. AgeLn	-.262*	-.242*	.017	-.092	-.034	-.069	.365**	1
Mean	5.39	4.46	4.53	6.03	4.81	4.69	n/m	n/m
SD	.957	1.181	1.118	.972	1.417	1.200	n/m	n/m

Notes: $N = 74$; *SD*: Standard Deviation; EO: Entrepreneurial Orientation; MIC: Market Information Management Capability; MMC: Marketing Mix Capability, CS: Customer Satisfaction; Prft: Profitability; Adpt: Adaptability; SizeLn: Company size (ln); AgeLn: Company age (ln); Company size and company age were transformed by taking logarithm; n/m: not meaningful; **p < .01, *p < .05.

Table 4. Factor Analysis of Variables

	Factor					
	1	2	3	4	5	6
EO1					.556	
EO2					.510	
EO3					.637	
EO4					.756	
EO5					.802	
MIC1	.651					
MIC2	.915					
MIC3	.586					
MIC4	.863					
MIC5	.832					
MMC1						.603
MMC2						.849
MMC3						.696
MMC5						.477
MMC6						.487
CS1			.864			
CS2			.867			
CS3			.900			
CS4			.725			
Prft1		.909				
Prft2		.895				
Prft3		.885				
Prft4		.914				
Adpt1				.814		
Adpt2				.839		
Adpt3				.813		

Notes: $N = 74$; EO: Entrepreneurial Orientation; MIC: Market Information Management Capability; MMC: Marketing Mix Capability, CS: Customer Satisfaction; Prft: Profitability; Adpt: Adaptability

Research Model Test Results

The research model was assessed using multilevel regression with IBM SPSS Statistics 19. To test main hypotheses, three times of regressions were executed with MIC and MMC, and firm performance as dependent variables for each corresponding model. For control other critical variables, firm size and firm age were included in each regression test. All three regression models were verified through coefficient of determination. R-squares of each model indicated satisfactory level of explained variability (R^2/Adj. R^2= .393/ .367, .252/ .220, and .301/ .260, respectively), and therefore, validations were established.

Positive relationships between EO and two marketing-related capabilities: MIC and MMC were found (β= .502, p < .001; β= .490, p < .001, respectively). This supports H1 and H2. Firm performance was regressed on MIC and MMC at the same time, and the positive links among the variables were found (β= .273, p < .05; β= .372, p < .01, respectively). This supports H3 and H4. Neither firm age nor firm size was found to correlate firm performance. The results of multilevel regression analyses are reported in Table 5 below.

Table 5. Regression Results

	Model 1		Model 2		Model 3	
Dependent Variables	Market Info. Mgmt.		Marketing Mix		Firm Performance	
Control Variables						
Firm Size	.370	.223	.219	.085	.242	-.005
(Ln)	(3.196)**	(2.138)*	(1.722)+	(.728)	(1.940)+	(-.039)
Firm Age	-.377	-.192	-.068	.102	-.164	.032
(Ln)	(-3.259)**	(-1.799)+	(-.538)	(.850)	(-1.309)	(.266)
Independent Variable						
Entrepreneurial		.502		.490		
Orientation (EO)		(4.990)***		(4.413)***		
Mediating Variables						
Market Info.						.273
Management (MIC)						(2.200)*
Marketing						.372
Mix (MMC)						(3.235)**
R^2 (Adj. R^2)	.177 (.154)	.393 (.367)	.041 (.014)	.252 (.220)	.056 (.029)	.301 (.260)
F	7.633	15.102	1.493	7.751	2.085	7.327

Firm size and firm age were transformed by taking logarithm;
***p < .001, **p < .01, *p < .05, +p < .10; N = 74

Mediating Effect Analysis

To check the possibility of a mediating role of MIC and MMC, the original approach suggested by Baron and Kenny (1986) was used. According to Baron and Kenny (1986) to test a mediation effect, "one should estimate the three following regression equations: first, regressing the mediator on the independent variables; second, regressing the dependent variable on the independent variables; and third, regressing the dependent variable on both the independent variable and on the mediator" (Baron & Kenny, 1986, p. 1177. We also followed the guideline of Preacher and Hayes (2008) for the multiple mediation testing.

In the first analytical step, the first mediator, MIC was regressed on EO. As Model 1 in Table 6 showed, the relationship was significant (EO-MIC: β= .587, p < .001). In the second step, firm performance was regressed on EO, and the regression result showed their positive relationship in Model 4 (EO-performance: β= .478, p < .001). In the last step, MIC was loaded with EO as independent variables in Model 5-1. The result showed that EO was still found to have a positive impact on firm performance but the effect was significantly decreased from .478

to .349. Thus, MIC partially mediated the link between EO and firm performance, although MIC marginally linked to firm performance.

To validate MMC as a mediator, the identical procedure was used. MMC was regressed on EO. As Model 2 showed, the relationship was positive and significant (EO-MMC: β= .477, p < .001). MMC and EO were loaded as independent variables in Model 5-2. The result showed that EO was still found to have a positive impact on firm performance but the effect was significantly decreased from .478 to .272. Thus, MMC partially mediated the link between EO and firm performance.

Table 6. Mediation Test Results

	Market Info. Mgmt.	Marketing Mix	Firm Performance[a]				
	Model 1	Model 2	Model 3-1	Model 3-2	Model 4	Model 5-1	Model 5-2
Main Effect							
Entrepreneurial Orientation	.587 (6.158)***	.477 (4.578)***			.478 (4.619)***	.349 (2.769)**	.272 (2.399)*
Mediating Effects							
Market Info. Mgmt.			.424 (3.977)***			.219 (1.738)+	
Marketing Mix				.495 (4.807)***			.365 (3.218)**
R^2 (Adj. R^2)	.345 (.336)	.228 (.217)	.180 (.169)	.246 (.235)	.229 (.218)	.260 (.239)	.303 (.283)
ΔR^2						.031 (.021)	.074 (.065)
F	37.918	20.956	15.817	23.103	21.332	12.476	15.202

***p < .001, **p < .01, *p < .05, +p < .10; N = 74

a. Firm performance is the mean values of Customer Satisfaction, Profitability, and Adaptability;

DISCUSSION

Conclusions and Implications

The results provide empirical support for the argument made in this research. First, entrepreneurial orientation (EO) is proven to have a direct and strong impact on firm performance. Specifically, the results show that having EO does positively impact SME performance. This finding confirms the results of the relevant prior studies. EO is a critical organizational culture that SMEs should foster in order to achieve better firm rents. Second, marketing capabilities - MMC and MIC - are proven to directly influence firm performance in the SME context. This finding generalizes the critical role of marketing capabilities for improved firm performance regardless of the size of the firm. These results strengthen findings found in other research (e.g., Morgan et al., 2003; Vorhies & Morgan, 2005; Shin & Aiken, 2012) that have found a positive impact of marketing capabilities on firm performance. What is interesting in these findings is that MMC appears to exert a stronger influence (β= .372 versus .273) on performance than does MIC (see Table 5). It may be that MMC more directly enables a firm to implement the necessary actions (e.g., effective communications with the marketplace, developing and placing the right products or services that consumers desire and implementing effective pricing strategies) that drive superior firm performance.

Third, this study proposes that there exists a positive relationship between a firm's EO and its marketing capabilities. The results support this contention as EO has been shown to positively influence both MIC and MMC. These findings suggest that EO allows for firms to better monitor their environment for marketing opportunities. Further, the results are consistent with other research (e.g., Kwak, Jaju, Puzakova, & Rocereto, 2013; Wales, Parida, & Patel, 2013) which show that EO motivates a "constant indulgence to exploit environmental dynamics" and that entrepreneurial firms tend to more actively create new markets by closely observing environmental pressures (e.g., market information) that provide opportunities for new product or service development (Lumpkin & Dess, 1996). Entrepreneurial firms constantly operate in turbulent market environments that are rife with new information providing a context which leads to information acquisition and exploitation (Lumpkin & Dess, 1996; Wang, 2008). Further, the results reaffirm other research that has shown EO's ability to enhance a firm's ability to acquire, assimilate, transform, and exploit market information (Wales et al, 2013).

Fourth, most importantly, MMC and MIC are shown to mediate EO and firm performance among SMEs. Furthermore, having both EO and additional marketing capabilities exerts a direct and positive influence on SME performance. Our findings show EO's influence on performance is partially mediated when additional marketing capabilities (e.g., market information management capabilities (MIC) and marketing mix capabilities (MMC)) exist within the firm. More specifically, though EO does influence SME performance, the full impact of EO can only be realized when other capabilities exist within the SME. That is, having marketing capabilities (i.e., MMC and MIC) enhances the effect of a firm's EO on its performance. Furthermore, as the findings suggest that MMC exerts a greater influence on SME performance than does having MIC. These results evidence the need in SMEs to foster marketing abilities such as marketing research efforts, information management for customers and competitors in the market, new product development, marketing communications, sales and promotions, and channel management, if they are to realize greater firm performance and thrive in an increasingly more competitive global marketing environment. Results suggest that having EO in and of itself is becoming insufficient as a motivator of superior firm performance for the SMEs. It may be that the hypercompetitive market environment of recent years has "raised the bar," so to speak, in regards to how firms can engender superior performance.

Taken together, the results provide evidence that SMEs require marketing capabilities in order to more fully benefit from EO. Although preliminary in nature, these finding suggest that in today's highly competitive market environment, SMEs need to develop addition capabilities in order to realize significant competitive advantage and that having marketing capabilities (MIC and MMC) may serve to enable the benefits an EO to the SMEs. It appears that marketing capabilities may serve to bridge the benefits derived from EO to firm performance in SMEs. Results imply to SMEs that effort needs to be made to develop marketing capabilities even if EO exists within the firm if it is to thrive in the todays turbulent and hypercompetitive market environment.

Our findings have implications for practitioners relating to the execution of marketing strategy for developing sustainable competitive advantage. First, to advance an organization's businesses performance SMEs should cultivate marketing capabilities including marketing mix (MMC) and market information management (MIC) capabilities. It is not enough for a firm to be entrepreneurially oriented but it must possess the means to effectively implement the requisite marketing actions needed to effectively exploit opportunities identified. Moreover, as MMC was found to the most impactful marketing capability enabling firm performance, SMEs would be well served to allocate effort and resources toward developing their MMC in order to more fully realize the firm performance benefits motivated by EO. With limited resources, SMEs might be well served in initially hiring individuals with specific experience and competencies that relate to the planning and execution of product, pricing, promotion and distribution activities (e.g., MMC skills). Second, SMEs still need to cultivate MIC to facilitate firm performance. Yet, with the quickening pace of changing market trends and the unpredictable nature of economic transformations SMEs may waver in allocating scarce resources to building their knowledge assets. Our study findings suggest that this would be short sighted. Results show that managers and small businesses need to invest in building knowledge assets which can be a source of sustainable competitive advantage.

Although studied within the context of U.S. SMEs, our findings do have implications for SMEs in other countries. As technology and a changing marketspace have blurred the boundaries of competition, more and more firms are finding that competition is no longer geographically bound nor defined. The prevalence of the Internet in fomenting marketing transactions coupled with the expansion of contract global distribution systems such as Fedex and UPS small businesses are increasingly finding themselves competing with entities from across the world. This changing competitive landscape is the new reality facing the SME today. With finite resources and hyper competition it would serve the SME well to allocate its limited resources to those areas having the greatest impact on performance. To this end, our findings suggest that increased focus on MMC and MIC development may provide the best return on investment for the SME regardless of geographic location.

This research sought to explore whether or not entrepreneurial orientation and marketing capability positively influences firm performance in SMEs and whether or not marketing capability mediates the EO-firm performance relationship. Findings provide support that marketing capability does have a direct and positive influence on firm performance and that it partially mediates the effect that an entrepreneurial orientation has on SME performance. Other factors have been shown to influence the effect of EO on firm performance to include firm size (Rauch et al., 2004), networking capabilities (Walter et al., 2005), access to financial resources (Wiklund & Shepard, 2005), and learning orientation (Wang, 2008).

LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

As with any research, this research has limitations. First, the study only looked at businesses in four states from the Northwest of the United States. Additional research should be undertaken to see if the results replicate across geographical regions and cultures. Efforts should be made to conduct larger studies that investigate the phenomena across business type and settings in order to further elucidate our understanding of entrepreneurship at the marketing interface. Differences may be found with respect to the importance of marketing capabilities in relations to technology versus nontechnology oriented businesses Second, only two marketing capabilities–marketing mix capability (MMC) and market information management capability (MIC)-were investigated in the present research. Other factors such as marketing planning capability and marketing implementation capability (Chang et al., 2010; Morgan et al., 2003) or marketing control (Armstrong & Kotler, 2013; Shin, 2013) have been shown to influence firm performance and as such merit further investigation within the context of the SME. Third, difficulty in collecting the data at SME level has prevented us from including objective measures of performances. Other researchers may overcome this difficulty and test similar relationships with objective indicators of firm performance.

With research in entrepreneurship still rather fragmented it is important to keep focus on this phenomenon, especially since SMEs are significant contributors to economic development. Although previous research has recognized various factors that serve to enhance entrepreneurship and motivate performance this study was undertaken in an attempt to elucidate the factors that motivate performance within the SME and further our understanding of the same. We hope this research serves to motivate additional research concerning the SME at the entrepreneurship/marketing interface.

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ON USING BIG FIVE FACETS FOR ENTREPRENEURSHIP'S PERSONALITY RESEARCH: CONSCIENTIOUSNESS' TAXONOMY

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Abstract:

Among the Big Five personality dimensions (i.e., Agreeableness, Conscientiousness, Extraversion, Neuroticism, and Openness), it is Conscientiousness that, more so than the others, predicts entrepreneurial intention, performance, and actual business creation (e.g., Zhou, Seibert and Lumpkin, 2010). Yet, despite its salience, the various facets of Conscientiousness and their association with specific entrepreneurial behaviors are not clearly understood. The present study cross-references the psychology literature and uncovers an extended set of thirteen Conscientiousness facets, ordering them in terms of prevalence and salience, and then links them to specific entrepreneurial behaviors. Following this, it also provides a host of implications as well as future research directions.

Keywords: Entrepreneurship, personality, Big Five, dimension, facet, conscientiousness

Introduction

The personality approach to entrepreneurship assumes that entrepreneurs possess distinct inner qualities that make them fundamentally different from other individuals. Since these traits may lead to extraordinary achievements, they are worth studying (Gartner, 1988). Given the personality approach's intuitive nature, business has long theorized on entrepreneurs' key characteristics. Among others, Cole (1946) suggests particular *Perseverance*; McClelland (1961) *Need for Achievement*; and Liles (1974) *Risk Tolerance*.

Despite early skepticism, notably Gartner (1988), entrepreneurships' personality research has flourished. Refined methods not only met prior methodological objections, but produced substantial findings (Rauch, 2014). A number of recent meta-analysis, e.g. Rauch and Frese (2007), Zhao, Seibert, and Lumpkin (2010) and Brandstätter (2011), among others, examine the different relationships between personality and entrepreneurship. Results strongly suggest that the personality approach to entrepreneurship is both valid and useful, personality now generally accepted as influencing entrepreneurial behavior (Rauch, 2014).

Entrepreneurship's early skepticism was based on personality research producing weak results. This had to do, among others, with the lack of a generally-accepted personality structure. The development of the Big Five dimensions advanced entrepreneurship's personality research considerably (Nicholson, 1998). The framework's robustness made it ideal for business research, allowing the study of personality issues related to selection, evaluation and training (Barrick & Mount, 1991). Within entrepreneurship, the Big Five enabled the exploration of personality's relation to venture creation, growth and survival (Ciavarella, Buchholtz, Riordan, Gatewood & Stokes, 2004).

Broad, amalgamated dimensions like the Big Five describe general behaviors. However, fields like entrepreneurship comprise quite specific behaviors (Rauch, 2014). Omnibus dimensions, like the Big Five, are therefore not really suited for behavioral prediction because they are not domain-specific (Bandura, 1997). This makes it difficult to produce and compare findings, essentially develop theory, at all but the most general levels.

A way to overcome this limitation, and help entrepreneurship's personality research further develop, is by using the Big Five's more specific sub-dimensions (facets). Their more precise level of explanation, coupled with their ability to be more relevantly targeted, allow to better predict behavioral outcomes (Paunonen & Ashton, 2001). However, there is still no clarity as to what exactly Big Five dimensions consist of. While business and entrepreneurship focus on only a few select dimensional domains, psychology is barely starting to reach consensus in regards to the Big Five's lower-order structure (Roberts, Lejuez, Krueger, Richards & Hill, 2014).

The present exploratory paper begins to resolve this situation. Following Lumpkin and Dess (1996), who addressed *Entrepreneurial Orientation's* more-specific components, this study looks into the taxonomy of one of the Big Five dimensions: *Conscientiousness*. This factor was chosen as a first exemplar given its entrepreneurial importance. *Conscientiousness* is mostly associated to task and goal-directed behaviors (Jackson, Wood, Bogg, Walton, Harms & Roberts, 2010) and is thus a core determinant of human capital (Roberts, Lejuez, Krueger, Richards & Hill, 2014). Of all Big Five dimensions only *Conscientiousness* consistently predicts job performance (Barrick, Mount & Judge, 2001). It also strongly correlates to superior group leadership (Judge, Bono, Ilies & Gerhardt, 2002); job satisfaction (Judge, Heller & Mount, 2002); and career success (Judge, Higgins, Thoresen & Barrick, 1999). Unlike other Big Five dimensions *Conscientiousness* encompasses quintessential entrepreneurial traits such as *Achievement Striving*, *Risk-Taking*, *Self-Efficacy*, *Discipline* and *Perseverance* Rauch (2014). It thus also correlates to key entrepreneurial behaviors like venture intention, creation, performance (Zhao, Seibert & Lumpkin, 2010) and long-term survival (Ciavarella, Buchholtz, Riordan, Gatewood & Stokes, 2004).

This paper begins with a brief overview of personality and its Big Five taxonomy. The *Conscientiousness* construct is then addressed, along with some empirical findings associated to it. A discussion on the benefits of using dimensional facets then leads into *Conscientiousness'* components. Finally, a series of future directions for personality research in entrepreneurship are offered. It is hoped that the extended set of *Conscientiousness* facets uncovered assists entrepreneurship in subsequent empirical efforts. It is also hoped that this taxonomical research be extended to other Big Five dimensions to further expand entrepreneurship's personality research.

Personality and the Big Five

Psychology generally conceives *personality* as individuals' innate and pervasive mental characteristics which lead to distinct behavioral patterns (Costa & McCrae, 1994a). Characteristics may be overt, reflected by personal, professional and social behaviors; and covert, referring to how people perceive, think and feel (Widiger, 1998). Regardless of nature, these mental characteristics are consistent across situations and time (Cervone & Pervin, 2008).

Psychology has converged on an overarching five-factor personality structure (Digman, 1990). This framework consolidates decades of multidisciplinary research (Zhao & Seibert, 2006). These so-called *Big Five* have become the most widely used personality taxonomy (Rauch, 2014). Thorough and efficient, they consistently provide valid and reliable measures (Ashton & Lee, 2005). An impressive body of literature has come to support the Big Five. Despite some variation, there is general five-factor agreement between genders, age groups, self/peer ratings, longitudinal studies and cross-cultural contexts. There is thus consensus that the Big Five likely represent the basic and universal personality dimensions (Cervone & Pervin, 2008).

The Big Five account for most personality variation through a handful of broad bipolar dimensions: 1) *Extraversion*; 2) *Agreeableness*; 3) *Emotional Stability (*aka *Neuroticism)*; 4) *Openness to Experience (*aka *Intellect)*; and 5) *Conscientiousness* (Ashton, Lee & Goldberg, 2004). Each of these is hierarchical, going from general dimensions, through progressively specific sub-dimensions/facets, to ultimately traits. Table 1, below, illustrates Costa and McCrae's (1994a) Five-Factor Model with some representative facets.

1) Extraversion	**2) Agreeableness**	**3) Neuroticism**	**4) Openness**	**5) Conscientiousness**
Warmth	Trust	Anxiety	Fantasy	Competence
Gregariousness	Straightforwardness	Angry hostility	Aesthetics	Order
Assertiveness	Altruism	Depression	Feelings	Dutifulness
Activity	Compliance	Self-consciousness	Actions	Achievement
Excitement seeking	Modesty	Impulsiveness	Ideas	Self-discipline
Positive emotions	Tender mindedness	Vulnerability	Values	Deliberation

Table 1: The Five-Factor Model and Some Representative Facets

To provide some context, the first four personality dimensions will be briefly addressed. *Conscientiousness*, as the focus of this paper, will be discussed in its own section thereafter.

Extraversion is associated to the quantity and intensity of interpersonal relationships. It focuses on being *active*, *assertive* and *outgoing*. Extraverts enjoy people, groups and seek external stimulation (Costa & McCrae, 1992). Entrepreneurs' degree of *Extraversion* impacts their success. Often assuming sales roles, they must constantly interact with a variety of constituents like customers, employees, partners and investors (Zhao & Seibert, 2006).

Agreeableness relates to the quality of relationships. It encompasses being *caring*, *understanding* and *trusting* (DeNeve & Cooper, 1998). *Agreeableness* leads to positive, cooperative relationships. Though in excess it may thwart the ability to make difficult decisions and bargain to one's advantage. This is particularly detrimental for entrepreneurs who often operate on minimal resources with low margins of error (Zhao & Seibert, 2006).

Emotional Stability (aka *Neuroticism*) reflects individuals' inner resilience and outward adjustment. It refers to tolerance towards stress, irritability and anxiety. Individuals high in *Emotional Stability* are generally *self-confident*, *even-tempered* and *calm* (Judge, Higgins, Thoresen & Barrick, 1999). Entrepreneur's *Emotional Stability* impacts their success. Their unstructured work environment, and the higher workload, work-family conflict, and financial risk associated to new ventures, all cause mental stress beyond conventional professions (Zhao & Seibert, 2006).

Openness to Experience (aka *Intellect*) refers to individuals' broad-mindedness. It comprises being curious and exploring new ideas and experiences. Individuals high in *Openness* are *non-traditional*, *creative* and *innovative* (Rauch, 2014). Schumpeter (1942/2008) suggests that entrepreneurs are essentially defined by innovation. Identifying opportunities and growing a business require novel ideas and creative problem solving, both at the core of more recent entrepreneurship definitions, such as that of Shane and Venkataraman (2000).

Personality is thus important for opportunity recognition (Ardichvili, Cardozo & Ray, 2003), venture intention, creation, and performance (Zhao, Seibert & Lumpkin, 2010); and long-term business survival (Ciavarella, Buchholtz, Riordan, Gatewood & Stokes, 2004). Compared to managers, entrepreneurs operate in more self-directed environments. Entrepreneur's personality therefore has a larger impact on behaviors and outcomes. Particularly amongst smaller firms where owners/managers have a stronger presence, opposed to larger ones with an emerging or already established cadre of managers (Rauch, 2014).

As to the first four personality dimensions mentioned above, Zhao and Seibert (2006) found that entrepreneurs are indeed different than managers. Entrepreneurs are equally *extraverted*, but significantly less *agreeable*, and significantly more *open* and *emotionally stable*.

Conscientiousness

The fifth personality dimension, *Conscientiousness* is central within the Big Five framework. It is consistently obtained across psychological studies and accounts for a relatively large portion of personality's total variance (Ashton, Lee & Goldberg, 2004). The *Conscientiousness* label implies moral adherence. Though this interpretation is too literal. The dimension actually encompasses a broad spectrum of characteristics (Cartwright & Peckar, 1993), variously called *Dependability*, *Will to Achieve*, *Self-Control*, *Prudence* and *Constraint* (Costa & McCrae, 1998).

Conscientiousness is mostly associated to task and goal-directed behaviors. These encompass both assertive and inhibitive qualities (Jackson, Wood, Bogg, Walton, Harms & Roberts, 2010). The former comprise traits related to achievement, e.g. *responsible*, *hard-working* and *persistent*. The latter to self-control, like *orderly*, *cautious* and *scrupulous* (Rauch, 2014). Going back to early notions like *persistence of motives* (Webb, 1915) or *super-ego* (Freud, 1922/1989), *Conscientiousness* builds on a long psychological tradition. The dimension has since become closely linked to a variety of important psychological constructs (Roberts, Lejuez, Krueger, Richards & Hill, 2014).

Though *Conscientiousness* is not only a theoretical notion. It also has real-life implications, linked to a range of positive individual and professional outcomes. At the personal level, *Conscientiousness* is associated with sound eating habits (Goldberg & Stycker, 2002); positive health, psychological adjustment and ageing (Roberts, Lejuez, Krueger, Richards & Hill, 2014); longevity (Kern & Friedman, 2008); marital stability (Roberts & Bogg 2004); college retention (Tross, Harper, Osher & Kneidinger, 2000); and college achievement (Noftle & Robins, 2007).

As to business, *Conscientiousness* is a core determinant of human capital (Roberts, Lejuez, Krueger, Richards & Hill, 2014). It positively correlates to superior job performance (Hogan, Rybicki, Motowidlo & Borman, 1998), group leadership (Judge, Bono, Ilies & Gerhardt, 2002), job satisfaction (Judge, Heller & Mount, 2002), and career success (Judge, Higgins, Thoresen & Barrick, 1999). Barrick and Mount's (1991) meta-analysis (verified by Barrick, Mount, and Judge (2001)) found that of all Big Five dimensions only *Conscientiousness* consistently predicted job performance across diverse occupational groups and performance criteria. *Conscientiousness*' relationship was also noticeably larger than that of other Big Five dimensions making it the strongest performance indicator. This has to do with *Conscientiousness*, unlike other dimensions, encompassing a series of performance-related traits. Individuals with a strong work ethic, sense of purpose, and persistence, all *Conscientiousness* components, not surprisingly tend to perform better at work than those who lack these qualities.

In regards to entrepreneurship, Zhao and Seibert's (2006) meta-analysis found entrepreneurs to be significantly more conscientious than managers. This makes entrepreneurs even more performance-oriented than the former. As to behaviors, *Conscientiousness* was found to strongly correlate with *entrepreneurial intention* (Zhao, Seibert & Lumpkin, 2010); *business creation* (Zhao & Seibert, 2006); and *entrepreneurial performance* (Zhao, Seibert & Lumpkin, 2010). Interestingly *Conscientiousness* relates mostly to latter venture phases: Ciavarella, Buchholtz, Riordan, Gatewood, and Stokes (2004) hypothesized strong positive relationships between all Big Five personality factors and entrepreneurial longevity. Though contrary to expectations, *Extraversion*, *Emotional Stability*, and *Agreeableness* were found to have no significant impact while *Openness* actually reported a substantial negative one. It seems that entrepreneurs who are excessively broadminded, and therefore opportunistically take their ventures in different directions, are more likely to fail due to lack of focus. Hence *Openness*' negative relationship. Only *Conscientiousness* was found to significantly predict venture survival, at 4-years after startup (adolescence), 8-years (maturity) and overall (long-term). Furthermore, the impact of *Conscientiousness* increased as post-launch time progressed. These results suggest that entrepreneurs need to shift from a creative mindset to a more managerial one as ventures mature. It is along this transition where *Conscientiousness* components such as *Constraint*, *Prudence*, *Responsibility* and *Persistence* become so important.

Bandwidth

The Big Five are efficient. They explain a substantial portion of personality variation through a mere handful of variables (Ashton & Lee, 2005). The merits of this framework cannot be denied, having become the standard within personality research (Rauch, 2014).

However, the Big Five do pose limitations: A first one is conceptual: despite being statistically independent, Big Five dimensions cannot be seen as single, conceptually unique variables. They should instead be understood as *collections* of related personality variables aggregated into general, overarching themes (Ashton & Lee, 2005)**.** This conceptual broadness results in ambiguity, the finer features of personality often lost (Saucier & Ostendorf, 1999). Individuals with identical dimensional scores may differ widely in their behavior due to how their scores are distributed among the more specific sub-dimensions/facets. This is why, for precise diagnostic purposes, psychology prefers using a series of more specific variables instead of a few general ones (Widiger, Trull, Clarkin, Sanderson & Costa, 1994).

Instead of using broad dimensions, as conventionally done within entrepreneurship research, it is better to address personality at the more-specific facet level as this increases conceptual fidelity (Saucier & Ostendorf, 1999). Facets constitute a sound level of aggregation balancing the need for parsimony and representativeness (Briggs, 1989; Perugini & Gallucci, 1997). Made up of traits more similar to each other, facets allow the relationship between personality and other variables of interest to be more precisely established. Personality research can thus be taken to another level (literally) with further reaching implications (Roberts, Lejuez, Krueger, Richards & Hill, 2014).

A second Big Five limitation concerns predictive ability. The debate of broad vs. narrow dimensions being more effective is not new. This bandwidth-fidelity discussion goes back at least half a century to Cronbach and Gleser (1965), among others. The Big Five have been extensively used within entrepreneurship to predict a variety of behaviors. Broad, amalgamated dimensions like the Big Five are no doubt appropriate for general situations (Rauch, 2014). Though their use leads to a loss of specific variance, lowering the overall composite validity (Goldberg, 1993). Omnibus dimensions, like the Big Five, are not really suited for behavioral prediction because they are not domain-specific (Bandura, 1997). This makes it difficult to produce and compare findings, essentially develop theory, at all but the most general levels.

In contrast, dimensions' narrower facets tend to be more effective. Their more precise level of explanation, coupled with their ability to be more relevantly targeted, allow to better predict particular behavioral outcomes. Facets are thus better able to capture criterion-related variance unexplained by broader dimensions, Carver (1989); Perugini and Gallucci (1997); Paunonen and Ashton (2001); Ashton and Lee (2005). And even when the more-specific facets offer little predictive advantage, it is still useful to know which ones provide the greatest correlation, thus enhancing the overall understanding of the construct measured (Saucier & Ostendorf, 1999). Limiting entrepreneurship research to single, broad constructs or a narrow range of related ones may lead to misleading results. The field should instead use more comprehensive measures which capture constructs' different areas Lumpkin and Dess (1996). In the particular case of entrepreneurship's personality research, facets are better suited than dimensions to understand the field's unique behaviors (Rauch, 2014).

Granted, using facets opposed to dimensions to study the relationship between personality and entrepreneurship comes at the expense of efficiency, more variables needed to represent each overarching domain. Statistical issues might also arise, as unlike dimensions, facets are not independent variables: Having originally loaded under the same dimension, they are statistically related and thus co-vary. And this co-variance extends to other dimensions through secondary item loadings (Hofstee, De Raad & Goldberg, 1992). The above limitations are certainly acknowledged. However, one must not forget that dimensions, and especially their items, are rarely perfectly independent. They also often cross-load. Entrepreneurship has long acknowledged the co-variance of factors. To illustrate, Lumpkin and Dess (1996) comment on how Entrepreneurial Orientation's *competitive aggressiveness*, *innovativeness* and *risk taking* dimensions are to a certain degree related.

With this in mind, the above issues should not be a major obstacle towards the use of facets to study personality's impacts upon entrepreneurship. Facets' conceptual fidelity, directed targeting, and superior ability to predict specific behavioral outcomes more than compensate any reasonably-resolved statistical issues Perugini and Gallucci (1997); Paunonen and Ashton (2001); Ashton and Lee (2005).

Conscientiousness Facets

In the particular case of *Conscientiousness*, there is ongoing debate as to its lower-level structure. Its different facets are only starting to be pursued, researchers providing different interpretations (Roberts, Lejuez, Krueger, Richards & Hill, 2014). Mount and Barrick (1995), among others, suggest just two *Conscientiousness* facets: *Achievement Motivation* and *Dependability*. However, their narrow perspective does not do this rich dimension justice, its other aspects ignored. Alternatively, more recent entrepreneurship literature, e.g. Rauch (2014), suggests that *Conscientiousness* encompasses facets like *Orderliness*, *Discipline*, *Self-Efficacy*, *Cautiousness*, *Achievement Striving* and *Dutifulness*. While this portrayal is certainly more varied, it is nevertheless skewed towards entrepreneurial features. Given the inconsistency in number and nature of dimensions reported, as well as the possible biases that different fields might introduce, a more thorough and objective taxonomical review is necessary.

Per Costa, McCrae, and Dye (1991), and to theoretically ground the present effort, psychology's personality literature was reviewed to identify studies addressing *Conscientiousness'* lower-order structure. This follows the personality construct, and more specifically the Big Five framework to which *Conscientiousness* belongs, having originated within psychology. Not elsewhere, say business or entrepreneurship, which at best provide an interpretation of the original psychological theory. While the latter literatures were consulted for reference purposes, they were nonetheless omitted from the analysis for emphasizing only certain aspects, not providing a complete picture of the construct.

Furthermore, the psychological studies were selected based on the theoretical model they followed. Only studies using the Big Five framework were included to ensure theoretical consistency. Studies using other taxonomies, say Cattell, Eber and Tatsuoka's (1970) 16 Personality Factors or Eysenck's (1965) 3-factor model were consulted for reference purposes. While their different dimensions and facets no doubt closely relate to the Big Five and *Conscientiousness* in particular, they were also omitted from the analysis given their different theoretical origin (Goldberg, 1982).

Table 2, below, shows some key studies addressing *Conscientiousness'* lower-order structure. That only a handful are presented has to do, on the one hand, with psychology only beginning to formally address the dimension's taxonomy (Roberts, Lejuez, Krueger, Richards & Hill, 2014). Being a rather new area of inquiry, the number of papers on the subject is from the start limited. On the other hand, the sparse number of studies presented has to do with the authors having eliminated those deemed redundant. Some of the studies listed function as meta-analysis of sorts, synthesizing previous efforts, i.e. those not listed. Including the latter would have otherwise skewed results. To illustrate, Roberts, Chernyshenko, Stark, and Goldberg (2005) empirically test 36 scales related to *Conscientiousness* drawn from seven major personality inventories. While the studies listed are by no means exhaustive, the results offered in Table 2 are nevertheless deemed representative.

Studies, to the far left, are chronologically organized. The *Conscientiousness* facets identified by each are arranged from left to right in order of prevalence. The top row mentions absolute and relative frequencies for each facet, just as a rough indicator. Though it should be noted that at this aggregate level facet's nature become a bit fuzzy: Despite their classification being based on facet name, and then on the traits contained thereunder, facet's meaning and resultant position is not that clear-cut. To illustrate, the difference between Paunonen and Jackson's (1996) *drive to succeed* and *ambition* facets is somewhat obscure. While by no means exhaustive, Table 2 does provide some initial insights as to *Conscientiousness'* different aspects.

Frequency	x 15 = 94%	x 14 = 88%	x 12 = 75%	x 8 = 50%	x 8 = 50%	x 6 = 38%	x 5 = 31%	x 5 = 31%	x 4 = 25%	x 3 = 19%	x 2 = 13%	x 2 = 13%	x 2 = 13%
Facet **Study**	**Organization**	**Responsibility**	**Industriousness**	**Self-Control**	**Decisiveness**	**Perfectionism**	**Caution**	**Conventionality**	**Achievement Striving**	**Efficiency**	**Logic**	**Consistency**	**Virtue**
(Goldberg, 1990)	Organization	Dependability Punctual	Persistence		Decisiveness	Precision	Caution	Conventionality		Efficiency Thrift	Logic	Predictability	Dignity
(Costa, McCrae & Dye, 1991)	Order	Dutifulness	Competence	Self-Discipline	Deliberation				Achievement Striving				
(Hofstee, De Raad & Goldberg, 1992)	Organization	Reliability				Perfectionism	Caution	Conventionality	Ambition			Consistency	
(Saucier & Goldberg, 1996)	Orderly	Dependable Reliable	Industrious						Ambitious	Systematic			
(Paunonen & Jackson, 1996)	Methodical Orderly	Dependable Reliable	Drive to Succeed						Ambition				
(Perugini & Gallucci, 1997)		Reliability				Meticulousness							
(Saucier & Ostendorf, 1999)	Orderliness	Reliability	Industriousness		Decisiveness		Cautiousness						
(Goldberg, 1999)	Orderliness Organiz.	Dutifulness Consc.			Purposefulness	Perfectionism	Cautiousness			Efficiency	Rationality		
(Peabody & De Raad, 2002)	Order liness	Responsibleness	Work	Impulse Control	(Persistence)								
(Roberts, Bogg, Walton, Chernyshenko & Stark, 2004)	Order liness	Reliability Punctuality	Industriousness	Impulse Control	Decisiveness			Conventionality Formalness					
(Ashton & Lee, 2005)	Organization	Responsibility		Discipline		Thoroughness							
(De Raad & Peabody, 2005)	Order liness	Responsibleness	Work	Impulse Control	Persistence								
(Roberts, Chernyshenko, Stark & Goldberg, 2005)	Orderliness	Responsibility	Industriousness	Self-Control				Traditionalism					Virtue
(DeYoung, Quilty & Peterson, 2007)	Order liness		Industriousness										
(MacCann, Duckworth & Roberts, 2009)	Tidiness Planning		Industriousness	Control	Perseverance	Perfectionism	Cautiousness						
(Jackson, Wood, Bogg, Walton, Harms & Roberts, 2010)	Cleanliness Organiz.	Responsibility Punctual.	Industriousness	Impulsivity				FormalityAppearance					

Table 2: Select Conscientiousness Taxonomies with their Respective Facet Frequencies

Findings

Thirteen different *Conscientiousness* facets were identified: 1) *Organization*, 2) *Responsibility*, 3) *Industriousness*, 4) *Self-control*, 5) *Decisiveness*, 6) *Perfectionism*, 7) *Caution*, 8) *Conventionality*, 9) *Achievement Striving*, 10) *Efficiency*, 11) *Logic*, 12) *Consistency*, and 13) *Virtue*. Though the facets uncovered were not all equally prevalent. Some were more frequent than others. Facets were thus classified into three tiers according to their incidence. This three-tiered classification is admittedly arbitrary, and other groupings are certainly possible. However, this three-tiered classification does provide a simple, intuitive and practical overview of *Conscientiousness'* components.

Core *Conscientiousness* facets were put forward by at least two thirds of the studies and are thus relatively frequent. This primary tier comprises the *Organization*, *Responsibility* and *Industriousness* facets.

1) Organization refers to having one's tasks, objects and environment systematically arranged. Especially at a broad scale, anticipating efficient future use (OED, 2015a). The facet thus includes traits like *planful*, *methodical*, *clean* and *tidy*, the latter two belonging to the more-specific *Orderliness* sub-facet. *Organization* is important for entrepreneurs as it increases their efficiency, a key characteristic given their limited resources and strong competitive pressures.

2) *Responsibility* refers to fulfilling specific obligations and general standards of behavior, acknowledging one's accountability for outcomes (OED, 2015b). The facet therefore encompasses traits like *dependable*, *trustworthy* and *dutiful*, as well as the more-specific *Punctuality* sub-facet. *Responsibility* is also important for entrepreneurs. Customers, employees, suppliers and especially venture capitalists will tend to favor entrepreneurs driven to fulfill commitments.

3) *Industriousness* refers to putting higher effort and commitment into the tasks that one undertakes (OED, 2015c). The facet thus comprises traits like *energetic*, *hard-working*, *diligent* and *productive*. *Industriousness* is also important for entrepreneurs. By working harder, and putting in more hours, entrepreneurs compensate for their relative lack of resources and are able to generate additional output making them more competitive.

Complementary *Conscientiousness* facets were put forward by between one third and two thirds of the studies and are therefore occasional. This secondary tier comprises the *Self-control*, *Decisiveness* and *Perfectionism* facets.

4) *Self-control* refers to individual's ability to constrain impulses, be it emotions or desires, especially in difficult situations (OED, 2015d). The facet thus includes traits like *non-impulsive*, *composed*, and *levelheaded*. *Self-control* is also important for entrepreneurs as it helps align personal behaviors with business goals. Given their relatively small scale, and the magnified consequences of their actions, entrepreneurs can rarely afford to make impulsive decisions.

5) *Decisiveness* refers to individual's ability to make quick and effective decisions towards a definite course of action (OED, 2015e). The facet therefore encompasses traits such as *deliberate*, *determined*, and *purposeful*. *Decisiveness* is also important for entrepreneurs. It is related to *self-efficacy*, understood as task-specific self-confidence (Bandura, 1982). Self-confident entrepreneurs strongly believe in their own abilities (Simon, Houghton & Aquino, 2000), which in turn helps sustain motivation, driving *Industriousness*, *Persistence*, and *Efficiency*.

6) *Perfectionism* refers to doing things extraordinarily well, with particular attention to detail, ideally refusing anything short of perfection (OED, 2015f). The facet thus comprises traits like *meticulous*, *precise*, *thorough*, and *fussy*. *Perfectionism* is also important for entrepreneurs as it can generate a competitive advantage. However, excessive perfectionism might make entrepreneurs inefficient and uncompetitive in today's fast-paced business environment.

Peripheral *Conscientiousness* facets were put forward by less than one third of the studies and are thus rare. This tertiary tier comprises the *Caution*, *Conventionality*, *Achievement Striving*, *Efficiency*, *Logic*, *Consistency*, and *Virtue* facets.

7) *Caution* refers to individual's propensity to avoid problems, harm or loss (OED, 2015g). The facet therefore includes traits like *careful* and *prudent*. Caution is directly associated to its opposite *Risk-taking*, another quintessential entrepreneurial feature (Rauch, 2014) related to *Entrepreneurial Orientation* Lumpkin and Dess

(1996). *Caution* is also important for entrepreneurs. It helps prevent entrepreneurs from engaging in excessively risky behaviors, thus jeopardizing assets, perhaps even the entire venture. However, excessive *Caution* might lead entrepreneurs to lose their entrepreneurial edge and fail to capitalize on important market opportunities. Stewart and Roth (2001) found that entrepreneurs are more risk-prone than managers. Risk propensity also differs significantly between entrepreneurs focused on venture growth opposed to those focused on income. Zhao, Seibert, and Hills (2005) found risk-taking to be moderated by entrepreneurial self-efficacy.

8) *Conventionality* refers to individual's propensity to follow what is commonly done or believed as acceptable (OED, 2015h). The facet thus encompasses traits such as *traditional*, *conservative* and *conforming*. It also includes the more-specific *Formality* sub-facet, which refers to social manners and etiquette (OED, 2015i). *Conventionality* is directly related to its opposite *Innovativeness*, another *Entrepreneurial Orientation* dimension associated to the departure of existing practices to support new ideas and experimentation Lumpkin and Dess (1996). Conventionality is also important for entrepreneurs as business operates within a social context whose norms should be observed. However, excessive observance of norms might stifle creativity and action, making entrepreneurs uncompetitive.

9) *Achievement-Striving* refers to eagerly wanting to accomplish goals and making vigorous efforts towards obtaining them (OED, 2015j). The facet therefore comprises traits like *ambitious*, *excellence-seeking*, and *competitive*. *Achievement*-Striving is another quintessential entrepreneurial feature (Rauch, 2014). It has been long considered a key driver of entrepreneurship (McClelland, 1961) and is directly related to Entrepreneurial Orientation's *Competitive Aggressiveness* dimension, which drives entrepreneurs to outperform rivals (Lumpkin & Dess, 1996). Zhao and Seibert (2006) report significantly higher *Achievement-Striving* among entrepreneurs than managers. Collins, Hanges, and Locke (2004) found achievement to also be related to entrepreneurial performance, while McHenry, Hough, Toquam, Hanson, and Ashworth (1990) found it to validly predict general job performance.

10) *Efficiency* refers to achieving goals with limited resource expenditure, i.e. minimum waste (OED, 2015k). The facet thus encompasses traits like *concise*, *prompt*, and *economical*. It also includes the more-specific *Thrift* sub-facet. Closely linked to *Efficiency*, and worth further looking into, perhaps even adding, is a *Skill/Competence* facet. Associated to *self-efficacy* (Bandura, 1982), individuals will tend to embark on ventures and put sufficient effort into them only if they perceive themselves to have the required skills. In contrast, those who perceive themselves as less competent are more likely to forego enterprises, prematurely give up, or fail.

11) *Logic* refers to individual's propensity to think clearly, sensibly and objectively, without being influenced by feelings or opinions (OED, 2015l). The facet therefore includes traits like *analytical* and *rational*. *Logic* is important for entrepreneurs as venture survival depends, among others, on a rational appreciation of situations. However, being excessively logical might be counterproductive, taking the inspiration and excitement out of a venture.

12) *Consistency* refers to individuals not having aspects that contradict one-another or that change over time (OED, 2015m). The facet thus includes traits like *predictable* and *steady*. Consistency is also important for entrepreneurs as it supports the efficiency of efforts, resources not wasted pursuing conflicting directions. It also lends reliability to the entrepreneur as an individual, being perceived as more trustworthy.

13) *Virtue* refers to individual's propensity towards high moral standards, those deemed socially-desirable (OED, 2015n). The facet therefore includes traits like *honest* and *moral*. It also encompasses the more-specific *Dignity* sub-facet. Virtue is also important for entrepreneurs. Not only is honesty a key business requirement, but as markets shift towards social and environmental sustainability ethical entrepreneurship will become increasingly important.

As already mentioned, and now probably clearer, the above facets are not independent variables. Having originally loaded under the same dimension, they conceptually overlap, all referring in one way or another to the overarching *Conscientiousness* theme. That said, and despite this conceptual overlap, the facets are semantically more specific than their overarching *Conscientiousness* dimension. Made up of traits more similar to each other, facets allow the relationship between personality and other variables of interest to be more precisely established (Roberts, Lejuez, Krueger, Richards & Hill, 2014). As Galton (1884) observed during his pioneering lexical studies (p. 181), each "has a separate shade of meaning, while each shares a large part of its meaning with some of the rest".

Personality characteristics should align with entrepreneurship theory (Rauch, 2014). Though interestingly this study revealed that they are to a certain extent at odds. On the one hand, *Conscientiousness* was found to be a much richer construct than conventionally thought of by the business and entrepreneurship literatures. Instead of consisting of only two facets, say *Achievement Motivation* and *Dependability* (Mount & Barrick, 1995), or even six, *Orderliness*, *Discipline*, *Self-Efficacy*, *Cautiousness*, *Achievement Striving* and *Dutifulness* (Rauch, 2014), *Conscientiousness* was found to encompass thirteen different aspects. This new-found richness underscores the importance of revisiting original theoretical sources, in this case psychology, to obtain a better understanding of the constructs borrowed by entrepreneurship, marketing and business in general. Doing so will not only help these fields develop along more theoretically correct lines, but provide useful insights that drive research into new, interesting areas.

On the other hand, some of entrepreneurship's most important personality variables, e.g. the *Risk-taking* and *Achievement-striving* facets, turned out to have a mere peripheral role within the broader psychology literature. This illustrates how fields who adopt psychological theory, be it entrepreneurship or marketing, selectively retain and emphasize only certain elements according to their interests. While understandable, this further underscores the importance of revisiting the original theoretical sources to avoid the biased theoretical picture fields might portray on their own. With this in mind, following some general directions in which entrepreneurship might take its personality research.

Future Research

A first research direction pertains the personality construct itself. Some researchers, Hogan (1991) among others, suggest that personality also encompasses individuals' social reputation. This construal has been long present in popular speech and media, *personality* often equated with *popularity* (familiarity/liking), *charm* (influence), *attractiveness* (aesthetic value) or *character* (moral evaluation). However, this biosocial notion of personality, which evaluates individuals based on external social norms, is wrong (Allport, 1938). Instead of being an objective description of a persons' inner nature, the biosocial view distorts personality into a subjective, contextually-laden and thus ambiguous construct (Azoulay & Kapferer, 2003). Per its proper biophysical meaning, personality refers strictly to individuals' internal psychological characteristics, irrespective of how others evaluate or are influenced by them (Allport, 1938). It is these innate, pervasive and enduring mental characteristics which lead to distinct behavioral patterns consistent across situations and time (Cervone & Pervin, 2008). In the context of entrepreneurship, these innate mental characteristics, such as *Achievement Striving*, *Industriousness* and *Caution* are what lead to venture creation, growth and survival. It is thus strongly suggested that future entrepreneurship research abstain from biosocial notions of personality. The construct's incorrect application is seldom noticed, much less challenged. Though improper construct definitions hinder education, research and practice, basically field's development as sciences (Conejo & Wooliscroft, 2015). Neglecting personality's correct conceptualization might lead entrepreneurship down the same path as marketing: Despite decades of research on *brand personality*, there is still no commonly accepted definition, the field plagued by a plethora of inconsistent and contradictory notions, studies and scales.

A second research direction refers to the Big Five. With this framework's consolidation personality research might be thought of as having matured. However, there is ongoing debate within psychology as to whether the Big Five are still too general. Additional, more-specific dimensions might be yet required to improve personality's understanding. Some advocates of expanded models suggest that particular Big Five dimensions be split, for instance *Openness* becoming two distinct *Intellect* and *Culture* dimensions (Digman & Takemoto-Chock, 1981). Others suggest that entirely new dimensions be added to the Big Five. Ashton, Lee, and Goldberg (2004) propose two extra dimensions, *Honesty*, *Humility*, and perhaps *Religiosity*; while Paunonen and Jackson (2000) suggest a staggering nine additions: *Religiosity*, *Deception*, *Honesty*, *Frugality*, *Sensuality*, *Conservatism*, *Gender*, *Ego* and *Humor*. Future personality research in entrepreneurship might apply these newer taxonomies. These are no doubt interesting, and in certain circumstances perhaps even advantageous. However, and even though the present paper considers the dimensional approach as sub-optimal, if entrepreneurship research is to be conducted at this aggregate level, it is recommended that it continue using the Big Five. Not only has this framework proven itself extensively, but by still being the only generally-accepted personality taxonomy, it is particularly well suited towards producing, discussing and accumulating findings.

A third research direction pertains Big Five facets. This exploratory paper addressed the lower-order structure of *Conscientiousness'*, chosen as a first, exemplifying effort given the entrepreneurial importance of its components. However, personality research in entrepreneurship needs to also address the taxonomy of the remaining Big Five dimensions. This approach not only keeps efforts within an accepted theoretical framework, but offers ample opportunities for expansion and refinement. A hierarchical Big Five model is thus advocated, ranging from broad general dimensions, through progressively-specific facets, all the way down to individual traits. Efforts in this regard should first address core facets, then complementary ones, and perhaps later even lower-level facets. Like with the development of Big Five, this stands to be a prolonged process also encompassing cross cultural research Saucier and Ostendorf (1999).

A fourth research direction refers to entrepreneurial phenomena addressed. Entrepreneurship's personality research has advanced considerably, an important body of knowledge having emerged. Though the identification of more precise Big Five facets expands research opportunities within the field: On the one hand, and instead of continuing to address rather general situations as done so far, future research may now begin to study the myriad of more-specific entrepreneurial behaviors and outcomes associated to personality (Rauch, 2014). This more targeted approach should both extend and refine existing knowledge. On the other hand, and given entrepreneurship's richness, coupled with this new array of personality variables available, more sophisticated research models become possible. The field may now go beyond conventional bivariate correlations towards more complex ones acknowledging the simultaneous impact of other entrepreneurial variables. Venkatraman (1989) suggests a series of approaches to this effect, variables alternatively seen as interacting, mediating, or moderating the different relationships.

A fifth research direction addresses situational impacts. Psychology generally conceives *personality* as the innate mental characteristics which lead to distinct and enduring patterns of behavior (Costa & McCrae, 1994a). The assumptions of internal origin and situational pervasiveness are certainly important and warrant further research. However, a substantial portion of personality variance is environmentally moderated (Krueger & Johnson, 2008). In some instances innate tendencies are even completely overridden by situational demands (Cervone & Pervin, 2008). Within entrepreneurship, the same individual, with the same general personality, might show different, perhaps even conflicting behaviors within different contexts. Contexts can be broad, say the volatile startup stage opposed to more stable maturity one, each with their own set of conditions (Baron & Markman, 2005). Contexts can also be more specific, associated to single watershed events such as partnerships unexpectedly failing or extraordinarily successful IPOs. Divergent contextual behaviors might also have to do with some traits, e.g. *self-control*, being able to be activated/deactivated as needed (Block & Block, 1980). Personality research in entrepreneurship should thus expand its scope into the oft-neglected situational factors moderating behavior. Lower-level facets are particularly suited for this, some highly contextualized (Roberts, Lejuez, Krueger, Richards & Hill, 2014).

A sixth research area refers to subjects. Psychology generally assumes personality to be stable throughout people's lives (Cervone & Pervin, 2008). Fully developed by age 30, changes thereafter are deemed more the exception than the rule (Costa & McCrae, 1994b). This agrees with entrepreneurship's perspective, which has long conceived personality as fixed (Gartner, 1988). However, more current research suggests that personality is not immutable. While still generally consistent, it continues to develop well into adulthood. To illustrate, *Conscientiousness* facet measures were found to change both in type and degree during ageing (Jackson, Bogg, Walton, Wood, Harms, Lodi-Smith, Edmonds & Roberts, 2009). Research might therefore also address how entrepreneurs' personality develops over time, as well as the difference between entrepreneurial cohorts, say *Millennials* vs. *Boomers*. That said, the above supposes a single kind of entrepreneur. Though Miner (1997), among others, suggests an entire entrepreneurial typology: different types of entrepreneurs each with unique goals and characteristics. Research could thus also address the personality differences between entrepreneur types, be it novice, serial or lifestyle entrepreneurs; low and high-growth entrepreneurs (Miner & Raju, 2004), or acquisitive, administrative, opportunistic, incubative and imitative entrepreneurs (Schollhammer, 1982). Though to examine different entrepreneurial types, as well as the longitudinal research mentioned above, the more-specific personality facets are again better suited.

A seventh research area involves methods. Personality research relies mostly on self and (occasionally) peer ratings, as used by Baum and Locke (2004). Though extending personality research beyond traditional methods allows non-conventional questions and situations to be approached (Roberts, Lejuez, Krueger, Richards & Hill, 2014). An alternative approach might be projective techniques. These address unconscious/implicit tendencies, thought to better predict spontaneous and long-term behavioral patterns. Among those using this approach are Vianello, Robusto, and Anselmi (2010) who correlated implicit measures of *Conscientiousness* with academic performance; and Miner and Raju (2004) who compared implicit risk-propensities among low and high-growth entrepreneurs. Another approach might be experimental, which directly assess behaviors through laboratory-controlled tasks. This was used by De Wit (2009) who experimentally addressed three *Conscientiousness* domains, *Impulsivity*, *Inattention*, and *Disinhibition*, to assess subject's persistence in goal-directed behavior. Though projective and objective measures of the same variable may produce different results. While methodological effects need to be controlled, cross-method assessments should provide additional and richer insights (Meyer, 1996). Extending traditional methods also refers to instruments. Both entrepreneurship and marketing, like psychology, rely almost exclusively on factor analytical scale development. However, alternative scaling methods might also be looked into. One might be Rasch Modelling, which transforms conventional nominal and ordinal data into continuous logarithmic units. This allows respondents to be placed along latent variables' intensity continuum, essentially be measured (Meads & Bentall, 2008). This technique was used by e.g. Conejo and Wooliscroft (2014) to develop a *Conscientiousness* brand personality scale.

An eighth and final research direction refers to the cross-cultural. The relationship between culture, personality, and entrepreneurship is no doubt complex. Though in general, behaviors which are culturally congruent are more acceptable and therefore more likely exhibited (Dorfman, 2004). With this in mind, research should be able to apply the different cross-cultural models, e.g. Hofstede (1984), to continue uncovering interesting entrepreneurial relationships. To illustrate, McClelland (1961) posited that a nation's level of entrepreneurial activity was linked to the extent to which its society emphasizes *achievement*. Such societies will value *striving*, *hard work* and *accomplishment*, and will encourage and reward achievement-oriented behaviors like launching a venture. Along these lines, Zhao and Seibert (2006) meta-analysis studied whether House and Javidan's (2004) *performance orientation* variable culturally moderated the relationship between *Conscientiousness' achievement-motivation* facet and entrepreneurial activity. Interestingly, the study found no significant difference between societies high and low in *performance orientation*. This is but one example, though the world's cultural diversity and myriad of associated variables do offer a wealth of opportunities which research might pursue.

The research directions mentioned above address situational impacts, nature and evolution of entrepreneurial subjects, likely cross-cultural differences, and alternative research methods. The rather precise nature of variables required to pursue these directions underscores the importance of approaching personality research from the more-specific facet perspective.

Conclusion

This paper set out to build on prior psychological research and highlight the multidimensionality of Big Five personality dimensions, *Conscientiousness* as an exemplar. This was accomplished: thirteen different facets were identified and briefly discussed. Though the facets offered are by no means the final word on *Conscientiousness'* lower-order structure. They are neither the only nor the best possible ones, just a first step towards clarifying this issue. That said, the facets identified are reasonably representative of the psychology literature. As such, they should be useful for future personality research within entrepreneurship and marketing.

The authors do not suggest that the personality approach to entrepreneurship provides a complete understanding of the field. Personality is just part of a larger, more complex multidimensional model encompassing a series of processes and variables product of individual, organizational and environmental factors. Though personality does contribute towards the big picture. But in order to better understand personality's impact upon entrepreneurship, its variables should be refined. Hence the present effort advocating entrepreneurship's use of personality facets.

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AN INTERVIEW WITH JAKE JABS, PRESIDENT AND CEO OF AMERICAN FURNITURE WAREHOUSE

Jake Jabs is one of the great entrepreneurs in the Rocky Mountain West. In February and June of 2015, JIMS Co-Editor-in-Chief Lawrence Cunningham had an opportunity to interview Jake at length regarding his domestic and international operations and his views about entrepreneurs. These interviews were conducted at The Business School at the University of Colorado Denver and at the American Furniture Warehouse Headquarters in Englewood, Colorado.

As an introduction to the interview, the JIMS editorial staff is sharing the American Furniture Warehouse Story https://www.afwonline.com/about-us/ (with permission of the firm and with AFW modification) with our readers:

American Furniture Warehouse president and CEO, Jake Jabs, is not a run-of-the-mill businessman by any stretch of the imagination. The fourth of nine children, Jabs was born and raised in rural Montana, and his parents were immigrants from Russia and Poland. He credits his family for providing him a strong work ethic, a sense of family and a love of music. In fact, this long-time musician's entrepreneurial career began in guitar sales.

Later, after a brief stint selling home electronics in the early 1950s, Jabs' first serious venture into the furniture business came in 1968 when he opened Mediterranean Galleries, a high-end furniture store with locations in Denver, Colorado Springs, Pueblo and Billings, Montana. The Mediterranean trend ran its course and the Galleries closed five years later. Shortly after that, Jabs came across an opportunity that would become his life.

American Furniture Warehouse was founded in 1975 when Jabs purchased the struggling, 90-year-old American Furniture Company. With just one location at 58th and Bannock in Denver, Colorado, Jabs brought in fresh marketing ideas and new business philosophies, including a name change to American Furniture Warehouse, which set the company on the path to success.

Under Jabs' leadership over the last three decades, American Furniture Warehouse is vastly different than the one-store operation he purchased in 1975. The company has expanded into a fourteen-store operation that has experienced a remarkable growth trend over the years. As he has been since the beginning, Jabs is responsible for the day-to-day operations of the company and also leads the company's team of buyers - even taking multiple buying trips in the U.S. and overseas per year himself. Today, American Furniture Warehouse, which is headquartered in Englewood, Colorado, is one of the top retail furniture companies in the U.S. With sales topping $500 million in 2014 and with over 2,000 employees throughout Colorado and Arizona, American Furniture Warehouse is one of the largest privately held businesses in the state. The company has fourteen locations throughout Colorado and Arizona; Aurora, Englewood, Centennial, Lakewood, Thornton, Westminster, Colorado Springs, Firestone/Longmont, Fort Collins, Glenwood Springs, Pueblo, Grand Junction, Gilbert and Glendale, AZ.

At today's American Furniture Warehouse, customers enjoy the largest selection of quality, stylish home furnishings and accessories at the lowest prices in the state. What's more, American Furniture Warehouse is known to have the largest selection of furniture under one roof in the United States. American Furniture Warehouse makes a priority of working efficiently and keeping costs low, so that those savings can be passed on to the more than one million customers the company serves each year.

In addition to its mission of providing customers with the best furniture at the lowest prices, American Furniture Warehouse is deeply committed to giving back to the community. Jabs traveled throughout more than 50 countries over the course of his career as a major furniture importer as well as in his early years in the Armed

Services. Those experiences have prompted him toward a lifelong study of various forms of government and business. In yet another form of giving back to the community, he often speaks to high school and college students on topics such as the basics of business and the keys to success. Widely known as an innovator and a pioneer in the home furnishings industry, Jabs is frequently sought out for comment on pressing industry issues.

This self-taught businessman credits American Furniture Warehouse's success to "the basic American philosophies of hard work, long hours, self-confidence, the courage to take risks, the desire to give value and service to every customer as well as the passion for community service." In addition, Jabs has built a business where "honesty is the best policy" is not just a catch phrase; rather it is a core operating principle.

With more opportunities to grow and give back to the community, American Furniture Warehouse will continue to make a positive impact for years to come.

The Interview:

Lawrence Cunningham: Jake, you've had a long, successful business history in Denver. Why have you been successful?

Jake Jabs: The main reason that I have been successful is that I was never in the business solely for the money. Entrepreneurs often are not in it to get rich but rather because they trying to contribute or use their skills in a meaningful way. Entrepreneurs take risks and they are successful because they often know how to judge risks. For example, we have taken risk in opening our Arizona stores. Even at my age, I enjoy taking calculated risks.

American Furniture manages a large logistics operation for our customers. For example this month I am taking delivery of twenty-one new tractors and forty new trailers. The tractors are $140,000 and the trailers are $27,000. This equipment is not cheap but it is necessary to keep our inventory up to date, deliveries on time and customers happy so we feel we will make our money back on this investment. Making investments in our logistical systems is expensive and risky but it does wonders for customer service.

I have also been successful because I have a passion for my business. I like what I am doing and I enjoy giving people value for their money. The greatest thing for me is to have people tell me how they love our products, great prices and value for their money. Most entrepreneurs live for the same words.

LC: Jake how have the challenges facing your business evolved over time?

JJ: One of the difficult challenges is finding good employees. I need to find twenty one new over the road drivers, and right now, these over the road drivers don't grow on trees, they're hard to find.

We also need more people in government who understand the challenges facing business. Regulation is a very difficult area for small business because there is often a divide between small business owners and those in all levels of government.

We also need to have our educational institutions focusing on areas where they can help small business. That was one of my goals in establishing the Entrepreneurship Institute at the Business School of the University of Colorado Denver. I wanted to help close the gap for others who are following in my footsteps. I wanted entrepreneurs to have better skills in these more challenging areas and hoped that people in who went through the institute and wound up in government would have a better sense of what entrepreneurs faced.

Another challenge is how to compete in a worldwide market. Since American Furniture imports from many overseas markets we face challenges in many countries. My employees need to understand the regulations and the appropriate ways of doing business. We are not just sourcing with American factories but with factories in Mexico, China, Vietnam and Korea.

I am not sure if business people in the United States really understand all we need to know to compete internationally. I sometimes worry about competing internationally but I worry more about America competing internationally. Are we doing all we need to prepare and help small business do this? Sometimes our regulation really impacts our ability in America to do business internationally.

LC: You are right on the mark. The future of Denver is clearly small and medium size product/service businesses and therefore our businesses we need to know how they expand internationally or at least source internationally. Let me switch gears if I may.

LC: In the past we have talked about advertising and how the TV market is so fragmented today. We discussed the growing importance of social media. Have you found social media useful?

JJ: Traditional advertising is over for the most part. I often joke that your newspaper is today just a bump in the driveway that you run over! So what do you do? Enhance the newspaper with social media. The nice thing about social media is that you can use testimonials. Prompt customers to offer testimonials on social media like Facebook. Encourage customers to share their great experiences on social media. Believe me that's worth a lot. I have a full time person just doing social media now.

LC: Has it paid off?

JJ: It has paid off by spreading the word about our products and services but also our charity activities. Today what you really need is word of mouth. You need people recommending you. That's one of the reasons we're so successful. We want our social media to have a common theme which is if you want good furniture come to American Furniture. Social media strategy is creating a buzz about the new things you are doing. Its people recommending you. Its people talking about you. We want people to talk about those things that we hold as core values-honesty. You need to be honest. If you're not honest, people can blog you and say bad things about you.

LC: What motivated you to go international?

JJ: The furniture business in America changed just like the TV Business. Sourcing in the furniture business became international and most of the competition sources internationally on a regular basis. We feature many imported items to compete with Walmart, Target, Costco, Sam's Club, Pier 1 and IKEA.

You will notice in this ad we have a chair featured for $29. I shopped Crate and Barrel and they have this chair for $149. I went to my supplier in China and asked them to make the same chair for $29. Often we run specials with imported items that are competitive and then, you wind up selling people a recliner, sofa, bedroom set or mattress. If we weren't importing we wouldn't be able to stock our stores.

Larry you will notice items in our ads like this Bombay Chest for $139. If we made it in America it would probably be $400. Importing is something we have to do to be competitive with our competitors.

LC: So, the important factors are cost, quality and competition?

JJ: Yes, Americans demand good quality furniture products at competitive prices.

Products always require a learning curve. Let's say I wanted to make that chair you are sitting in in a foreign market. We would send them our pictures and they would send samples back. If we need a better quality and they make it better quality. Once they figure out how to make the chair, they would be able to produce it very efficiently. The advantage is they have a labor structure that allows them to build thousands and thousands of the same item.

Foreign suppliers will reduce the cost through mass production. Their factor cost are cheaper including basically unskilled laborer, cheaper labor, cheaper cost of doing business, overhead and heat, lights, gas. Everything's cheaper such as transportation. They also can build huge quantities.

My theory on American manufacturers is that they try to build too many products.

Let's say you go into Broyhill, Thomasville or Basset. They are making chairs, sofas, desks, bedroom sets, mattresses, home office. They are making this whole entourage of stuff and the prices aren't good. Don't get me wrong. We buy American whenever we can but the labor rates are quite different overseas and this places American manufacturers in many product areas at a disadvantage. In China they are specializing. We often buy from fifteen factories because they do not make all the products in one factory. They specialize.

LC: How did you find the international sources you use and how did you evaluate them? How did you pick them? How did you do the evaluation?

JJ: It starts by going to market. When you go to market you walk around and see hundreds of vendors, hundreds of them. The Guangzhou show we just went to they had 3,000 vendors there. So, you look around and think that will sell. You do it by the seat of your pants. You just take a chance you know. At the beginning you have to take some risks. After you are doing a lot of business, you start looking for the factories that could do volume. A lot of big factories that do a lot of business with Costco and Target don't show at these markets. They don't want their products exposed to everybody.

Often you need to find agents. We have an agent who started as a Mormon missionary to Taiwan. He learned to speak the language. He married a married a Taiwanese lady. He moved to China. He became our lead guy. We would give him assignments but he would also represent other firms.

I have five people sourcing for us in Asia. We actually have three ex-missionaries that source for us in China. One was doing sourcing for Lazy Boy. She is good at sourcing because she understands that part of her job is quality control in the factory.

You need someone checking on quality in the factory. They need to check the runs to make sure that it meets our quality standards. Our agent also has her sister and mother working for her checking for quality.

LC: Previously you have touched upon the evolution of your Asian sourcing and suppliers. How have things changed?

JJ: Many Chinese fled to Taiwan in 1949. They had money and went into manufacturing. They produced furniture in Taiwan and Hong Kong. Wages and other costs increased in each location until they had to move to reduce costs.

When the Chinese introduced economic reforms, they instituted free enterprise zones in the Pearl River Delta. Taiwanese manufacturers set up factories in these zones and often worked in conjunction with their relatives who had stayed in China.

When costs in China became more expensive and duties were instituted, the Taiwanese factories moved to Vietnam. Furniture factories are today in many countries. The factories move where costs are low, infrastructure is low and government regulation is low. The factories are built in record time.

Many Taiwanese today own big factories in Malaysia. Malaysia has a lot of wood, a great climate and good labor. Some also have gone to Indonesia.

LC: You've looked at a lot of entrepreneurs over the years. Can you tell the winners from the losers? And if so, how?

JJ: You can at least tell if they have a business plan. More importantly, the chances of success improve if the entrepreneurs can tell you where you going to get the money, who's going to invest money in your thing, where you going to get your investors.

The key is find a demand, that's the secret to free enterprise, find a demand. There has to be a demand for the product. The problem that I see in a lot of business plans is that the entrepreneurs never sat down and asked if there is really a demand. If there is not a demand who cares? This factor separates many of the winners from the losers.

The ones that really win are the ones who find a demand. We found there was demand for a good furniture store in Arizona. I use to call on those dealers down there and there just wasn't a good dealer down there. They followed the customer around and pressured the customer to buy. They tied to sell them warranties, fabric care and polish care with huge mark-ups. Why do you need a warranty for a well-built sofa?

LC: So you believe one of the major challenges for budding entrepreneurs is proving the case for demand?

JJ: Yes, that's right. Bill Gates found a need for software programs to run on computers in hopes of evolving the home computer.

LC: I know business passion is a favorite topic of yours. Why is passion necessary?

JJ: I had a start out with a guitar music store and I love music. I still play music. I still have a guitar sitting right over there. I play for my employees now. I was successful because I was working in excess of 40 hours a week. Working 80 or 90 hours a week wasn't a problem because I had a passion for what I did. I am the same way with furniture. I have a passion for furniture. I still buy most of the furniture.

You have to have a passion if you are going to work the 60, 70, 80 hours a week. And if you have a passion, it's not work, it is fun. If you don't have a passion for what you do, you're probably not going to put the time and effort to be successful. Entrepreneurs and small businesses don't run on 40 hours a week. Small businesses are not nine to five jobs.

LC: So it has to be an all-consuming passion

JJ: Seven days a week. If you enjoy it, it's not work. I come down here on Sundays and go through my reports because it's quiet and I can go through these reports and make my buying decisions without any interruptions. I do it on Sunday. Saturdays I go visit stores.

LC: Again, let me switch gears. Should entrepreneurs be looking internationally as well as domestically when they start a business? If you were going into the furniture business today, you'd almost have to look internationally wouldn't you?

JJ: Yeah, absolutely.

LC: You do a couple things differently I'd imagine.

JJ: Yes, because it is a different business. Larry, look at this ad and tell me where it is made.

LC: I believe in India.

JJ: India, yeah. Obviously.

LC: I'm cheating.

JJ: The furniture coming out of India is fresh, new and different.

My daughter Terry mentioned that high end people want this restored vintage looking furniture. Right now, it is in vogue with high end decorators.

LC: What are the competitive advantages of the Indian suppliers?

JJ: They have great labor and they do a very good job of recycling their existing supplies of timber.

LC: What would be the three or four things that you would stress with any aspiring entrepreneur?

JJ: Entrepreneurs need to focus on finding a demand. Because of social media, entrepreneurs can't deceive the public. You need to harbor your cash and carefully use your credit so you have good credit. Good credit opens doors.

When I bought the old American, there was a major recession. Furniture stores were going out of business. A recession is an opportunity to buy businesses that have assets they want to turn into cash. They were going broke. The Old American was selling all their assets such as trucks, forklifts, warehouse racks, typewriters and adding machines. I gave them $80,000 cash for $1.5M worth of assets. I was going to open a furniture store so I could use those assets

JJ: I had this 180,000 square foot empty warehouse. I had to fill it full of furniture so I went to North Carolina and bought $1M worth of furniture. I had a 1 credit rating, and they shipped it on my credit rating. If I didn't have a 1 credit rating, I never would have got the thing going. Now I had this 180,000 square foot store full of furniture and I had to sell it. That's when I started making all the commercials.

The second issue is get an education. Education develops confidence. I always appreciated my college education. I always figured if I couldn't make business go, I would go into education.

The last item is passion. I know we already talked about this but I don't know that I can stress passion enough. It just seems to me that if you have passion and never quit working that you will live a lot longer. Seems like you have a reason for sticking around.

It comes down to three or four things to remember, passion, value your customer, great services and honesty in transactions.

LC: Thank you so much.

JJ: It is my pleasure

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Entrepreneurial Marketing: Creating a Customer Base

Author John Kalu Osiri. ASIN: B00HPL25ZA**.** 1st Edition, January 2014**.** Kindle Edition, 92 pages, $9.99**.** Unleash Publishing, Pullman, WA**.** http://jkosiri.tumblr.com/

Book Reviewer: Francisco Conejo

Dell, Google, Facebook. Just a few examples of billion-dollar companies launched by college students. With employment prospects still shaky, and young, mega-successful entrepreneurs à la Mssr. Zuckerberg inspiring Millennials, starting up a business remains an option for future grads.

Building on his teaching and business experience, author John Kalu Osiri now offers *Entrepreneurial Marketing: Creating a Customer Base*, a primer targeting the more venturesome college students. As the author indicates, p. 1:

> "This book is written for those, particularly students, who want to start something new and seek to create a customer base. The content is straight-forward and loaded with information you can put into action immediately. It is short and concise for a reason, because it is written for students who are already slammed with school work and various extra-curricular activities. Nonetheless, whether you are selling merchandise, opening a barber shop near campus, or starting a consulting firm, this book provides practical steps to creating your customer base."

Entrepreneurial Marketing begins with *A Letter from Dr. Osiri*. In it, he explains where this new book fits in regards to the five entrepreneurial processes presented in his previous publication, *Unleashing Your Idea: Steps to a Successful Start*. Specifically, this latter effort helps implement the personal strategy guiding entrepreneurial innovation.

After this introduction come *Entrepreneurial Marketing's* four parts. These address Osiri's *Four E* framework towards building a customer base: *Step 1 – Explore Your Idea*, is about developing a solid product strategy. This chapter discusses, among others, the importance of maintaining a customer focus and evaluating concepts' viability from a market perspective. *Step 2 – Examine Your Idea*, addresses the development of a pricing strategy for the product to be launched. It discusses issues like prototyping and consumer trials; the development of a solid business plan; and obtaining funding. *Step 3 – Exploit the Opportunity*, covers the development of a product distribution strategy. It addresses topics such as taking advantage of market circumstances; the use of different forms of capital; and the importance of ongoing innovation to remain relevant. *Step 4 – Expand the Opportunity*, discusses the development of a promotion strategy to communicate the product's value proposition to an increasingly broader market. It talks about how products catch on (and potential backlashes); different promotional approaches; and offers a series of short entrepreneurial cases and profiles. The book then ends with brief sections on *References* and *Acknowledgements*.

Entrepreneurial Marketing is short and to the point. It is written in straightforward language devoid of technical/academic jargon. The book's style is also candid and personal. It often uses first and second person tenses as if talking directly to readers. *Entrepreneurial Marketing* draws liberally from a variety of sources and is also full of quotes, ranging from Peter Drucker to Dr. Seuss. All the above should make the book appealing to its collegiate target.

However, the ideas presented by *Entrepreneurial Marketing* are by no means groundbreaking. They have been long available in the academic and popular literatures, summarized and repackaged for the present effort. Though more concerning are the book's simplistic, and at times sensationalistic claims lacking any substantive discussion. To illustrate, in an effort to portray entrepreneurial marketing as something new and unique, hence legitimize the book, traditional marketing is criticized for lacking proper consumer research, not being truly customer-oriented, and overly relying on rules of thumb. Ironically, this book ends up doing precisely the latter, offering a rather shallow cookbook-approach towards entrepreneurship.

Regardless of these theoretical limitations, even inaccuracies, Osiri's efforts need to be recognized. On the one hand, *Entrepreneurial Marketing* does cover (albeit lightly) most of the basics. His *Four-E Framework* closely mirrors marketing's Four-Ps. Though by giving each of the latter an entrepreneurial twist, he makes the book focused, relevant and thus useful. On the other hand, and more importantly, is the enthusiasm Osiri conveys. While acknowledging the risks and hardships associated to new ventures, his book champions the benefits and importance of the entrepreneurial spirit, encouraging students to start their own business. This alone is most valuable.