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“Betting Big on Small Business”

Small Business Institute®

38th Annual National Conference

2014 Conference Proceedings

Includes:

Competitive Papers

Best Practices

Workshops

Abstracts

February 13-15, 2014

The New Tropicana in Las Vegas, NV



From the *President*

Welcome to the 2014 Small Business Institute® Conference and Viva Las Vegas!

You're really in for a great conference thanks to the hard work of Bill McDowell and his conference planning team. Patrick Walker has put together the *SBI Proceedings* that is well-designed to reflect the program. There is an exciting array of workshops, paper presentations, keynote speakers, and engaging social activities that includes a surprise celebrity at the Saturday reception! Our Thursday opening reception will give you an exciting opportunity to meet first time SBI Conference attendees as well as network with long-time members. Our camaraderie is key to what makes the Small Business Institute® a vital link to your success! Be sure and welcome our new friends and our longstanding members and Fellows. These sessions are sure to attract your attention and provide exciting professional development opportunities.

Over the past year, we have accomplished much together. I have implemented a strategic development task force. We have added our student affiliates. We have added to the conference the ability to submit abstracts as well as full papers to encourage first time attendance and also those who have papers in process to submit. We have added extra emphasis on taking papers to the next step to encourage submissions to our two sponsored journals and to encourage excellent submissions. We have expanded the Spotlight Program on the website to include not only SBI Programs, but member research and student affiliates.

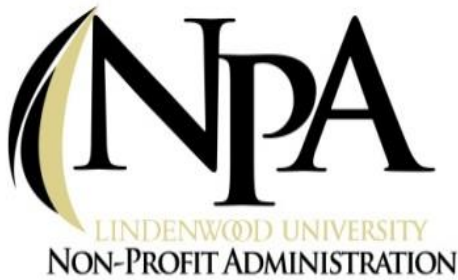
I have been honored to serve as President of the SBI. My first SBI Conference was in 1989 while I was a new faculty member at Eastern Washington University under the mentorship of Leo Simpson. Since then, I have regularly attended SBI Conferences. However, I continually am amazed at the new ideas, energy, enthusiasm, sincere loyalty, and belief in the Small Business Institute® and the SBI Model and system. It is as relevant today with the emphasis on experiential learning as it was at our beginning conference. This is further evident from the AACSB in April 2013 making experiential learning a major pillar of accreditation.

I want to personally thank each of the Board of Directors for their hard work and willingness to go the extra mile, as well as Matthew Sonfield, our Fellows Chair. We all have the best intentions to continue the work of our former leaders to grow and sustain the Small Business Institute®. We need your continued support and engagement. We all need to be cheerleaders to continue the work of the Small Business Institute and the important work we do for small businesses and real student learning!

Thank you for the honor of serving as your President.

All the best for a great conference!

Dianne H.B. Welsh, Ph.D.



From the *Proceedings* Editor

On behalf of the Small Business Institute® Board of Directors, welcome to the 38th Annual Conference.

For nearly four decades, academicians, business practitioners, and community leaders have gathered across the nation to present and discuss strategies in education, business, and community engagement. This year's Annual Conference is no exception with collectively over 75 representations from competitive papers, best practices, workshops, abstracts, and student project submissions. The mission of Small Business Institute® is alive and well.

It has been my honor to work with many people to create the Conference Proceedings. They include first and foremost all of the authors and reviewers. Without your intellectual contributions, commitment, and unwavering dedication to SBI, this document would not be possible. I also want to thank Dianne, John, Bill, Lynn, Don, Chuck, Mike, and Shanan for their constant leadership and support. I am also thankful for my colleagues at Lindenwood University. Finally, I want to thank Erin Eckstein, the best student research assistant in the world.

Nearly five years ago, Stephanie Bardwell introduced me to SBI. Her active and authentic commitment to students, small businesses, nonprofit organizations, and the law continue to inspire me and many others everyday. I honor Stephanie, my dearest colleague and friend, with this conference proceedings publication (at least the parts I got right)!

Now, let's take over Las Vegas and get ready to *bet big on small business*!

V/R,

Patrick D. Walker

Patrick D. Walker

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An Exploratory Investigation of the Impact of Internet Usage at Work Productivity

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Abstract

The introduction of internet usage into the work place has changed the dynamics of work, productivity, and management. There are two types of motivations of internet usage: intrinsic motivation (perceived enjoyment) and extrinsic motivation (perceived usefulness) at the workplace (Teo, Lim and Lai, 1999), but interestingly, each one of them can affect a firm very differently with regard to productivity. This paper studies connections between internet usage by employees at work and how that impacts on firm's productivity based on the industry that it belongs to. Primary data were gathered via a self-reported survey, and the results were analyzed. Results indicate that the level of internet usage is significantly associated with firm productivity. Aside from the results, this paper also leaves suggestions for companies incurring a substantial loss of productivity as a result of not implementing internet governance policies such as Employee Internet Management (EIM) systems to monitor employees of internet usage.

Key words: *Technology, Productivity, Internet usage, Small-Medium firms.*

Introduction

As early as 1975 personal computers were introduced into small business work places (History of Computers in the Workplace, 2010), and computerization has been shown to have had positive impacts on work output and productivity in the work place. (Good & Stone, 2000). At the same time, the introduction of computers has had various drawbacks. For example, using computers for mundane and repetitive tasks, making it possible to relieve human workers from some activities, has increased some safety risks in health care (McDonald, 2006).

In the mid-1990s, with the introduction of the Internet and the World Wide Web, companies again realized the benefits of computer power. Like computerization in the 1970's, the introduction of the World Wide Web as a means for getting things done has had a far reaching impact – one example is the way using the Internet has allowed research to be completed faster and more thoroughly (Derek & Walker, 1999). The Internet has been a factor in revitalizing old fashioned businesses, providing access to new markets, and breathing new life into old businesses (Ana Rosa del, Sebastian, & Antonio, 2002).

However, the need for worker trust grew as workers could now instantly communicate via e-mail and other forms of electronic communication. Unfortunately, many organizations have found that these useful resources are increasingly being used for other than their intended purposes, namely employees using computer and Internet resources for personal reasons. One extreme example is the unintentional lock-up of corporate email at Lockheed Martin, when an employee sent a personal email promoting the National Day of Prayer to 60,000 recipients (with return receipt requested) (Johnson & Rawlins, 2003). The result was that the corporate email system was unavailable for a 6 hour period, and the cost of downtime was estimated in the hundreds of thousands of dollars.

Employers take a dim view of this misuse – Dow Chemical Company, *The New York Times*, Merck, and Xerox have all terminated large numbers of employees for abuses that include distributing sexually explicit material through email, surfing pornographic web sites, and other abuses (2003). Terms such as Cyber Slacking and Cyber Loafing have entered our vernacular, describing time wasted by workers who are spending time on the Internet doing things not related to work (Mills, Hu, Beldona, & Clay, 2001). In addition to taxing valuable internet resources and causing productivity losses, Mills et al. point out that Cyber Slacking also opens organizations to a variety of legal liabilities ranging from sexual discrimination to criminal acts being committed while using computer resources belonging to the firm.

What effect has the introduction of technology in the work place had on productivity? It is plain that methods of work continue to change as new technology is introduced, especially in areas of communications. Organizations have come to expect workers to pursue efficient means of communicating and performing other work tasks, naturally leading to employing internet resources for the good of the firm (Sharma & Gupta, Winter 2003/2004). However, the questions remain, “Are workers more productive by using technology at work?”, and “If productivity has increased due to use of technology, can that increase be measured?” Of course computers can allow many work tasks to be performed faster and more accurately, offering reductions in work force among other gains in efficiency. However, there seems to be little evidence that investment in technology alone is a single factor that results in overall financial gain (Winter 2003/2004). This purpose of this study is not seeking answers to either of these questions, but these questions are logical extensions from our central question “Is a loss of productivity associated with worker use of the Internet?”

Literature Review

The Internet and its connected equipment and other resources are an example of a system, a work method, or even a mode of entertainment and enjoyment (Teo, Lim, & Lai, 1999). Teo et al. explain that the rate that users adopt systems is directly influenced by both extrinsic (perceived usefulness) and intrinsic (perceived enjoyment) motivation. Their study “Intrinsic and extrinsic motivation in Internet usage” suggests that as a system, the Internet is adopted by users because it is particularly useful, and secondarily because users find enjoyment in its use (1999).

Many studies have been focused on productivity losses experienced from workers using the Internet inappropriately. One survey conducted by Vault.com for the study “Internet Usage at Work” involved 451 employees at 670 employers, and showed that 25 percent of workers admitted to spending a significant amount of time each day using the Internet for purposes other than work – some more than an hour per day (Sharma & Gupta, Winter 2003/2004). Sharma & Gupta explore a variety of ways that technology and use of the Internet have improved communication and the potential for efficiency in organizations, but also that these technology resources are abused significantly and regularly, contributing to productivity losses instead of anticipated productivity gains. Several strategies to help organizations mitigate losses are listed. In “Development of a measure of personal web usage in the workplace” Mahatanankoon et al. describe activities that workers perform outside the normal range of activities required for their job as Personal Web Use in the workplace (Mahatanankoon, Anandarajan, & Igbaria, 2004). This study describes and analyzes three dimensions of Personal Web Use (PWU) - personal external business, personal external socializing, and personal

external interest and research. PWU is described as potentially opening organizations to loss of productivity and increased liabilities; however the researchers also suggest that some PWU in the workplace can lead to a healthy level of productivity. All PWU according to Mahatanankoon does not necessarily have negative consequences. A related work expands on this thought, suggesting that some PWU may provide for some workers a needed distraction, not unlike so-called “stress relief” toys (Anandarajan & Simmers, 2004).

Identifying reasons or motivations for employees abusing computing resources at work was the focus of a study by Bock, Park, and Zhang. The study concludes that so-called Non-work Related Computing (NWRC) is more a function of the formation of inappropriate habits than deliberate and intentional action (Bock, Park, & Zhang, 2010). Suggested mitigating factors include identifying the activity that can lead to habit formation, and intentionally forming appropriate work habits instead. Mahatanankoon et al. theorize that low job satisfaction among workers could also be a contributing factor.

Prior research documents, categorizes, and calculates productivity losses due to habitual or intentional misuse of company Internet resources. However, management policy and practices that result in employee empowerment and a sense of job satisfaction are essential factors for corporate productivity (Prema, 2011). More freedom for employees to use the Internet while at work is an indicator of companies with higher levels of worker empowerment and trust, both of which are factors in increased job satisfaction. And, low levels of job satisfaction contribute to deviant behavior, many of which are associated with lower productivity (Mahatanankoon, Anandarajan, & Igbaria, 2004). The intent of our study is to determine the extent to which productivity at work (productivity) is influenced by, or is a function of company permissiveness with regard to use of the Internet at work. Our H_0 (null) hypothesis is stated as: Organizations that make Internet access available to workers have a higher level of productivity than organizations that do not. Primary data was collected in the form of a survey of for-profit enterprises, and the analysis results are presented in this paper.

Data

As non-business use of computer resources during the work day is inevitable, most companies allow “reasonable” use of the Internet. However, few companies define “reasonable” use (Hoffman, Hartman, & Rowe, 2003). To study the impact on performance for companies permitting employee use of the Internet at work compared to companies not permitting this access, an electronic (online) survey consisting of 47 questions was conducted. Individual leaders and managers (1 per organization) were invited to participate via email invitation – 42 responses were received. Descriptive statistics are presented in Table 1.

The sample included 42 for-profit organizations. Focusing on *Location*, respondents were located mainly in the North East (33%) and North Central (52%) regions of the United States. On average, 69.69% of workers have access to the Internet while at work – all respondents indicated at least some workers have access to the Internet, and some companies responded that 100% of workers have access.

Table 1: Descriptive statistics

Variable	Min	Max	Mean	Std. Deviation
Sales	1	6	5	1.66
Construction	1	9	1.67	0.38
Manufacturing	0	1	0.12	0.33
Wholesale	0	1	0.12	0.33
Retail	0	1	0.07	0.26
Information	0	1	0.07	0.26
Finance	0	1	0.09	0.30
North East	0	1	0.33	0.48
South East	0	1	0.07	0.26
North Central	0	1	0.52	0.50
South Central	0	1	0.05	0.21
Age	2	159	35.64	30.72
% Part-time	0	1	0.21	0.30
% Male	0	100	55.75	35.32
% White	30	100	90.77	16.25
% Employees age Less than 40 years	0	100	36.92	28.14
% High School Graduates	0	100	59.23	34.26
% 16-20 years experience	0	100	23.25	26.00
Computer Use Policy	1	2	1.43	0.50
Internet Access	0.07	1	0.70	0.33
Cell phone Use Permitted	1	2	1.17	0.38
Productivity	0	2500000.00	259894.90	445773.70
Industry	1	9	5.19	3.13
Transportation	0	1	0.02	0.15
Location	1	5	2.36	1.08
% Managers	0	100	21.83	19.84
Social Media Required	1	2	1.64	0.48
Knowledge of Computers Encouraged	1	2	1.02	0.15

A cross-section of the firms represented includes *Industry*. The majority of respondents represent the Construction Industry (16%), followed by Manufacturing (12%), Wholesale Trade (11%),

and Finance (9%). Twenty-two percent of respondents (10) indicated an industry Other than those that we included in our survey. *Age* of the firm is a proxy to gain insight into the stability and maturity of the business. Firm ages ranged from 2 years to 159 years, with a mean of 33.3 years. We would expect to see the variations among newer firms to older firms in adopting new technology such as the Internet, since newer firms that have started recently have more access to technology, whereas older firms may adopt technology slowly.

In the survey we tried to explore workers demography. The survey reveals that responding firms have a *percentage of part-time workers* ranging from 0% to 100% part-time, with a mean of 23.57% part-time workers, so roughly 8 out of 10 workers in responding firms are full-time workers. We would expect full-time workers on average to be more committed to success of the firm vs. their part-time co-workers, and hence would tend to spend less time in unproductive or deviant activities. In many cases firms hire younger part-time workers which could adversely impact firm performance. The worker gender mix of respondents leans slightly toward male, with the mean *percentage of male workers* measuring 55.16%.

Additional demographic variables include the racial mix of workers at responding firms, which is interestingly overwhelmingly Caucasian – 90.76%, with all firms reporting at least some white workers. The *percentage of white workers* ranges from 30 to 100%. From a *Worker Age* perspective, we divided age variables in various categories and we found that the majority of workers are age 40 or above which is on average about 36 percent of the total workers in a firm. Also interesting, we found that nearly 60% of workers have only attained high school education as the *highest level of education*.

In an attempt to gauge managers' attitudes toward worker discretionary use of technology at work, which is the primary question of this survey, we asked if respondents have a Computer Use Policy in place – more than half of the respondents indicate the presence of such a policy. Also, as a proxy for managers' attitude toward worker discretionary use of time at work, we asked whether workers are permitted to use their Internet at work. This may be a close indicator of management's attitude toward non-work related use of the Internet – on the average more than 83% of firms report that they permit workers to use their Internet at work. Please consult Table 1 for variable descriptions and summary statistics.

Methodology

The primary goal of this paper is to understand whether Internet usage policy is affecting firms' performance, since this argument remains inconclusive from a review of current literature. We have cross-sectional primary data which were collected from a random survey. We have determined that the Ordinary Least Squares methodology is the most appropriate for evaluating the hypothesis of this paper. Our empirical model is as follows:

$$Y_i = \alpha_i + \alpha X_i + \beta \text{Company Computer Policy}_i + \pi \text{Cell phone}_i + \varepsilon_i \quad (1)$$

Where Y_i = dependent variable, Log of Labor Productivity, X_i = A vector of demographic variables, ε is the error term and i represents the observation, i.e. companies in the study.

Results

Table 2 presents the results of the cross-sectional data analysis. Four empirical models are used to analyze the results.

Table 2: Regression Results

Variable	Model 1	Model 2	Model 3	Model 4
Dependent: Log-Productivity	Coefficient (std.error)	Coefficient (std.error)	Coefficient (std.error)	Coefficient (std.error)
Constant	-7.03 (2.39)**	-9.53 (2.88)***	-11.16 (3.86)**	-13.19 (3.43)***
Construction	1.61 (1.10)	0.69 (1.24)	0.39 (1.46)	-1.01 (1.45)
Manufacturing	2.29 (1.32)	1.50 (1.84)	1.03 (1.97)	1.97 (1.50)
Wholesale	2.32 (0.71)***	2.22 (0.73)***	2.17 (0.63)***	3.27 (0.72)***
Retail	-3.10 (1.15)**	-3.84 (1.14)***	-4.61 (1.54)**	-5.11 (1.31)***
Information	0.69 (1.19)	1.76 (1.22)	1.36 (1.40)	2.74 (1.48)*
Finance	3.32 (0.65)***	3.32 (0.70)***	3.54 (0.92)***	3.29 (0.79)***
North East	3.96 (1.14)***	3.26 (1.19)**	4.83 (1.56)***	3.98 (1.35)**
South East	9.83 (1.33)***	9.26 (1.29)***	10.23 (1.42)***	9.71 (1.28)***
North Central	3.19 (0.75)***	2.71 (0.79)***	3.70 (1.04)***	3.16 (0.94)***
South Central	10.02 (1.64)***	9.17 (1.64)***	11.16 (2.14)***	9.06 (2.19)***
Age	-0.00 (0.01)	-0.01 (0.01)	0.01 (0.01)	0.00 (0.01)
% Part-time	-1.53 (0.90)	-2.11 (0.92)**	-1.89 (1.01)*	-3.29 (1.24)**
% Male	-0.03 (0.01)**	-0.03 (0.01)**	-0.03 (0.02)*	-0.03 (0.01)**
% White	0.18 (0.02)***	0.19 (0.02)***	0.20 (0.03)***	0.22 (0.03)***
% Employees age Less than 40 years	-0.03 (0.01)**	-0.03 (0.01)**	-0.03 (0.01)**	-0.02 (0.01)*
% High School Graduates	-0.03 (0.01)	0.00 (0.01)	0.00 (0.02)	0.02 (0.02)

% experience	16-20 years	-0.01 (0.01)	-0.01 (0.01)	-0.00 (0.01)	-0.02 (0.01)*
Computer Policy	Use		2.52 (0.75)***	1.91 (0.087)**	4.53 (1.51)**
Internet Access				0.61 (0.59)	0.41 (0.49)
Cell phone Use Permitted					-2.03 (0.96)*
Observations		32	32	32	32
R ²		0.62	0.72	0.85	0.88

Please note: All models are Heteroskedacity checked and corrected models.

* Statistical significance at 10%

** Statistical significance at 5%

*** Statistical significance at 1%

Model 1 is the base model with only control variables. Overall, there are ten control variables that appear to be significant in Model 1, which are Wholesale, Retail, Information, Finance, Northeast, Southeast, North Central, South Central, Percent male, Percent white, and Employee age. We used six types of industry variables in this model and only three variables enter significantly in the model. Both the Wholesale and Finance variables are significant at the 1 percent level and holding a positive sign which indicates that holding all other variables at a constant level, the numbers of Wholesale or Finance industries positively impact the firm's labor productivity. On the contrary, for a firm operating in the Retail industry, a significance in labor productivity is observed while all other variables remain constant in the model.

All location variables are significant at the 1 percent level with a positive sign in Model 1, which indicates that if a firm is located in the East or Central regions of the country labor productivity will increase in comparison to other regions of the country, while holding all other variables constant in the model.

Other significant variables in Model 1 are Percent of male workers, Percent of white workers, and Percent of employees less than 40 years of age. The Percent of male workers variable has a negative sign which indicates that holding all other variables at a constant level, increasing the number of male workers will decrease firm labor productivity and this finding added more support to Udry, Hoddinott, Alderman, & Haddad (1995).

The next significant variable is Percent of white workers which is significant at the 1 percent level, which indicates that increasing the number of white workers will increase firm labor productivity, while holding all other factors at a constant level. Interestingly, the Percent of employees less than 40 years of age variable has a negative sign but significant at 5 percent level. Therefore, a firm having younger workers tends to decrease labor productivity, a finding which is contrary to many previous articles, including Lallemand & Rycx, (2009), and Lazear (1979). The control variables are consistently significant throughout all models (Model 2, 3 and 4) with

similar signs. Moreover, the Percentage of part-time workers variable becomes significant in Models 2, 3 and 4 with a negative sign, indicating that firm labor productivity will decrease as the number of part-time workers increases. Thrall, Meehan and Whelton (2006) and Künn-Nelen, de Grip, & Fouarge (2011) argued the difference between part-time and full-time workers and their productivity, and noted that there are several reasons why the gap in labor productivity exists. Scheduling differences, wage disparity and differences in expectations (GADEL, 1953) are a few suggested reasons in the previous literature as the contributing factors for part-time worker performance.

In Model 2 we added the computer use policy variable. This variable is significant at 1 percent level and enters into the model with a positive sign which indicates that firms with a computer use policy that addresses personal use of the Internet while on the job observe higher labor productivity than firms who don't, while other factors in the model remain unchanged. There are many possible factors that have considerable influence in worker productivity, and using the Internet is one of them. Recently, social media such as Internet chatting, Facebook, and Twitter have become highly popular, which tends to draw considerable attention from everybody given its high popularity. But Internet use appears to lower labor productivity, most likely by distracting employees from their assigned tasks. Employers have taken many measures to monitor and limit Internet usage by employees, and introducing a computer use policy which addresses appropriate use of computer resources (including the Internet) while on the job is one of them. Our results predict that companies that implement such policies are enjoying higher labor productivity than companies that do not. This variable is significant in model 2, 3 and 4 in a consistent direction (positive).

The next explanatory variable is Internet Access, which appears in Model 3 and Model 4, and is insignificant in all models. The last variable is Cell phone usage policy at work, and this variable appears only in the full model (Model 4). The Cell phone usage policy has significant negative effects on labor productivity, which indicates that firms with no cell phone usage policy will experience lower labor productivity than firms that do maintain a cell phone usage policy. Recently, cell phones have become very indispensable in our lives and those who use them tend to take them virtually everywhere. Use of cell phones can negatively impact our daily lives and business environments in many ways. Distracting employees, creating interruptions, and increasing security risks are some of the critical ways that are directly related to firms' labor productivity¹. This is a similar finding to that of Spira & Feintuch (2005). They mention in their paper that there has been a monumental increase in various forms of interruptions in the past decade, which directly or indirectly affect worker productivity.

All of these models are tested for heteroskedasticity and corrected accordingly. The R-square value increases significantly from Model 1 to Model 4 which indicates that the explanatory power is increasing when we are adding more variables.

Conclusion

There has been arousing interest in research on the Internet's effect productivity and in the last several years the productivity paradox still remains the central theme in information technology research. Several scholars provide empirical evidence as to the positive impact that information

technology has on improving productivity (Pilat, 2004), (Luque & Miranda, 2000), (Maliranta & Rouvinen, 2006), and (Teo, Lim, & Lai, 1999). On the other hand, other researchers argue that allowing Internet use in the workplace affects the work culture and can deteriorate productivity (Griffiths, 2010), (Chen, Chen, & Hsiao-Han, 2008). Therefore, the impact of Internet usage on labor productivity still remains inconclusive. The primary goal of this paper is to reexamine how Internet usage and cell phone policy affect labor productivity at the work place.

It has been observed that technology generally allows work tasks to be completed more quickly and with less incidence of error, so it is not unexpected to see the positive impact of technology on labor productivity and firm growth. But when technology interferes with work tasks due to distraction, then it becomes problematic. Non-work activities occurring in the work place has increased dramatically in the last few years, particularly as social media has become popular. Many employers now acknowledge this issue and are proposing or implementing appropriate strategies to offset productivity losses caused by non-work activities of the Internet at the workplace. This study also confirms that having an Internet usage policy at the workplace tends to increase firm labor productivity. Likewise, we would expect that companies that have focused on the problem of misuse of technology resources to the point that they maintain a computer use policy, would tend to be more engaged with employee activities, hence a tendency to have lower levels of abuse, therefore higher levels of productivity.

Alongside the proliferation of the Internet, another technological change occurring in recent years is in the cell phone industry. In addition to being used for voice communications, cell phones are increasingly being used for various purposes such as text messaging, social networking, and browsing the Internet. Many employees make use of cell phones in various ways while at work, which affects firm labor productivity. This study empirically provides more support to the above argument that companies that do maintain cell phone policies within the workplace observe higher labor productivity.

As cited herein, it is clear that the introduction of computers into the work place leads to higher levels of productivity. However, misuse of company Internet resources (so-called “cyber-slacking”) is also cited as being problematic. Recent studies indicate more than half of workers admit to using the Internet for non-business reasons while on the job (Johnson & Rawlins, 2003). Fully extrapolated costs in America for this lost productivity time ranges into billions of dollars annually. However, just as technology contributes to this time waste problem, other technology is available to assist companies. Employee Internet Management (EIM) systems employ various techniques that allow employers to monitor Internet traffic and to tailor how the Internet will be utilized from within the enterprise (Kim, 2006). Companies should consider anticipated return on investment as they employ EIM technology, as additional technology costs will be incurred for implementing such a system.

The solution is to employ management techniques that maximize company and worker assets. Technology changes the amount of work output that is possible per worker hour. If managers do not recalibrate worker expectations, workers will be left with more free time at work. Managers need to establish and communicate work expectations that are reflective of new work processes made possible by introduction of technology (Sharma & Gupta, 2004). One possible limitation of

our study is the low number of respondents to our survey. A larger sample size should lend more credibility to the results of the analysis.

References

- Ana Rosa del, A. O., Sebastian, B. C., & Antonio, P. M. (2002).). Internet usage and competitive advantage: The impact of the internet on an old economy industry in Spain. *Internet Research*, 12(5), 391-401.
- Anandarajan, M., & Simmers, C. A. (2004). Constructive and dysfunctional personal web usage in the workplace: mapping employee attitudes. In M. Anandarajan, & C. A. Simmers, *Personal web usage in the workplace: a guide to effective human resources management*.
- Bock, G., Park, S. C., & Zhang, Y. (2010). WHY EMPLOYEES DO NON-WORK-RELATED COMPUTING IN THE WORKPLACE. *The Journal of Computer Information Systems*, 50(3), 150-163.
- Chen, J. V., Chen, C. C., & Hsiao-Han, Y. (2008). An empirical evaluation of key factors contributing to internet abuse in the workplace. *Industrial Management + Data Systems*, 108(1), 87-106.
- Derek, H. T., & Walker. (1999). Quality - using the world wide web for developing project management research case studies. *Facilities*, 17(5), 195.
- Gadel, M. S. (1953, September). Productivity and Satisfaction of Full and Part-Time Female Employees. *Personnel Psychology*, 6(3), 327-342.
- Good, D. J., & Stone, R. W. (2000). The impact of computerization on marketing performance. *The Journal of Business & Industrial Marketing*, 15(1), 34-56.
- Griffiths, M. (2010). Internet abuse and internet addiction in the workplace. *Workplace Learning*, 22(7), 463-472.
- History of Computers in the Workplace*. (2010, 04 19). Retrieved from http://www.ehow.com/about_6362639_history-computers-workplace.html
- Hoffman, W., Hartman, L., & Rowe, M. (2003). You've Got Mail . . . And the Boss Knows: A Survey by the Center for Business Ethics of Companies' Email and Internet Monitoring. *Business and Society Review*, 108(3), 285-307.
- Johnson, P. R., & Rawlins, C. (2003). Employee Internet Management: Getting People Back to Work. *Academy of Organizational Culture, Communications and Conflict*, 61-66.
- Kim, S. (2006). Economics of employee internet management. *The Bottom Line* , 124-138.
- Künn-Nelen, A., de Grip, A., & Fouarge, D. (2011). Is Part-Time Employment Beneficial for Firm Productivity? (No. 5423). *Institute for the Study of Labor* .
- Lallemand, T., & Rycx, F. (2009). Are older workers harmful for firm productivity? *De Economist*, 157(3), 273-292.
- Lazear, E. P. (1979). Why is there mandatory retirement? *The Journal of Political Economy*, 1261-1284.
- Liu, D., Zhang, S., Wang, L., & Lee, T. W. (2011). The effects of autonomy and empowerment on employee turnover: Test of a multilevel model in teams. *Journal of Applied Psychology*, 96(6), 1305-1316. doi:10.1037/a0024518
- Luque, A., & Miranda, J. (2000). Technology Use and Worker Outcomes: Direct Evidence from Linked Employee-Employer Data. *Center for Economic Studies, Bureau of the Census, Working Paper*.
- Mahatanankoon, P., Anandarajan, M., & Igbaria, M. (2004). Development of a measure of personal web usage in the workplace. *Cyberpsychology & Behavior: The Impact Of The*

- Internet, Multimedia And Virtual Reality On Behavior And Society*, 7(1), 93-104.
- Maliranta, M., & Rouvinen, P. (2006). Informational mobility and productivity: Finnish evidence. *Economics of Innovation and New Technology*, 15(6), 605-616.
- McDonald, C. J. (2006). Computerization can create safety hazards: A bar-coding near miss. *Annals of Internal Medicine*, 144(7), 510-516.
- Mills, J. E., Hu, B., Beldona, S., & Clay, J. (2001). Cyberslacking! A liability issue for wired workplaces. *Cornell Hotel and Restaurant Administration Quarterly*, 42(5), 34-47.
- Pilat, D. (2004). The ICT productivity paradox: insights from micro data. *OECD Economic Studies*, 38(1), 37-65.
- Prema, R. P. (2011). An empirical investigation on employee empowerment practices. *Interdisciplinary Journal of Contemporary Research in Business*, 2(11).
- Sharma, S. K., & Gupta, J. N. (Winter 2003/2004). Improving Workers' Productivity and Reducing Internet Abuse. *The Journal of Computer Information Systems*, 44(2), 74-78.
- Spira, J. B., & Feintuch, J. B. (2005, September). *The cost of not paying attention: How interruptions impact knowledge worker productivity*. Retrieved 10 06, 2013, from The Information Overload Research Group: <http://iorgforum.org/wp-content/uploads/2011/06/CostOfNotPayingAttention.BaseexReport.pdf>
- Teo, T. S., Lim, V. K., & Lai, R. Y. (1999). Intrinsic and extrinsic motivation in Internet usage. *Omega*, 27(1), 25-37.
- Thrall, J. H., Meehan, M. J., & Whelton, D. G. (2006). Comparison of productivity and cost of full-time and part-time faculty members in an academic department of radiology. *Journal of the American College of Radiology*, 3(5), 335-339.
- Udry, C., Hoddinott, J., Alderman, H., & Haddad, L. (1995). Gender differentials in farm productivity: Implications for household efficiency and agricultural policy. *Food Policy*, 20(5), 407-423.

Academic Plagiarism at the Faculty Level: A Case Study and the Legal Versus Ethical Issues

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Abstract

Plagiarism by college and university faculty members has become a growing issue and concern in academia. This paper presents a case study of an extreme and clear case of such plagiarism. Yet an analysis of the legal and ethical contexts of such plagiarism, and the specific chronicle of this case, illustrate the complexities and difficulties in dealing with such situations. Implications for researchers, for colleges and universities, and for academic journals are offered.

Introduction

With the objective of providing academics with a better understanding of the issues of academic plagiarism at the faculty level, this paper presents the facts of a case of substantial and flagrant academic plagiarism – an academic journal article being largely copied verbatim by other academics and then published in another academic journal. The structure of this paper is as follows:

- 1) The case and its discovery
- 2) The relevant ethical and legal issues and context
- 3) The responsive actions of the various parties
- 4) The resolution of the case to date
- 5) Conclusions and implications presented by the case

It will be seen that cases of academic plagiarism by faculty members present complex issues which are much more difficult to identify and to resolve than would be expected. Actions of recourse are limited and constrained, and frustration is inherent in such cases. Yet there are implications for authors, journals, and colleges.

The Case of Plagiarism

In the early 2000s, Matthew C. Sonfield and Robert N. Lussier began conducting research in the field of family business and subsequently published an article entitled “First-, Second-, and Third-Generation Family Firms: A Comparison,” which was published as a lead article in the academic journal, *Family Business Review* (Sonfield & Lussier, 2004). This journal was at the time the only academic journal within the field of family business and was (and continues to be) considered a “top-tier” journal in the broader field of management. The significance of this article was indicated by its being named “one of the most influential readings in the field of family business during the period of 1991 through 2005” by a leading researcher and journal editor in the discipline.

This case of plagiarism would never have been discovered if the lead author of the above article (Matthew Sonfield) had not, by chance, happened to search under his own name in the spring of 2012 in Google Scholar, and discovered a journal article published in 2010 and entitled “Behavioral Characteristics of Entrepreneurs in the Gujrat, Gujranawala and Slalkot Industrial Clusters of Pakistan: A Comparison of First, Second and Third Generation Family Firms.” The

authors were listed as Shahid Qureshi, Faculty of Business Administration, Technical University Berlin; Sarfraz A. Mian, S.U.N.Y. Oswego School of Business; and Aif Iqbal Rana, Lahore University of Management Sciences Pakistan. Their article was published in the International Journal of Business and Social Science, Vol. 1 No. 2; November 2010 (Qureshi et. al., 2010).

Obtaining the full text of the Qureshi article, Sonfield determined that this second journal article appeared to be a replication of the original Sonfield & Lussier research methodology, using the identical survey instrument and hypotheses, and conducted in certain geographical areas of Pakistan. Permission to use the original survey instrument had not been given to these authors.

And far more seriously, a paragraph-by-paragraph comparison of the two journal articles revealed that the vast majority of the text of the second journal article copied the wording of the original article, either verbatim or with minor interchange of words. In total, about 50% to 70% of the original Sonfield & Lussier journal article text was copied into the second journal article, along with virtually all of the citations and references. See Figure 1 below for the comparison.

Figure 1. Comparison of two journal articles.

<u>SONFIELD & LUSSIER</u>	<u>QURESHI, MIAN & RANA</u>
ABSTRACT (1 paragraph)	Different
INTRODUCTION (1/2 page)	Different – describes the different research sample location and demographics;
THEORETICAL FOUNDATION (2 pages)	Virtually identical wording
HYPOTHESES (4 pages)	Virtually identical wording – identical eleven hypotheses and identical discussions of the literature supporting each hypothesis
RESEARCH METHODOLOGY (1 1/2 pages)	
SAMPLE	Different
VARIABLES MEASURED	Identical methodology and wording
ANALYSIS OF VARIANCE	Identical methodology and wording
CONTROL VARIABLE	Identical methodology and wording
RESULTS (2 pages)	Identical headings and sequence, but different content and wording
DISCUSSION (1 page)	Approx. 50% identical wording
CONCLUSIONS (1/2 page)	Approx. 25% identical wording
REFERENCES	27 of 29 references are identical

The two journal articles can be found at:

http://www.ijbssnet.com/journals/Vol._1_No._2_November_2010/7.pdf “Behavioral Characteristics...” (2010)

<Http://fbr.sagepub.com/content/17/3/189.full.pdf+html> “First-, Second-, and Third-Generation...” (2004)

Upon discovering this case of plagiarism, in June 2012, Sonfield immediately contacted the current Editor of the Family Business Review, advising him of the discovery. The Editor responded, advising that the copyright of the journal’s articles were now owned by SAGE Publications, and that he would advise both SAGE and the owner of the journal, the Family Firm Institute, of this discovery. Soon after, SAGE responded to the journal editor that they would follow up on the matter, and the editor advised Sonfield of this. Sonfield also provided SAGE with a detailed comparison of the two journal articles, highlighting the identical wording throughout the two.

Ethical and Legal Issues

Ethics in academia, and more specifically, academic plagiarism, have been an increasing topic of interest and discussion in recent years – both at the secondary and higher levels of education. Most of the focus has been on student ethics and plagiarism, especially within the context of the internet and other electronic opportunities for easily copying information from one source to another.

Much more limited in focus has been the issue of plagiarism by academic faculty members in a professional context. Yet this specific issue seems to be one of growing concern, and discussion of such plagiarism can be found in three areas of the literature: the general public media, academic journals, and legal journals. While briefly looking at the issues seen by the general public, this review of the literature will focus largely on the latter two areas.

General Public Media

Newspapers, television and other general public media have frequently reported on cases of academic dishonesty in secondary schools and in higher education. Students’ use of the internet for plagiarism, cheating in examinations, and other forms of student dishonesty frequently make the news, and have been reported in America’s most prestigious universities (Pérez-Peña & Bidgood, 2012). But only occasionally has the general media reported on ethical issues at the academic faculty level (Kolata, 2013).

Academic Journals

Within academic journals, the subject of dishonesty, and more specifically plagiarism, has rarely been mentioned until recently. Only within the past few years have studies and articles with this focus come into print (Elliott et. al., 2013). Most of this reported research has involved a case study methodology (Lewis et. al., 2011).

One recent and revealing study by Honig and Bedi (2012) reaffirms that only now are researchers recognizing a rise in plagiarism by faculty (rather than by students), and are probing this issue. These two authors examined 279 papers presented at the International Division of the

2009 Academy of Management annual conference and found that 25% of this sample contained some amount of plagiarism, and over 13% exhibited substantial plagiarism.

A study by Karabag and Berggren (2012) focuses on the reactions of academic journals to this issue. While scientific journals have begun to take potential plagiarism more seriously, and have sometimes developed and published clear written plagiarism policies, few academic journals in the fields of business and economics have such policies or have made an effort to prevent cases of plagiarism, to identify plagiarism in manuscript submissions, or respond to plagiarism identified in their submissions and published articles.

To summarize the recent academic literature, most of it is conceptual rather than empirical in methodology, and the common themes and conclusions are that plagiarism on the part of academic faculty members is on the rise and that it erodes the fundamental value of academic research. Academic journals are urged to utilize current electronic methods of examining all manuscript submissions for plagiarism, and to develop and publish clear definitions of plagiarism and policies for potential submitters of manuscripts (Lewis et. al., 2011).

Legal Journals

Legal journals have also in recent years begun to examine the issue of plagiarism on the part of academic faculty members. Several common themes are apparent.

Authors often focus on the rise of such plagiarism, and cite as one cause the increasing pressure on faculty members, even at non-research institutions, to publish more frequently in academic journals. These authors emphasize the need for journals, colleges and universities to develop more clear definitions of academic plagiarism, to instate written and published policies, and for academic to place a stronger emphasis on intellectual honesty. More education on the issues of such honesty and dishonesty to new academics is also urged (Bast & Samuels, 2008; Latourette, 2010).

Focusing specifically on the Federal Office of Research Integrity and the National Science Foundation, Parrish (2006) stresses the need for greater clarity in published ethics policies, and sees the policies of these institutions now evolving toward greater effectiveness, but with much progress still to be made.

Another common and critical theme among legal articles on this subject is that academic plagiarism is often not a truly legal issue. While the law is relatively clear with regard to copyright infringement, academic plagiarism generally does not involve such infringement under the law. Thus, while copyright infringement is clearly a legal issue, academic plagiarism is generally a professional and moral issue, governed by established academic ethical standards, and by university and other professional guidelines and policies, where they exist (Nimmer, 2004; Stearns, 1992). Thus, we must look beyond the law to deal with academic plagiarism at the faculty level.

If academic plagiarism is not generally a legal crime, but rather a professional and moral issue, then why is it important? At one level, the moral issue is a sufficient reason. Intellectual honesty and morality are desirable and indeed necessary.

Yet the practical repercussions of identified academic plagiarism are very serious in themselves. While such plagiarism may not inflict injury or monetary damages upon the authors who are plagiarized, the offenders may receive major damage to, or the loss of, their academic careers. Students found to plagiarize may be punished in some manner, but can usually then move on with their lives. A non-tenured professor who is found guilty of plagiarism will generally not have his or her contract renewed. Even a tenured professor may be subject to termination, after some form of academic investigation and due process.

Yet almost never is an act of academic plagiarism by a professor the subject of a lawsuit or other legal action. Because the damages to the plagiarized authors and to the original journals are subjective and not financial or in other ways material, the victims and the journals very rarely file legal actions. Furthermore, because such plagiarism is often subjective when comparing the written texts, there is always the possibility of a defamation liability suit on the part of the accused, and this is a deterrent to legal action by the victims. Furthermore, an accused plagiarist might also claim a breach of contract if dismissal actions are taken by an employing university. Thus, the instances of legal actions in response to academic plagiarism are still rare, with the courts offering varying opinions on their appropriate roles in such cases (Billings, 2004).

In light of this review of the literature, and the ethical and legal contexts of academic plagiarism in general, and of this specific case, this paper continues with a narrative of the resolution of this specific case.

The Resolution of the Case

Resolution of the case proved to be less simple than expected. Since the degree of plagiarism was so extreme and clear, with such a sizable portion of the original article being copied verbatim, Sonfield assumed that some form of response and apology from both the second article's authors and their journal would be forthcoming. Furthermore, since he expected that the authors' university deans or other administrators would be informed, that they would also respond to the plagiarism. But the following time-line illustrates that reparation for plagiarism, even non-financial, works in slow and mysterious ways:

Figure 2: Time-line of Plagiarism Grievance

June 2012	Plagiarism discovered Editor of <i>Family Business Review</i> notified <i>Family Firm Institute</i> notified <i>SAGE Publications</i> notified Full documentation of plagiarism sent to SAGE
August 2012	Case now at SAGE legal department SAGE legal department sends letter to editor of <i>International Journal of Business and Social Science</i>
September 2012	Qureshi (lead author) responds to <i>IJBSS</i> editor
October 2012	<i>IJBSS</i> editor no longer responds to SAGE
February 2013	SAGE issues DMCA takedown notice
April 2013	SAGE drafts letters to all three authors' deans Qureshi now advises that #2 and #3 authors played no role in the writing of the article SAGE sends letter only to Qureshi's dean SAGE advises that notice of the plagiarism will be placed at the original article's location in the <i>FBR</i> website archives SAGE files 3 rd DMCA takedown notice
June 2013 (as of the writing of this paper)	No further responses or actions Notice not yet posted in <i>FBR</i> archives Qureshi article, with all three co-authors listed, remains on-line at <i>IJBSS</i> website

As denoted in the Time-Line, it was two month before Sonfield's complaint reached the appropriate location for further action – the SAGE Publications legal department. In September of 2012, the first author of the plagiarizing article responded to the *IJBSS* editor with an explanation that the copying was done because of his newness to academia and his lack of understanding of what constitutes plagiarism. The following are excerpts from his letter:

With reference to your email regarding the complaint about my journal article, Qureshi et al, v. 1, n. 2 of IJBSS, entitled "Behaviourial Characteristics of Entrepreneurs...", I would like to submit that this is a replication study. The objective was to compare the Pakistani and the US family entrepreneurs. In my view, things can only be compared, if there is some basis, in the form of a common theoretical framework. This is the primary reason that I had chosen to take the same set of hypotheses as used by Sonfield and Lussier (2004).

{Qureshi then cites several places in his article where it is noted that his study is a replication of the Sonfield & Lussier study}

As this paper was a replication to compare two countries, the same questionnaire, variables and the methodology were adopted. This statement unequivocally acknowledges that the same hypotheses are being used as that of Sonfield et al. In this case most of the objections regarding the use of same hypotheses shall be invalid.

I understand that some language in the theory part that was derived from Sonfield & Lussier's paper (being the main reference) should have been acknowledged with an additional reference. For your information, this paper was written when I was in the very early stages of my doctoral programme and going through the learning process and was not that familiar with referencing system. To prove my innocence, I would like to bring to your attention that I even remember contacting the authors in 2005/2006 informing them about the replication study I was undertaking. According to my understanding the reference given to Sonfield and Lussier's original work on page 80 and additional four references that followed in places of my paper was to duly acknowledge that their model was being replicated and there was no intention of any plagiarism what so ever.

In the end, I do appreciate your bringing this complaint to my attention as lead author I look forward to working with you to resolve this matter.

Finding the author's response and explanation insufficient, in February 2013 SAGE filed a DMCA "takedown" notice. This is a legal mechanism which allows a complainant whose internet content has been copied without authorization to another web location to have the copied content removed from the web. Concrete documentation must be provided to DMCA, which SAGE did, for such a "takedown" to be implemented (www.DMCA.com).

In April 2013 SAGE drafted letters to be sent to each of the three authors and their school deans. However, prior to these letters being sent, Qureshi then advised SAGE that he was actually the sole author of the article – the second and third author names had been added to the article as co-authors as a courtesy for their prior mentoring of him. Although the veracity of this claim was open to question, SAGE at this point chose to send formal letters of advice and complaint about the plagiarism only to Qureshi's academic superiors.

Also in April 2013, SAGE advised Sonfield that a third DMCA takedown notice had been filed, since takedown had not yet been implemented. SAGE also advised that its own notice of the plagiarism would be placed in the Family Business Review on-line archives where the Sonfield

& Lussier article was located. As of the writing of this paper, in June 2013, the article remains on the IJBSS website and the notice on the JBS website is not yet in place.

Conclusion and Implications

A variety of conclusions can be drawn from this case, and a number of implications can be offered to researchers, to journals, and to colleges and universities.

There is a need for college and university faculty members who perform research and submit papers for conference presentation and publication in the conferences' proceedings, and/or submit manuscripts for academic journal publication, to have a clear and better understanding of the meaning of "plagiarism" and exactly what it entails. When writing a conference paper or journal article, all of the rules of citation, quotation, and attribution must be understood and adhered to. Furthermore, when one's paper or article is published, an author should periodically use appropriate internet search engines to scan for any unauthorized reproduction or copying from the author's published papers or articles. Searching by author name(s), title, and key words should facilitate this task. If such copying is found, the author should promptly and methodically respond by identifying and documenting the degree and details of the plagiarism and then notify the journal and the publisher of the paper or article. As can be seen in the above narrative, journals and their publishers may find a case of possible plagiarism a low priority issue, especially since their response actions are constrained by both the law and by the nature of academic publishing. Thus, the plagiarized author must take the leading and pro-active role in the case, and frequent follow-ups may be required.

Academic journals have a responsibility and obligation as well. They should develop and frequently publish a set of policies and guidelines regarding plagiarism. Potential manuscript contributors should be made fully aware of such policies and guidelines. All manuscript submissions should be processed through an electronic plagiarism checker, and any submitted manuscripts for which some level of plagiarism is indicated should be returned to the submitting author, along with a clear and detailed explanation of the nature of the plagiarism which was identified. Academic journal editors have a duty to avoid the publication of plagiarized materials, and also to educate contributors and readers with regard to the full nature of plagiarism.

Colleges and universities, and their various academic units, also have an obligation to foster professional integrity, to prevent plagiarism, and to educate their faculty members regarding academic honesty. Here too, policies and guidelines should be developed and periodically circulated, so that both junior and senior faculty members and administrators fully understand the various aspects of plagiarism and the university's policies with regard to infractions. If faculty members fully understand the components of plagiarism and the penalties for such behavior, then the universities and colleges have fulfilled their professional and ethical duties and concurrently assured that due process in cases of infraction will be maintained.

In summary, academic plagiarism at the faculty level is indeed a serious and complex issue, yet with appropriate and pro-active actions by all parties involved, this is an issue that can be successfully dealt with.

References

- Bast, C. & Samuels, L. (2008). Plagiarism and legal scholarship in the age of information sharing: The need for intellectual honesty. *Catholic University Law Review*, Spring, 779-814.
- Billings, R. (2004). Plagiarism in academia and beyond: What is the role of the courts? *University of San Francisco Law Review*, Spring, 1-31.
- Elliott, T., Marquis, L. & Neal, C. (2013). Business ethics perspectives: Faculty plagiarism and fraud. *Journal of Business Ethics*, 112(1), 91-99.
- Honig, B. & Bedi, A. (2012). The fox in the hen house: A critical examination of plagiarism among members of the Academy of Management. *Academy of Management Learning & Education*, 11(1), 101-123.
- Karabag, S. & Berggren, C. (2012). Retraction, dishonesty and plagiarism: Analysis of a crucial issue for academic publishing, and the inadequate responses from leading journals in economics and management. *Journal of Applied Economics & Business Research*, 2(4), 172-183.
- Kolata, G. (2013). Scientific articles accepted (personal checks, too). The New York Times, April 7. Accessed at www.nytimes.com, April 8, 2013.
- Latourette, A. (2010). Plagiarism: Legal and ethical implications for the university. *Journal of College and University Law*, 9-80.
- Lewis, B., Duchac, J. & Douglas Beets, S. (2011). An academic publisher's response to plagiarism. *Journal of Business Ethics*, 102(3), 489-506.
- Nimmer, D. (2004). The moral imperative against academic plagiarism (without a moral right against reverse passing off. *DePaul Law Review*, Fall, 1-67.
- Parrish, D. (2006). Research misconduct and plagiarism. *Journal of College and University Law*, 1-32.
- Pérez-Peña, R. & Bidgood, J. (2012). Harvard says 125 students may have cheated on a final exam. The New York Times, August 30. Accessed at www.nytimes.com, June 5, 2013.
- Qureshi, S., Mian, S. & Rana, A. (2010). Behavioral Characteristics of Entrepreneurs in the Gujrat, Gujranawala and Slalkot Industrial Clusters of Pakistan: A Comparison of First, Second and Third Generation Family Firms" (sic). *International Journal of Business and Social Science*, 1(2), 80-88.
- Sonfield, M. & Lussier, R. (2004). First-, second-, and third-generation family firms: A comparison. *Family Business Review*, 17(3), 189-202.
- Stearns, L. (1992). Copy wrong: Plagiarism, process, property, and the law. *California Law Review*, March, 1-34.

Survey Results of a Problem-Based Learning Business Planning Coursework Impact on Student Entrepreneurial Intentions

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Abstract

This study examines how a Problem-Based Learning (PBL), business-planning course affects student entrepreneurial intentions. Data is collected using a survey issued to students and designed to address various aspects of entrepreneurial intentions, in addition to some general related demographic information. Student responses were gathered at the point of concept adoption and again at the completion of the written coursework. This analysis seeks to address two primary aspects of the coursework: the student's attitude toward the success of the new business venture chosen, and the student's attitude toward pursuing or acquiring a new business, before and after the completion of the course (James and Bell, 2013). This analysis is used to identify and understand factors associated with entrepreneurial students' decisions to pursue an entrepreneurial career.

Introduction

Over the last 20 plus years significant attention and resources have been devoted to entrepreneurial education at the university level. In 1971, only 16 academic institutions offered entrepreneurship education. By 2010 the number of academic institutions that offer entrepreneurship had grown to over 2000. (Hatton, 2012) Solomon, Duffy, and Tarabishy (2002) suggested that greater exposure to entrepreneurship education would lead to greater numbers of start-up ventures. And Drost (2010) later proposed that there is evidence of a positive relation between entrepreneurship education and venture creation.

When contemplating one's career choices, entrepreneurship is considered one of the most risky and unstable choices one can make (Campbell, 1992). As an entrepreneur, one is often faced with everyday work and life situations with continuous increases in levels of uncertainty, difficulties, failures, and frustrations directly associated with the process of new venture creation (Audit, 2000). It seems as if one would hesitate to consider an entrepreneurial career feeling less than confident to perform the necessary tasks demanded by the creation of his or her own business venture.

Intentions are conceived as immediate antecedents of actual behavior (Ajzen, 1991). Intention-based models have attracted considerable attention of researchers as they offer a great opportunity to increase our understanding and predictive ability for entrepreneurship (Krueger, Reilly, and Carsrud, 2000). Significant research has concentrated on psychological factors as contributors to entrepreneurial intentions. Among these factors are: a high need for achievement, a desire for autonomy, a proclivity for moderate risk taking, aggressive competitiveness, an internal locus of control and a flair for innovation (Gartner, 1989; Reynolds, 1995; Timmons and Spinelli, 2004; Zhao, Seibert and Lumpkin, 2010; Spinelli and Adams, 2012).

Others like, Douglas and Shepard (2002) examined the link between attitudes toward work, risk, independence and income, and intentions to become self-employed. They parted from prior works that focused on theoretical perspectives of economic factors, and empirical research as to

when people become self-employed, and focused on macro-economic and demographic factors, to determine individual attitudes toward self-employment. They found that attitudes toward risk tolerance and independence contributed positively toward entrepreneurial intentions.

But, there is a recent shift in entrepreneurship research from the investigation of entrepreneurial characteristics from ex-post facto perspectives to investigating ex-ante influences on entrepreneurial behavior. This shift is important particularly to curriculum designers and policy makers if the intention of including entrepreneurship studies in university curricula is to augment post-education incidence of entrepreneurship. (Byabashaua and Katono, 2011) This examination of ex ante influences on entrepreneurial intentions specifically goes on to acknowledge the impact entrepreneurial education has on entrepreneurial intentions.

Where Luthje and Franke (2003) concluded that personality traits have a strong impact on attitudes toward self-employment, Drost (2010) in a Finnish study, found that entrepreneurial self-efficacy is a strong predictor of entrepreneurial intentions. She identified variables that enhance entrepreneurial self-efficacy through entrepreneurial education. Those variables included particular, specific, and practical educational experiences that lead to increased exposure to role models, persuasion to increase students' confidence in themselves, and assistance in coming to terms with students' anxiety when they are, in fact, actively involved in the excitement of entrepreneurship. Drost (2010) concluded that entrepreneurial education positively influences students' confidence that they are truly able to start their own business within five years. Izuierdo and Buelens (2011) suggested that perceived competencies acquired through education, indirectly influences intentions to start a new business through the mediating role of entrepreneurial self-efficacy.

Finally, this survey was delivered in a PBL course environment. Over the years, much has been written on PBL including work by Barrow (1996), and also Gijssels (1996). They assert that PBL begins with the assumption that learning is an active, integrated, and constructive process influenced by social and contextual factors. In their review of the literature, Wilkerson and Gijssels (1996) claimed that PBL is characterized by a student-centered approach, teachers act as facilitators rather than disseminators, and open-ended problems (or also referred to as, ill-structured) serve as the initial stimulus and framework for learning. Instructors also hope to develop students' intrinsic interest in the subject matter, emphasize learning as opposed to recall, promote group work, and help students become self-directed learners. Bell (2008) took the concept of PBL a step further and specifically applied PBL teaching and learning methodology to a business-planning course. The concepts of PBL would seem to contribute to entrepreneurial self-efficacy and impact entrepreneurial intentions.

The outcome of this analysis will serve as an evaluation of the confidence level of future entrepreneurs before completing the given coursework compared to the confidence level of future entrepreneurs after completing the given coursework. The survey questionnaire was designed to evaluate the confidence level of each student on their decided new venture project idea as well as their future entrepreneurial intentions.

Methodology

Due to their relevance and ease of accessibility, the students enrolled in the New Venture Creation course at the University of Arkansas at Little Rock during the 2012 Spring and 2012 Fall semesters were surveyed. The survey was administered in two-parts; a pre-course survey was completed soon after the business venture idea was conceived, and a post-course survey was completed upon completion of the written coursework. At the beginning of the course, students were issued both the pre- and post- course surveys and asked to only complete the pre-course survey. The students retained the survey and were asked to complete the post-course survey just prior to the end of the coursework and then anonymously submit the survey to the instructor.

The test sample consists of 13 of the total 18 students enrolled in the New Venture Creation course for the 2012 Spring semester and 18 of 21 enrolled students in the 2012 Fall semester. In total, 31 of 39 student respondents participated in the survey. Participation in the survey study was strictly voluntary and potential survey respondents were assured of confidentiality and anonymity. Participants were also informed that no survey information would be reviewed until after final course grades had been formally submitted. No incentives of any kind were offered to the survey participants for their participation in the survey. The researchers were unaware of the identities of the respondents to this study.

Discussion

The survey consisted of items that addressed gender, race, business owners/non business owners, age, and current grade point average. Other items included in the survey addressed the source of idea for the business plan, perceived future success of the idea, willingness to pursue idea after course completion, student perception of the business planning process, ability of the venture to raise capital to start the business, attitude of ability to gain investment money from federal and/or state government, interest in starting or acquiring a new business immediately and/or within the next five to ten years, and interest in starting or acquiring and building a high growth (20% or more annual growth year after year within the next five to ten years).

The 31 survey respondents included 23 undergraduate students and eight graduate students. Among these were 22 male and nine female respondents. The ethnicities of the respondents included 18 Caucasian students, seven African American students, five Asian or Pacific Islander students, and one no answer. Four of the 31 respondents had previously owned or currently owned their own business. Of the 31 respondents, 12 worked full-time (more than 36 hours per week), 10 worked part-time, and seven were not currently working.

Results

The students spent the first two weeks of the course developing a concept upon which to base their semester-long business plan project. This is the point where the pre-course survey was administered. Once the idea/concept was adopted, written coursework began including market analysis, target market development, drafting pro forma financials, etc. Upon completion of the written coursework, the post-course survey was administered.

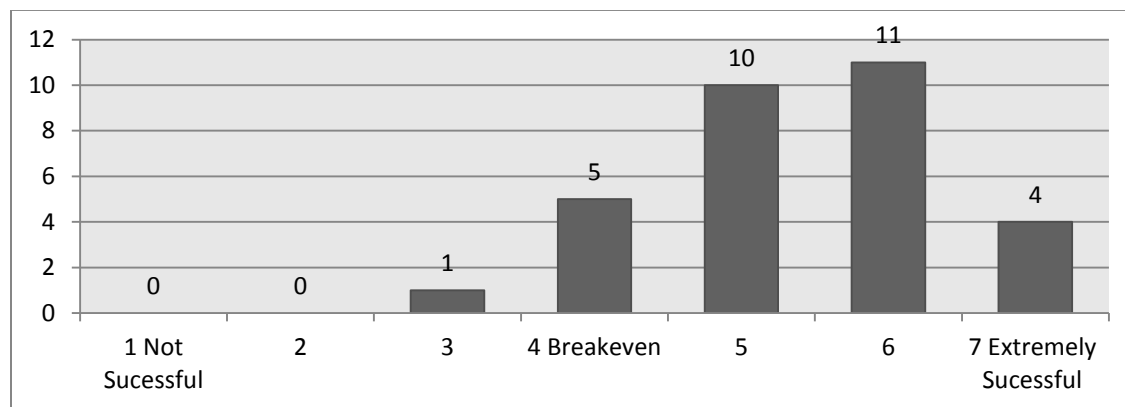
Question One of the pre-coursework (“pre-course”) survey asked for the source of the idea for each groups’ business plan. Answer options and responses included:

- Group brainstorming exercise - 8

- Work-related - 2
- Family member - 1
- Friend - 2
- Just came to me - 3
- Other - 1
- Another group member came up with the idea - 12

Question Two of the pre-course survey asked the respondents to rank how successful he/she perceived the business idea to be using a seven-point Likert scale, with one being “not successful” and seven being “extremely successful”. Again, the respondents completed this question once the business idea was conceived but prior to any additional written coursework was completed. The pre-course survey responses are presented in Table 1.

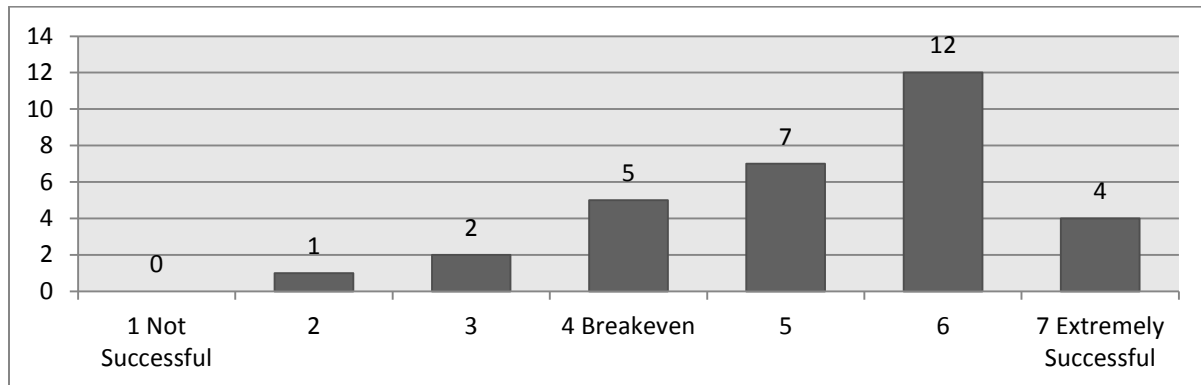
Table 1. Question 2 – Pre-course survey.



An overwhelming number of pre-course survey respondents held a higher level of confidence in the perceived future success of the business concept with 25 of 31 respondents ranking the perceived success of the concept 5 or greater. This is consistent with the Spring semester results of 11 of 13 respondents and 14 of 18 of the Fall respondents ranking the perceived success of 5 or greater. A response of 4 was considered neutral.

Question One of the post-course survey asked the respondents to rank how successful he/she perceived the business idea to be using a seven-point Likert scale, with one being “not successful” and seven being “extremely successful”. The post-course survey responses are presented in Table 2.

Table 2. Post-course Question 1.



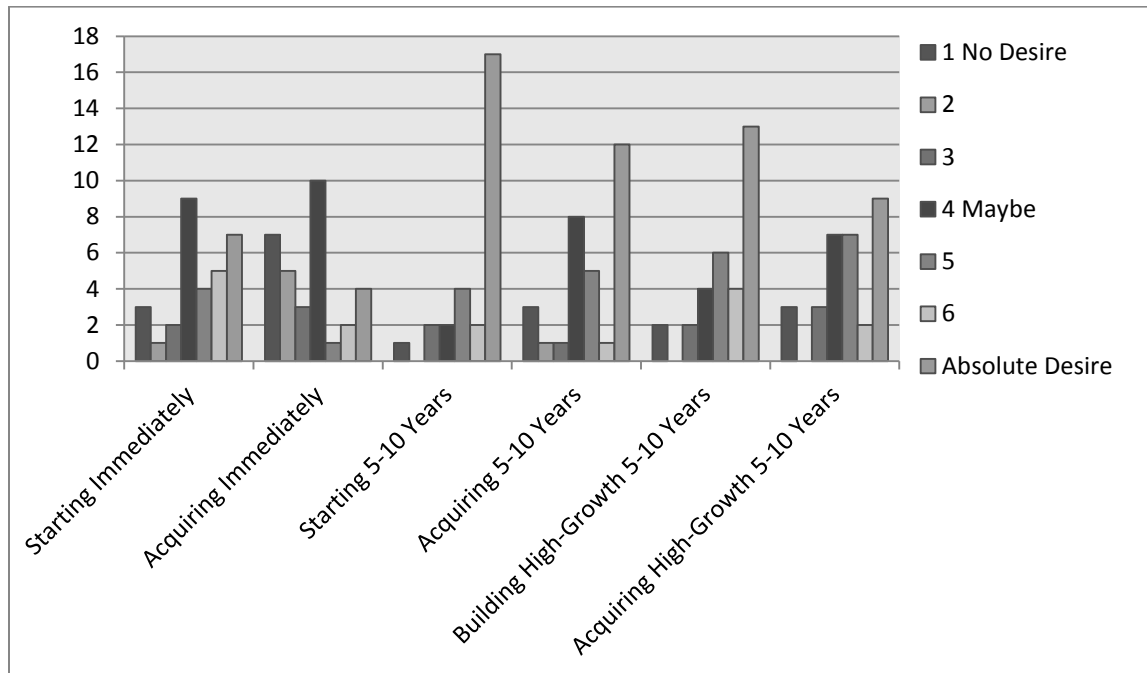
Again, an overwhelming number of post-course survey respondents held a higher level of confidence in the perceived future success of the business concept with 23 of 31 respondents ranking the perceived success of the concept 5 or greater. It should be noted, that the reduction in confidence from the pre-course to post-course survey (25 to 23) saw the respondents become more negative in their confidence level and increasing the less than breakeven (3 or lower on the Likert scale) from 1 pre-course survey response to 3 post-course survey.

Questions 7 through 12 of the pre-course and Questions 8 through 13 of the post-course survey asked the participants to rank their level of interest:

- In starting or immediately following the completion of the business planning course,
- In acquiring a new business immediately following the completion of the business planning course,
- In starting a new business within five to ten years after completion of the business planning course,
- In acquiring a new business within five to ten years after completion of the business planning course,
- In starting and building a company into a high-growth (20% or more annual growth year after year) business within the next five to ten years after completion of coursework, and
- In acquiring and building a company into a high-growth (20% or more annual growth year after year) business within the next five to ten years after completion of coursework.

Respondents were asked to rank their interest on a seven-point Likert scale, with one being “no desire” and seven being “absolute desire” for each Question 7 through 12 (see above). The pre-course survey responses are presented in Table 3.

Table 3. Pre-course survey Questions 7-12.



Respondents were asked again to rank their interest one through seven, with one being “no desire” and seven being “absolute desire” for the post-course survey Questions 8 through 13. The post-course survey responses are presented in Table 4.

Table 4. Post-course survey Questions 8-13.

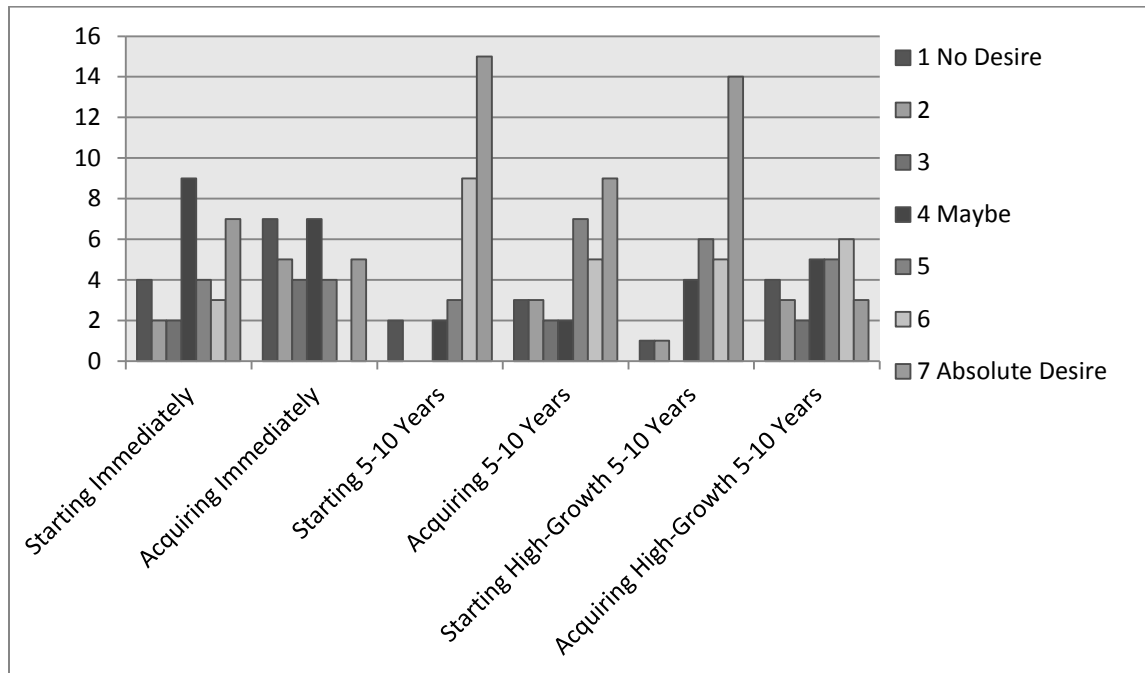


Table 4. Post-course survey Questions 8-13.

The responses from the pre-course to the post-course survey showed movement between each of the categories but the analysis and conclusions are beyond the scope of this results paper. A quick observation of the data would indicate some growth in entrepreneurial intentions in the 5-10 year out categories for both starting and acquiring a business. This would be consistent with the Drost (2010) findings.

What we can say is that, after completion of the business-planning coursework, 19 of the 31 survey participants were willing to pursue the specific chosen business idea that served as the basis for the business plan, and 12 were not. This would seem to be somewhat consistent with the post-course survey where 23 respondents viewed their concept as feasible (Question 1, post-course survey).

Question 4 of the pre-course, and Question 3 of the post-course survey, asked if the respondents believed the business planning process was a useful tool for them to utilize post-graduation. Of the 31 survey respondents, 31 in both the pre-course and post-course surveys identified the business planning process as a useful tool for them post-graduation.

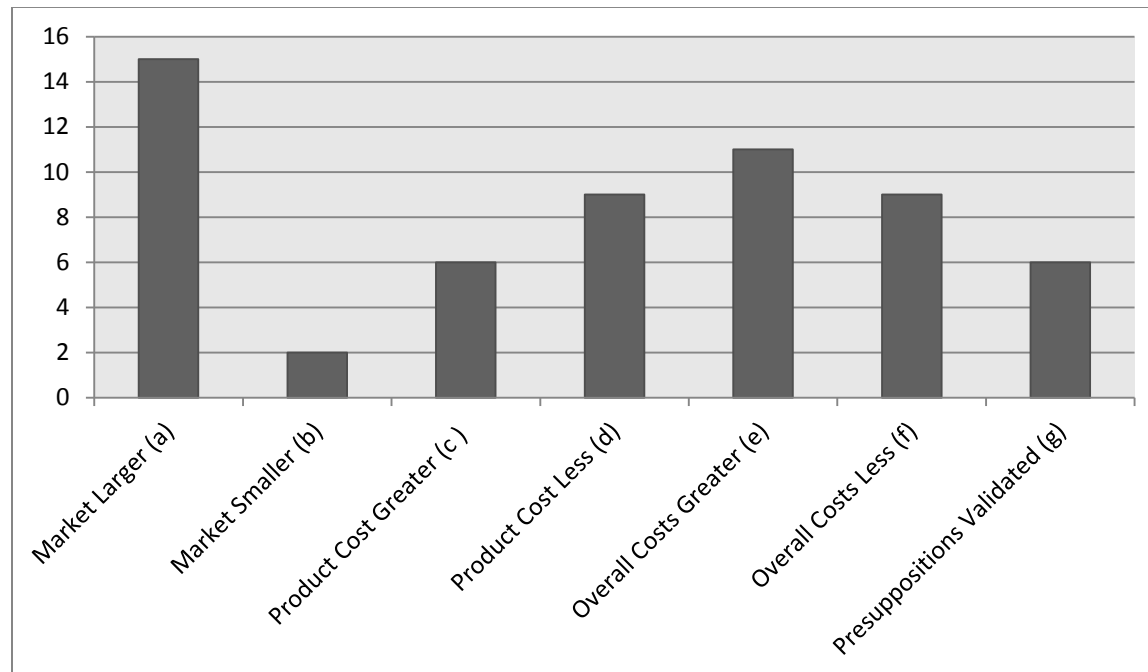
Question Six, of the post-course survey, asked respondents what he/she learned about the chosen business idea while constructing the business plan. Respondents were asked to select all that apply from the following choices:

- The market was larger than expected.
- The market was smaller than expected.
- The cost of the product was greater than expected.

- d. The cost of the product was less than expected.
- e. The overall costs of the project were greater than expected.
- f. The overall costs of the project were less than expected.
- g. The planning process validated all presuppositions.

The post-course survey responses are presented in Table 5.

Table 5. Post-course Response to Question 6.



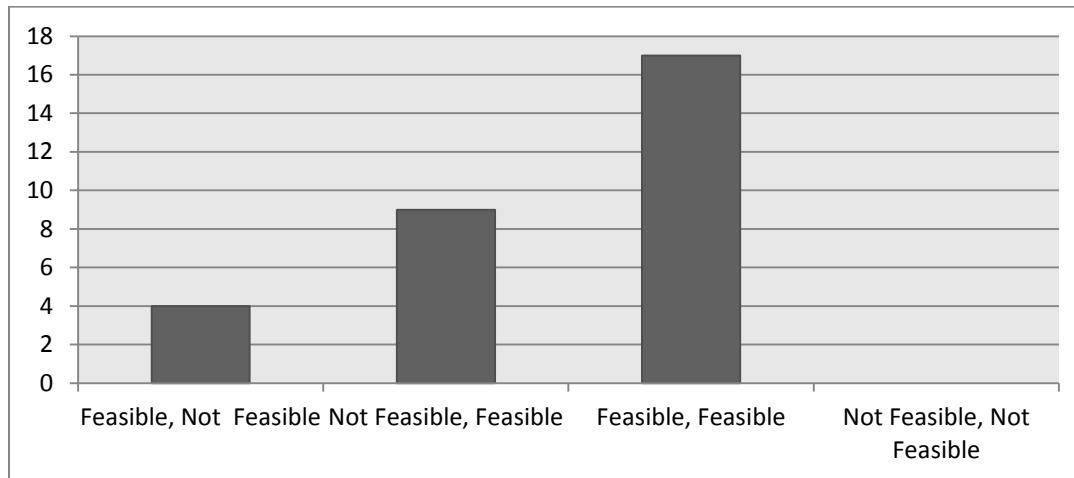
Nearly 50% (15 of 31) of all respondents post-course found the market for their concept to be larger than anticipated than at the point of adoption of the concept (pre-course).

Question Seven asked the respondents of the post-course survey how the business planning process changed his/her perception of the chosen business idea given the following choices:

- a. I thought the idea was feasible before the planning process began but found it to not be feasible by the end of the planning process.
- b. I thought the idea was not feasible before the planning process began but found it to be feasible by the end of the planning process.
- c. I thought the idea was feasible before the planning process began and found it to be feasible by the end of the planning process.
- d. I though the idea was not feasible before the planning process began and found it to not be feasible by the end of the planning process.

The post-course survey responses are presented in Table 6.

Table 6. Post-course Response to Question 7.



The results for post-course survey Question Seven are very interesting in that 26 of 30 respondents believed post-course that the idea they created a business plan around was feasible. These results seem to be consistent, though not identical to Question 1 pre-course and Question 2 post-course.

Most interesting was that nine respondents in the pre-course survey believed that their business concept was not feasible but in the post-course survey they changed their belief and thought the concept was feasible. This would seem to be inconsistent with Question 2 pre-course that showed only six respondents ranking the probability of success at 4 or lower.

An overall objective of this author's research stream is to demonstrate a nexus between entrepreneurial learning and entrepreneurial intentions. Survey results that demonstrate a change in perception leads one to believe that entrepreneurial learning occurred via coursework. The existing literature supports a nexus between entrepreneurial education and entrepreneurial self-efficacy. This analysis then goes on to attempt to demonstrate that in fact, entrepreneurial learning, via entrepreneurial self-efficacy, affects entrepreneurial intentions.

Implications for Future Research

The author intends to continue to collect survey data along with continued analysis of the survey results. The analysis will attempt to determine additional influences in an attempt gain a better understanding of entrepreneurial intentions, and the effect of business planning coursework on those intentions. In addition, the survey was an attempt to evaluate the effect of entrepreneurial course work on the class participants' perception of the viability of entrepreneurial concepts, pre- and post-coursework. The idea was to illustrate a nexus between change in concept perception in relation to knowledge gained, and corresponding self-efficacy. The author believes this nexus could be further explored, expanded or introduces other proxies for demonstrating self-efficacy.

The opportunity to continue to define the effects of entrepreneurial education on student intentions may help define specific individual traits, or triggers, that may affect entrepreneurial decision-making. As the respondent base grows, the conclusions contained herein, or as

expressed in other literature, could be further supported or contradicted. Because the sample size was limited, future results could vary greatly from these preliminary findings. Additional literature suggests how the relationship of gender (Wilson, Kicked and Marlino, 2007; Gupta, Turban, Wasti, and Sikdar, 2009; Kokkenan, 2011), ethnicity (Prieto, 2011), or international perspectives (Byabashaua and Katono, 2011) might play when looking at self-efficacy and entrepreneurial intentions.

The author also might ask the affect of a single course instructor versus that of the Zhao, Seibert, and Hills (2005) study that surveyed students across an entire MBA curriculum. Could individual instructor personality affect student self-efficacy? Additional work might also look into the affects of a PBL classroom environment on survey participants versus other classroom delivery methods.

Conclusion

The leading purpose of this study was to gain a better understanding of the intentions of students in a PBL business-planning course and how the completion of that course affects the students' attitude and perception of an entrepreneurial concept and on the decision to pursue an entrepreneurial career. Some of the preliminary evidence from the survey supports other existing research such as the Izquierdo and Buelens (2011) study of education and the effect of entrepreneurial intentions through its impact on attitudes and self- efficacy. This analysis addressed two primary aspects of the coursework: the student's attitude toward the success of the new business venture chosen, and the student's attitude toward pursuing or acquiring a new business, before and after the completion of the course.

The information from this ongoing survey will provide the researcher with continuous research opportunities related to entrepreneurial intentions. It will be interesting to carry this research further to enrich our understanding of the extent to which intentions are converted into entrepreneurial actions. This information will be beneficial for the collaboration of policy makers, entrepreneurship course designers, and instructors aiming to learn the extent to which reasons for not starting or delaying to start their own businesses are external or internal to the individual. For example, one intervening variable suggested by Shapero and Sokol is the individual's propensity to act. The general belief is that intentions lead to behavior (Azjen, 1987, 1991; Bird and Vozikis, 1994) but it would be interesting to know what mediates or moderates this relationship.

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Audet, J (2000). Evaluation of two approaches to entrepreneurial education using an intentions based model of venture creation. *Academy of Entrepreneurship Journal*, 1(6), 57–63.
- Autio, E, R Keeley, M Klostén and T Ulfstedt (1997). Entrepreneurial intent among students: Testing an intent model in Asia, Scandinavia and in the USA. *Frontiers of Entrepreneurship Research*. Wellesley, MA: Babson College.
- Bandura, A (1986). *Social Foundations of Thought and Action*. Engelwood Cliffs: Prentice Hall.
- (1997). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191–215.
- Barrows, H. S. (1996). Problem-based learning in medicine and beyond: A brief overview. In LuAnn Wilkerson and Wim H. Gijsselaers (Eds.), *Bringing problem-based learning to higher education: Theory and practice* (pp. 3-12). San Francisco: Jossey-Bass.
- Bell, J., The Utilization of Problem-Based Learning in An Entrepreneurship Business Planning Course, *New England Journal of Entrepreneurship*, 11(1), 53-60, Spring 2008.
- Byabashaua, W., and Katono, I., (2011). The Impact Of College Entrepreneurial Education On Entrepreneurial Attitudes And Intention To Start A Business In Uganda, *Journal of Developmental Entrepreneurship*, Vol. 16, No. 1, 127–144.
- Bird, B (1988). Implementing entrepreneurial ideas. The case for intentions. *Academy of Management Review*, 13, 442–454.
- Buelens, M. & Izquierdo, E. (2008). Competing Models of Entrepreneurial Intentions: The Influence of Entrepreneurial Self-Efficacy and Attitudes, 3, 19-20.
- Byabashajja, W. & Katono, I. (2011). The impact of college entrepreneurial education on entrepreneurial attitudes and intention to start a business in Uganda. *Journal of Developmental Entrepreneurship*. Vol. 16, No. 1 (2011) 127–144.
- Bygrave, W.D., 1993. Theory building in the entrepreneurship paradigm. *Journal of Business Venturing*, 8, 255 – 280.
- Campbell, C. A. (1992). A decision theory model for entrepreneurial acts. *Entrepreneurship Theory and Practice*, 17 (1), 21-27.
- Davidsson, P (1995). Determinants of Entrepreneurial Intentions. Paper presented at the RENT IX Workshop. November 23–24, Piacenza, Italy.
- De Meza, D., Southey, C., 1996. The borrower's curse: optimism, finance and entrepreneurship. *Economic Journal*, 106, 375–386.
- Douglas, E. J. and Shepard, D.A., 2002. Self-Employment as a Career Choice: Attitudes, Entrepreneurial Intentions, and Utility Maximization, *Entrepreneurship Theory and Practice*, Spring, 26 (3), 81-90.
- Drost, E.A. (2010). Entrepreneurial Intentions of Business Students in Finland: Implications for Education, *Advances in Management*, Vol. 3 (7) July (2010).
- Gartner, W.B. (1989). Some suggestions for research on entrepreneurial traits and characteristics. *Entrepreneurship: Theory and Practice*, Fall, 14(1), 27-38.
- Gijsselaers, W.H. (1996). Connecting problem-based practices with educational theory. In LuAnn Wilkerson and Wim H. Gijsselaers (Eds.). *Bringing problem-based learning to higher education: Theory and practice*. San Francisco: Jossey-Bass.

- Gupta, V.K., Turban, D.B., Wasti, A., and Sikdar, A. (2009), The Role of Gender Stereotypes in Perceptions of Entrepreneurs and Intentions to Become an Entrepreneur, *Entrepreneurship Theory and Practice*, March, 397-420.
- Hatten, T.S. (2012), *Small Business Management: Entrepreneurship and Beyond*, 5th Edition, Houghton Mifflin Company, Boston, p8.
- Izquierdo, E. and Buelens, M. (2011), Competing Models Of Entrepreneurial Intentions: The Influence Of Entrepreneurial Self-Efficacy And Attitudes, *International Journal of Entrepreneurship and Small Business*, 13 (1), 75-91.
- James, B. and Bell, J.R., (2013) Evaluating The Effects Of Business Pre-Planning Coursework On Student Entrepreneurial Intentions, Small Business Institute 2013 Conference, February 13-16, 37(1), pp. 96-103, St. Petersburg, FL.
- Kakkonen, M-L., (2011). Students' Perceptions of Their Business Competences and Entrepreneurial Intention, *Management*, 6 (3), 225–243.
- Krueger, N and DV Brazeal (1994). Entrepreneurial potential and potential entrepreneurs. *Entrepreneurship Theory and Practice*, 3(18), 91–104.
- Krueger, N. F., Jr., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15, 411-432.
- Luthje and Franke (2003) The Making of an Entrepreneur: Testing a Model of Entrepreneurial Intent Among Engineering Students at MIT, *R&D Management*, 33 (2), 135-147.
- Parker, S. C. (2006). Learning about the unknown: how fast do entrepreneurs adjust their beliefs? *Journal of Business Venturing* 21, 1-26.
- Peterman, NE and J Kennedy (2003). Enterprise education: Influencing students' perceptions of entrepreneurship. *Entrepreneurship Theory and Practice*. Winter, 129–144.
- Prieto, L., (2011). The Influence Of Proactive Personality On Social Entrepreneurial Intentions Among African-American And Hispanic Undergraduate Students: The Moderating Role Of Hope, *Academy of Entrepreneurship Journal*, 17 (2), 77-96.
- Reitan, B (1996). Where Do We Learn That Entrepreneurship Is Feasible, Desirable and/or Profitable? Paper presented to the ICSB World Conference.
- Reynolds, P.D. (1995). "Who Starts New Firms? Linear Additive versus Interaction Based Models", paper presented at the 15th Babson College Entrepreneurship Research Conference, London, April 13-15.
- Sexton, D.L., Upton, N.B., Waeholtz, L.E., 1997. Learning needs of growth-orientated businesses. *Journal of Business Venturing*, 12, 1–8.
- Shapero, A and L Sokol (1982). Social dimensions of entrepreneurship. In *The Encyclopedia of Entrepreneurship*, C Kent, D Sexton and K Vesper (eds.). Englewood Cliffs: Prentice-Hall, 72–90.
- Solomon G., Duffy S. and Tarabishy A., The State of Entrepreneurship Education in the United States: A Nationwide Survey and Analysis. *International Journal of Entrepreneurship Education*. 1(1), (2002).
- Spinelli and Adams (2012). *New Venture Creation: Entrepreneurship for the 21st Century*. (9th Edition) McGraw-Hill Irwin, 38-41.
- Timmons, J and S Spinelli (2004). *New Venture Creation: Entrepreneurship for the 21st v Century* (6th edition). Burr Ridge: Irwin.
- Wilson, F., Kickul, J., and Marlino, D., (2007), Gender, Entrepreneurial Self-Efficacy, and Entrepreneurial Career Intentions: Implications for Entrepreneurship Education, *Entrepreneurship Theory and Practice*, 31(3), May, 387-406.

- Zhao, H., Seibert, S. E., and Hills, G. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90, 1265-1272.
- Zhao, H., Seibert, S. E., and Lumpkin, G.T. (2010). The Relationship of Personality to Entrepreneurial Intentions and Performance: A Meta-Analytic Review, *Journal of Management*, Vol. 36 No. 2, March 2010, 381-404.

A Business Success Versus Failure Prediction Model For Small Businesses in Israel

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Abstract

With the great discrepancy in the literature as to which variables do in fact lead to success or failure of small businesses there is no theory; the Lussier (1995) 15 variable business success versus failure prediction model stands out in its accuracy that has been tested and validated already in three very different parts of the world. This study further contributes by testing the model in Israel with a sample of 205 small businesses - 101 failed and 104 successful. Results support the model's validity in Israel, reinforcing its global validity and moving toward a theory; while demonstrating similarity of SMEs in Israel to those in other economies.

Introduction

Small and Medium-size Enterprises (SMEs) have been recognized by governments worldwide for their contribution to the economy stability and growth, employment and new job creation, and social cohesion and development (Morrison et al. 2003; OECD 2004). Moreover, during the economic recession of the last several years and the debt crisis in the euro zone, SMEs have retained their position as the backbone of the European economy accounting for more than 98 percent of all enterprises, for 67 per cent of total employment and 58 percent of gross value added (EU 2012). In the U.S.A. small businesses make up 99.7 percent of U.S. employer firms, 49.2 percent of private-sector employment, 64 percent of net new private-sector jobs, and 33 percent of exporting value (SBA 2012). Thus, creation and existence of SMEs is crucial for the stability of the economy, size and quality of employment, and socio-political structure of a nation (Nooteboom 1988).

Given the importance of SMEs to economy and society (Nooteboom 1988), public policy makers and other stakeholders have put efforts in helping to boost creation of new small businesses and reduce the incidents of failure and bankruptcy (Carter and Van Auken 2006). Therefore, predicting SMEs fate in terms of success and failure has become an important area of research (Davidsson and Klofsten 2003; Lussier 1995; Pompe and Bilderbeek 2005). Such research on the prediction of success versus failure would benefit current and would be entrepreneurs, as well as variety of other stakeholders including parties who assist and advise them, investors and institutions who provide them with capital, communities and society by and large (Dennis and Fernald 2001). However, finding out which factors lead to small business success and failure is still an ongoing and unfulfilled effort that research continue to pursue (Rogoff, Lee, and Sub 2004).

Several success versus failure (S/F) models have been offered in the past (Cooper, Gascon, and Woo 1991; Dennis and Fernald 2001; Pompe and Bilderbeek 2005; Reynolds and Miller 1989). However, the Lussier (1995) S/F model is among the most extensive because it is based on 15 variables that have been identified previously by numerous studies to be influential factors on success and failure of small businesses (Lussier 1995, 1996a, 1996b; Lussier and Corman 1996; Lussier and Pfeifer 2000). To date, the Lussier S/F model has been validated in different parts of

the world including the U.S.A. (North America), Croatia (Central and Eastern European), and Chile (South America).

“Why do some businesses succeed and others end up bankrupt? There is great discrepancy in the literature as to which variables do in fact lead to success, thus, there currently is no theory (Lussier and Halabi 2010). Also, as stated by Bono and McNamar (2011), there is a need to test models in multiple countries to assess the robustness of the findings. To move the field in that direction, the goal of this research was to test the Lussier 15 variable S/F model in Israel (Middle East), where there are no prior S/F research studies that could be found, which can further qualify its robustness for wide use as a global prediction model. Israel represents not only a different location on the globe, but also differs from others by size, age, economy, geo-political situation and highly diverse society and culture.

Israel Economy

Although small, Israel is considered a highly developed country with modern advanced market economy, as reflected in various ranking (Israel MOF 2012). According to the UN's Human Development Index, as of 2012, Israel ranks 16th among 187 world nations, which places it in the top category of "Very Highly Developed" (UNDP 2013). Israel's economy also ranks 19th among the world's most economically developed nations, according to IMD's World Competitiveness Yearbook (IMD 2012); and rated 27th out of more than 130 countries in GDP per capita in PPP in 2011 standing at \$31,514, according to the International Monetary Fund (IMF 2013). In addition to those rankings, Israel also became a member of the OECD in 2010 (Israel MOF 2010), and has also signed free trade agreements with the European Union, the United States, and others.

The Israeli economy showed great resilience during the latest global economic crisis; and was ranked 1st in 2010-2011 by the 'Resilience of the Economy' Index, as part of the WEF Global Competitiveness Index (WEF 2013). In addition, during the past two years, natural gas fields discovered off Israel's coast have strengthened Israel's energy security outlook, projecting energy independence by mid-2014 (Israel MOF 2012).

Israel is a world class player in innovation, entrepreneurship and high tech industries. It is home to many international high tech companies, which identified its cultural and economic benefits, as well as its innovative spirit (Israel MITL 2010). This has earned Israel the attribute of a Start-up Nation, and 'The Israeli Silicon Valley'. Israeli companies, particularly in the high-tech area, have enjoyed considerable success raising money on Wall Street and other world financial markets, and as of 2010 the country was ranked second among foreign countries in the number of its companies listed on U.S. stock exchanges (Israel MITL 2010, Israel MOF 2012).

In absolute numbers Israel is a relatively small country and economy, with population reaching 8 million recently, and GDP circa \$243 billion, which is about 1.5 percent of that of the United States (Israel CBS 2011). Additionally, the country faces tough security challenges being isolated in the Middle East geo-political unstable situation, surrounded by numerous hostile countries.

SMEs In Israel

As of 2010 there were 478,000 active SMEs in Israel, constituting more than 99 percent of the total businesses in Israel, accounting for 55 percent of the workforce in the private sector, and for 45 percent of the country's' GNP, and about 15 percent of the export (figures compiled by the ministry of Industry, Trade and Labor for 2010). Thus, SMEs constitutes a major part of the country economy. Out of the total number of SMEs, about 75 percent employ up to four people, 14 percent employ five to twenty people, and the rest employ more than twenty people. Currently, the average annual net growth in number of SMEs is about 3 percent – with 10 percent of new SMEs and 7 percent closure (SBAI 2011).

The definition of SMEs in Israel is based on Government resolution 2190 (Israel Government 2007) as follows: Micro Business: Up to 5 employees and annual sales less than \$ 2.7 Million (Exchange rate \$U.S. 1 equals 3.7 New Israel Shekel - NIS). Small Business: Up to 50 employees and annual turnover less than \$ 6.75 Million. Medium Business: Up to 100 employees and annual turnover less than \$ 27 Million. Despite this definition, they are not mandatory for all parties involved in SMEs. For example the banking system has its own definitions of SMEs.

The main agency that deals and promotes SMEs in Israel is the Small Business Authority of Israel (SBAI 2013). The SBAI was established in 1994 at the initiative of the Ministry of Industry and Trade, and is a non-profit association which operates as an independent entity in partnership with Government ministries, economic organizations and the public. The main objectives and functions of the SBAI are to promote and implement policies to encourage small and medium-sized businesses and to create tools for assisting them coordinate activities, provide professional support and guidance, and initiate the establishment of funds and other financial instruments to assist SMEs.

Western and Israeli Differences

Although the business environment of SMEs in Israel is similar in general to that in other western countries as reviewed above, there are some attributes of difference, including:

Geopolitical Situation: Located in the Middle East surrounded by countries that are mostly hostile, Israel SMEs can not grow by exporting over the borders to neighboring countries. According to the Uppsala Model of SMEs development (Johanson and Wiedersheim-Paul 1975; Johanson and Vahlne 1990), growth may be accomplished first via cross neighboring border activity, which is not possible for SMEs in Israel, and thus their growth through internationalization must be directed overseas which presents a higher barrier to growth and survivability.

Population and Culture: Israel population grew from 800,000 at the birth of the state in 1948 to 8,000,000 at 2012. This growth was based on waves of immigration of Jews from different parts of the world, which created a highly diverse society and culture (Israel CBS, 2011). Thus, the way owners manage and conduct their SME might follow many different patterns. Research has shown that owners' personal factors including perceptions and culture might have strong impact on the achievement of the business (Manolova et al. 2002).

High level of entrepreneurship: Israel is known for its unique entrepreneurial and innovative spirit, and leads the world in research and development endeavors, as reflected in the ratio of national expenditure on R&D to the GDP, which stands at 4.4 percent (World Bank, 2011). It is also classified amongst the innovation-driven economies, together with the United States, United Kingdom, Germany, Sweden, and others. In the city of Tel Aviv, a city of 400,000, it has 700 tech startups eager to solve problems (Wainer 2013). The central measure of GEM (Global Entrepreneurship Monitor) is the Total Entrepreneurial Activity (TEA) rate, which consists of the percentage of individuals aged 18 – 64 years in an economy who are in the process of starting or are already running new businesses. The TEA rate therefore includes both nascent and new entrepreneurs. The TEA rating for Israel is 7, and it is lower than the other countries in which the Success vs. Failure Prediction Model has been tested: Croatia 8, USA 13, and Chile 23 (GEM 2012).

According to previous research (Schwartz and Malach-Pines 2007), there are many differences between high technology entrepreneurs (HTE) and small business owners (SBOs), including HTEs' higher level of education, greater leadership experience and greater love of management. Thus, the high number of HTE type SMEs might have an impact on the success and failure dimensions.

Selection of the Model

Prior success and failure model studies have been conducted by Carter and Van Auken 2006; Cooper, Dunkelberg, Woo, and Dennis 1990; Cooper, Gascon, and Woo 1991; Dennis and Fernald 2001; Pompe and Bilderbeek 2005; Reynolds 1987; Reynolds and Miller 1989; van Gelder, de Vries, Frese, and Goutbeek 2007; Westhead et. al 2001. The Lussier (1995) model was selected to be used in this study for the following reasons. Lussier was the most extensive model because the study examined the efficacy of 15 variables identified from 20 prior studies. The Lussier (1995) model has been published in more journals (Lussier 1995, 1996a, 1996b; Lussier and Corman 1996; Lussier and Pfeifer 2000) and has been used to predict success and failure cross-nationally in Croatia (Lussier and Pfeifer 2001); and in Chile (Lussier and Halabi 2010). The Lussier (1995) success versus failure (S/F) prediction model is also a nonfinancial model, which is more appropriate than financial models for small business research (Cooper, Dunkelberg, Woo, and Dennis 1990; Cooper, Gascon, and Woo 1991; Dennis and Fernald 2001; Reynolds 1987; Reynolds and Miller 1989). In a more recent small business bankruptcy study, Van Auken et al. (2009) used a nonfinancial model. Also, most financial models use sales as a predictor, and are thus not appropriate to use with startup business (Scherr 1989). Lussier also uses resource-based theory as entrepreneurs make judgments about which resources are more or less important based on their expectations about the future of the venture (Lichtenstein and Brush 2001). The Lussier model is designed to determine which variables are more and less important to success and failure. Thus, the Lussier (1995) model was selected for testing in Israel.

Lussier (1995) researched the literature to better understand why some businesses succeeded and others failed. To be included in the Lussier (1995) S/F model, a variable had to have been included in a study that had at least three variables identified as contributing factors to success and failure. Fifteen variables were identified in the literature and for each of the variables a hypotheses was developed to explain the relationship between the independent variable and the dependent variable performance—success vs. failure. See Table 1 for an explanation of the 15

independent success versus failure variables found in the Lussier model. Because a “model” was developed and tested, the 15 variable hypotheses are not tested and reported separately.

Table 1. Explanation of Success versus Failure Variables.

Capital (capt). Businesses that start undercapitalized have a greater chance of failure than firms that start with adequate capital.

Record keeping and financial control (rkfc). Businesses that do not keep updated and accurate records and do not use adequate financial controls have a greater chance of failure than firms that do.

Industry Experience (inex). Businesses managed by people without prior industry experience have a greater chance of failure than firms managed by people with prior industry experience.

Management Experience (maex). Businesses managed by people without prior management experience have a greater chance of failure than firms that are managed by people with prior management experience.

Planning (plan). Businesses that do not develop specific business plans have a greater chance of failure than firms that do.

Professional Advisors (prad). Businesses that do not use professional advisors have a greater chance of failure than firms using professional advisors. A more recent source of professional advisors are venture capitalist (Barney, Busenitz, Fiet, and Moesel 1996; Fiet, 1995).

Education (educ). People without any college education who start a business have a greater chance of failing than people with one or more years of college education.

Staffing (staff). Businesses that cannot attract and retain quality employees have a greater chance of failure than firms that can.

Product/Service Timing (psti). Businesses that select products/services that are too new or too old have a greater chance of failure than firms that select products/services that are in the growth stage.

Economic Timing (ecti). Businesses that start during a recession have a greater chance to fail than firms that start during expansion periods.

Age (age). Younger people who start a business have a greater chance to fail than older people starting a business.

Partners (part). A business started by one person has a greater chance of failure than a firm started by more than one person.

Parents (pent). Business owners whose parents did not own a business have a greater chance of failure than owners whose parents did own a business.

Minority (mior). Minorities have a greater chance of failure than nonminorities.

Marketing (mrkt). Business owners without marketing skills have a greater chance of failure than owners with marketing skills.

There is little consistency in the literature supporting which variables do in fact explain and predict success vs. failure. Of the studies, the variable listed most frequently as a contributing factor to success vs. failure was the need for planning. However, planning was only cited in 16

(55%) of the studies. See Table 2 for a comparison of variables identified in 29 articles in the literature as factors contributing to success versus failure; note that Lussier (1995) list included 20 studies. Due to such a large discrepancy in the literature, there is no strong unifying theory of success vs. failure. Thus, this study is an attempt to help clarify which variables do in fact explain and predict success vs. failure as we move towards a unifying theory.

The model includes all 15 variables identified in the literature review. Although, prior researchers concluded that success factors vary in different countries (Benzing et al. 2009), the S/F model was significant in three very different countries and parts of the world. Thus, the primary research hypothesis was that the model would also predict S/F in Israel.

Table 2. A Comparison of Variables Identified in the Literature as Factors Contributing to Business Success versus Failure.

Senior	Independent Variables														
Author	capt	rkfc	inex	maex	plan	prad	educ	staf	psti	ecti	age	part	pent	mior	mrkt
Barsley	F	-	F	F	F	F	-	-	-	-	-	-	-	-	-
Bruno	F	F	-	F	F	-	-	F	F	F	-	-	-	-	F
Cooper 90	F	-	N	N	F	F	N	-	F	F	F	F	-	F	-
Cooper 91	F	-	F	N	-	F	F	-	N	N	N	N	F	F	-
Crawford	-	-	F	-	-	F	F	-	-	N	N	-	-	-	-
Cressy	F	-	-	F	-	-	-	-	-	-	-	-	-	-	-
D+B St.	F	F	F	F	-	-	-	-	-	F	-	-	-	-	-
Flahvin	F	F	F	F	-	F	-	F	-	-	-	-	-	-	-
Gaskill	N	F	F	F	F	F	N	-	-	N	-	-	-	-	F
Hoad	-	-	F	N	N	F	F	-	-	-	-	-	-	-	-
Kennedy	F	-	-	F	F	-	-	-	-	F	-	-	-	-	-
Lauzen	F	F	-	F	F	-	-	F	-	-	-	-	-	-	-
Lussier 95	N	N	N	N	F	F	F	F	N	N	N	N	F	N	N
Lussier 96a	N	F	N	F	F	F	N	F	N	F	N	F	F	N	F
Lussier 96b	N	F	N	N	F	F	N	N	F	F	F	N	N	N	N
Lussier & C 96	F	F	F	N	F	F	F	F	N	F	N	N	F	F	N
Lussier & Pf 01	N	N	N	N	F	F	F	F	N	N	N	N	N	N	N
Lussier & Ha 10	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
McQueen	F	-	F	F	-	-	-	-	-	-	-	-	-	-	F
Reynolds 87	F	F	-	-	F	-	-	N	F	-	-	-	-	-	N
Reynolds 89	F	F	-	-	F	-	N	N	F	-	N	F	-	-	-
Sage	F	-	-	F	-	-	F	-	-	-	-	-	-	-	-
Santarelli	-	-	-	-	-	-	F	-	-	F	-	-	-	-	-
Sommers	-	-	-	F	F	-	-	F	-	-	-	-	-	-	-
Thompson	N	-	-	F	F	-	-	F	F	-	-	-	-	-	F
Vesper	F	F	F	F	N	F	F	-	F	F	-	F	-	-	F
Wight	F	F	-	F	-	F	-	-	-	-	-	-	-	-	-
Wiklund	F	-	-	F	-	-	-	-	-	-	-	-	-	-	-
Wood	-	F	F	F	F	-	F	-	-	-	-	-	-	-	-
Total F	17	13	11	17	16	14	10	9	7	9	2	4	4	3	6
Total N	7	3	6	8	3	1	6	4	6	6	8	6	3	5	6
Total -	5	13	12	4	10	14	13	16	16	14	19	19	22	21	17
F supports variable as a contributing factor															
N does not support variable as a contributing factor as an individual variable															
- does not mention variable as a contributing factor															

Method

The primary methodology of this study was survey research using the previously validated Lussier (1995) research study questionnaire in Israel. The questionnaire was translated to Hebrew Language to adapt to the local language by a professional and the questionnaire was pilot tested for accuracy in translation. .

Personal interviewers were conducted, rather than mail/email data collection due to its inherent threefold advantageous. First, a higher percentage of responses; second, a shorter time frame to collect the data; and third, the possibility to provide the owner with further explanations about the questions.

A total of 340 businesses were contacted through random selection within six industrial parks and commerce centers in the northern region of Israel, as well as from bankruptcy records of the Ministry of Justice. There were 242 completed surveys, resulting in a response rate of 71 percent. However, 37 had missing data, resulting in 205 usable questionnaires. Thus, 205 questionnaires were included with 104 (51%) classified as successful, and 101 (49%) classified as failures were included for statistical analysis. Businesses that were operational at the time of study were termed successful, while bankrupt businesses and businesses that cease operations were termed failures.

This study has a large sample sizes (205) and response rate (71%) considering Carter and Van Auken (2006) used a sample of 57 bankrupt and 55 non-bankrupt firms with a response rate of 16 percent, and van Gelder et al. (2007) used 71 operational and only 20 failed business owners. The Lussier (1995) U.S.A. study was based on 216 businesses (108 successful and failed) with a response rate of 39 percent. The Croatia sample included 120 different owner/managers, representing 84 successful and 36 failed businesses with a response rate of 37 percent (Lussier and Pfeifer 2000); and the Chile study included 103 successful and 131 failed businesses with a response rate of 22 percent (Lussier and Halabi 2010).

Results and Discussion

Table 3 contains the means and standard deviations among the 15 independent variables in the regression equation for the 205 Israeli businesses, and test of differences between the successful and failed firms. The results of the logistic regression analysis appear in Table 4.

Table 3. Israel Descriptive Statistics and Test of Differences (N = 205).

Model Variables	Failed Mean/ [Frequency] (n = 101)	Failed s.d.	Success Mean/ [Frequency] (n = 104)	Success s.d.
1. Capital (1 adequate - 7 inadequate) ¹	4.15	1.314	3.04	1.033**
2. Record keeping and financial control (1 poor - 7 good)	3.52	1.230	4.86	0.960**
3. Industry experience (# of years)	3.46	2.189	3.63	1.947
4. Management experience (# of years)	3.53	2.115	2.48	1.768**
5. Planning (1 specific - 7 no plan) ¹	3.53	1.277	2.18	0.760**
6. Professional advice (1 used - 7 not used) ¹	3.95	1.260	2.97	1.234**
7. Education (0 GS - 4 PhD)	1.39	0.860	1.57	0.822
8. Staffing (1 easy - 7 difficult) ¹	4.62	1.256	5.04	0.985**
9. Product/service timing (1 intro. - 7 decline) ¹	4.18	1.299	4.43	0.963
10. Economic timing (1 recession - 7 expand)	4.05	0.792	4.50	0.711**
11. Age of Owner (number of years)	34.21	5.443	31.50	3.631**
12. Partners (# with partners / %)	[30/30%]		[29/28%]	
13. Parents (# parents owned a business / %)	[36/36%]		[39/38%]	
14. Minority (1 yes – 2 no)	[24/24%]		[20/19%]	
15. Marketing (1 unskilled - 7 skilled)	3.75	1.236	3.90	1.390

¹ Note that these are reverse scale items. Thus, a lower number is preferred or expected.

* Success and failure mean difference is significant at the .05 level.

** Success and failure mean difference is significant at the .01 level.

Table 4. Logistic Regression Model Test Results Israel.

Model Parameter Estimates <i>Variables Name</i>	Model	
	β	Sig.
1. Capital	.568	.004
2. Record keeping and financial control	-.791	.001
3. Industry experience	-.189	.101
4. Management experience	.072	.579
5. Planning	.969	.000
6. Professional advice	.500	.013
7. Education	.535	.081
8. Staffing	-.148	.492
9. Product/service timing	-.077	.716
10. Economic timing	-.565	.090
11. Age of owner	.135	.021
12. Partners	.796	.112
13. Parents owned a business	.685	.155
14. Minority	.162	.774
15. Marketing	.315	.108
Constant	-8.055	.017
Model Test Results		
-2 Log Likelihood	145.081	
Model Chi-square	139.065	
Model Significance	.000	
R Square	.657	
Classification Results		
Correctly Classified Cases		
Success	84.6%	
Failed	<u>86.1%</u>	
Overall	85.4%	

Test of Differences

As shown in Table 3, the successful firms had higher levels of six of the variables. Thus, if small businesses have adequate capital, maintain good record keeping and financial control, have management experience, have specific plans, make use of professional advice, and have good economic timing, they will increase their chances of success.

Test of the Model

The -2 log likelihood (LL) for the model is 145.081. The large -2 LL statistic indicates that the model does not differ significantly from the “perfect” model. The logistic regression results testing the model Chi-square was 139.065 with the model significance level less than .01 ($p = .000$). Thus, the model has empirical validity as 99% of the time it will be more accurate than random guessing of which businesses are successful and failed. Results support the model’s

ability to predict success and failure in Israel. Thus, if the small businesses have adequate capital, maintain good record keeping and financial control, have prior industry and management experience, have specific plans, make use of professional advice, have higher levels of education, do a good job of staffing, have good product/service and economic timing, have partners, parents that owned a business, and have marketing skills, they will increase their chances of success. Age has also been found significant, but has little importance, as is discussed below.

The ability of the model to predict a specific business as successful or failed accurately overall was 85.4 percent of the businesses. The model had similar prediction level of business failure (86%) and success (84%). The predictive results are more accurate than the Lussier (1995) U.S.A. study (70%), and the Lussier and Pfeifer (2001) Croatian study accuracy (72%), and Lussier and Halabi (2010) Chile study accuracy (63%).

Many published regression model studies using large sample sizes are supported with significant p-values, but are not supported by having low R-square values. The validity of the Lussier (1995) model is also supported by the high Nagelkerke R-square value (.657), indicating that only 33 percent of the variance in success versus failure is explained by other variable not in the model.

Thus, based on the model, small business owners in the U.S.A. and Israel need to focus on the variables in order to improve their chances of success and decrease their chances of failure. With the current global economy downturn, the economic timing variable becomes important. New startups should be sure that they have specific plans that include having adequate capital, good record keeping and financial control, and a marketing sales forecast to ensure sales and cash flow to keep the firm solvent; and the business plan will be improved through the use of professional advice.

Previous Research

The model test results ($p = .000$) do support Lussier (1995) because the model did predict success and failure in the U.S.A. ($p = .001$) and Chile ($p = .004$). However, the model was not significant in the Lussier and Pfeifer (2001) Croatian study. The contrary results may be due to a different smaller sample size in Croatia ($N = 120$) versus the U.S.A. ($N = 216$), Chile ($N = 234$), and Israel ($N = 205$). In Croatia there were only 36 failed firms, with 84 successful firms. Thus, the model has predictive validity because it is significant in the Middle East Israel, South American Chile, and North America U.S.A., or the model fits the data. In other words, the model will reliably predict a group of businesses as failed or successful more accurately than random guessing in all three countries over 99 percent of the time.

It is difficult to compare results of this study using the Lussier (1995) model to prior studies not using the same model; because of the wide discrepancy among prior research identifying which variables do in fact predict success or failure (Lussier and Halabi 2010). Also, only four other studies actually developed a nonfinancial model to predict success vs. failure using logistic regression (Cooper et al. 1990, 1991 and Reynolds 1987, Reynolds and Miller 1989). Other studies tried to determine factors of success vs. failure without models and logistical regression. For example, Gaskill, Van Auken and Manning (1993) conducted a factor analytic study of the

perceived causes of small business failure. Reynolds (1987) and Reynolds and Miller (1989) used age of the business and first year sales as predictors of success or failure, which are unknown variables in predicting success or failure of a new venture. The Cooper et al. (1990 and 1991) did not actually survey failed businesses.

Individual Variables in the Model, Near Multicollinearity, and Test of Differences

The parameter estimated beta coefficients appear in Table 4. Of the 15 variables in the model, the parameter estimates for the logistic regression model found five of the variables to be significant. This indicates that businesses started with adequate capital ($p = .004$), have good record keeping and financial controls ($p = .001$), develop plans ($p = .000$), and use professional advisors ($p = .013$). have a significantly greater chance of success from failure in Israel. Age was also significant ($p = .021$) and the result contradicted the literature suggesting that starting a business at an older age improves the chances of success. However, it is not important as the mean ages were failed entrepreneurs was 34.21 and success 31.50, for a difference of 2.71. Finding this small difference in age to be significant is most likely due to having a large sample size ($N = 205$). It is not logical to suggest starting a business a couple of years earlier, as the key criteria should be to start when the entrepreneur finds a good opportunity.

The most likely reason for the lack of significance for the other individual independent variables is because the model has near multicollinearity. Near multicollinearity, also called faced or just multicollinearity, exist when one independent variable is linearly dependent to one or more other independent variables; without the variable(s) the estimators would not exist. For example, the number of years of industry experience, the number of years of management experience, and the age of the owner are exceedingly likely to be correlated.

Returning to Table 3, the results of 10 out of the 15 test of differences between the successful and failed resources, supports the Lussier (1995) model. The following variables were significantly different. Successful firms (1) started with greater capital ($p = .000$), had better (2) record keeping and financial control ($p = .000$), (4) more years of management experience ($p = .000$), (5) more specific plans ($p = .000$), (6) made greater use of outside professional advisors ($p = .000$), (8) had an easier time staffing ($p = .009$), (10) better economic timing ($p = .000$), but (11) the owner was younger ($p = .000$). Thus, these variables may be more important than the others in distinguishing success from failed businesses in Israel.

Multicollinearity

Correlation analysis was run to assess the degree of multicollinearity among the 15 variables. The correlation matrix (Table 5) shows that most of the correlations are relatively low.

Table 5. Correlation Between Variables.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Capital														
2. Record Keep. & Fin. Con.	-.393**													
3. Industry Experience	-0.027	0.044												
4. Management Experience	0.075	-.154*	.169**											
5. Planning	.336**	-.490**	-0.058	.186**										
6. Professional Advice	.320**	-.378**	-0.006	.128*	.268**									
7. Education	-.194**	.278**	.121*	-0.081	-.150*	-.228**								
8. Staffing	-.132*	.270**	0.020	-0.041	-.149*	-0.085	-0.044							
9. Product/Service Timing	-0.029	0.058	0.016	-0.002	-0.081	-0.008	-.153*	.174**						
10. Economic Timing	-0.112	.261**	.116*	-.131*	-.223**	-.252**	0.050	0.024	.123*					
11. Age of Owner	0.049	-0.099	.317**	.482**	.228**	0.106	-0.068	0.062	0.114	-0.104				
12. Partners	-0.104	0.069	0.094	0.070	-0.087	-.192**	0.049	-0.021	-.133*	0.022	0.031			
13. Parents Owned a Bus.	-0.055	0.071	-0.046	0.015	-0.052	0.053	-0.098	0.023	0.000	0.076	0.044	-0.032		
14. Minority	-0.057	.146*	0.016	0.077	-.159*	-.134*	0.043	-0.066	-0.088	-0.012	-0.070	.175**	0.096	
15. Marketing	-.136*	.241**	.224**	.231**	-0.100	-.276**	.237**	0.066	-0.111	.213**	0.110	.214**	-0.060	0.104

** Correlation is significant at the 0.01 level (1-tailed).

* Correlation is significant at the 0.05 level (1-tailed).

While some of the correlations are significant, of the 105 correlations only 2 are greater than .50 and 25 are greater than .20. The correlations also have lower covariance than the Lussier (1995) study. Thus, the covariance is low and multicollinearity should not be problematic in the model (Lussier 2011).

Use of the Model, Limitations and Further Research

The model does not provide numerical guidelines for variables distinguishing success from failure. Judgment is needed when applying the model. The user must look at the list of variables in the model and subjectively assess the strengths of the business for each variable. A system of assigning a rating of strong, moderate, or weak to each variable can be used. Then an overall rating of strong, moderate, or weak can be assigned to the probability of success. When the business is strong on some variables and weak on others, the judgmental assignment of a probability of success is more subjective. With mixed strengths and weaknesses among the variables, the other decision criteria previously used by entrepreneurs, managers, investors, lenders, and suppliers become increasingly important when they assign a probability of success or failure to a business.

Although this study has used rigorous methodology and an extensive model with 15 variables to explore success versus failure, we acknowledge that it has certain limitations. First, this research was based on data that has been collected at a single point in time; rather than a longitudinal study. This could mean that if the same research would be conducted at different times; such as during recession or prosperous years, different results might come up. For example, the variable of economic timing of starting a business may be more critical during recession. A second limitation arises out of the fact that the model includes subjective measures. The fact is that about half of the 15 variables are based on self-reporting data. Thus, the model should be used as a technique to improve decision making, but not as a sole predictor for success versus failure of a business.

Additional limitations of this study arise out of its global distribution. First, with the current study in Israel, the Lussier (1995) prediction model has been tested in only four countries globally. With somewhat different results in the four locations, there is a need to further validate the model in other countries to compare results. In doing so, a global success versus failure

prediction model and theory may develop. Second, there is a cross-cultural study limitation because of the many differences between the countries where the model has been tested. Those differences include legal systems, economies, attitudes towards business, and other factors.

Future research should seek to improve on the limitations of our study. Researchers may make data collection less subjective by measuring more objectively some of the existing subjective variables, and use other methods of obtaining data. Also future research can take a longitudinal methodology rather than making data collection at one point in time. Additionally, future researchers may test the model in other countries, as well as develop cultural control variables and explore how regulatory environments, economics and culture affect business success and failure.

Implications and Complications

Public policy makers in Israel do realize the importance of the small business sector because of its major contribution to the economy as well as its significant share to the local employment market. It is therefore that large resources are allocated each year for support programs to SMEs. However, a question remains about the effective use of those resources, following reports that the failure percentage of small businesses in Israel is amongst the highest within the OECD (OECD 2012). The Small Business Authority of Israel that is tasked with providing guidance and support to small businesses, similar to the SBA in the U.S.A.; could increase effectiveness by considering the critical variables as found in this research. Therefore, such support programs should consider offering more low interest loans so that entrepreneurs don't continue to start undercapitalized, as well as provide an understanding of the capital needs to start a business and how to keep records and financial controls. Additionally, more professional advice can be provided regarding how to develop a business plan, management and marketing training, and how to keep records and financial controls. Those recommendations are applicable also to the high-tech start-up sector, which has proven highly important for the economy of Israel. With 772 exists of Israeli start-ups during the last decade (Calcalist 2013), contributing \$ 41.6 Billion to the country's economy; it is highly important to direct support programs effectively, strengthening the major success variables.

The fact that the Lussier (1995) model variables do in fact predict success and failure in four very different parts of the world, North America U.S.A., South America Chile, Central Eastern Europe Croatia, and in the Middle East Israel, is of importance because success versus failure prediction research benefits both the would be and current entrepreneurs; those who assist, train and advise them; those who provide capital for their ventures; their suppliers; and public policy makers. If they use the model to assess a firm's potential for success, society can benefit in direct and indirect ways via the reallocation of limited resources (entrepreneurial capital, investments and loans, government aid, and so forth) toward higher potential businesses.

A promising finding of this study is that although there is great discrepancy in the literature, see Table 2, and great differences between countries, the Lussier (1995) model is significant in four different countries from varying parts of the world. Maybe businesses success vs. failure variables in different countries are more similar than people think, or maybe it is the effect of globalization. The exploratory global success vs. failure prediction model may be a significant predictor in other countries as well. Although there is much discrepancy in the literature, and no unifying theory, this study helps to move us in that direction. With the trend toward increasing

globalization, international global business success versus failure prediction models become more valuable.

References

- Benzing, C., H. M. Chu, and O. Kara (2009). "Entrepreneurs in Turkey: A Factor Analysis of Motivations, Success Factors, and Problems," *Journal of Small Business Management* 47(1), 58-91.
- Bono, J.E., and G. McNamar (2011). "From the Editors," *Academy of Management Journal* 54(4), 657-660.
- Calcalist (2013). "Ten years, 772 Exits, and \$ 41.6 Billion," (in Hebrew). Calcalist newspaper article March, 23, 2013. <<http://www.calcalist.co.il/internet/articles/0,7340,L-3598587,00.html>>. Accessed on May 15, 2013.
- Carter, R., and H. Van Auken (2006). "Small Firm Bankruptcy," *Journal of Small Business Management* 44(4), 493-512.
- Cooper, A., W. Dunkelberg, C. Woo, and W. Dennis (1990), *New Business in America: The Firms & Their Owners*. Washington D.C.: The NFIB Foundation.
- Cooper, A., J. Gascon, and C. Woo (1991). "A Resource-Based Prediction of New Venture Survival and Growth," *Academy of Management Proceedings*, August, 113-119.
- Cressy, R. (2006). "Why do most firms die young?," *Small Business Economics*, 26(2), 103-116.
- Davidsson, P., and M. Kolsftén (2003). "The Business Platform: Developing and Instrument to Gauge and to Assist the Development of Young Firms," *Journal of Small Business Management* 41(1), 1-26.
- Dennis, W. J., and L. W. Fernald (2001). "The Chances of Financial Success (and Loss) From Small Business Ownership," *Entrepreneurship Theory and Practice* 26(1), 75-83.
- EU (2012). "EU SMEs in 2012: at the crossroads." Annual report on small and medium-sized enterprises in the EU, 2011/12.
- GEM (2012). "Global Entrepreneurship Monitor – 2012 Global Report". <<http://www.gemconsortium.org/docs/download/2645>>. Accessed on May 15, 2013.
- International Institute for Management Development - IMD (2012). "World Competitiveness Rankings 2012." <<http://www.imd.org/research/publications/wcy/upload/scoreboard.pdf>>. Accessed on May 15, 2013.
- International Monetary Fund - IMF (2013). "World Economic Outlook Database." <<http://www.imf.org/external/pubs/ft/weo/2013/01/weodata/index.aspx>>. Accessed on May 15, 2013.
- Israel Central Bureau of Statistics - CBS (2011). "Israel in Figures 2011." <http://cbs.gov.il/www/publications/isr_in_n11e.pdf>. Accessed on May 15, 2013.
- Israel Government (2007). "Israel Government Decision 2190," dated August 12, 2007: Supporting SMEs." <<http://147.237.77.193/Secretary/GovDecisions/2007/Pages/des2190.aspx>>. (in Hebrew Language). Accessed on May 15, 2013.
- Israel Ministry of Industry, Trade and Labor - MITL (2010). "ISRAEL: Global Center for Breakthrough Innovation." Ministry of Industry, Trade and Labor, Investment Promotion Center. <<http://www.moital.gov.il/NR/rdonlyres/D20FF2AA-23AA-4D5F-8D44-8CD1DD61127B/0/Innovationbrochure2010.pdf>>. Accessed on May 15, 2013.
- Israel Ministry Of Finance - MOF (2010). "Israel Joins the OECD." Press Release 0202-328, dated May 10, 2010; Israel Ministry of Finance (MOF), International Affairs Department. <<http://www.financeisrael.mof.gov.il/FinanceIsrael/Docs/En/pressReleases/20100510.pdf>>.

Accessed on May 15, 2013.

Israel Ministry Of Finance - MOF (2012). "The Israeli Economy: Fundamentals, Characteristics and Historic Overview." Israel Ministry of Finance (MOF), International Affairs Department, Fall 2012.

<http://www.financeisrael.mof.gov.il/FinanceIsrael/Docs/En/The_Israeli_Economy_2012.pdf>. Accessed on May 15, 2013.

Johanson, J. and F. Wiedersheim-Paul (1975). "The internationalization of the firm – four Swedish cases," *Journal of Management Studies* 12(3), 305-22.

Johanson, J. and J. E. Vahlne (1990). "The Mechanism of Internationalization," *International Marketing Review* 7(4), 11-24.

Lichtenstein, B. M. M. and C. G. Brush (2001). "How Do "Resource Bundles Develop and Change in New Ventures? A Dynamic Model and Longitudinal Exploration," *Entrepreneurship Theory and Practice* 25(3), 37-58.

Lussier, R. N. (1995). "A Nonfinancial Business Success Versus Failure Prediction Model for Young Firms," *Journal of Small Business Management* 33(1), 8-20.

____ (1996a). "A Business Success Versus Failure Prediction Model for Service Industries," *Journal of Business and Entrepreneurship* 8(2), 23-37.

____ (1996b). "A Startup Business Success Versus Failure Prediction Model for the Retail Industry," *Mid-Atlantic Journal of Business* 32(2), 79-92.

____ (2011). *Research Methods and Statistics for Business* (Long Grove, Ill. Waveland Press).

Lussier, R. N., and J. Corman (1996). "A Business Success Versus Failure Prediction Model for Entrepreneurs with 0-10 Employees," *Journal of Small Business Strategy* 7(1), 21-35.

Lussier, R. N., and C. E. Halabi (2010). "A three-country comparison of the business success versus failure prediction model." *Journal of Small Business Management*, 48(3), 360-377.

Lussier, R. N., and S. Pfeifer (2000). "A Comparison of Business Success versus Failure Variables between U.S. and Central Eastern Europe Croatian Entrepreneurs," *Entrepreneurship Theory and Practice* 24(4), 59-67.

____ (2001). "A Crossnational Prediction Model for Business Success," *Journal of Small Business Management* 39(3), 228-239.

Manolova, T. S., C. G. Brush, L. F. Edelman, and P. G. Greene (2002). "Internationalization of small firms: International factors revisited," *International Small Business Journal* 20(1), 9-13.

Nooteboom, B. (1988). "The facts about small business and the real values of its 'Life World'," *American Journal of Economics and Sociology* 47(3), 299-314.

Morrison, A., J. Breen, and S. Ali (2003). "Small Business Growth: Intention, Ability, and Opportunity," *Journal of Small Business Management* 41(4), 417-425.

OECD (2004). "Promoting entrepreneurship and innovative SMEs in a global economy," The 2nd OECD Conference on Small and Medium-Sized Enterprises (SMEs), Istanbul, Turkey, 3-5 June 2004.

OECD (2012), *Entrepreneurship at a Glance 2012*, OECD Publishing.

<http://dx.doi.org/10.1787/entrepreneur_aag-2012-en>. Accessed on May 15, 2013.

Pompe, P. M., and S. Bilderbeek (2005). "The Prediction of Bankruptcy of Small-and-Medium Sized Industrial Firms," *Journal of Business Venturing* 20(6), 847-869.

Reynolds, P. (1987), "New Firms: Societal Contribution Versus Potential," *Journal of Business Venturing* 3, 231-246.

Reynolds, P., and B. Miller (1989), "New Firm Survival: Analysis of a Panel's Fourth Year," in

- Frontiers of Entrepreneurship Research*, ed. R.H. Brockhaurs, N.C. Churchill, J.A. Katz, B.A. Kirchoff, K.H. Vesper, and W.E. Wetzel, Wellesley, Mass: Babson College.
- Rogoff, E. G., M. S. Lee, and D. C. Sub (2004). "Who Done it? Attributions by Entrepreneurs and Experts of the Factors that Cause and Impede Small Business Success," *Journal of Small Business Management* 42(4), 364-376.
- Santarelli, E., and M. Vivarelli (2007). "Entrepreneurship and the process of firms' entry, survival and growth," *Industrial and Corporate Change* 16(3), 455-488.
- Small Business Authority - SBA (2012). "Frequently Asked Questions about Small Business". SBA Office of Advocacy, September 2012. < <http://www.sba.gov/sites/default/files/files/Finance%20FAQ%208-25-11%20FINAL%20for%20web.pdf>>. Accessed on May 15, 2013.
- Small Business Authority of Israel - SBAI (2011). "Report on Government Strategy to Support SMEs." <<http://sba.tamat.gov.il/About/Pages/strategic.aspx>> (In Hebrew Language). Accessed on May 15, 2013.
- Small Business Authority of Israel - SBAI (2013). "About Us." < <http://sba.tamat.gov.il/About/Pages/default.aspx>>. (In Hebrew Language). Accessed on May 15, 2013.
- Scherr, F.C. (1989), "Causality, Regression, Discriminant Analysis, and Research on Failure," *Akron Business and Economic Review* (Spring), 8-20.
- Schwartz, D. and A. Malach-Pines (2007). "High Technology Entrepreneurs versus Small Business Owners in Israel," *The Journal of Entrepreneurship*, 16(1), 1-17.
- The World Bank (2011). "Research and development expenditure (% of GDP)". <<http://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS/countries/1W-IL?display=default>>. Accessed on May 15, 2013.
- United Nations Development Programme - UNDP (2013). "Human Development Report 2013, Israel." <<http://hdrstats.undp.org/images/explanations/ISR.pdf>>. Accessed on May 15, 2013.
- Van Auken, H., J. Kaufmann, and P. Herrmann (2009). "An Empirical Analysis of the Relationship Between Capital Acquisition and Bankruptcy Laws," *Journal of Small Business Management* 47(1), 23-37.
- Van Gelder, J. L., R. E. de Vries, M. Frese, and J. P. Goutbeek (2007). "Differences in Psychological Strategies of Failed and Operational Business Owners in the Fiji Islands," *Journal of Small Business Management* 45(3), 388-400.
- Wainer, D (2013). "The Upside to Traffic Snarls in Tel Aviv," *BusinessWeek* (June 20), 40.
- Westhead, P., M. Wright, and C. Ucbasaran (2001). "The Internationalization of New and Small Firms: A Resource-Based View," *Journal of Business Venturing* 16(4), 333-335.
- Wiklund, J., Patzelt, H., and , D. A. Shepherd (2009). "Building an integrative model of small business growth," *Small Business Economics* 32(4), 351-374.
- World Economic Forum - WEF (2013). "The Global Competitiveness Report 2011–2012." <http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf>. Accessed on May 15, 2013.

The Influence of the Entrepreneur's Education Level on Strategic Decision-Making

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Abstract

The Entrepreneurship literature includes many studies focusing upon antecedents of entrepreneurial behavior and performance, but a specific focus upon education as an antecedent has been minimal. This study of 184 small businesses specifically tests the relationship between two variables: 1) the owner/manager's level of formal education and 2) his or her choice of entrepreneurial strategy for the business. To measure strategy, the Sonfield and Lussier (1997) Entrepreneurial Strategy Matrix, a situational model which suggests appropriate entrepreneurial strategies for both new and ongoing ventures, was utilized. As discussed below, certain limited relationships between these two variables were found. The implications of these findings and the opportunities for future research are presented. Because the entrepreneurship literature has long questioned whether entrepreneurs benefit from formal education, this study and its conclusions advance the literature of entrepreneurship.

Introduction and Literature Review

Since the 1970s, as the study of entrepreneurship has developed, many researchers have focused upon the antecedents of entrepreneurial behavior and performance. What external variables are related to, and perhaps impact, entrepreneurs and their business endeavors? One category of these variables or antecedents has been the background and experiences of the entrepreneur (Brush & Hisrich, 1991; Griesse et. al., 2012; Hult et. al., 2004; Klein & Maher, 1966; Menon et. al., 1999).

More specifically, some of this earlier research focused upon education as an antecedent variable. For example, Vesper (1990) found the education level of the new venture entrepreneur strongly related to the venture's performance. Cooper et. al. (1988), studying business survival factors, found that survivors were more often college graduates than were non-survivors. On the other hand, Lorrain and Dussault (1988) found a negative relationship between the entrepreneur's education level and the performance of new technology firms. In a study of "deliberate practice" (individualized self-regulated and effortful entrepreneurial activities aimed at improving performance), Unger et. al. (2009) identified education level as an antecedent of such behavior. And Boeker (1987), focusing specifically upon education and strategy, found a significant relationship between the level of formal education and the degree to which the entrepreneur followed a "first mover" marketing strategy.

Yet these prior studies are limited and often dated. Only a few of these prior investigations of antecedents to entrepreneurial activity focused on formal education as an antecedent, and in more recent years, research focuses on antecedents have been targeted largely in other directions. Thus the existing body of literature is insufficient to allow for a general consensus, let alone for the development of entrepreneurship theory. Thus there is a need for and a value in the current study.

Research Objectives

The Entrepreneurial Strategy Matrix (Sonfield & Lussier, 1997; Sonfield et. al., 2001) was utilized as the basis for this current study. This matrix is a situational model which suggests appropriate entrepreneurial strategies for both new and ongoing ventures, in response to the identification of different levels of venture innovation and venture risk. Such identification leads to the placement of the venture into one of four cells of a matrix, each cell denoting a strategic situation, and appropriate strategies are then presented for that cell. See Figures 1 and 2.

Figure 1. The Entrepreneurial Strategy Matrix.

Innovation	<i>High</i>	I-r High Innovation Low Risk	I-R High Innovation High Risk	
	<i>Low</i>	i-r Low Innovation Low Risk	i-R Low innovation High Risk	
	<i>Low</i>	Risk		<i>High</i>

The acceptance of this model is confirmed by its inclusion in a wide variety of textbooks, trade books, and entrepreneurship web sites. (A Google search of “entrepreneurial strategy matrix” will provide over 5000 separate results.)

As discussed below, a sample of 184 small businesses was generated and investigated, with the objective of determining whether significant relationships existed between the formal education level of the business owner/manager and the cell of the Entrepreneurial Strategy Matrix which identified his or her entrepreneurial strategy.

Figure 2. The Entrepreneurial Strategy Matrix: Appropriate Strategies.

I-r <ul style="list-style-type: none"> ▪ Move quickly ▪ Protect innovation ▪ Lock in investment and operating costs via control systems, contracts, etc. 	I-R <ul style="list-style-type: none"> ▪ Reduce risk by lowering investment and operating costs ▪ Maintain innovation ▪ Outsource high investment operations ▪ Joint venture options
i-r <ul style="list-style-type: none"> ▪ Defend present position ▪ Accept limited payback ▪ Accept limited growth potential 	i-R <ul style="list-style-type: none"> ▪ Increase innovation; develop a competitive advantage ▪ Reduce risk ▪ Use business plan and objective analysis ▪ Minimize investment ▪ Reduce financing costs ▪ Franchise option ▪ Abandon venture?

Hypothesis

There is a relationship between an entrepreneur's level of education and the business strategies chosen by that entrepreneur.

Methods

Design and Sample

As explained above, this study focused on the Entrepreneurial Strategy Matrix (ESM) – see Figure 1 - developed by Sonfield and Lussier (1997).

A national random sample of 2,500 small business owners, representing a full range of business types and industry groups, was prepared by a mailing list company. The list was stratified to ensure adequate representation in all nine Dunn & Bradstreet industry groups, and was then cut to 900 for survey mailing. Of the 900 questionnaires mailed, 98 were returned as non-deliverable, and 78 were returned completed. Follow-up telephone interviews with non-respondents produced an additional 116 completed questionnaires, but 10 were discarded for too many missing answers. Thus, the sample size was 184, for a response rate of 23 percent.

Addressing Non-response Bias

To address non-response bias, a test of differences was run between the original mail responses and the follow-up telephone responses from mail non-respondents. No significant differences ($p < .05$) were found between responses of the mail and telephone surveys on any of the questions were found. Thus, non-response bias should not be problematic.

Measures and Statistical Analysis

To test the hypothesis, the measurement dependent variable was the number of years of education (on a scale of 1 = grade school, 2 = high school, 3 = some college, 4 = two years of college, 5 = four year college degree, 6 = graduate school, 7 = doctorate). The independent variable was the cell in the four-cell ESM which best defined the overall strategy of the entrepreneur and his or her business, as shown in Figure 2 and Table 1.

Table 1. Level of Education Used by Strategy.

One-Way ANOVA	
F	P-value
3.194	.025

Tukey HSD Post Hoc Tests

Strategy <i>One strategy group selected as the major strategy</i>	Mean/sd Level of Education Frequency/% Strategy Selected	<i>Strategy Selected Comparison</i> P-Value
<i>High Innovation / Low Risk (I-r)</i> Move Quickly Protect Innovation Lock in Investment	5.54 / 1.50 24 / 13%	<i>I-r -</i> I-R = .79 i-R = .09 i-r = .08
<i>High Innovation / High Risk (I-R)</i> Lower Investment Costs Maintain Innovation Joint Venture	5.14 / 1.83 63 / 35%	<i>I-R -</i> I-r = .79 i-R = .23 i-r = .20
<i>Low Innovation / High Risk (i-R)</i> Increase Innovation Lower Costs Franchise Option Abandon Venture	4.35 / 1.92 26 / 15%	<i>i-R -</i> I-r = .09 I-R = .23 i-r = .98
<i>Low Innovation / Low Risk (i-r)</i> Defend Present Position Accept Limited Payback Accept Limited Growth	4.52 / 1.81 66 / 37%	<i>i-r</i> I-r = .08 I-R = .20 i-R = .98

Bold significant at the .10 level

Respondents were asked to identify their business strategies from a listing of various possible strategies, and this self-identification then allowed the researchers to place each respondent into one of the four ESM cells. The one-way ANOVA was used to test the hypothesis, followed by the Tukey HSD Post Hoc Tests. For this statistical testing, the terms “independent variable” and

“dependent variable” do not imply causality or the direction of the relationship, but are used as the established terminology for the testing methodology, comparing the mean level of education by the strategy group selected. This research treats education level as a potential antecedent to entrepreneurial strategic decision-making.

Results

Descriptive Statistics

See Table 2 for descriptive statistics of the sample. As noted, the sample size was large (N = 184) and well balanced with approximately a 70/30 split between retail/services and manufacturing, a 60/40 split of men to women, and 34 states were represented in the sample.

Table 2. Descriptive Statistics.

Variable (N=184)	Mean / sd	Frequency / Percentage
Years in Business	14.72 / 14.29	
Years in Venture	9.66 / 8.27	
No. of Employees	19.71 / 51.51	
Satisfaction with business Very Satisfied 7-1 Very Dissatisfied	4.96 / 1.57	
Education 1 = grade 7 = doctor	4.86 / 1.24	
Industry Retail / Service Manufacturing		130 / 71% 54 / 29%
Product Offering Product Service Both		27 / 15% 75 / 41% 81 / 44%
Gender Men Women		109 / 59% 75 / 41%
State of Business Operations Respondents represent 34 states (65% of America), ranging from Alabama to Wyoming.		

The means for the sample were approximately 15 years in business, 10 years in the present business venture, and 20 employees.

Based on the descriptive statistic means, see Table 2, the strategy used most frequently by the small business owner/managers with the highest level of education was the High Innovation/Low Risk (HI/LR) strategy (m = 5.54, 5 = college degree), followed by the High Innovation/High Risk (HI/HR) strategy (m = 5.15), the Low Innovation/Low Risk strategy (m = 4.52, and the Low Innovation/High Risk (LI/HR) strategy (m = 4.35).

Table 2. Level of Education Used by Strategy.

One-Way ANOVA

F	P-value
3.194	.025

Tukey HSD Post Hoc Tests

Strategy <i>One strategy group selected as the major strategy</i>	Mean/sd Level of Education Frequency/% Strategy Selected	<i>Strategy Selected Comparison</i> P-Value
<i>High Innovation / Low Risk (I-r)</i> Move Quickly Protect Innovation Lock in Investment	<i>5.54 / 1.50</i> <i>24 / 13%</i>	<i>I-r - I-R = .79</i> <i>i-R = .09</i> <i>i-r = .08</i>
<i>High Innovation / High Risk (I-R)</i> Lower Investment Costs Maintain Innovation Joint Venture	<i>5.14 / 1.83</i> <i>63 / 35%</i>	<i>I-R - I-r = .79</i> <i>i-R = .23</i> <i>i-r = .20</i>
<i>Low Innovation / High Risk (i-R)</i> Increase Innovation Lower Costs Franchise Option Abandon Venture	<i>4.35 / 1.92</i> <i>26 / 15%</i>	<i>i-R - I-r = .09</i> <i>I-R = .23</i> <i>i-r = .98</i>
<i>Low Innovation / Low Risk (i-r)</i> Defend Present Position Accept Limited Payback Accept Limited Growth	<i>4.52 / 1.81</i> <i>66 / 37%</i>	<i>i-r I-r = .08</i> <i>I-R = .20</i> <i>i-R = .98</i>

Bold significant at the .10 level

Hypothesis Testing

See Table 2 for the results of hypothesis test. As a model of the relationship between education and the strategy used by the small business owner/managers, the model ANOVA was significant ($F = 3.194$, $p = .025$) at the .05 level—there were significant differences among the four strategy groups by education. However, when comparing the four strategies selected using the Tukey

HSD Post Hoc Tests, none of the four individual t-tests of differences were significant at the .05 level. Nevertheless, two of the strategies selected were significantly different at the .10 level of significance. The High Innovation/Low Risk strategy (HI/LR) was significantly different than the Low Innovation/High Risk strategy ($p = .09$) and the Low Innovative/Low Risk strategy ($p = .08$).

The reason for the discrepancy in the level of significance going from .05 down to .10 was based primarily on the level of the statistical testing. The one-way ANOVA compares differences among all four strategies by level of education, whereas the post hoc test essentially runs the simple comparisons between each group of two (or one-on-one) with the t-test. This commonly happens with regression models. Thus the entire model can be significant, while none of the individual independent variables is significant (Lussier, 2010).

Discussion and Implications

This empirical analysis indicates some possible relationships between the formal education level of the entrepreneur and the strategies chosen by that entrepreneur. Furthermore, since the Entrepreneurial Strategy Matrix is based upon the levels of innovation and of risk in the business venture, these relationships to education level are also relevant to the type of venture which the entrepreneur has chosen.

More specifically, there appears to be a positive relationship between an entrepreneur's level of education and a higher level of innovation in the entrepreneur's venture, with a stronger relationship with higher innovation but lower risk, rather than higher innovation and higher risk. Thus this might indicate that a greater level of education tends to move an entrepreneur toward ventures involving greater innovation, but preferably with lower risk. Since the "High Innovation/Low Risk" cell is the most desirable cell in the Entrepreneurial Strategy Matrix (see a full discussion of this in Sonfield & Lussier, 1997), this implies that a greater level of education leads to choosing "better" entrepreneurial innovation/risk situations and their appropriate entrepreneurial strategies. Of course, this study's statistical analysis cannot test causality but only relationship, and thus the above implication is only that.

Yet as the levels of statistical significance are not strong, when looking at the individual strategy cells (Tukey HSD Post Hoc Tests), there is clearly a need for further investigation of this issue. Does a higher level of education indeed lead to, or relate to, an entrepreneur choosing better innovation/risk situations, and in turn the appropriate strategies for those situations? Future research is needed before any clear conclusions can be reached, and any meaningful models can be developed. The Entrepreneurial Strategy Matrix is but one of many ways to obtain the strategy measurements necessary for such future research.

In the meantime, this current research study indicates that there is some level of relationship between an entrepreneur's level of formal education and his or her choices of business venture and strategy, and this finding is important and of value in our overall objective of theory development in the field of entrepreneurship.

References

- Boeker, W. (1987). Strategic origins and environmental imprinting at founding. *Academy of Management Proceedings – Best Papers*, pp. 150-153.
- Brush, C. & Hisrich, R. (1991). Antecedent influences on women-owned businesses. *Journal of Managerial Psychology*, 6(2), 9-16.
- Cooper, A., Dunkelburg, W. & Woo, C. (1988). Survival and failure: A longitudinal study. *Proceedings, Conference on Entrepreneurship*, 225-237.
- Griese, I., Pick, D. & Kleinaltenkamp, M. (2012). Antecedents of knowledge generation competence and its impact on innovativeness. *Journal of Business and Industrial Marketing*, 27(6), 468-485.
- Hult, G., Hurley, R., & Knight, G. (2004). Innovativeness, Its antecedents and impact on business performance. *Industrial Marketing Management*, 33(5), 429-438.
- Klein, S. & Maher, J. (1966). Education level and satisfaction with pay. *Personnel Psychology*, 19(2), 195-208.
- Lorrain, J. & Dussault, L. (1988). Relation between psychological characteristics, administrative behaviors, and success of founders at the start-up stage. *Proceedings, Conference on Entrepreneurship*, pp. 150-164.
- Lussier, R. (2011). *Research Methods and Statistics for Business* (Long Grove, Ill. Waveland Press).
- Menon, A., Bharadwaj, S., Adidam, P. & Edison, S. (1999). Antecedents and consequences of marketing strategy making: A model and a test. *Journal of Marketing*, 63(2), pp. 18-40.
- Sonfield, M. & Lussier, R. (1997). The entrepreneurial strategy matrix: Strategies for new and ongoing ventures. *Business Horizons*, 40(3), 73-77.
- Sonfield, M., Lussier, R., Corman, J., & McKinney, M. (2001). Gender comparisons in strategic decision-making: An empirical analysis of the entrepreneurial strategy matrix. *Journal of Small Business Management*, 39(2), 65-173.
- Unger, J., Keith, N., Hilling, C., Gielnik, M. & Frese, M. (2009). Deliberate practice among South African small business owners: Relationships with education, cognitive ability, knowledge, and success. *Journal of Occupational & Organizational Psychology*, 82(1), 21-44.
- Vesper, C. (1990). *New Venture Strategies*. Englewood Cliffs: Prentice Hall, pp. 27-55.

Central City Vibrancy and New Business Venturing

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Abstract

A “virtuous circle” will exist in a region when innovation and entrepreneurship yield additional innovation and entrepreneurship, driving economic growth. Researchers argue that the likelihood of a virtuous circle may depend on the quality of life or vibrancy of a city. Using U.S. data from metropolitan counties, we examine whether typical vibrancy measures are related to new business venturing. We use principal components analysis to organize the vibrancy measures and estimate their impact in a boiler-plate model of business veering. Contrary to expectation, we find that, generally, vibrancy is not related to business venturing. Our results do not disprove the “vibrancy hypothesis” or the “creative class” hypothesis as the triggers for a virtuous circle of economic development. Rather, our results indicate that new business venturing may not a necessary component of those stories, or of the virtuous cycle story.

Introduction

Especially in mature economies wherein the external margins for growth have been largely exhausted, the hope for continued economic growth lies in the intensive margin, where innovation and entrepreneurship lead to new products, the discovery of new resources, and to new patterns of production and exchange. Common to the literature developing this idea is the notion that networks or clusters of economic activity—often defined spatially—exhibit external network economies. At the simplest example, the more innovative and entrepreneurial a city or region is, the more attractive it becomes for other entrepreneurs and innovators, and the more conducive it becomes for “follow-up” innovation and entrepreneurship. As income accrues to the innovators and entrepreneurs, the entrepreneurial-innovation spiral causes a rising income spiral. Authors have referred to this as “the virtuous circle” (Easterly 2002). The corollary is that areas which are neither innovative nor entrepreneurial can expect more of the same. In economies where natural resources have been extracted or scale economies achieved, the paucity of innovation and entrepreneurship would lead to income stagnation or decline, “the vicious circle” (Easterly 2002). For the most part, the literature seems to suggest that “virtuous circles” occur spatially and institutionally at the local or regional level, rather than the national level (e.g., Acs and Armington 2004; Lucas 1988)

Understanding why spatially clustered virtuous circles occur, and whether we can use public policy to promote the emergence of new virtuous circles is of significant interest to researchers and policymakers, alike. Numerous researchers (e.g. Glaeser, Kolko & Saiz 2001; Florida 2002a) have pointed to the “quality” of local life as an important factor. The sort of questions that emerge from this literature, among others, would include: Does the quality of city (or regional) life encourage residents to be more innovative and entrepreneurial? Are people with a high capacity for innovation and entrepreneurship attracted to a particular area by the quality of city life?

One of the best known theorists in the area is Richard Florida (e.g., Florida 2002a). His theory of “the Creative Class” is that there is a type or class of people—the Creative Class—who have a

high potential for innovation and entrepreneurship. When in close enough proximity to a sufficient number of similar people, this group's behavior can trigger a virtuous circle. Florida also theorizes that the Creative Class members share similar preferences, and are mobile. They will relocate to cities or regions that offer their preferred quality of life. When a sufficient density of Creative Class member is reached, then a virtuous circle of entrepreneurially-led economic growth may occur. Florida theorizes that the Creative Class shares a preference for a particular quality of life, and that preferred quality of life can be externally quantified. This forms the background for Florida's Bohemian Index and Creativity Index (among others), in which areas with high index values will be relatively more attractive to the Creative Class. The "Bohemian index is a location quotient that measures the percentage of bohemians in a region compared to the national population of bohemians divided by the percent of population in a region compared to the national population." (Florida 2002b, p.59) Florida defines bohemians as workers in the following occupations: "authors; designers; musicians and composers; actors and directors; craft-artists, painters, sculptors, and artist printmakers; photographers; dancers; and artists, performers, and related workers." (Florida 2002b, p. 59) "The Creativity Index is a mix of four equally weighted factors: the creative class share of the workforce; high-tech industry, using the Milken Institute's widely accepted Tech Pole Index; innovation, measured as patents per capita; and diversity, measured by the Gay Index, a reasonable proxy for an area's openness to different kinds of people and ideas." (Florida 2002c) "[Regions] with higher scores on this measure are expected to be both more attractive to creative people and also to cultivate new ideas and accelerate their flow, which are crucial in forming a new firm" (Lee et al. 2004, 883).

In a parallel literature, researchers have studied what makes a city "vibrant" and what the effects of vibrancy might be (e.g. Holian & Kahn 2012). In this literature, a vibrant city would not only provide workspace for daytime workers and cater to daytime workers, but also continue to stay "alive" throughout the evening. A vibrant city would be a place that attracts businesses, consumers, and residents. This is similar—but not identical—to the literature that examines the impact on regional amenities on the quality of life, (e.g. Glaeser, et al. 2001, Kahn 1994). As we interpret the difference, for example, a city may have many amenities—such as attractive views, a mild climate, and decent schools—but still offer residents few opportunities for consumption, entertainment, and socializing; that is, low vibrancy. Alternatively, a city may lack some amenities—the climate is hot and humid, and the geography flat and monochromatic, for example—but offer residents many opportunities for consumption, entertainment, and socialization; i.e. high vibrancy. In the end, researchers anticipate that both "amenities" and a "vibrant city" will attract businesses, consumers, and residents. In such a situation, network economies of innovation and entrepreneurship are more likely to appear. Therefore, vibrant cities, and/or cities with many amenities, are more likely to experience a virtuous circle.

One element of the virtuous circle story is people launching new business ventures. As the creative class relocates in numbers to vibrant cities loaded with amenities, a way for them to take advantage of the agglomerative economies will be through creating new businesses. (Lee, Florida & Acs 2004) Therefore, the data should show a relationship between a city's vibrancy and the level or rate of change of businesses per capita. In this paper, we estimate the impact of vibrancy on business venturing within a standard model of new business venturing. Our level of analysis is the U.S. County of the "central city" of U.S. Census-designated metropolitan statistical areas (MSAs).

Many of the measures of urban vibrancy are strongly correlated (Holian and Kahn 2012), and cannot be directly estimated within a single equation. Furthermore, theory is currently inadequate to explain either which of these measures are critical, or how they will influence business venturing. Rather than impose a priori and atheoretical restrictions on the data, we allow the data to organize itself through exploratory principal components analysis. The recovered components from this analysis become the measures of vibrancy we use in a model of new business venturing.

We designed our model of new business venturing to closely mimic Reynolds, Storey, and Westhead (1994) (RSW). RSW intended their model to be robust to time and location, and to use easily collected, secondary data that was similar across time and space. Because of these virtues, numerous researchers (e.g. Lee, Florida, and Acs 2004) have used the RSW model as the test bed for their hypotheses.

The next section discusses more thoroughly our model variables, specifically focusing on the process used to obtain the components. In the subsequent sections we discuss our results and then conclude. Contrary to our expectations, most of our components of vibrancy had no statistically significant impact on the level or rate of new businesses over our sample period. Moreover, “Component 1,” which indicates comparative youth, international origin, higher educational attainment, and growing jobs and population, was consistently *negatively* related to the number of new firms and the growth rate of new firms.

Data

Our data set contains those counties that include the principal city within a metropolitan statistical area (MSA). For example, Chicago is the principal city of the Chicago-Joliet-Naperville MSA. The city of Chicago is incorporated in Cook County, Illinois. Therefore, our data is drawn from Cook County. In a handful of instances, an MSA will contain two or more metropolitan divisions. A metropolitan division is a smaller grouping of counties or equivalent entities defined within a metropolitan statistical area containing a single core with a population of at least 2.5 million. For example, Dallas-Fort Worth-Arlington, TX, MSA contains the Dallas-Plano-Arlington Metropolitan Division and the Ft. Worth-Arlington Metropolitan Division. If one were to drive on Interstate 30 from Royse City, Texas, (east of Dallas) to the intersection of I-30 and I-20 (west of Ft. Worth), it would be obvious that Dallas and Ft. Worth comprise a continuous metropolitan area. However, it would also be obvious that the Dallas-Ft. Worth area are two distinct metropolitan areas which have grown together along the East-West axis. In these instances, we collected data from the principal city’s county within each *division*. Therefore, we collected data for both, Dallas County, Texas, (Dallas) and Tarrant County, Texas (Ft. Worth).

Research in this general area has focused on different levels of civic and economic activity: central business districts (e.g., Holian & Kahn, 2012), U.S. Census Bureau-designated Labor Market Areas (e.g., Acs & Armington 2004) and U.S. Census Bureau-designated metropolitan statistical areas (e.g. Glaeser & Resseger, 2010). Using U.S. data, the most appropriate level of data analysis regarding amenities, vibrancy, and external economies is an unsettled question. Our intuition, based on personal experience, is that the “amenities” and “vibrancy” of any particular MSA can vary greatly across the counties in the MSA. For example, we imagine that New York

County, New York, and Sussex County, New Jersey—both part of metropolitan New York—could be very different in their vibrancy. For this reasons, we chose not to use MSA-level data. Similarly, we thought that the central business district might be too limiting. Furthermore, the data is much more readily available for counties than for central business districts. For these reasons, we selected the county of incorporation of each MSA’s primary city.

As dependent variables, we use the level of establishments for 2010 and growth in establishments between 2004 and 2010. Glaeser, Rosenthal, and Strange (2010) posit that the self-employment rate does not capture the size element of a firm or the level of risk and innovation. Using newly established firms will generally be superior to measures of self-employment. The data for both the level of establishments and the growth in establishments (internally derived) are from the U.S. Census’ Community Business Patterns.

For the baseline model, we rely on the increasingly “standard” model of RSW. In their model, RSW focused on seven processes underlying new firm starts:

1. *Demand*, indicated by population growth and growth in regional gross domestic product
2. *Urbanization/agglomeration*, indicated by population density, among others
3. *Unemployment*, indicators included the absolute level of unemployment
4. *Personal, household wealth*, which included indicators based on home ownership and real estate values.
5. *Small firms/specialization*, for which the primary indicators were based on the percentage of all firms that would be considered “small”
6. *Local political ethos*, which, in Europe, the authors envisioned as a socialist-conservative dimension; and measured by support for socialist parties in recent elections. Given the difference in political culture between Europe and the United States, this measure was not included for the United States.
7. *Government spending/policies*, indicated by infrastructure expenditure and spending on direct “entrepreneurship support” programs

We replicated their model as follows:

1. *Demand*, indicated by population growth and median household income
2. *Urbanization/agglomeration*, indicated by population density and the population percent with at least a bachelor’s degree-level of education
3. *Unemployment*, indicated by the “headline” unemployment rate
4. *Personal, household wealth*, median value of owner-occupied housing
5. *Small firms/specialization*, indicated by small and medium enterprises (499 or fewer employees) as a percent of all firms
6. *Government spending/policies*, infrastructure (capital spending) as a percentage of all governments’ expenditure.

Unlike RSW, we did not attempt to calculate “political ethos,” as our sample is exclusively drawn from U.S. counties.

To select the individual indicators of cultural vibrancy we relied on Holian and Kahn (2012), although their study focuses on the central city of an MSA, rather than the county of the central

city. Holian and Kahn (2012) write, “As a general statement, we consider a downtown area vibrant if it is an area where people want to be. If a downtown has a large number of jobs, people will want to be there. However, there are many Central Business Districts (CBDs) in U.S. cities that are largely empty after 5 p.m. Therefore, in addition to jobs and other production-based vibrancy measures, we will also consider consumption-based vibrancy measures.” (p. 32) Glaeser, Kolko, and Saiz (2001) emphasize the need for cities to attract residents via consumption and quality of life characteristics rather than the productivity effects of the past. Glaeser et al. (2001) demonstrate that reductions in transportation costs and increased idea dispersion have altered the city dynamic, which allows many people to spread beyond concrete jungles and into the suburbs. Therefore, we include some vibrancy measures that relate to jobs to capture production-oriented vibrancy, some measures related to consumer services (for example, restaurants) to capture consumption-oriented vibrancy, and some measures related to crime to capture public service and environmental amenities. Table 1 lists the vibrancy measures we use in this analysis.

Table 1. Vibrancy measures.

Vibrancy Indicators	
College	Population percent attaining at least a bachelor's degree
Jobs	Count of jobs
Gr. Jobs	Growth in the number of jobs
Crime	Violent crime rate
Gr. Crime	Growth in the violent crime rate
Gr. Pop	Growth in population
Entertain	Percentage of entertainment establishments
Poverty	Percentage of people [all ages] in poverty
Foreign	Foreign born percentage of the population
Med. Age	Population median age

We calculated several of these vibrancy measures. We collected employment statistics from the U.S. Census Bureau. As a static measure we use the 2010 employment numbers of a county and divide it by the state total, capturing the percent of employment in each county relative to a state. We also calculate a more dynamic variable, the growth rate in the metro county's job share between 2001 and 2010. From the Bureau of Labor Statistics, we obtained a count of the businesses listed as musical groups and artists, museums, hotels, bars, and restaurants as identified by their respective NAICS codes. We divided the sum of these businesses by the total of all businesses in the county to obtain our measure, “Entertain.” The violent crime data comes from the FBI's uniform crime report (UCR) for 2006-2010. For observations where data is incomplete (for example, missing either 2006 or 2010), we calculate the growth rate from the two most distant years within our 5 year range.

Holian and Kahn (2012) note that many of their urban vibrancy measures are strongly correlated. To prevent multicollinearity, they estimate a separate OLS equation for each measure of vibrancy. We face a further complication in that many of the vibrancy measures are either strongly correlated, or directly included, in our model of new business venturing. Both to address

multicollinearity and to preserve degrees of freedom, we turn to exploratory principal components analysis (PCA) to process the vibrancy data. Table 2 shows the results of the principal components analysis.

Table 2 Principal components analysis.

Principal components/correlation				
Number	278			
Number	10			
Trace	10			
Rho	1			
Rotation: (unrotated=principal)				
Component	Eigenvalue	Difference	Proportion	Cumulative
Component	1.92	0.14	0.19	0.19
Component	1.78	0.31	0.18	0.37
Component	1.47	0.34	0.15	0.52
Component	1.13	0.15	0.11	0.63
Component	0.98	0.16	0.10	0.73
Component	0.81	0.12	0.08	0.81
Component	0.70	0.16	0.07	0.88
Component	0.53	0.15	0.05	0.93
Component	0.38	0.08	0.04	0.97
Component	0.30	.	0.03	1

Somewhat arbitrarily, we chose to retain only the four components with eigen values greater than one. Overall, these four components accounted for 63 percent of the total variation across all ten vibrancy indicators. Table 3 shows the resulting eigenvectors.

Table 3. Eigenvectors.

Principal components (eigenvectors)					
	Component	Component	Component		
Variable	1	2	3	Component 4	Unexplained
College	0.33	-0.46	0.15	-0.25	0.31
Jobs	0.16	-0.56	0.03	0.21	0.35
Gr. Jobs	0.42	0.30	0.27	-0.36	0.24
Crime	0.05	0.30	0.35	0.51	0.37
Gr.					
Crime	-0.02	0.06	0.04	0.47	0.75
Gr. Pop	0.52	0.17	0.36	0.05	0.24
Entertain	-0.20	0.35	0.19	-0.38	0.49
Poverty	0.15	0.37	-0.60	0.10	0.18
Foreign	0.38	0.05	-0.04	0.35	0.58
Med.					
Age	-0.46	-0.02	0.51	0.13	0.20

To obtain the loadings used to create new variables for our estimates, we retained the variables with eigenvector values greater than 0.3. Of the underlying vibrancy indicators, College, Gr. Pop, Entertain, Poverty, Foreign, and Med. Age each load on two components. Gr. Jobs and Crime load on three components. Jobs and Gr. Crime load on one component each. Every vibrancy indicator loaded onto at least one component. “Growth in crime” loaded onto only one component, Component 4. Table 4 indicates how the various vibrancy measures combine to form the different components.

Table 4. Vibrancy measures combined.

Component 1		Component 2		Component 3		Component 4	
College	Higher education	<i>College</i>	<i>Lower education</i>	Crime	High crime	Gr. Jobs	Slow job growth
Gr. Jobs	Growing jobs	<i>Jobs</i>	<i>Fewer jobs</i>	Gr. Pop	Growing pop	Crime	High crime
Gr. Pop	Growing pop	Gr. Jobs	Growing jobs	<i>Poverty</i>	<i>poverty</i>	Gr. Crime	Growing crime
Foreign	More foreigners	Crime	High crime	Med. Age	Older people	<i>Entertain</i>	<i>Low entertainment</i>
<i>Med. Age</i>	<i>Younger people</i>	Entertain	entertainment			Foreign	More foreigners
		Poverty	High poverty				

It is common in PCA to speculate on the underlying relationship that would cause different indicators to “clump together” as a component. Component 1 is positively loaded with education level, foreign population, growth in jobs, and growth in population. It is negatively loaded with median age. We refer to Component 1 as the “destination of the brain drain.” The young, educated, and—not infrequently—foreign born leave their hometowns/universities and relocate to the thriving city to begin their careers (Chen and Rosenthal, 2008). Component 2 is positively loaded with crime and poverty, but also with entertainment and growth in jobs; however, it is negatively loaded with the level of jobs. It is also negatively loaded with educational attainment. To us, this suggests a “Wild West Boomtown,” wherein a small, poor, and uneducated locale experiences a boom (natural resources, for example) that attracts employment and the demand for entertainment, but also attracts crime. Component 3 is positively loaded with the crime level, median age, and growth in the population; it is negatively loaded with poverty. To us, this suggests “gentrification/urban renewal in progress.” Older, wealthier households are relocating to the area, where they might be victimized by criminals attracted to concentrations of older, wealthier people. Component 4 is positively loaded with the crime level, the crime growth rate, and the foreign population. It is negatively loaded with job growth and entertainment. This suggests to us “immigrant arrival and assimilation,” wherein new arrivals first come to a saturated, depressed area, and are, for a while anyway, unable to move on.

This type of exercise is, of course, purely speculative and intentionally exploratory. However, it does serve our purpose of transforming the vibrancy indicators into variables that we can estimate in a standard model of business venturing. To reinforce the concept that the variables are re-packaged vibrancy variables, we choose to retain the neutral labels Component 1, Component 2, etc.

To test the appropriateness of estimating coefficients for more than one component in a model, we first examine the correlation coefficient matrix, as in Table 5.

Table 5. Correlation coefficient matrix.

	Component 1	Component 2	Component 3	Component 4
Component 1	1			
Component 2	0.14	1		
Component 3	-0.72	0.13	1	
Component 4	-0.09	0.81	0.59	1

Table 5 indicates that some of the components are strongly correlated. Components 1 and 3, Components 2 and 4, and Components 3 and 4 are strongly correlated. This is an indication that we should specify models inserting only one component at a time as a means of reducing multicollinearity and reducing any bias in our estimated variance. Consequently, this also reduces any potential inferences we can make regarding the relative significance among the components.

Robust t-statistics are in italics below the coefficients. “Stars” denote the customary significance levels.

As an additional test for multicollinearity we estimate the variance inflation factors (VIF) in Table 6, to better determine whether any model specification is acceptable for including multiple components.

Table 6. Variance inflation factors.

<u>Variable</u>	<u>VIF</u>	<u>Variable</u>	<u>VIF</u>
Component 4	31.27	College	2.5
Component 3	29.4	Unmply	1.79
Component 2	16.42	Ln[Pop	1.51
Component 1	11.36	Gr. Pop	1.43
Ln(Income)	8.81	Cap Exp	1.21
Ln(House]	3.84	SME Pct	1.02

Robust t-statistics are in italics below the coefficients. “Stars” denote the customary significance levels.

Table 6 shows the resulting VIF when we include all four of the component measures and the control variables in one model. The VIF values for the components are substantially above five. Combined with the high correlation coefficients, running multiple model specifications seems likely beneficial for reducing potential multicollinearity. These results persuade us to run multiple model estimates, implementing the components independently or in pairs.

Results

In Table 7 we estimate a “baseline RSW” model using ordinary least squares with the standard errors corrected for heteroscedasticity, but without any of the vibrancy components included.

Table 7. Baseline RSW

	Estabs. per capita	Gr. Estabs
Gr. Pop	-0.005 <i>-0.79</i>	-0.38 *** <i>-13.15</i>
College	0.03 ** <i>1.98</i>	-0.12 * <i>-1.71</i>
ln(House)	0.005 *** <i>2.93</i>	0.01 <i>1.02</i>
Unmploy	-0.07 *** <i>-4.88</i>	0.49 *** <i>3.34</i>
Cap Exp	0.004 *** <i>3.51</i>	-0.03 ** <i>-2.45</i>
SME Pct.	0.1 <i>1.49</i>	-0.24 <i>-0.48</i>
ln(Income)	-0.008 * <i>-1.66</i>	-0.03 <i>-1.48</i>
Ln(Pop	0.0006 <i>0.65</i>	0.00 <i>1.6</i>
Constant	-0.05 <i>-0.73</i>	0.50 <i>0.97</i>
F-statistic	17.39	50.91
R-squared	0.21	0.55

For this type of estimate, the model is acceptably well specified, according to the basic goodness-of-fit measures.

Robust t-statistics are in italics below the coefficients. “Stars” denote the customary significance levels.

However, the models for the number of establishments per capita, and growth in the number of establishments per capita are substantially different. In three instances—educational attainment, the unemployment rate, and government capital expenditures—the variables are statistically significant in both models, but they switch signs and the magnitudes are notably different. Housing wealth and median income are significant only in the level estimate, while population growth is significant only in the growth estimate. The SME percentage is significant in neither model. Table Seven implies that it is accumulated wealth and an educated population—but not income—which influences the number of establishments. Neither wealth nor income is related to growth in the number of establishments in our sample. Educational attainment is negatively related to establishment growth rates. Surprisingly, growing populations are associated with slower establishment growth. These results might suggest that educated populations move into areas lacking a great degree of accumulated wealth. Only later, after the wealth has been accumulated by an educated population, does the number of establishments rise. We can envision this as a “Big Box backlash” or “preference for boutique” effect among the wealthy.

Higher unemployment rates, not surprisingly, appear to stimulate new business starts, but not new business survival, as higher unemployment is also tied to fewer businesses (in the level). Governmental capital expenditure follows establishments instead of *causing* establishment launches.

Table 8 contains the estimates for the level of establishments per capita including the previously-estimated vibrancy components.

Table 8. Level of establishments per capita.

Dependent Variable: Establishments Per Capita (2010)					
	Model 1	Model 2	Model 3	Model 4	Model 5
Comp 1	-0.001 *** -5.71			-0.001 ** -2.31	-0.0009 *** -5.38
Comp 3		0.0004 *** 5.16		0.0002 * 1.77	
Comp 4			0.0001 ** 2.16		0.0001 1.42
Gr. Pop	-0.0004 -0.06	-0.0056 -0.97	-0.007 -1.14	-0.002 -0.35	-0.001 -0.19
College	0.04 *** 2.82	0.04 *** 2.74	0.03 ** 2.16	0.04 *** 2.83	0.04 *** 2.84
ln(House)	0.004 *** 2.85	0.005 *** 3.08	0.004 *** 2.83	0.005 *** 2.95	0.004 *** 2.85
Unmploy	-0.08 *** -4.95	-0.08 *** -4.95	-0.08 *** -4.9	-0.08 *** -5.01	-0.08 *** -5
Cap Exp	0.005 *** 4.08	0.005 *** 3.93	0.004 *** 3.43	0.005 *** 4.17	0.005 *** 4.11
SME Pct	0.09 1.53	0.11 * 1.78	0.12 1.6	0.09 1.62	0.09 1.58
ln(Income)	-0.010 ** -2.23	-0.01 *** -2.74	-0.008 -1.58	-0.013 ** -2.48	-0.01 ** -2.3
ln(Pop Den)	0.001 0.7	0.0008 0.79	0.0006 0.64	0.001 0.75	0.0007 0.7
Constant	-0.02 -0.4	0.01 0.18	-0.06 -0.92	0.008 0.14	-0.02 -0.31
F-statistic	18.87	19.03	15.44	19.26	18.84
R-squared	0.26	0.25	0.21	0.261	0.26

The estimates in Table 8 are very consistent with the model estimated in Table 7. Educational attainment, housing wealth, and government capital expenditures are positively related to the number of establishments per capita. Income and the unemployment rate are negatively related to the number of establishments per capita. Those metropolitan counties with high employment, high achieving, wealthy households—although with lower incomes—had more establishments per person, *ceteris paribus*.

Robust t-statistics are in italics below the coefficients. “Stars” denote the customary significance levels.

Component 1 was uniformly, significantly negatively related to the number of establishments, and the coefficient was stable. This is an unexpected result which we shall discuss throughout the remainder of the paper. Component 2 was never statistically significant in any model and those results were omitted for brevity. Component 3 and Component 4 were positively related to the number of establishments. In Model 5, the coefficient on Component 1 remains negative and significant while the coefficient on Component 4 becomes statistically insignificant. In Model 4, both Components 1 and 3 retain their sign and remain significant, although the coefficient on Component 3 is halved. We conclude that Component 1 dominates the other components when they are included in the same model. Those counties with an older, less educated, more native, slower growing population had more establishments. Based on Model 4, we can add to the list of characteristics: Counties with more crime, but a lower poverty rate, also had more establishments. Component 1 and Component 3 are loaded with median age in similar weights, opposite signs. Therefore, Model 4 indicates that county populations that are less educated, more native, slower growing, with a lower poverty rate, but suffering more crime have more establishments.

The estimates for growth in the number of establishments per capita including the previously-estimated vibrancy components are in Table 9.

As in Table 8, the estimates in Table 9 are very consistent with the model estimated in Table 7. Greater educational attainment, more government capital expenditure, faster population growth, and higher unemployment are associated with faster growth in the number of establishments.

Despite the differences in the baseline model between estimates of the level of establishments and the growth in establishments, the effects of the vibrancy components were qualitatively very similar across dependent variables. The coefficient on Component 1 is significant and negative across all specifications. The coefficients on Components 3 and 4 are positive. Once again, Component 1 dominates the other components. When including Component 1, neither Component 3 nor Component 4 is statistically significant. Thus, after controlling for “RSW-like” factors, those counties with an older, less educated, more native, slower growing population experienced a faster growth rate in the number of establishments.

Considering Tables Eight and Nine together, after controlling for the influence of the cultural vibrancy indicators, densely settled areas with rapid population growth had a slower growth rate of establishments. Growth in the number of establishments leads government capital expenditures. Launching an establishment appears to be an alternative to wage/salary employment, as income had a negative effect on the growth rate and level of establishments.¹ This is particularly true for wealthy, educated populations. The trigger to accelerating establishment launches is an increasing unemployment (rate), although high unemployment takes a toll on the number of establishments (level). Component 1 dominated the other components derived from the cultural vibrancy indicators.

Table 9. Growth in the number of establishments per capita.

Dependent variable: Growth in Establishments (2001-2010)					
	Model 1	Model 2	Model 3	Model 4	Model 5
Comp 1	-0.005 *** -4.64			-0.004 *** -2.63	-0.005 *** -4.42
Comp 3		0.002 *** 3.86		0.0004 0.69	
Comp 4			0.0009 * 1.93		0.001 1.17
Gr. Pop	-0.35 *** -13.31	-0.38 *** -14.91	-0.39 *** -13.15	-0.35 *** -12.4	-0.355 *** -12.88
College	-0.06 -0.86	-0.07 -1.1	-0.11 -1.58	-0.05 -0.83	-0.051 -0.79
ln(House)	0.008 0.93	0.009 1.15	0.008 0.91	0.008 0.98	0.007 0.86
Unemploy	0.45 *** 3.39	0.46 *** 3.4	0.48 *** 3.3	0.45 *** 3.4	0.444 *** 3.37
Cap Exp	-0.03 ** -2.19	-0.03 ** -2.29	-0.03 ** -2.48	-0.03 ** -2.19	-0.026 ** -2.22
SME Pct	-0.38 -0.73	-0.25 -0.48	-0.18 -0.36	-0.35 -0.7	-0.335 -0.65
ln(Income)	-0.05 ** -2.28	-0.06 *** -2.82	-0.03 -1.32	-0.06 ** -2.49	-0.049 ** -2.13
ln(Pop Den)	0.004 * 1.82	0.004 * 1.95	0.004 1.59	0.004 * 1.88	0.004 * 1.81
Constant	0.74 1.43	0.80 1.52	0.42 0.79	0.78 1.48	0.687 1.31
F-statistic	60.83	56.6	46.57	55.39	55.76
R-squared	0.58	0.57	0.56	0.58	0.5824

We would wish to estimate models interacting with the components, but these estimates result in an unacceptable increase in the VIFs. However, Component 1 was negatively associated with both the level of establishments and the growth in the number of establishments. The joint effect of a county that is adding jobs and population into a society that is comparatively young, foreign-born, and educated is (a) fewer establishments, and (b) slower growth in the number of establishments. Notably absent are the indicators of crime, culture, and entertainment.

Implications

Our evidence says that “vibrancy” matters, but not in the manner one would expect. Although our paper is not directly comparable to Lee, Florida & Acs (2004), that paper is very much concerned with the effects of urban lifestyle on entrepreneurship. They find some evidence that cities which we would term “vibrant” display more entrepreneurship among the population. In this paper we empirically determined, under no a priori assumptions, that the vibrancy which

matters in business venturing is youth, educational attainment, international origin, and positive job and population growth.

However, this county-level vibrancy reduces both the level of ventures and growth in the number of ventures, strongly and significantly. Thus, the story of our results is not a story of the “creative class” launching businesses (Florida 2002, Lee et al. 2004). Neither are our results a story of urban economies of agglomeration and network externalities triggering entrepreneurial firm formation (Acs & Armington 2004). Rather, it is a much more traditional story: the young, educated, and foreign born congregate in areas where the economy is adding jobs. Instead of launching new establishments the population works in previously existing companies. Adding establishments is the domain of older, less educated areas that may also be losing population.

Our results do not disprove the “vibrancy hypothesis” or the “creative class” hypothesis as the triggers for a virtuous circle of economic development. Rather our results indicate that new business venturing may not be a necessary component of those stories.

One implication, therefore relates to public policies intended to jumpstart new business venturing as a way of boosting municipal economic growth. One possible reading of the “urban vibrancy” and “creative class” literatures echoes the famous line from “Field of Dreams”: “If you build it[they] will come.” That is, cities may pursue economic development incentive policies, such as subsidies and tax breaks, to entice businesses designed to attract Florida’s “creative class,” under the assumption that the arriving “creative class” members will launch new businesses. Our evidence indicates that such spending and/or foregone revenue by municipalities might not earn much return by way of new business launched.

Concluding Remarks

A limitation to our approach is that not all principal city counties are created equal. For example, Harris County, Texas (Houston), is 1,778 square miles and has an estimated population of 4.2 million. Fulton County, Georgia (Atlanta), is 534.61 square miles and has an estimated population of 950,000. Metropolitan Houston’s population is around 6.1 million, and the Atlanta metropolitan area has a population around 5.3 million. Our personal experience with both cities is that more of “Houston” is contained in Harris County than is “Atlanta” contained in Fulton County. Our estimates implicitly treat Harris County and Fulton County as if they were equal in their “metropolitan-ness.”

Hall and Sobel (2008) demonstrate that entrepreneurship has a statistically significant spatial component at the U.S. state level. We do not doubt that business venturing also has a significant spatial component. If so, this would indicate the need to make a spatial correction to our estimates. However, given our data set, it is unclear what observations would comprise the spatial matrix. We believe that this may be a fruitful opportunity for future research using a data set that includes all MSA counties and theoretical development as to the nature of the spatial interconnectedness across metropolitan areas.

References

Acs, Z. J., & Armington, C. (2004). Employment growth and entrepreneurial activity in cities. *Regional Studies*, 38(8), 911-927.

- Chen, Y., & Rosenthal, S. S. (2008). Local amenities and life-cycle migration: Do people move for jobs or fun? *Journal of Urban Economics*, 64(3), 519-537.
- Easterly, W. (2001). *The elusive quest for growth: Economists' adventures and misadventures in the tropics* Cambridge and London: MIT Press.
- Florida, R. L. (2002b). The rise of the creative class: And how it's transforming work, leisure, community and everyday life. New York, NY: Basic Books.
- Florida, R. (2002c). Bohemia and economic geography. *Journal of Economic Geography*, 2(1), 55-71.
- Florida, R. (2002, May). The rise of the creative class; why cities without gays and rock bands are losing the economic development race. *The Washington Monthly*, 34(5).
- Glaeser, E.L. & Resseger, M.G. (2010) The complementarity between cities and skills. *Journal of Regional Science*, 50(1), 221-244.
- Glaeser, E. L., Rosenthal, S. S., & Strange, W. C. (2010). Urban and entrepreneurship. *Journal of Urban Economics*, 67(1), 1-14.
- Glaeser, E. L., Kolko, J., & Saiz, A. (2001). Consumer city. *Journal of Economic Geography*, 1(1), 27-50.
- Hall, J. C., & Sobel, R. S. (2008). Institutions, entrepreneurship, and regional differences in economic growth. *Southern Journal of Entrepreneurship*, 1(1), 69-96.
- Holian, M., & Kahn, M. (2012). The impact of center city economic and cultural vibrancy on greenhouse gas emissions from transportation. Mineta Transportation Institute.
- Lee, S., Florida, R., & Acs, Z. (2004). Creativity and entrepreneurship: A regional analysis of new firm formation. *Regional Studies*, 38(8), 879-881.
- Lucas, R. E. (1988). On the mechanics of economic development. *Journal of Monetary Economics*, 22(1), 3-42.
- Parker, S. (2005). Explaining regional variations in entrepreneurship as multiple occupational equilibria, *Journal of Regional Science*, 45(4), 829-850.
- Reynolds, P., Storey, D., & Westhead, P. (1994). Cross-national comparisons of the variation in new firm formation rates. *Regional Studies*, 28(4), 443-456.
- Studenmund, A. H. (2005). Using econometrics: A practical guide (5th ed.) Addison Wesley.

Psychological Entitlement and Deservingness as Predictors of Socially Responsible Workplace Decisions

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Abstract

Organizations of all sizes can gain a competitive advantage when their employees make ethically sound decisions that benefit organizational stakeholders. Yet identifying employees most likely to make such decisions can be daunting. Building upon agency theory (Jensen & Meckling, 1976; Fama, 1980) and the literature on distributive justice (e.g., Folger & Konovsky, 1989; Colquitt et al., 2001), we propose that job candidates with higher levels of psychological entitlement and deservingness will make less ethical decisions for and about their organizations. Results from a survey of 118 potential job candidates provide some support for our hypotheses. Theoretical and practical implications are discussed.

Key Words

Psychological entitlement, deservingness, ethical decision making, social responsibility

Introduction

Over a half century ago, President John F. Kennedy famously directed Americans to “ask not what your country can do for you, but what you can do for your country.” Focusing on the selflessness of the common good instead of the selfishness of individual interests still challenges people today. Scholars of organizational theory and economics often turn to agency theory for a greater understanding of this ethical challenge in organizations. Agency theory (Jensen & Meckling, 1976; Fama, 1980) posits that employees act in their own self-interests when making rational decisions, often to the detriment of their principals - the owners of the organizations for which they work. Acting in one’s own interest is also at the heart of the entitlement literature, to which we now turn our attention.

Campbell, Bonacci, Shelton, Exline, and Bushman (2004, pp. 29-30) cite a variety of press articles lamenting issues of entitlement as a “curse” affecting a wide variety of people, from CEOs and entrepreneurs, to younger workers, to students and faculty. The authors further state that entitlement “is at the heart of many questions concerning the distribution of resources in society, from tax breaks to social welfare to university enrollments (p. 29).” Psychological entitlement is often captured within the construct of narcissism (Emmons, 1984; Morf & Rhodewalt, 2001), yet Campbell and colleagues conceptualize psychological entitlement as a construct independent of narcissism and define it as “a stable and pervasive sense that one deserves more and is entitled to more than others (p. 31).” The authors developed and validated a Psychological Entitlement Scale (PES), which has exhibited internal consistency and validity by exhibiting positive relationships with a variety of negative dispositions, such as hostility, dominance, neuroticism, skepticism (converse of agreeableness), aggression, greed and taking items that belong to others (Campbell et al., 2004).

Psychological entitlement focuses on an individual's judgments and expectations that are not necessarily related to individual performance (Harvey & Martinko, 2009). In other words, entitlement perceptions are based on unbalanced assessments of reciprocity (Harvey & Martinko, 2009; Naumann, Minsky, & Sturman, 2002). Employee entitlement has been examined as it relates to the psychological contracts between employers and employees (Robinson & Rousseau, 1994) and with respect to the ways in which entitlement impacts work attitudes and behaviors (Naumann, Minsky, & Sturman, 2002). Psychological contracts are unstated, stable contracts between employees and employers that affect expectations and perceptions of inequity (Morrison & Robinson, 1997). If organizations make decisions that employees deem unfair, the employees may perceive that the psychological contract has been violated, leading to feelings of anger and betrayal (Morrison & Robinson, 1997). Highly entitled employees with high expectations of their organizations may more strongly sense psychological contract violations when such expectations are unmet (Naumann, Minsky, & Sturman, 2002; Robinson & Rousseau, 1994).

Recent research has identified academic entitlement as a construct unique to the K – 12 and university populations. Kopp, Zinn, Finney, and Jurich (2011, p. 106) define academic entitlement as the “expectation that one should receive positive academic outcomes in academic settings, often independent of performance.” While student test scores and performance in the K – 12 grades have remained relatively constant over time, grades have increased dramatically, fueling student expectations about receiving high grades despite minimal effort (Kopp et al., 2011). Grade inflation has also spilled over in university settings (Summary & Weber, 2012; Jewell & McPherson, 2012; Jewell, McPherson, & Tieslau, 2013). While academic entitlement focuses on expectations of grades, psychological entitlement (as part of a “generalized entitlement” variable) stems from peoples’ beliefs that they should receive various outcomes due to their unreasonable expectations of especially favorable treatment (Kopp et al., 2011; Chowning & Campbell, 2009; Ciani, Summers, & Easter, 2008). Psychological entitlement may thus help to capture work-related expectations.

While the term entitlement is sometimes used interchangeably with deservingness (cf., Major, 1994), the two terms can be distinguished. Feather (2008) notes that a person could deserve an outcome, yet not be entitled to it, while another person could be entitled to an outcome, yet not deserve it. Feather (2008) further suggests that entitlement refers to judgments that relate more to an external frame of reference such as laws, social norms, and formal or informal rules. Deservingness, in contrast, relates more to outcomes that are achieved following a person's actions.

The extant literature on psychological entitlement has identified several personality and attitudinal correlates (e.g., Campbell et al., 2004; Naumann et al., 2002), while the literature on deservingness has focused on whether others are deserving of various outcomes (e.g., Feather, 2008). Less research has examined the impact of the two dimensions on ethical workplace decisions, despite a growing public attention to ethics and social responsibility following the Enron, WorldCom, and Tyco debacles and the financial market collapse of 2009.

Utilitarian theory suggests that business leaders should focus on decisions that produce the greatest good for the greatest number (DesJardins, 2009). In the context of an organization, a good decision would be an ethical and fair decision that serves to benefit the long-term interests of the organization, since multiple stakeholders (employees, stockholders, owners, customers, suppliers, community, the environment) would be affected. Decisions that benefit the self-interests of agents of an organization, yet are detrimental to others, are the least utilitarian.

Agency theory (Jensen & Meckling, 1976; Fama, 1980) helps to support the argument that entitled individuals and those with high levels of deservingness may act in their own self-interest when making decisions in the workplace. Accordingly, the present study examines whether entitlement and deservingness are predictive of the ability to make good decisions. Additionally, we examine whether there is a relationship between entitlement and deservingness and the willingness to work in a more socially responsible company at slightly lower pay relative to a less socially responsible company. Understanding the relationship between psychological entitlement, deservingness and ethical decision making in the workplace is critical to organizations seeking to hire and retain the best employees.

The next section of this paper proposes and tests a model of psychological entitlement, deservingness, and ethical decision making. Theoretical and practical implications follow.

Psychological Entitlement, Deservingness, and Ethical Decision Making

The literature on entitlement and deservingness often focuses on whether *others* are entitled to or deserving of particular outcomes. Feather (2008) categorized 251 undergraduate students as either low, average, or high performers and found that those categorized as low performers reported more resentment, less sympathy, and more schadenfreude (pleasure derived from the misfortunes of others) than their higher performing counterparts following the failure of a high achiever. Feather (2008) further reported resentment and displeasure related to perceptions of the deservingness of the high achiever and the wish to denigrate the high achiever. These findings also correspond to the literature on knocking down “tall poppies,” which refer to people who have achieved a high status. Tall poppy syndrome is the belief that tall poppies should be cut down to size (e.g., Feather, 1993; Kirkwood, 2007), particularly if it’s believed that they do not deserve their success or do not possess positive personality characteristics (Feather, Volkmer, & McKee, 1991).

Less literature has focused on how respondents’ *own* feelings of entitlement and deservingness relate to various outcomes. Research on distributive justice may help to explain why such feelings can be harmful in the workplace. Over the past few decades, a considerable literature has developed on distributive justice (e.g., Folger & Konovsky, 1989; Colquitt, Wesson, Porter, Conlon, & Ng, 2001), which refers to the perceived fairness people feel with respect to the distribution of resources. The literature on distributive justice is largely derived from equity theory (Adams, 1965), which examines the social process by which a person might respond to perceived discrepancies between his/her outcome/input ratio and that of a referent or comparison other. Scholars have examined whether rewards (e.g., compensation, promotions) should be allocated based on *equity* due to an individual’s contributions and performance or *equality* due to an individual’s needs (Feather, 1990; Feather, 1994; Colquitt, 2001). From this literature, scholars have begun to recognize that what’s judged to be fair depends on the

characteristics of the person (e.g., values and attitudes) and on the particulars of the situation (Feather, 1994). As an example, Feather (1994) found that people who considered hedonism, stimulation, and power to be important values were less likely to allocate higher pay to a sick performer (equality), while those who considered prosocial or spirituality values to be important were more likely to award higher amounts to a sick performer.

Perceptions of equity or equality may vary as a function of the levels of entitlement and deservingness of the perceiver. Agency theory (Jensen & Meckling, 1976; Fama, 1980) helps to explain why employees with strong senses of entitlement and deservingness may act in their own interests when making workplace decisions. They may consider a reward *equitable* due to inflated perceptions of their own performance or contributions or feelings of superiority. If they recognize that their inputs are below the level of their coworkers, they may use a needs-based *equality* perspective to justify equal rewards. They may further act in their own self-interests when making a wide variety of decisions that impact themselves, others, and their organizations. Accordingly, we propose the following:

Hypothesis 1: Highly entitled individuals will make less ethical decisions for their organizations than their less entitled counterparts.

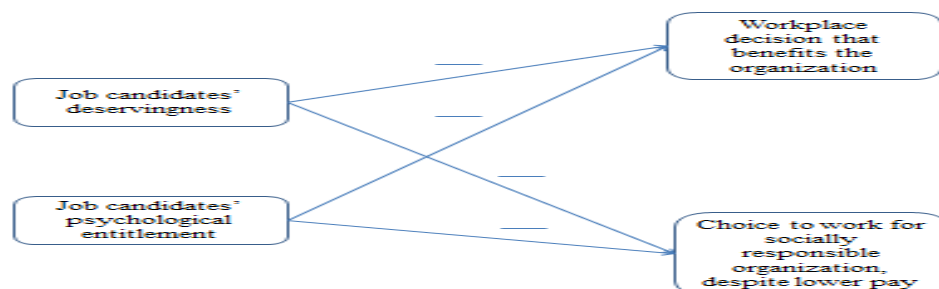
Hypothesis 2: Individuals with high levels of deservingness (despite effort) will make less ethical decisions for their organizations than their counterparts with lower levels of deservingness.

Hypothesis 3: Individuals who would prefer to work for a socially responsible organization despite lower pay will have lower levels of psychological entitlement than their counterparts.

Hypothesis 4: Individuals who would prefer to work for a socially responsible organization despite lower pay will have lower levels of deservingness than their counterparts.

Figure 1: A Model of Psychological Entitlement, Deservingness, and Ethical Decision Making

Figure 1 illustrates hypotheses.



Method

We initially conducted a manipulation check of the two ethical decision making vignettes that we developed to test our hypotheses. Both vignettes are detailed in the appendix. We administered pencil and paper survey instruments for vignette #1 to 25 and vignette #2 to 39 undergraduate and graduate students in a mid-size university in the southeastern United States. Participation was voluntary and surveys were distributed during class time. The mean age of the first group of 25 respondents was 22 with 20 males, while the mean age of the second group of 39 respondents was also 22 with 25 males and 14 females.

In the first vignette, we created a scenario in which an employee faces a choice of choosing either a highly qualified, high performing informal team leader for a promotion or choosing a less qualified complainer who happens to be the CEO's son. For the first vignette, 24 of the 25 respondents to vignette #1 identified Mike Lambert, the high performer, as the best choice for the organization overall (mean response for Mike Lambert 6.4, S.D. = .76; mean response for Bob Anderson 3.4, S.D. = 1.41).

In the second vignette, we described two hypothetical organizations similar in every way except that employee pay is slightly lower in the more socially responsible organization. This organization contributes a portion of its earnings to charity, offers multiple opportunities for volunteerism, and is recognized as a world leader in eco-friendly initiatives. Respondents to vignette #2 were asked to select the organization that was the "most socially responsible." 35 of 39 (90%) respondents to vignette #2 identified XYZ Company as the most socially responsible company of the two choices.

In phase 2, we administered a pencil and paper survey instrument to 118 undergraduate and graduate students taking business courses in a mid-size university in the southeastern United States. Students participated voluntarily and the surveys were administered during class time. 72 students were male and the mean age of the students was 21 with a range of 18 to 39 years. Table 1 presents the means, standard deviations, correlations, and reliability coefficients (on the diagonal) of the study variables.

Table 1. Means, standard deviations, correlations, and reliability coefficients of the study variables.

		Mea	S.D.	1	2	3	4	5	6	7	8	9	10	11
1	OrgMike	6.39	.89											
2	OrgBob	3.00	1.54	-.38										
3	ABCBest	4.91	1.61	-.05	-.03									
4	XYZBest	5.21	1.44	.10	-.06	-								
5	PES	3.54	1.14	-.03	-.01	.16	-	.84						
6	Deserving	3.10	1.49	-.21	.14	.15	-	.54	.83					
7	Extraversi	3.52	.68	.18	-.10	-	-	.14	-	.84				
8	Agreeable	3.92	.58	.29	-.24	-	.13	-	-	.24	.79			
9	Conscienti	3.73	.59	.35	-.19	-	.06	.07	-	.31	.39	.79		
10	Neuroticis	2.59	.70	-.10	.09	.00	-	.02	.21	-	-	-	.81	
11	Openness	3.71	.54	.23	-.06	.12	.12	.06	.15	.21	.20	.25	-.26	.75

N = 118

* Correlations at or above .18 significant at the .05 level (2 tailed test)

* Correlations at or above .24 significant at the .01 level (2 tailed test)

Cronbach's alpha coefficients are on the diagonal.

OrgMike = Higher responses on this scale indicate that respondent is aware of the best ethical choice from the organization's perspective and from his/her own perspective, respectively.

OrgBob = Higher responses on this scale indicates that the respondent is not aware of the best ethical choice from an organization's perspective or from his/her own perspective, respectively. PES = Psychological entitlement scale

Deserving = new deserving entitlement scale

Psychological Entitlement (PES)

We used the Psychological Entitlement Scale, which was validated in the Campbell et al. study (2004) to assess psychological entitlement. The items were anchored by a 7 point Likert- type scale with 1 = strongly disagree and 7 = strongly agree. Items were as follows: (1) I honestly feel that I'm just more deserving than others; (2) Great things should come to me; (3) If I were on the *Titanic*, I would deserve to be on the *first* lifeboat; (4) I demand the best because I'm worth it; (5) I do not necessarily deserve special treatment (reverse scored); (6) I deserve more things in my life; (7) People like me deserve an extra break now and then; (8) Things should go my way; and (9) I feel entitled to more of everything.

Deservingness

The Psychological Entitlement Scale includes items that don't fully capture the deservingness element of entitlement. By incorporating deservingness despite others' opinions of the individual's performance, we were able to assess this dimension. Those who perceive that they

are receiving lower evaluations than they deserve, even when their performance doesn't merit better evaluations, have higher levels of deservingness. Accordingly, we developed three items for our survey using the same 7 point scale as in the PES above to capture this dimension with questions relevant to all respondents in our student population: (1) I often receive lower grades than I deserve; (2) I deserve the same reward as my team even if I contribute less to the project than other members; and (3) I deserve higher grades than my professors usually give me.

These items relate closely to items in the "others-focused" and "deservingness" facets of the Academic Entitlement Scale developed by Kopp et al., 2011. The others-focused facet states that "others will provide all the education that is necessary" while the deserving facet states that "certain outcomes are deserved because the student pays tuition" (p. 125-126). Neither quite captures deservingness despite others' evaluations, or unbalanced assessments of reciprocity (c.f., Harvey & Martinko, 2009; Naumann, Minsky, & Sturman, 2002).

As shown in the correlation matrix, deservingness shows both convergent and discriminant validity. To show convergent validity, we would expect that deservingness would correlate positively with the PES, which is confirmed ($r = .54, p < .001$). To show discriminate validity, the two scales should correlate differently with other measures. We followed the approach in the Campbell et al. 2004 study and examined correlations with the Five Factor Model of Personality (FFM). To assess the FFM, we used the validated scale developed by John and Srivastava (1999), which uses an "I see myself as someone who" anchor for 44 items. The participants then rate the extent to which they agree or disagree with the statement based on a 5- point Likert-type response scale anchored by 1=strongly disagree and 5=strongly agree. Each of the five personality variables is captured in 8 to 10 items and we used the mean score of each to derive the five personality domains.

We would expect that the deservingness scale, which captures poor performance, yet inflated self-perceptions, would correlate positively with neuroticism and negatively with conscientiousness (c.f. Chen, Ferris, Kwan, Yan, Zhou, & Hong, 2013). Neuroticism is the counterpart of emotional stability and is captured with items indicating anxiety, tension, stress, and depression. Conscientiousness is a measure of achievement, dutifulness, competence, and organization. Both correlated with deservingness in expected directions ($r = -.27, p < .01$ and $.21, p < .05$, respectively), yet didn't correlate with the PES. The PES negatively correlated with agreeableness, as in the Campbell et al. 2004 study ($r = -.19, p < .05$).

Results

To test our first and second hypotheses, we used hierarchical ordinary least squares regression with the dependent scale variable of the most ethical decision (Mike Lambert) for the benefit of the organization. Gender significantly correlated to the decision that Mike Lambert is the best choice for the organization, so we controlled for the male dummy variable in the analysis. The mean score of the dependent variable for the 41 females was 6.65 (SD =.62), which was significantly greater than the mean score for 72 males (mean = 6.21, SD = .99). We entered our independent variables in two steps: in the first step, we entered the male control variable and in the second step, we entered the PES and the deservingness variables.

Table 2 present our results, which indicate significance for the overall regression equation and for the deservingness variable in line with the prediction that greater deservingness would negatively relate to job candidates' making the best choice for the benefit of the organization.

Table 2. Regression Analysis to Test Hypotheses 1 and 2.

Model	Independent	F	df	Sig.	R ²	Beta	T value	Sig.
1	Constant	6.90	1,111	.01	.06			
	Male					-.24	-2.63	.01
2	Constant	4.16	3,109	.00	.10			
	Male					-.22	-2.38	.02
	PES					.06	.54	.59
	Deservingness					-.24	-2.19	.03

Dependent variable: Best ethical choice for the benefit of the organization

To test our third hypothesis, we used ANOVA with the choice of ABC or XYZ as the factor and the PES and deservingness constructs as dependent variables. Results, summarized in Table 3 below, indicated support for our hypotheses 3 and 4: mean scores on psychological entitlement and deservingness for the groups who chose the more socially responsible company were significantly lower than for their counterparts.

Table 3. ANOVA to Test Hypotheses 3 and 4.

	Company Choice	N	Mean	S.D.	Sum of Squares	df	Mean Square	F	Sig.
PES									
	ABC	57	3.87	.99					
	XYZ	59	3.23	1.22					
	Total	116	3.54	1.15					
Between groups					11.87	1	11.87	9.59	.002
Within groups					141.05	114	1.24		
Total					152.92	115			
Deservingness									
	ABC	57	3.43	1.34					
	XYZ	59	2.76	1.58					
	Total	116	3.09	1.50					
Between groups					13.02	1	13.02	6.05	.015
Within groups					245.34	114	2.15		
Total					258.35				

Conclusion and Implications

Large organizations seeking to attract, select, and retain high-performing, ethical employees often use a wide variety of selection tools, including intelligence tests and personality tests such as the Five Factor Model (FFM) of Personality (Costa and McCrae, 1992). Small and medium-sized organizations, in contrast, are less likely to use formal methods of selection and are more likely to hire based on organizational fit instead of hiring for a specific job (Henemen, Henemen, & Judge, 1997). Applicants are hired based on whether they seem capable of handling multiple tasks and responsibilities in smaller firms. Smaller firms are also less likely to rely on personality instruments and the person-organization fit instruments that have been shown to be valid and useful in larger organizations (Heneman, Tansky, & Camp, 2000). Such tools could be beneficial to small firms, however, especially when considering that job applicants with low levels of conscientiousness may consider small firms attractive (Thomason, Brownlee, & Steiner, 2013).

Firms of all sizes benefit from selecting high performing, ethical employees at the outset, as high performers with the capability to make good ethical decisions at all levels are likely to help organizations succeed. While widely-used personality tools such as the Five Factor Model of Personality (Costa & McCrae, 1992) offer validity in the prediction of performance by identifying conscientious and emotionally stable employees (e.g., Barrick, Mount, & Judge, 2001; Ones, Dilchert, Viswesvaran, & Judge, 2007), they do not succeed in identifying attitudinal problems, such as those related to entitlement and deservingness. Job applicants with a strong sense of entitlement may not be easily detected during the interview process and hiring such applicants could be deleterious to all organizations seeking high performing, ethical, and cohesive organizational cultures. Results from the present study provided partial support for our hypothesized model of psychological entitlement and deservingness. Specifically, results indicate that deservingness is a predictor of the ability to make the most ethical choice in identifying a candidate for promotion. Psychological entitlement and deservingness further correspond negatively to the choice to work for a socially responsible company.

Furthermore, our study provides some support for the validity of the Psychological Entitlement Scale (PES) and the new Deservingness Scale. As in the Campbell et al. 2004 study, the PES corresponded negatively with agreeableness. The PES further related positively with deservingness ($r = .54$, $p < .01$), providing convergent validity for the new scale. While deservingness didn't relate to agreeableness, the new scale did relate positively to neuroticism and negatively with conscientiousness, as expected, providing discriminant validity between the two constructs. These tools, coupled with personality instruments, intelligence tests, and structured and behavioral interview techniques, can be used to help organizations make appropriate and legally defensible hiring decisions.

Limitations and Suggestions for Future Research

While the results of the present study serve to stimulate both theory and practice, a few limitations should be acknowledged. One limitation relates to the size and characteristics of our respondents. While we collected data using a separate set of respondents for each of the vignettes and a third set of respondents to test the hypothesis, the overall sample size was relatively small and based on responses from a student population of a single university. Future

studies should gather responses from a greater number and wider variety of respondents from multiple locations.

Another limitation relates to the use of a new scale of deservingness. While this study provides some support for the convergent validity, discriminant validity, and reliability of the new construct, additional studies should be conducted on a larger and more diverse population to enhance generalizability. Future studies could further identify the relationship of this new scale with other values, personality types, attitudinal, or behavioral variables. As an example, researchers could investigate whether deservingness correlates negatively to values such as achievement and benevolence and positively to hedonism, as conceptualized by Schwartz (1992, 1994) in a large multicultural study of over 60,000 respondents in 20 countries.

References

- Adams, J.S. (1965). Inequity in social exchange. In L. Berkowicz (Ed.) *Advances in experimental social psychology*, 2, 267-299. New York: Academic Press.
- Barrick, M. R., Mount, M. K., & Judge, T. A. (2001). Personality and performance at the beginning of the new millennium: What do we know and where do we go next? *Personality and Performance*, 9(1/2), 9-31.
- Benson, J. (1998). Developing a strong program of construct validation: A test anxiety example. *Educational Measurement: Issues and Practice*. 17: 10-17.
- Campbell, W.K., Bonacci, A.M., Shelton, J., Exline, J.J., & Bushman, B.J. (2004). Psychological Entitlement: Interpersonal Consequences and Validation of a Self- Report Measure. *Journal of Personality Assessment*, 83(1): 29-45.
- Chen, Y., Ferris, D.L., Kwan, H. Yan, M., Zhou, M., and Hong, Y. (2013). Self-love's lost labor: A self-enhancement model of workplace incivility. *Academy of Management Journal*, 56(4):1199-1219.
- Chowning, K. & Campbell, N.J. (2009). Development and validation of a measure of academic entitlement: Individual differences in students' externalized responsibility and entitled expectations. *Journal of Educational Psychology*, 101: 982-997.
- Ciani, K.D., Summers, J.J. & Easter, M.A. (2008). Gender differences in academic entitlement among college students. *Journal of Genetic Psychology*, 169: 332-244.
- Colquitt, J.A. (2001). On the dimensionality of organizational justice: a construct validation of a measure. *Journal of Applied Psychology*, 86(3): 386-400.
- Colquitt, J.A., Wesson, M.J., Porter, C.O.L.H., Conlon, D.E., & Ng, K.Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology*, 86(3): 425-445.
- Costa, P. T., Jr., & McCrae, R. R. (1992). Revised NEO Personality Inventory (NEO PI R) & NEO Five Factor Inventory (FFI) Professional Manual. Odessa, FL: Psychological Assessment Resources.
- DesJardins, J. (2009). *Business Ethics*. 3rd ed. New York, NY: McGraw Hill Irwin.
- Eammons, R.A. (1984). Factor analysis and construct validity of the narcissistic empirical evidence. *Journal of Personality and Social Psychology*, 60: 53-78.
- Fama, E.F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*, 88: 288-307.
- Feather, N.T. (1990). Reactions to equal reward allocations: Effects of situation, gender, and values. *British Journal of Social Psychology*, 29: 315-329.

- Feather, N.T. (1993) Authoritarianism and attitudes towards high achievers. *Journal of Personality and Social Psychology*, 65, 152-164.
- Feather, N.T. (2004). Human values and their relation to justice. *Journal of Social Issues*, 50(4): 129-151.
- Feather, N.T. (2008). Perceived legitimacy of a promotion decision in relation to deservingness entitlement, and resentment in the context of affirmative action and performance. *Journal of Applied Social Psychology*, 38(5): 1230-1254.
- Feather, N.T., Volkmer, R.E., & McKee, I.R. (1991) Attitudes towards high achievers in public life: Attributions, deservingness, personality, and affect. *Australian Journal of Psychology*, 43, 85-91.
- Folger, R. & Konovsky, M.A. (1989). Effects of procedural and distributive justice on reactions on pay raise decisions. *Academy of Management Journal*, 32(1): 115-130.
- Harvey, P. and Martinko, M.J. (2009). An empirical examination of the role of attributions in psychological entitlement and its outcomes. *Journal of Organizational Behavior*, 30: 459-476.
- Heneman, H.G. III, Heneman, R.L. & Judge, T.A. (1997). *Staffing Organizations* 2nd ed. New York: McGraw-Hill.
- Heneman, R.L., Tansky, J.W., & Camp, S.M. (2000). Human resource management practices in small and medium-sized enterprises: Unanswered questions and future research perspectives. *Entrepreneurship Theory and Practice*, 25(1), 11-26.
- Jensen, M. C. and W. H. Meckling (1976), Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure, *Journal of Financial Economics*, 3(4): 305-360.
- Jewell, R. T. & McPherson, M.A. (2012). Instructor-specific grade inflation: Incentives, gender, and ethnicity. *Social Science Quarterly*, 93(1): 95-109.
- Jewel, R.T., McPherson, M.A. & Tieslau, M.A. (2013). Whose fault is it? Assigning blame for grade inflation in higher education. *Applied Economics*, 45(9): 1185-1200.
- John, O.P. and Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In L.A. Pervin and O.P. John (eds.), *Handbook of Personality: Theory and Research*, (2nd ed.), 102-138. New York: Guilford.
- Kirkwood, J. (2007) Tall poppy syndrome: Implications for entrepreneurs in New Zealand. *Journal of Management and Organization*, 13, 366-382.
- Kopp, J.P., Zinn, T.E., Finney, S.J., and Jurich, D.P. (2011). The Development and Evaluation of an Academic Entitlement Questionnaire. *Management and Evaluation in Counseling and Development*, 44(2): 105-129.
- Major, B. (1994). From social inequality to personal entitlement: The role of social comparisons, legitimacy appraisals, and group membership. In M.P. Zanna (Ed.) *Advances in Experimental Social Psychology*. Vol. 26, pp. 293-355). San Diego, CA: Academic Press. Cited in Feature, N.T. (2008). Perceived legitimacy of a promotion decision in relation to deservingness, entitlement, and resentment in the context of affirmative action and performance. *Journal of Applied Social Psychology*, 38(5): 1230-1254.
- Morf, C.C. & Rhodewalt, F. (2001). Unraveling the paradoxes of narcissism: A dynamic self-regulatory process model. *Psychological Inquiry*, 12: 177-196.
- Morrison, E.W. & Robinson, S.L. (1997) When employees feel betrayed: A model of how psychological contract violation develops. *Academy of Management Review*, 22: 226-256.

- Naumann, S.E., Minsky, B.D., & Sturman, M.C. (2002). The use of the concept “entitlement” in management literature: A historical review, syntheses, and discussion of compensation policy implications. *Human Resource Management Review*, 12: 145-166.
- Ones, D. S., Dilchert, S., Viswesvaran, C., & Judge, T. A. (2007). In support of personality assessment in organizational settings. *Personnel Psychology*, 60(4), 995-1027.
- Robinson, S.L. & Rousseau, D.M. (1994). Violating the psychological contract: not the exception but the norm. *Journal of Organizational Behavior*, 15: 245-259.
- Schwartz, S.H. (1992). Universals in the content and structure of values: Theory and empirical tests in 20 countries. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 25) (pp. 1–65). New York: Academic Press.
- Schwartz, S.H. (1994). Are there universal aspects in the content and structure of values? *Journal of Social Issues*, 50, 19-45.
- Summary, R. & Weber, W. (2012). Grade inflation or productivity growth? An analysis of changing grade distributions at a regional university. *Journal of Productivity Analysis*, 38(1):95-107.
- Thomason, S.J., Brownlee, A., & Steiner, S. (2013). Personality as a moderator of the relationship between organizational size and organizational attraction perceptions. *Small Business Institute Journal*, 9(1): 1-17

Transformational Leadership: The Antecedent Role of Emotional Intelligence

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Introduction

A great deal of empirical research has been completed in the area of transformational leadership, providing evidence that this leadership style has a positive impact on performance and leader effectiveness (eg., Avolio, Walumbwa, & Weber, 2009; Bass, Avolio, Jung, & Berson, 2003; Bycio, Hackett, & Allen, 1995; DeGroot, Kiker, & Cross, 2000; Lowe & Galen Kroeck, 1996). However, some questions remain unanswered. What traits make these transformational leaders great? What are the antecedents of transformational leadership? What other variables may come into play? Since transformational leadership is considered a behavioral theory, where leadership behaviors can be learned (Judge & Bono, 2000; Kark, Shamir, & Chen, 2003), additional investigation to determine the dispositional sources of leadership is warranted (Judge, Bono, Ilies, & Gerhardt, 2002). The purposes of this paper are to explore the antecedent relationship of emotional intelligence (EI) to transformational leadership and the role time plays in this process, since both transformational leadership and emotional intelligence are continually evolving constructs. An overview of the extant literature on transformational leadership and emotional intelligence is presented followed by an exploration of the relationship between these two constructs. Eight propositions are offered along with a conceptual model depicting the proposed linkages.

Transformational Leadership

A transformational leader attempts to mold and shape the environment (Avolio & Bass, 1988). The transformational leader construct was introduced by Burns (1978) and was more fully developed by Bass (1985). Burns defined a transformational leader as an individual who engages his/her follower in such a way that each person raises each other to a higher level of motivation. Bernard Bass defined this leadership construct in terms of the effect this style of leadership has on the followers. In essence, transformational leadership separates itself from other leadership theories (i.e. charismatic, transactional, or laissez-faire) by having the leader focus on the higher order intrinsic needs of followers while their follower identifies with the needs of their leader (Burns, 1978).

Transformational leadership is generally described using the following four interrelated dimensions: idealized influence, inspirational motivation, intellectual stimulation, and individual consideration (Bass, 1985; Yukl & Van Fleet, 1990). Using this four dimension conceptualization in their 2004 meta-analysis, with 87 sources and 626 correlations, Judge and Piccolo (2004) found transformational leadership to have a higher validity than contingent reward (transactional) and laissez-faire leadership. With regard to the dimensionality of the construct, the most recent measure of transformational leadership (MLQ-5x) shows empirical support for the four dimension structure (Avolio, Bass, & Jung, 1995). Thus, transformational leadership is empirically shown to be a significant predictor of aspects related to effective leadership. The following discussion elaborates on the four dimensions.

Idealized influence

Transformational leaders build commitment and transform the organization by infusing their followers with ideological values and moral purpose (House & Podsakoff, 1994; Lowe & Galen Kroeck, 1996). This dimension is the one most closely linked to charisma and is sometimes referred to as “charisma.” These leaders demonstrate high moral and ethical behavior (Bass & Steidlmeier, 1999; Howell & Avolio, 1998), and they are admired, respected, and trusted (Bass, Avolio, Jung, & Berson, 2003; Jung & Avolio, 2000; Yukl, 1998). They are “role models”, and followers identify with them and strive to imitate them. With this aspect of transformational leadership, employees are not dependent on their leader; instead, they are empowered by their leader (Lowe & Galen 1996).

Inspirational motivation

Leaders motivate others by articulating an inspiring and appealing vision in such a way that it is shared by peers and subordinates (Yammarino & Bass, 1990). By communicating optimism and establishing high standards, the leader empowers and motivates the followers with meaningful and challenging work.

Intellectual stimulation

The leader encourages and rewards creative and innovative solutions to complex problems (Bass, Avolio, Jung, & Berson, 2003). Stimulation is achieved by arousing followers’ awareness of problems and initiating the problem solving process with the use of thought and imagination (Bass, 1985).

Individual consideration

Leaders attend to the individual needs and desires of each employee and comprehend individual differences among their followers (Yammarino & Bass, 1990). In this dimension, the “concern” shown by the leader is for the individual as a unique person with special attention to the specific developmental needs of that individual (Bass, 1995). Here the leader must know the needs of the follower and elevate these needs to a higher moral level (Bass & Avolio, 1993). Bass and Avolio (1993) note that this process can be either direct or participative.

These four inter-related dimensions are important characteristics of a transformational leader. The leader is effective because s/he not only attends to the employees’ individual needs, but s/he also motivates, inspires, and intellectually stimulates his/her followers (Ashkanasy, Haertel, & Daus, 2002). Thus, a transformational leadership achieves his/her results by empowering and motivating employees. This approach is in sharp contrast with a purely charismatic leader who attempts to achieve the same goal through employee dependence (see House, 1977).

The charismatic construct only deals with the “idealized influence” dimension of transformational leadership, whereas the whole of transformational leadership deals with all four dimensions simultaneously. Many authors have actually labeled “idealized influence” as charisma (Bycio, Hackett, & Allen, 1995; Howell & Avolio, 1993). Perhaps the best way to view the relationship between transformational and charismatic leadership is to view transformational leadership as layered on top of charismatic leadership (see Walumbwa, Avolio, & Zho, 2008). This clarification helps distinguish a transformational leader from the purely charismatic leader.

Even though there are some similarities, there are also some major differences between these two constructs:

- Both reference the idealized influence dimension. However, charismatic leadership primarily consists of this dimension while a transformational leader must demonstrate leadership proficiency in all four dimensions.
- A transformational leader elevates and empowers his/her employee, whereas a charismatic leader may seek to keep followers weak and dependent (Yukl & Van Fleet, 1990).
- In charismatic leadership, the focus is on the leader who is perceived to be “larger than life”, whereas in transformational leadership, the focus is on both the leader and the leadership process (Yukl & Van Fleet, 1990).
- A charismatic leader primarily exists at senior levels of an organization, while a transformational leader can be found in upper and lower management levels (Lowe & Galen Kroeck, 1996).

Having demonstrated the difference between charismatic and transformational leadership, we now address the differences between transformational leadership and transactional leadership. Transactional leadership refers to followers agreeing to, accepting and complying with a leader in exchange for praise, rewards, and avoidance of disciplinary actions (Bass, Avolio, Jung, & Berson, 2003). Effective leaders first gain their followers’ trust by utilizing a transactional leadership style, but once that clarity and trust exists, the leaders can then utilize the transformational style (Bass, Avolio, Jung, & Berson, 2003). Consequently, an effective transformational leader must utilize a variety of leadership styles; however, a truly transformational leader will utilize the transformational skills much more frequently (Howell & Avolio, 1993).

In summary, the transformational leadership style is a highly effective approach that a leader can use to motivate followers to perform. Transformational leadership is comprised of four dimensions [idealized influence, inspirational motivation, intellectual stimulation, and individual consideration (Bass, 1985; Yukl & Van Fleet, 1990)] and is intertwined but distinctly different from charismatic and transactional leadership. Transformational leaders are found at all levels of the organization, and for those interested in studying leadership across many contexts and levels, transformational leadership should be more generalizable than charismatic leadership.

Emotional Intelligence (EI)

Salovey and Mayer (1989) completed the first empirical study of emotional intelligence, defining it as the “ability to monitor one’s own and other’s feelings and emotions, to discriminate among them and to use this information to guide one’s own thinking and actions” (pg. 189). That definition evolved over time:

“Emotional intelligence refers to an ability to recognize the meanings of emotions and their relationships, and to reason and problem-solve on the basis of them. Emotional intelligence is involved in the capacity to perceive emotions, assimilate emotion-related feelings, understand the information of those emotions, and manage them” (Mayer, Caruso, & Salovey, 1999, pg. 267).

Currently in the academic literature, there are three separate and very distinct models of emotional intelligence: Stream 1 - the four-branch ability test model (MSCEIT) (Mayer, Salovey, Caruso, & Sitarenios, 2003); Stream 2 - the four-branch self-report model (WLEIS) (Jordan et al., 2002); and Stream 3 - the mixed model (ECI and EQ-i) (Boyatzis & Sala, 2004; Bar-On, 1997). Meta-analytical review has shown these three streams to be significantly different from one another (O'Boyle, Humphrey, Pollack, Hawver, & Story, 2010).

Stream 1

The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT V2.0) specifically measures emotional intelligence. It is an ability test that has objective questions with right and wrong answers (Ashkanasy & Daus, 2005). This model is the product of a decade of empirical research and has excellent reliability levels. The model has been empirically tested and has been shown to accurately measure the EI construct (Mayer, Caruso, & Salovey, 1999; Mayer & Salovey, 1993, 1995; Mayer, Salovey, & Caruso, 1997; Mayer, Salovey, Caruso, & Sitarenios, 2001; Mayer, Salovey, Caruso, & Sitarenios, 2003; Salovey, Hsee, & Mayer, 1993). Of the three streams presented herein, this measure is the most closely related to cognitive intelligence and shows the lowest correlation with personality and the other two streams (O'Boyle et al., 2010).

Stream 2

This stream, like stream 1, is also based on the four-branch model but is a self-report measure. Being self-report, the ease, brevity, and low cost of administration make it a popular tool with researchers. Also, it is argued that the self-report nature of the measure is more appropriate than other measures because it places the respondents in the appropriate emotional context (i.e. work) (see Ashkanasy & Daus, 2005).

Stream 3

The Goleman/EQ-i self-report model does not produce reliable results because it is a mixed model that not only attempts to measure emotion and intelligence but also measures motivation and non-ability dispositions and traits (Mayer, Caruso, & Salovey, 1999). For instance, this stream has a high correlation with the Five Factor Model (FFM) of personality and centers more on traits, competencies, and skills (O'Boyle et al., 2010). Thus, this model may be more appropriate for commercial settings than for those interested in tapping a purely "emotional intelligence" construct.

Daus and Ashkanasy (2003), who have done extensive research in the area of emotional intelligence, strongly endorse the Mayer et al. (2002, 2003) stream 1 model over the other models because it accurately measures emotional skills and abilities and does not overlap with other constructs. They also acknowledge that the MSCEIT non-self-report, skill and behavior based tool has demonstrably good psychometric properties.

This tool measures the four skill groups of EI, also known as the four-branch model:

1. Perceiving emotion accurately—the input function
2. Using emotion to facilitate thought—knowledge base processing. Deals with comparing and contrasting this input with previous occurrences to enhance thinking.
3. Understanding emotion—abstract understanding and reasoning. The ability to synthesize the emotion for better understanding

4. Managing emotion—ability to grow personally through managing emotions and emotional relationship.

These branches are very closely knit together. Branches 1, 3 and 4 all relate to reasoning about emotion, and branch 2 is unique because it uses emotion to enhance reason. These branches are also hierarchical; one must accurately perceive emotion before it can be used to facilitate thought. The facilitation of thought increases understanding and thus allows the individual to accurately manage emotion by inducing the appropriate mood for thinking (Mayer & Salovey, 2002). Consequently, EI is the ability to solve emotional problems, and this is a skill that can be learned over time. (Mayer, Salovey, Caruso, & Sitarenios, 2001)

Emotion is important to study because we form opinions, react to situations, and make decisions at both an emotional and rational level (Massey, 2002). According to Massey, the emotional cognition precedes the rational cognition. Thus, to be effective, one must be able to manage the emotional aspects of cognition for the rational elements to function properly. For instance, those high in emotional intelligence are able to self-motivate, persist through difficult situations, control impulses, delay gratification, self-regulate mood, and empathize with others more effectively than those with low emotional intelligence (Goleman, 1995).

Linking Emotional Intelligence to Transformation Leadership

In order to be effective, leaders must solve problems by utilizing the resources at their disposal. The key resources they have are the individuals working within their organizations. Caruso, Mayer, and Salovey (2002) stated that individuals, teams, and organizations would all benefit from either developing emotionally intelligent leaders or choosing leaders who are already high in emotional intelligence.

George (2000) proposed that feelings are a central component of leading others. She outlines the following five key means by which emotional intelligence fosters leadership effectiveness:

1. Development of collective goals and objectives
2. Instilling knowledge and appreciation for the work activities
3. Generating and maintaining enthusiasm, confidence, excitement, optimism, cooperation, and trust
4. Encouraging flexibility in decision making and change, and
5. Establishing and maintaining a meaningful identity for the organization (p. 1039).

When it comes to the key abilities of emotional intelligence (perception, thought, understand, and managing), emotionally intelligent leaders are more apt to accomplish these five essentials of leadership effectiveness outlined by George (2000).

Early on in the development of emotional intelligence, researchers such as Socik and Mergerian (1999) suggested a link between emotional intelligence and transformational leadership. This link is a reasonable extension of both constructs as emotional intelligence and transformational leadership are both based on emotion (George, 2000). If a leader intends to instill commitment, inspire, foster creativity, and fulfill the desires of followers, how is this to be accomplished without the use of emotion and therefore emotional intelligence (see Caruso & Salovey, 2004)?

Further, emotional intelligence is vital to successful interpersonal relationships (Caruso & Salovey, 2004); thus, if one intends to use interpersonal relationships as a basis to influence others, his or her success depends on developing high levels of emotional intelligence.

Researchers have begun to empirically investigate the relationship between emotional intelligence and leadership style. Mandell and Pherwani (2003) found there was a significant linear correlation between emotional intelligence and transformational leadership. However, based on the findings from Lindenbaum and Cartwright (2010), this correlation is now questionable because Mandell and Pherwani (2003) utilized the Bar-On Emotional Quotient Inventory (EQ-i) to obtain their emotional intelligence scores. Lindenbaum and Cartwright (2010) found that after controlling for common method variance (CMV), no relationship existed between emotional intelligence and transformational leadership. When discussing their findings, they note that only self-report measures (i.e. Stream 2) were analyzed and suggest that the use of an ability test measure (Stream 1, MSCEIT) should be more fruitful and possibly alleviate the CMV issue of the self-report measure. Leban and Zulauf (2004) used an ability test measure (MSCEIT) and found support for the relationship between emotional intelligence and transformational leadership. It is logical that the ability test stands up much better than self-report measures because ability tests “have scrupulously followed traditional theory-building techniques” (Brown & Moshavi, 2005, p. 869). In the following section, we develop propositions for exploring the relationship between emotional intelligence and transformational leadership including one potential moderator. All these propositions are based on the use of Stream 1 (MSCEIT) assessments of emotional intelligence.

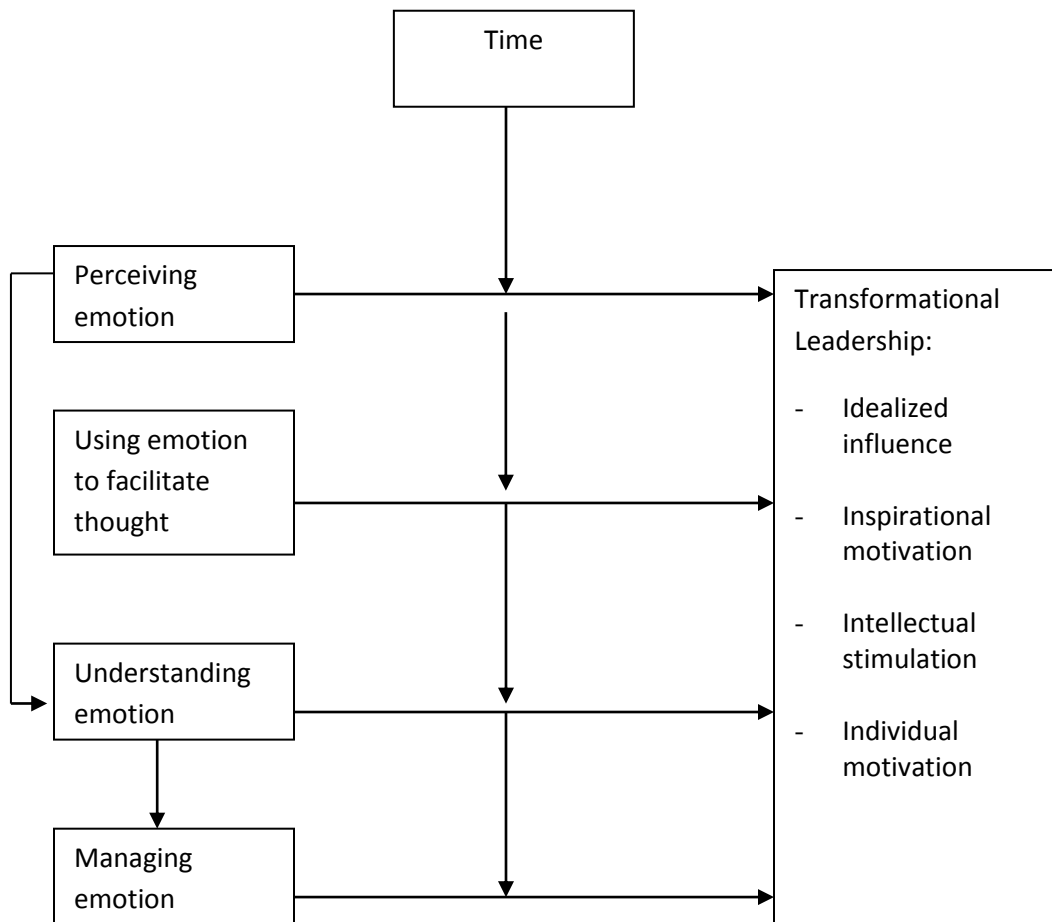
Conceptual Model and Propositions

One key dimension of a transformational leader is his or her ability to comprehend individual differences in each employee and to attend to each employee’s needs and desires. Another dimension is the leader’s ability to understand what intellectually stimulates and motivates each follower. Finally, a transformational leader needs to transform the organization by infusing each follower with a moral purpose. In order to accomplish these tasks, the leader must have a high degree of emotional intelligence. This leader must not only be able to perceive and understand his or her follower’s emotions but also must create an environment that is congruent with the follower’s needs.

With respect to what comes first, emotional intelligence or transformational leadership, we take the stance that in order to become an effective transformational leader, one must first be emotionally intelligent. When discussing emotional intelligence as an antecedent of transformational leadership, Brown & Moshavi (2005) argue that emotional awareness and understanding social contexts, characteristics of those high in emotional intelligence, may result in more effective leadership behaviors, including behaviors associated with transformational leadership. Thus, those low in emotional intelligence may choose to, or by necessity, engage in more transactional and laissez-faire leadership behaviors than those skilled in emotional intelligence.

As Figure 1 shows, we propose a positive relationship between emotional intelligence and transformational leadership.

Figure 1. Proposed conceptual model.



The following propositions elaborate on this relationship by describing the theoretical relationship between the four branches of emotional intelligence and how they are linked to the four dimensions of transformational leadership. We use George's (2000) five elements of how emotional intelligence increases effective leadership to explain this relationship in the leadership context.

Perceiving emotions

Leaders who are more skilled in recognizing emotion in their followers should be better positioned to respond proactively to subtle as well as obvious emotional changes than those counterparts who are less capable of perceiving emotion. For instance, leaders who are unable to judge the emotional states (enthusiasm, confidence, optimism, etc.) of their employees will not recognize a need to focus additional attention when these emotions wane in followers, resulting in a possible decrement in commitment, job satisfaction, and performance. This lack of attention may signal to employees that the leader does not care or is incompetent, which would negatively impact the idealized influence dimension. Further, a leader who is unable to perceive emotions accurately will not be able to delineate the difference between dependence and empowerment. Hence, such a leader may perceive himself or herself to be a transformational leader who empowers employees but in actuality s/he is fostering an environment of dependence.

The ability of a leader to perceive the emotions of his or her followers accurately will also assist in instilling a sense of appreciation for work in followers. First, a leader must be able to perceive emotions accurately to diagnose whether or not employees actually appreciate their work. If appreciation is absent, effort must be taken to generate such appreciation. Second, if employees currently possess appreciation for their work and perceive it to be important, these perceptions must be maintained by someone skilled in assessing when emotional intervention is needed. Thus, a leader skilled at interpreting emotions will understand when followers need a “pep rally” and avoid “preaching to the choir” which could result in perceptions by followers that their leader is “out-of-touch” (see Gardner, Fischer, & Hunt, 2009). For these reasons, we make the following proposition:

Proposition 1. “Perceiving emotion accurately” will increase a leader’s ability to maintain positive emotions, such as excitement and trust, and instill appreciation for the importance of the organization’s work leading to a positive effect on a leader’s ability to build commitment and transform the organization.

In a similar fashion, the ability of a leader to accurately perceive the emotions of followers and to generate and maintain positive internal states, such as enthusiasm, confidence, etc., should be related to the transformational aspect of attending to each follower as an individual. Only a leader skilled in perceiving emotions will be able to detect the emotional cues of individual followers and to determine their needs and desires in order to appreciate followers as individuals. For instance, a leader low in the ability to perceive emotions may realize that his or her followers’ needs and desires are not being met, but s/he may not know how or even see the need to address the needs of the individual follower. For these reasons, we make the following proposition:

Proposition 2. “Perceiving emotion accurately” will increase a leader’s ability to maintain positive emotions, such as excitement and trust, leading to a positive effect on a leader’s ability to identify and address individual differences among his or her employees (individual consideration) and as a consequence, will positively impact transformational leadership effectiveness.

Next, leaders skilled in perceiving emotion are better at sensing if followers are committed to the goals and objectives of their organization on ideological and moral grounds. Individuals join organizations for a myriad of reasons (See Sluss & Ashforth, 2007), not all related directly to the organization’s purpose. For instance, an employee who does not have a strong belief in the ethical treatment of animals may choose to work for the Humane Society simply because it is located near his or her residence. An emotionally acute leader will be able to detect if such individuals are present and “bring them into the fold” of the larger collective. Such a leader, by developing admiration, respect, and trust, may foster such self-defining (see Pratt, 1998) behaviors where, over time, followers begin to hold ideological values and believe in the moral purpose of the leader. Proposition three formally states this view:

Proposition 3. “Perceiving emotion accurately” will increase a leader’s ability to develop a collective sense of goals and objectives by infusing followers with ideological values and

moral purpose (idealized influence) and as a consequence, will positively impact transformational leadership effectiveness.

Using emotion to facilitate thought. The following two propositions illustrate how using emotion to facilitate thought are linked to transformational leadership. First, the idea of emotions as a springboard for idea generation is based on taking the emotional inputs one receives and integrating that information with what one knows about the outcomes these inputs have led to in previous occurrences. George (2000) explained that emotionally intelligent leaders can recognize situations or emotions of followers (inputs) where the followers are not aroused or even aware that problems exist. Leaders who are able to recognize these cues and who respond appropriately by encouraging followers to address important problems, motivating individually, and directing follower action by taking measures to initiate the problem solving process in followers, will be more effective than those unable to detect such situations. Further, emotionally intelligent leaders will understand that followers appreciate recognition for accomplishments such as these and will provide such recognition in an appropriate manner that is amicable to the employee. Such feedback, and the anticipation of future positive feedback, should function as encouragements for the follower the next time such a situation arises. In such situations, the emotionally intelligent leader is managing the sensemaking (Weick, 1995) process of the follower by intervening in the selection process by identifying what issues are important and providing emotional rewards which will be retained and used as feedback for the future enactment processes of followers.

Proposition 4. “Using emotion to facilitate thought” will increase a leader’s ability to encourage and reward creative and innovative solutions to complex problems (intellectual stimulation) and as a consequence, will positively impact transformational leadership effectiveness.

Emotionally intelligent leaders recognize emotional cues of followers, and such leaders will be able to use the cues to facilitate a way of thinking that adapts based on the feedback received from followers. For instance, an aging leader may rely on the tried and true communication strategies he or she has used for several decades and may assume that they are instilling a shared optimism and vision with followers. Leaders such as this, who are not emotionally intelligent, will not detect emotional cues such as melancholy or fault lines between groups of followers and will likely continue to use these stale leadership strategies. Conversely, an emotionally intelligent leader will detect this absence of enthusiasm and cohesion, use his or her understanding of emotions to think of new strategies, implement such strategies, and then monitor the emotional responses of followers (inputs) to gauge effectiveness. If these new strategies are effective, the leader has succeeded. If the strategies are ineffective, the process will continue until the optimism and shared vision are present in all followers. The following proposition is based on this discussion:

Proposition 5. “Using emotion to facilitate thought” will increase a leader’s ability to maintain positive emotions positive emotions, such as excitement and trust, leading to a positive effect on a leader’s ability to motivate others by articulating an inspiring and appealing vision in such a way that it is shared by peers and subordinates and as a consequence, will positively impact transformational leadership effectiveness.

Understanding emotions

Branch 1, 3, and 4 of the four branch emotional intelligence model are sequential. Individuals must first be able to perceive emotions before they can understand what they mean, and they must perceive and understand emotions before they can manage them. First, what separates an emotionally intelligent leader from one that is not, with respect to understanding emotions, is the correct diagnosis of the emotion perceived. For instance, consider the distinction between someone who is unhappy versus someone who is tired. These tricky distinctions are manageable for those possessing high levels of emotional intelligence. Further, this aspect deals with understanding chains of emotions, that is understanding the causes and consequences of emotions (Mayer & Salovey, 2002). In his popular book, *Emotional Intelligence*, Goleman (1995) describes an actual scenario where a robber was exiting the home of a lady he just robbed. On his way out, the lady said to him that she would remember his face and give his description to the police so that he would be apprehended. This emotional outburst resulted in the robber brutally stabbing her to death. What the victim failed to understand was that her emotional outburst would result in an emotional response by the robber, ultimately leading to her death. While this is an extreme example, it highlights the importance of understanding the chain effect of emotions.

We extend that being able to understand emotions contributes to a leader's ability to generate and maintain enthusiasm and excitement and to develop and maintain cooperation and trust in employees. This ability should first result in inspired, optimistic employees with a shared vision. Only leaders who are able to understand the difference between emotions such as optimism and feigned optimism will ever be able to truly inspire their followers. The same applies to understanding if employees actually share the vision or are feigning interest because it is socially desirable or compulsory for employment. Only such leaders that can make these fine distinctions can truly inspire their followers. Further, leaders must understand how their actions can lead to an emotional cascade in followers. For instance, if a leader tells an employee "I want you to do this job because I do not trust anyone else to do it.", the employee might at first feel honored that the leader has placed such trust in him or her. The problem emerges when the employee begins to do the job, determines that the job is very simple, and realizes that the leader only ask him to do the job because it is so mundane that no other employee would have agreed to do it. This type of emotional shortsightedness will affect this follower's trust in the leader for quite some time. An emotionally intelligent leader would have understood the shortsightedness of such a scheme.

Understanding emotions can assist leaders in both understanding individual differences and addressing individual needs and desires. To address individual needs, one must be able to accurately understand the needs and desires of that individual. If a leader cannot understand the emotions of a follower, they are helpless when it comes to addressing their needs. Any endeavor the leader pursues is like shooting in the dark. For instance, with respect to equity, Turnow (1971) describes three basic types of people: benevolents, who tolerate negative equity; equity sensitives, who respond to inequity; and entitlements, who prefer positive inequity. Leaders will inevitably deal with followers from all three of these groups. Only leaders who understand that, on an emotional level, some employees need more than others will be able to effectively lead a diverse group of people. Thus, according to the classes of followers listed above, some will require high level of attention to their needs while others will require almost none at all. Being able to understand these emotions and the needs of each employee is necessary to provide the

individual consideration characteristic of a transformational leader. We make the following proposition with reference to understanding emotions and transformational leadership:

Proposition 6. "Understanding emotion" will (a) increase a leader's ability to maintain positive emotions, such as excitement and trust, leading to a positive effect on a leader's ability to motivate others by articulating an inspiring and appealing vision in such a way that it is shared by peers and subordinates (inspirational motivation) and (b) have a positive effect on a leader's ability to address and identify individual differences among his or her employees (individual consideration), both consequentially will positively impact transformational leadership effectiveness.

Managing emotion

The ability to manage emotions in oneself and others should be the most influential aspect of emotional intelligence on transformational leadership. As mentioned earlier, branches 1, 3, and 4 of the four branch emotional intelligence model are sequential. Thus to manage emotions effectively, one must possess the ability to perceive emotions accurately and to understand these emotions. So, in essence, managing emotion is important for all the same reasons that perceiving and understanding emotions were in relation to different aspects of transformational leadership. The following discussion highlights aspects of how the specific act of managing emotions is related to transformational leadership.

Mayer and Salovey (2002) characterize emotional management as (1) the ability to be open to pleasant and unpleasant emotions thus not closing oneself off emotionally; (2) the ability to monitor one's emotion and reflect on the reason of these emotions; (3) the ability to illicit an emotion and prolong or detach from an emotion if necessary; and (4) the ability to manage the emotions of oneself and others. We suggest that these abilities foster effective leadership, according to the conceptualization of George (2000), which in turn influence all four aspects of transformational leadership. By actively managing the emotions of followers one can instill a belief that the organization and leader are moral, inspire individuals to follow the vision of the leader, encourage followers to engage in innovative problems solving, and meet the individual needs of each follower. To do so, the leader must do as Mayer and Salovey (2002) indicate and manage his or her own emotions. In other words, leaders must express the appropriate emotion for the situation and the individual by displaying the proper emotional reaction. This can be accomplished by prolonging excitement when needed, detaching from anger, or engaging in an emotion one is not currently feeling. The crux of this argument is that effective emotional management is associated with transformational leadership.

Proposition 7. "Managing emotion" will increase leadership effectiveness and have a large positive impact on transformational leadership, more so than the other three branches of emotional intelligence.

Figure 1 graphically demonstrates these seven propositions. It shows that all four branches of emotional intelligence influence transformational leadership. Further, with respect to emotional intelligence, the figure demonstrates how branches 1, 3, and 4 are sequential and branch 2 functions separately from the other three branches. As discussed herein, George's five essentials of effective management, relative to emotional intelligence, are used to substantiate this link.

The Role of Time

As time goes by, the relationship between emotional intelligence and leadership abilities should become more pronounced. When speaking of deep-level diversity, Harrison, Price, Gavin, and Florey (2002) state that “Clues to these latent individual difference are taken from members’ interactions with one another as they unfold over time” (p. 1031). One’s disposition to display emotion is an individual difference. Thus, to perceive, understand, manage, and use someone’s emotions as a springboard for thought, leaders must spend time with followers to gain insight into the follower’s mannerisms and idiosyncrasies with regard to emotion. As such, we see that even highly emotionally intelligent leaders will need some time to “figure out” their followers and that it takes time for one to perceive a leader to be transformational in nature.

The same holds true for transformational leadership with respect to time. As Bass, Avolio, Jung, and Berson (2003) argue, clarity and trust between leader and follower must first be established before the transformational leadership style can be utilized. For instance, Bass et al. (2003) argue that transformational leaders must start off as transactional leaders until trust and commitment can be established. That is, only after a leader has been in place for some period of time will we see the link between emotional intelligence and transformational leadership. We argue that for new leaders there will be a much weaker link between emotional intelligence and transformational leadership because enough time has not transpired for them to understand and effectively manage the emotions of followers and because enough time has not elapsed for the perceptions of transformational leadership to manifest themselves. Further, we extend that after a significant amount of time has passed there will be a much stronger link between emotional intelligence and transformational leadership than at the initial installment of the leader. Thus, we propose the following.

Proposition 8. Time moderates the relationship between emotional intelligence and transformational leadership. That is, the association between emotional intelligence and transformational leadership will be stronger when leader and followers have interacted for some minimal amount of time. Further, no significant association between emotional intelligence and transformational leadership is expected at the initial installment of the leader.

Conclusions and Implications

Researchers have empirically demonstrated that the transformational leadership style positively impacts performance and overall leader effectiveness (eg., Avolio, Walumbwa, & Weber, 2009; Bass, Avolio, Jung, & Berson, 2003; Bycio, Hackett, & Allen, 1995; DeGroot, Kiker, & Cross, 2000; Lowe & Galen Kroeck, 1996). However, some questions persist regarding the dispositional sources of leadership. Transformational leaders must possess multiple types of intelligence. However, emotional intelligence is especially important as it impacts the leader’s ability to inspire and build relationships with followers (Bass, 2002). This paper sought to explore the role of emotional intelligence as an important antecedent of transformational leadership.

We use the four dimension conceptualization of transformational leadership (Bass, 1985; Judge & Piccolo, 2004; Yukl & Van Fleet, 1990) as a foundation for integration with the hierarchical, four branch ability model of emotional intelligence (Mayer, Salovey, Caruso, & Sitarenios,

2003) in order to develop a conceptual model (see Figure 1) and eight propositions to guide future research and practice. George's (2000) elements for effective leadership were also used to support the propositions. Given that emotional intelligence and transformational leadership behaviors continually evolve over time, the concept of time is included a moderator of the linkage between emotional intelligence and transformational leadership.

We offer researchers an additional way to view the relationship between emotional intelligence and transformational leadership. Understanding how the hierarchical, four branch model of emotional intelligence relates to the four dimensions of transformational leadership along with the concern for time provides a solid framework for cross-sectional and longitudinal studies on specific pieces of each linkage or the whole model. Practitioners may use this paper to initiate conversations about transformational leadership in their organizations, assessing and facilitating emotional intelligence, etc. Our hope is that the propositions presented here will create or renew interest in the high potential constructs of emotional intelligence and transformational leadership.

References

- Ashkanasy, N. M., Haertel, C. E. J., & Daus, C. S. 2002. Diversity and emotion: The new frontiers in organizational behavior research. *Journal of Management*, 28(3): 307-338.
- Avolio, B. J., & Bass, B. M. 1988. *Transformational leadership, charisma and beyond*. Lexington MA: Lexington Books.
- Avolio, B. J., Walumbwa, F. O., & Weber, T. J. 2009. Leadership: Current theories, research, and future directions. *Annual Review of Psychology*, 60: 421-449.
- Bar-On, R. 1997. The Emotional Intelligence Inventory (EQ-i): Technical manual. Toronto, Canada: Multi-Health Systems.
- Bass, B. M. 1985. Leadership: Good, better, best. *Organizational Dynamics*, 13(3): 26-40.
- Bass, B. M. 2002. Cognitive, social, and emotional intelligence of transformational leaders. In R. E. M. Riggio, Susan E. (Ed.), *Multiple intelligences and leadership*.: 105-118. Mahwah, NJ, US: Lawrence Erlbaum Associates, Publishers.
- Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. 2003. Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88(2): 207-218.
- Bass, B. M., & Steidlmeier, P. 1999. Ethics, character, and authentic transformational leadership behavior. *Leadership Quarterly*, 10(2): 181-217.
- Burns, J. M. 1978. *Leadership*. New York: Harper & Row.
- Bycio, P., Hackett, R. D., & Allen, J. S. 1995. Further assessments of Bass's (1985) conceptualization of transactional and transformational leadership. *Journal of Applied Psychology*, 80(4): 468-478.
- Caruso, D. R., Mayer, J. D., & Salovey, P. 2002. Emotional intelligence and emotional leadership. In R. E. M. Riggio, Susan E. (Ed.), *Multiple intelligences and leadership*.: 55-74. Mahwah, NJ, US: Lawrence Erlbaum Associates, Publishers.
- Daus, C. S., & Ashkanasy, N. M. 2003. *Will the Real Emotional Intelligence Please Stand UP? On Deconstructing the Emotional Intelligence "Debate"*. Paper presented at the Conference for the Society of Industrial and Organizational Psychology (SIOP), Orlando, Florida.

- DeGroot, T., Kiker, D. S., & Cross, T. C. 2000. A meta-analysis to review organizational outcomes related to charismatic leadership. *Revue Canadienne des Sciences de l'Administration*, 17(4): 356.
- George, J. M. 2000. Emotions and leadership: The role of emotional intelligence. *Human Relations*, 53(8): 1027-1055.
- House, R., & Podsakoff, P. M. 1994. *Leadership effectiveness: Past perspectives and future directions for research*. Hillsdale, NJ.
- Howell, J., & Avolio, B. J. 1998. The ethics of charismatic leadership: Submission or liberation? In G. R. Hickman (Ed.), *Leading organizations: Perspectives for a new era.*: 166-176. Thousand Oaks, CA, US: Sage Publications, Inc.
- Howell, J. M., & Avolio, B. J. 1993. Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated-business-unit performance. *Journal of Applied Psychology*, 78(6): 891-902.
- Judge, T. A., & Bono, J. E. 2000. Five-factor model of personality and transformational leadership. *Journal of Applied Psychology*, 85(5): 751-765.
- Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. 2002. Personality and leadership: A qualitative and quantitative review. *Journal of Applied Psychology*, 87(4): 765-780.
- Jung, D. I., & Avolio, B. J. 2000. Opening the black box: An experimental investigation of the mediating effects of trust and value congruence on transformational and transactional leadership. *Journal of Organizational Behavior*, 21(8): 949-964.
- Kark, R., Shamir, B., & Chen, G. 2003. The two faces of transformational leadership: Empowerment and dependency. *Journal of Applied Psychology*, 88(2): 246-255.
- Lowe, K. B., & Galen Kroeck, K. 1996. Effectiveness correlates of transformational and transactional leadership: A meta-analytic review. *Leadership Quarterly*, 7(3): 385-425.
- Mandell, B., & Pherwani, S. 2003. Relationship between emotional leadership style: A gender comparison. *Journal of Business & Psychology*, 17(3): 387-404.
- Massey, D. S. 2002. A brief history of human society: The origin and role of emotion in social life. *American Sociological Review*, 67(1): 1.
- Mayer, J. D., Caruso, D. R., & Salovey, P. 1999. Emotional intelligence meets traditional standards for an intelligence. *Intelligence*, 27(4): 267-298.
- Mayer, J. D., & Salovey, P. 1993. The intelligence of emotional intelligence. *Intelligence*, 17(4): 433-442.
- Mayer, J. D., & Salovey, P. 1995. Emotional intelligence and the construction and regulation of feelings. *Applied & Preventive Psychology*, 4(3): 197-208.
- Mayer, J.D., Salovey, P., & Caruso, D.R., 2002. *Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) user's manual*. Toronto, ON: MHS.
- Mayer, J. D., Salovey, P., & Caruso, D. R. 1997. Emotional IQ test (CD ROM), *Virtual Knowledge*. Needham, MA.
- Mayer, J. D., Salovey, P., Caruso, D. R., & Sitarenios, G. 2001. Emotional intelligence as a standard intelligence. *Emotion*, 1(3): 232-242.
- Mayer, J. D., Salovey, P., Caruso, D. R., & Sitarenios, G. 2003. Measuring emotional intelligence with the MSCEIT V2.0. *Emotion*, 3(1): 97-105.
- Salovey, P., Hsee, C. K., & Mayer, J. D. 1993. *Emotional intelligence and the self-regulation of affect*. Upper Saddle River, NJ: Prentice-Hall, Inc.
- Salovey, P., & Mayer, J. D. 1989. Emotional intelligence. *Imagination, Cognition & Personality*, 9(3): 185-211.

- Weick K. E. 1995. *Sensemaking in organizations*. Thousand Oaks, CA: Sage.
- Yammarino, F. J., & Bass, B. M. 1990. Long-term forecasting of transformational leadership and its effects among naval officers: Some preliminary findings. In K. E. C. Clark, Miriam B. (Ed.), *Measures of leadership*.: 151-169. West Orange, NJ, US: Leadership Library of America, Inc.
- Yukl, G. 1998. *Leadership in Organization*. Englewood Cliffs, NJ: Prentice-Hall.
- Yukl, G., & Van Fleet, D. 1990. Theory and research on leadership in organizations, *Handbook of industrial and organizational psychology*, Second ed., Vol. 3: 147-198. Palo Alto, CA: Consulting Psychologists Press.

Teaching Small Business Management Successfully: A Lesson from Fedex

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Abstract

Small Business Management is perhaps the most unique combination of theory and practice among all business courses. Three methodologies are presented in this paper for teaching Small Business Management at the university level. An overriding theme is proposed that will ensure that students benefit from the course, regardless of the course format or who teaches it. The theme is the philosophy of people, service, and profits, the foundation of one of the most successful startups in U.S. history, FedEx, from one of the leading entrepreneurs of the twentieth century, Fred Smith.

Introduction

Small Business Management is offered at hundreds of colleges and universities throughout the world. When one considers business courses in general and particularly those in management, Small Business Management is perhaps the most unique combination of theory and practice. As an example, students at many universities are allowed to take the course without any prerequisites, resulting in blended classrooms where students majoring in drama, music, biology, agriculture, fashion design, management, and a host of other areas come together.

A group this diverse requires a unique approach to the material. Students not majoring in management, for example, need some basic instruction in management, logistics, production, income statements and balance sheets, marketing, and financing, all of which are usually part of a common business core. This instruction must be tempered with practical application, however, to avoid losing the attention and interest of business majors.

Many small business classes are taught by former small business owner/operators who have pursued graduate degrees and moved into the academic realm. Students tend to appreciate the examples shared by these instructors as to how the textbook concepts have played out practically, provided the 'war stories' are not the focus of the course. Yet, with the continuing emphasis on accreditation at most institutions of higher learning and the effort to legitimize research in the area of small business/entrepreneurship Aulet, (2013), universities are hiring younger, terminally-degreed faculty members, many of whom have little or no practical business experience, let alone business ownership and operation.

Without having personally experienced the stressful trials and tribulations, as well as the sometimes euphoric feelings, of owning and operating a business, instructors must pull examples from textbooks, case studies, or small business journal articles. Over time the classes tend to morph into resembling whatever field the instructor has been trained in, emphasizing the literature and training with which the teacher is most comfortable. These instructors, who usually teach other classes in their field, are not as familiar and don't stay as current with the small business/entrepreneurship literature.

Three methodologies are presented in this paper for teaching Small Business Management at the university level. Each has noted strengths and weaknesses. Regardless of the methodology

practiced, an overriding theme is proposed that will ensure a course from which students will benefit, no matter who teaches it or what their area of expertise might be. The theme is drawn from one of the most successful entrepreneurs of the twentieth century (Fortune, 2012) who is still actively involved in the firm he founded in 1973. The entrepreneur is Fred Smith, and his firm is FedEx.

A discussion of the three teaching methodologies is presented first, followed by a brief history of FedEx and its founder. His theme for operating a successful small business, which is how FedEx began, is outlined and incorporating Smith's philosophy into a small business class follows. Finally, a summary of the paper's purpose and a conclusion will round out the discussion.

Suggested Methodologies for Small Buisness

Three primary teaching methodologies are suggested for Small Business Management classes, including a traditional approach, an experiential method, and a purely online version. With most U.S. states reducing funding for higher education, causing tuitions to rise at a somewhat alarming rate, universities are feeling an ever growing pressure to reduce operating costs. One solution has been part-time faculty who generally are paid less than full-time and/or tenure track faculty. Another alternative being explored is online courses which can be taught or facilitated by full or part-timers. A third cost-cutting option has been larger classes, reducing the overall need for faculty members.

One other issue that has arisen is the emphasis being placed on experiential educational, the need for students to get out into the community and observe or participate first hand in community service or perform projects for businesses. This effort sometimes leads to a hybrid type class where students divide their time between the project and the classroom. In this situation more time is invariably devoted to the project for the local business as opposed to classroom instruction.

The aforementioned teaching methodologies have both strengths and weaknesses. Here are some of the strengths to the traditional approach to learning:

- Students tend to learn more from their peers due to classroom discussion and exercises;
- Teachers with owner/operator experience can share some of that practical knowledge as it relates to specific topics during the course;
- Textbooks provide a framework and reference for reading and discussion;
- Case studies bring opportunities for critical thinking and problem solving;
- And, examinations administered in the class test the students' retention of basics needed as a background for anyone desiring to own their own business.

Weaknesses of the traditional approach include:

- Students must attend class regularly to truly benefit from peer learning;
- Students prefer a class take up the least amount of their time possible;
- Textbooks add costs to taking a class.
- The traditional approach can deemphasize the utilization of technology;
- And, little time is left for students to work on out-of-class projects.

The experiential methodology's strengths include:

- Students participate in field-based consulting projects, either preparing a case study or a plan of action to address some small business real time problem;
- Allows students to interact with small business owners and understand issues they are struggling with as well as competencies they employ that make them successful;
- Promotes the development of critical thinking and problem solving;
- And, students learn how to work in a team format.

Some of the weaknesses of the experiential method are:

- Little, if any, time is available for establishing a theoretical background in small business literature;
- And, student interactions are limited to one team.

The third methodology, online, has some definite strengths, such as:

- It promotes the use of technology;
- Develops an independent work ethic in students;
- Allows students to earn course credit without attending class;
- And, provides the opportunity for some student-to-student interaction and discussion through the use of discussion boards.

Weaknesses of the online method include:

- The format does not really facilitate peer learning;
- It limits opportunities for the teacher to share past experiences;
- Professors never really know who is sending in the assignments;
- And, students are somewhat isolated and anonymous, losing the face-to-face interaction with a professor. (Note: A student in a classroom-based course was asked who his operations professor was. His reply was that the course was online, so who cares?)

Lessons from Fedex

Founded in 1973 in Little Rock, AR and soon relocated to Memphis, TN, FedEx is a global logistics and supply-chain management company that began as an overnight package delivery firm (Lester, 2008; Ng & Farhomand, 2002; Sigafos, 1988). Revenues for the fiscal year 2012 were \$42.6 billion (Fortune, 2013; p. I-104). FedEx ranked tenth on the list for 2013's World's Most Admired Corporations (Fortune, 2013; p. 107) and was listed in the 100 best Companies to Work for (Fortune, 2013; p. 96).

FedEx, originally known as Federal Express, has been recognized for several firsts in American business, including:

- The first U.S. company to reach \$1billion in revenue within ten years of start-up without an acquisition (Tu, Lester, & Sullivan, 1996);
- The first service company to win the Malcolm Baldrige award (Lester, 2008);
- The largest venture capital start-up, approximately \$90 million, in the history of U.S. businesses at the time it was founded;
- The first company to develop the hub-and-spokes system (Hill, 1998).

Founder Fred Smith, a former Marine who served two tours in Viet Nam and was a graduate of an ivy league school, has been described as a ‘skillful, egotistical, strong-willed, one-man show’ (Jenster, 1999; Sigafoos, 1988). Making a success out of the unique business model of FedEx required each of those personal characteristics.

Smith might have had a bit of head start in life due to his father’s success as a businessman. The elder Smith provided venture capital for a struggling quick-service restaurant chain known as Toddle House in 1934, and the chain was eventually sold in 1961, netting Smith and his brother approximately \$22 million (Sigafoos, 1988). Smith also founded and was chairman of the Dixie Greyhound Bus Lines. As a young man, Fred and his sister inherited approximately \$4 million each as a result of their father’s business acumen.

With this wealth in hand and having experienced the war after college, Fred Smith founded Federal Express based on an idea he wrote about in a college paper. The theme of the term paper was a new model for air freight due to Smith’s belief that the current model shipping freight via passenger service was not sustainable. Making this idea a reality was a challenge, especially considering the strict regulation of the air cargo industry by the U.S. government. Smith was convinced, however, that profit was to be made in this venture (Sigafoos, 1988). As he developed the firm, pitched its potential to other investors, and hired experienced managers and consultants, Smith came to realize the importance of people to any organization’s success. And, with the business model stressing overnight delivery of letters and small packages, something no one had ever attempted, service became a way of life. Smith was convinced that profits would follow if a firm took care of its people and worked constantly to improve its service.

People, Service, and Profits

Whether an instructor pursues a traditional approach, an experiential method, or an online methodology, the lessons learned by Fred Smith and FedEx can provide a framework for preparing small business students for the successful management of their own firms. A course outline is presented that incorporates the people, service, profits philosophy into a small business course. Each component of the philosophy is supported by topics for study, research, and discussion. For convenience purposes, a popular textbook, *Small Business Management, Launching & growing entrepreneurial ventures, 16E*, by Longenecker, Petty, Palich, and Hoy, is used to support the outline.

I. Introduction

- A. Idea generation – how to sift through ideas to find the nugget
 - B. External environmental analysis – change is swift and demands attention
 - C. Strategy – getting the right fit between how to attack the market and your firm
 - D. Family Business overview – many small firms don’t start this way, but?
- Longenecker, et al., (2012), chapters 1, 3, 5
- Other suggested readings: *Competitive Strategy*. Michael Porter (1980).
Innovation and Entrepreneurship. Peter Drucker (1985).

II. Managing People

- A. Leadership issues – owner/operators are the leaders
- B. Motivating employees – make each job challenging

- C. Communication – you can't survive without it
- D. Hiring, Firing, and other human resource issues – enough said
- E. Recognition – missing from many small firms
- F. Compensation – your one hiring advantage
- Longenecker, et. al, (2012), chapters 2, 19, 20
- Other suggested readings: Leaders. Warren Bennis and But Nanus (1985).
Managing. Harold Geneen (1984).

III. Managing Service

- A. Organizational culture – looking from the customer's perspective
- B. Training and development – organized or piecemeal
- C. Customer relationship management – imperative for growth
- D. Operations and logistics – can be a competitive weapon
- E. Promotions – advertise and promote constantly
- F. A bias for action – demonstrate it
- G. Attention to detail – think small, get big
- Longenecker, et. al, (2012), chapters 14, 15, 17, 21
- Additional reading: In Search of Excellence. Thomas Peters & Robert Waterman (1981)
The Goal. Eliyahu Goldrait (1992).

IV. Managing Profits

- A. Knowing where the money goes – understanding P & L's
- B. Managing credit – don't let others operate on your money
- C. Developing a competitive advantage – innovate, innovate, etc.
- D. Investing for the future – growth takes investment capital
- Longenecker, et. al, (2012), chapters 16, 22, 23

Another suggestion for the course is at least two standard case studies, not the one or two-page variety that usually accompany textbooks. These could serve as individual writing assignments with the instructor providing the cases and specific questions to the students. Published cases must be purchased in reprint form for the publishers, but their value as critical thinking stimulators cannot be overstated. It is suggested that the writing assignments be limited to two pages or so to get students used to presenting their arguments in direct, specific language. Class discussion of cases when the assignments are turned in to the instructor provide learning opportunities as students hear different perspectives presented by their classmates that expand their horizons and levels of understanding from the narrow, individual view that have used to evaluate the problem in the case.

The additional suggested readings need to selectively be chosen by the instructor due to expense and time constraints during a normal academic term. Most are older, more classical business books, but none are the typical gimmicky popular business book that seems to be pervasive in today's market. Bennis and Nanus' (1985) and Geneen's (1984) books are particularly useful. There have been some useful business management books written in the last decade, so each instructor can obviously tailor the additional reading list to suit their personal favorites.

If an instructor is familiar with the Longenecker, et. al (2012) textbook he or she is aware that the middle chapters of the book are dedicated to business planning. Small Business Management

courses are better served by focusing on managing an existing enterprise, leaving business planning for a dedicated course or an introductory entrepreneurship course. The long list of small business failures that have not been able to survive today's competitive business landscape demand that university students who aspire to owning their own company understand how to manage it. Almost every small business textbook writer acknowledges that poor management is one of, if not the, leading cause of business failure. Conversely, business planning education has diminished somewhat due to the importance being placed on intangibles by venture capitalists, angel investors, and other capital financing sources. Many times a well-written two page summary, an eloquent elevator pitch, or a well-qualified team of talented individuals carries more weight than a sixty page plan full of marketing research and made up numbers.

Discussion

Unfortunately, there is no simple formula for success in operating a small business. What small business instructors should try to do is teach students the importance of focusing on people, service, and profits to ensure long term success. History has taught us there is no ideal entrepreneur. What our goal should be is to teach students that the basics of business will provide them with a greater opportunity for success whatever their business idea or career choice. The unique thing about owning and operating a small business is that everything internal to the company is in the owner's hands. Yes, some entrepreneurs are serial (Allen, 2006), living for the excitement of the startup phase and impatient for the next startup. But most owner/operators are trying to make a living out of their enterprise, not build up sales and exit.

Should Small Business Management be taught online, experientially, in the classroom, or some hybrid version? That question is left to the instructor. What is important is that any format can be successful if students come away with a basic understanding of what they face when having to personally manage people, service, and profits. A university course in small business is a good start. No, Michael Dell, Steve Jobs, and several other famous entrepreneurs did not complete college degrees. Yet each would affirm the importance of the three-tenant philosophy presented here. Just ask Fred Smith.

References

- Allen, K.R. (2006). *Launching New Ventures: An entrepreneurial approach*, 4 ed. Boston, MA: Houghton Mifflin Company.
- Aulet, B. (2013). Teaching entrepreneurship is in the startup phase. *Wall Street Journal*, September, 12, A17.
- Bennis, W., & Nanus, B. (1985). *Leaders: The strategies for taking charge*. New York, NY: Harper & Row.
- Byrne, J.A. (2012). The 12 greatest entrepreneurs of our time. *Fortune*, 165(5), 68-86.
- Drucker, P. (1985). *Innovation and Entrepreneurship: Practice and principles*. New York, NY: Harper & Row.
- Fortune* (2013). Largest U.S. Corporations, 167(7), F-2 to F-25.
- Fortune* (2013). The World's Most Admired Companies, 167(4), 137-148.
- Fortune* (2013). 100 Best Companies to Work For, 167(2), 85-96.
- Geneen, H., with Alvin Moscow (1984). *Managing*. New York, NY: Avon Books.
- Goldrair, E. (1992). *The Goal: A process of ongoing improvement*. Second revised edition. Croton-On-Hudson, NY: North River Press.

- Hill, C. (1998). The evolution of the air express industry, 1973-1996, In C. Hill, and G. Jones (Eds.). *Strategic Management*. Boston, MA: Houghton-Mifflin, pp. 249-259.
- Jenster, P. (1988). Federal Express: Is there any “zip” left in Zapmail? In, J.A. Pearce, & R.B. Robinson, (Eds.), *Strategic Management*, 3rd edition, pp. 510-520.
- Lester, D.L. (2008). Making the case for sustainable strategic management: An assessment of FedEx. *International Journal of Sustainable Strategic Management*, 1(1), 82-97.
- Longenecker, J., Petty, J., Palich, L, & Hoy, F. (2012). *Small Business Management: Launching & growing entrepreneurial ventures*, 16E. Mason, OH: South-Western Cengage Learning.
- Ng, P., & Farhoomand, A.F. (2002). FedEx Corp: Structural transformation through e-business, in M.A. Hitt, R.D. Ireland, and R.E. Hoskisson (Eds.), *Strategic Management*, Mason, OH: South-Western Publishing, C-205-219.
- Peters, T., & Waterman, R. (1981). *In Search of Excellence: Lessons from America’s best-run companies*. New York, NY: Harper & Row.
- Porter, M. (1980). *Competitive Strategy*. New York, NY: The Free Press.
- Sigafoos, R.A. (1988). *Absolutely Positively Overnight*. Memphis, TN: St. Luke’s Press.
- Tu, H., Lester, D., & Sullivan, S. (1996). Federal Express: What next after globalization. In, P. Wright, M. Krohl, and J. Parnell, (Eds.), *Strategic Management Cases*. Englewood Cliffs, NJ: Prentice-Hall, pp. 446-456.

SMEs and the Role of Financial Reporting Information Within Trade Credit Decisions: An International Study

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Abstract

Trade credit is a critical source of financing for many SMEs and this study investigates the role of financial statements and other information within trade credit decisions involving smaller entities in Finland, the UK, USA and South Africa. The study adds to the literature by examining the information needs of unincorporated entities as a basis for making comparisons with small, unlisted companies. In-depth, semi-structured interviews in each country were used to collect data from owner-managers of SMEs, credit rating agencies and credit insurers. The findings provide insights into similarities and differences between countries and between developed and developing economies. The evidence suggests that there are three main influences on the trade credit decision: formal and report-based information, soft information relating to social capital and contingency factors. The latter dictate the extent to which hard/formal information versus soft/informal information is used.

Key words: Access to finance, financial management, financial reporting, SMEs, trade credit

Introduction

This study investigates the value of the financial statements of small and medium-sized enterprises (SMEs) to trade creditors and trade credit intermediaries, including credit rating agencies and credit insurers. The research focuses on small and medium-sized unincorporated and incorporated enterprises, to which we will refer collectively as SMEs. The study is set in the context of the increased internationalisation of smaller firms and growing international convergence of financial reporting requirements.

The economic importance of SMEs, especially in developing economies, has been widely documented. Not only do SMEs provide an increasing share of employment, but they are regarded as vital sources of innovation, growth and new jobs. As we discuss in the individual country chapters, definitions of size vary from place to place, but however measured, SMEs make a significant contribution to jobs and GDP in all economies and definitional issues are of minor importance. Against this background, many governments have developed favourable policies towards SMEs in order to lower barriers to their development. Two areas, in particular, have been singled out for attention – access to finance and financial reporting.

Many studies have identified a ‘finance gap’ where SMEs find it hard to obtain finance at the start-up stage and beyond, and various initiatives and incentives have been used to encourage financiers to invest in equity and to lend to SMEs, generally with disappointing take up. It is hard for lenders to overcome the high costs of assessing and monitoring SME investments in comparison with lending for property purchases, for example.

Existing and potential investors, lenders and creditors are widely considered to be the primary users of the published accounts (IFRS, 2010). Investors in large companies are generally external shareholders who delegate authority for managing the business to the directors. However,

investors in most small and medium-sized private companies are owner-managers (Page, 1984, Carsberg *et al.*, 1985, Collis, 2003 and 2008). Although there is some literature on the users of the financial statements of small and medium-sized companies, the main focus is on lenders, and little is known about the information needs of suppliers, other trade creditors or third parties, such as credit rating agencies and credit insurers. Moreover, the use of the financial statements produced by unincorporated entities by trade creditors is a notably under-researched area.

There has been a concerted push to reduce the perceived burden of regulation faced by small businesses. As regulation has increased small businesses and their representatives have complained that new regulation in many fields such as health and safety, employment and financial reporting impinge unfairly upon smaller businesses. Where such regulations impose costs that have a fixed element, or there are economies of scale in complying with them, there is substance in such complaints as larger competitors are able to spread additional costs over a larger volume of activity.

At the same time the public benefit of compliance by small businesses with regulations is less than for larger entities; SMEs bear a higher relative cost of regulation for a proportionally smaller social benefit. As shown in section 4.1, there has been a programme of reduction in the financial reporting requirements of small companies in the EU, IFRS and in the specific requirements of nations such as the UK, Finland and South Africa. Most recently the EU has proposed new rules that would exempt micro-entities² from most of the requirements of financial reporting (EU Parliament and Council, Directive 2012/6/EU). Implementation of the directive would mean that micro-entities did not need to report full accounts to their members, file financial statements for public inspection or comply with accounting standards in important respects. A substantial reduction in the amount of financial information available about small companies could have two effects. At the level of individual micro-entities, companies that chose to use the exemptions could find it harder to gain trade credit and/or bank finance. At the systemic level, the reduction of information about the SME sector might increase information costs and uncertainty in granting credit and finance so that the financing cost of all SMEs rose to some extent.

The focus of our research lies at the intersection of these two elements of policy towards small business. The majority of attention to the finance gap has focused on provision of bank loans, and to a lesser extent equity, for small businesses; yet, not all businesses borrow from banks and fewer still seek outside equity. Trade credit is another source of finance that is widely used and has many advantages for small businesses. Trade credit is usually costless or at least cheap, it is self-liquidating, in the sense that purchase of supplies on credit are generally for working capital that, when sold, provides the funds to pay the supplier and trade credit expands with the business. Studies in various countries have usually found that trade credit used by the small business sector is of the same order magnitude as bank borrowing.

According to Berger and Udell (2006), although trade credit is extremely important to SMEs, it has received much less attention than commercial bank lending, which provides only slightly more credit to SMEs. Trade credit provides a cushion during credit crunches, monetary policy contractions or other events that leave financial institutions less able or less willing to provide

small business finance. Since only a limited number of SMEs have access to loans from financial institutions, trade credit may often be the best or only available source of external finance for working capital. Previous research has tended to oversimplify the institutional framework by dichotomising SMEs into transparent and opaque firms and suggesting that lending to opaque SMEs is uneconomic for big banks. However, Berger and Udell (2006) argue that alternative institutional structures could be set in place to improve credit availability for SMEs.

Many of the procedures and processes associated with the other lending technologies appear to be utilized in underwriting trade credit (Wilner, 2000). Credit scoring and similar quantitative techniques have long been a part of the underwriting process used by credit managers. Financial statements are analysed as part of the underwriting process for larger accounts. No doubt, soft information and mutual trust play a role in some trade credit underwriting similar to relationship lending. Previous research shows that financial information is one of the primary measures used to assess the capacity of a business to effect payment of credit (Kwok, 2002). Although the generation and effective use of financial information are essential to accessing funds from external sources, loan officers tend to use full financial statements rather than relying on cash flow information alone.

A study of entrepreneurs and bank managers in Italy (Howorth and Moro, 2006) found that the bank lending decision is often based on the evaluation of the customer's financial statements and/or the provision of collateral, and/or credit rating score. These three technologies are grounded on hard facts and public information available. However, soft information such as ethics and trust, social capital (relationship, networks) is also important in the lending process. Ethical perception of the borrower plays an important role in reducing agency problems such as moral hazard and adverse selection. Since the information needs of lenders and creditors are similar, these findings suggest that a combination of hard and soft information might also be important in the decision to grant trade credit to SMEs.

The present research addresses corporate reporting and access to finance issues. Trade credit has been recognised in a number of surveys and research publications as an important source of finance for SMEs from both a UK and global perspective (Forbes, 2010; ACCA/CBI, 2010). Although it is known that published financial statements plays a significant role in the determination of the credit decision, prior research has tended to accept the user needs framework (IFRS, 2010) based on the economic decisions made by the users of the financial statements of large, listed companies (mainly investors). Little research has investigated the use of the financial statements of smaller entities in the context of trade credit and the customer/supplier relationship. To our knowledge, no study has investigated the needs of the users of the financial statements of unincorporated entities as a basis for making comparisons with small, unlisted companies.

The purpose of this study is to address the above mentioned gaps in the literature by providing empirical evidence on the value of the financial statements of unincorporated and incorporated SMEs in the context of trade credit decisions that support customer/supplier relationships. We investigate the following research questions:

- What are the main sources and types of information used by the case study SMEs when making trade credit decisions?
- How is the information used?
- What are the international similarities and differences in the findings in the context of institutional factors?

In the next section we explain the research design and methods chosen for collecting and analysing the data. We then provide an overview of the institutional setting and findings from the country-level analysis. In the final section we present a cross-country analysis and discuss the contribution and limitations of the research.

Methodology

The study focuses on the following countries:

- Finland, where very small non-publicly accountable companies can choose to publish slightly abridged accounts based on Finnish GAAP that also meets the requirements of the tax authorities, and which are exempt from audit.
- The United Kingdom (UK), where private companies that qualify as small can publish an abbreviated statement of financial position only (and notes thereto) that is based on the Financial Reporting Standard for Smaller Entities (FRSSE). Moreover, the full accounts they must provide for shareholders are generally exempt from statutory audit. On the other hand, private companies that qualify as medium can publish a separate version of abbreviated accounts that contains more information than the version for small companies. However, medium-sized private companies cannot use the FRSSE and the full accounts provided for shareholders must be audited.
- The United States of America (USA), where small and medium-sized private companies are not obliged to publish financial statements nor have their accounts audited.
- South Africa, where small private companies are obliged to publish financial statements based on the IFRS for SMEs and audit exemption was proposed in company law provisions in 2010.

This choice of countries allows data to be collected from:

- Europe (where the UK represents an early adopter of little GAAP and Finland a late adopter of the concessions available under the EC Fourth Directive) and in the major continents of Africa and North America
- Developed economies (Finland, the UK and USA) and an emerging economy (South Africa).

Data were collected via a number of in-depth, semi-structured interviews in each country:

- Interviews with two unincorporated small entities providing trade credit
- Interviews with two small private companies providing trade credit
- Interviews with two medium-sized companies providing trade credit
- One interview with a credit rating agency and one interview with a credit insurer.

To address the problems of access to a suitable sample, cultural and language barriers, the interviews were conducted and analysed by local academic researchers in each country. The entities were selected using snowball sampling, which is a technique based on networking and is

appropriate in a study where generalization is not the aim (Collis and Hussey, 2013). The majority of interviews were conducted face-to-face, but in some cases they were conducted by telephone.

The interview schedule (see Appendices A and B) included some closed questions to collect demographic data at the start of the interview, but the majority of the questions were open ended. Some questions incorporated critical incident technique (Flanagan, 1954) to focus the interviewee's attention on a recent defined event. This helps the interviewee express an opinion about a memorable experience rather than give a general impression of events or given an opinion based on vicarious knowledge. Because the primary goal was to obtain empirical insights, cues given by interviewees were followed in more depth and ad hoc prompts and probes were asked. Thus the interviews were designed to leave room for unforeseen issues to emerge.

The interview schedule was developed and tested with two small firms and a credit rating agency in the UK, prior to its wider adoption in the study. The questions addressed a number of areas relating to the information gathering processes involved in business-to-business credit decisions. It covered the types of information needed by SMEs providing trade credit and by credit rating agencies and credit insurers. It also explored the purposes for which the information is needed and the sources of information used.

The interviewees were given information about the nature and purpose of the research, in advance and permission was asked to record the interview. In the majority of cases, permission was granted. The researchers offered to provide a copy of the interview transcript for the participant's approval and a copy of the research report. The interviewees were made aware that the report would include anonymous quotations and neither their names nor the names of their organizations would be associated with any of the information provided.

Following the advice of Miles and Huberman (1994), a thematic approach was taken to the analysis of the research data. This entailed identifying the themes that emerged from the interviewees' responses and subsequently grouping them into categories that share a common characteristic. The first stage of the analysis took place at the country level and this is reported in Chapters 3-6. The second stage was to conduct a cross country analysis to form new integrated patterns (see Chapter 7).

Overview of the country-level analysis

Finland

As a member of the European Union (EU) since 1995, the regulation of financial reporting in Finland is aligned to the requirements of the Fourth Company Law Directive (78/660/EEC) and other accounting directives issued by the European Commission. In Finland there is a strong alignment between financial reporting and tax reporting. Financial statements are the basis for tax filings, and financial reports of all limited liability companies are transferred by tax authorities to a public record. Niskanen and Niskanen (2006, p. 84) describe Finland as an environment where the payment systems are highly developed. This is supported by the Dun & Bradstreet reports of the late 1990s and InstrumJustitia in 2012, which show that Finnish firms are the most prompt payers of trade credit in Europe.

The number of enterprises in Finland increased by 40% during the period 2000 to 2007, but since then has remained fairly stable with some 318,951 enterprises in 2010. Small companies with fewer than 50 employees represent 99% of small enterprises and play a very important role in the Finnish economy. In 2010, the total sales revenue attributable to small companies was EUR 358.9 billion and the number of jobs provided by small companies rose by approximately 11% between 2000 and 2010 to a total of 1.4 million.

The interviews with the Finnish SMEs were conducted with the owner-manager or business controller between May and November 2012. In addition, the head analyst from a credit rating agency and two senior managers of a credit insurer were interviewed. The SMEs represented a variety of industries. The participating credit rating agency is well established in the country. The credit insurer is a not-for-profit government-owned organization, which can take somewhat higher risks than a private credit rating agency. It operates with credit risks related to non-EU transactions where the other party of the business relationship is a Finnish entity. Table 3.1 provides a summary of the participants in Finland.

Table 3.1 Participants in Finland.

<i>Firm</i>		<i>Main activities</i>	<i>Number of employees</i>	<i>Audited accounts?</i>	<i>Interviewee</i>
Small entity A	unincorporated	Real estate refurbishment	1	No	Owner-manager
Small entity B	unincorporated	Events management	2	No	Owner-manager
Small private company A		Interior design	2	No	Owner-manager
Small private company B		Textile import agent	3	Yes	Owner-manager
Medium-sized company A	company	Manufacture of kitchen furniture	480	Yes	Business controller
Medium-sized company B	company	Business services	70	Yes	Owner-manager
Credit rating agency		Credit rating	-	-	Head analyst
Credit insurer		Credit insurance	-	-	Head of export credit Financial manager

The findings from Finland suggest there are three main influences on the trade credit decision: formal and report-based information; soft information; and contingency factors. For the formal and report based information, registered payment defaults comprised the most common piece of information used. In such decisions payment defaults were generally considered as a highly reliable measure of serious liquidity problems. The interviews showed that these default reports were requested for all new customers in the two medium-sized companies with 50 to 250 employees. Smaller firms were aware of the availability of payment default reports, but they used those only occasionally. Small companies seemed to avoid risky customers by relying on a variety of soft forms of information, such as observing certain behavioural patterns in customers, the attention paid by the customer to the supplier, answers given to questions by the customer,

the reputation of the customer, and the flexibility and the expertise in the subject shown to the supplier in the contract negotiation.

Changes in net sales were seen as important indicators of a small companies' ability to operate successfully. The tenure of company's operations and the estimated length of trade partnership were considered as trade credit risk decreasing factors. The relative size of supplier and customer appeared to be an important contingent factor that affected the terms of trade credit. This pattern reflects how negotiation power is used to the interest of the more powerful party. However, a contrasting force to the use of negotiation power was observed in the form of personal communication between the owner-managers to resolve short-term liquidity problems that can arise in fast growing small and medium-sized companies. It would appear that the availability of on-line data considerably improved the speed and efficiency of the collection of data for making credit decisions. Table 3.2 provides a summary of the key themes that emerged from the interviews.

Table 3.2 Finland: Summary of the main themes.

<i>Description</i>	<i>Formal information</i>	<i>report-based</i>	<i>Soft information</i>	<i>Contingency factors</i>
Revenue as a success indicator	✓			
Payment defaults as indicators of risk	✓			
Length of the business relationship	✓			
Age of the business	✓			
Organisational behaviour	✓		✓	
Relationships and trust			✓	
Cash flow management/credit control			✓	
Size factors and economic power				✓
Availability of Internet data				✓

The UK

From a users' perspective, there is very little evidence about how suppliers and customers of SMEs in a business-to-business relationship use the published financial statements in credit decisions. In the UK, companies register their annual reports and accounts at Companies House, but there is no record of who accesses these reports. Empirical evidence (Collis, 2008) shows that the directors of SMEs in the UK believe that the main users of their published accounts are suppliers and other trade creditors, credit rating agencies, competitors, followed by the bank/lenders, and customers.

Although some of the previous literature is somewhat dated, it is useful in building up a picture of the impact of regulatory relaxation in terms of financial reporting requirements for SMEs in the UK. The abbreviated accounts option was introduced in the UK in 1981 and this allows qualifying small companies to register an abbreviated balance sheet and notes only instead of the full statutory accounts. Morris and Omrod (1990) conducted a survey of credit analysts and credit managers and found that when a small company filed full accounts, they were the most

important source of information for assessing credit risk. When a small company filed abbreviated accounts, although approximately half the missing information could be found from other sources, the cost of locating that missing information was high.

A second development in the UK was the introduction of the audit exemption option for qualifying small companies in the UK in 1994. Initially the size tests were set at a lower level than for the abbreviated accounts option, but in 2003 the UK government conducted a consultation on raising the thresholds to the EU maxima. As part of their regulatory impact assessment, the DTI conducted a survey of members of the Institute of Credit Management (the largest professional credit management organisation in Europe) in 2003. The survey found that as a result of the previous increase in the audit exemption threshold in 2000, small companies' credit ratings were changed, additional security was required, credit limits were reduced or cancelled, credit became more expensive, more work went into assessing the companies' creditworthiness and further references were required, causing delays. The research also found that 64% of respondents would adjust the credit ratings of companies that took up audit exemption if thresholds were raised to the EU maxima.

More recently, a survey by the ACCA/CBI in 2010 identified suppliers as the most important creditors of small and medium-sized enterprises (SMEs) and highlighted trade credit as being twice as large as short-term bank lending in the financial market (Wilson, 2008). In one sense, all small businesses selling on credit are lenders, and consequently they are taking some risk in the process. The ACCA/CBI survey in 2010 suggests that day-to-day practice of credit management in the small business is far from perfect, often relying on poor information and methods, but concludes that it represents a reasonable compromise in the light of limited resources and the need to maintain valued commercial relationships. During the current economic crisis, managing cash flow was found to be more critical to survival in small firms than in buoyant conditions and there is greater need for SMEs to improve their management of trade credit in an environment where credit risk is increasing. The survey also found that the published financial statements play a significant role in the management of trade credit in SMEs.

Research by Kitching *et al.* (2011), which included interviews with banks, commercial credit reference agencies and credit insurance companies, confirms that abbreviated accounts offer limited insights into the financial performance and position of a company, and that other information is needed to assess credit risk. It is likely that the directors of small companies are aware of this because some file voluntary full accounts that have been audited on a non-mandatory basis to improve their credit rating (Collis, 2003, Marriott *et al.*, 2006). A UK study of 5,139 small companies filing full accounts (Lennox and Pitman, 2011) provides evidence that low-risk companies attract upgrades to their credit rating when they signal their favourable borrowing characteristics by choosing voluntary audit.

The interviews with the UK SMEs were conducted with the owner-manager between January and December 2012. In addition, the business development director from a credit rating agency and the underwriting consultant of a credit insurer were interviewed. The SMEs represented a variety of industries. The participating credit rating agency is a large, well established company. The credit insurer specialises in the timber, construction and retail sectors and holds

approximately 5% of the credit insurance market. Table 3.3 provides a summary of the participants in the UK.

Table 3.3 Participants in the UK.

<i>Firm</i>		<i>Main activities</i>	<i>Number of employees</i>	<i>Audited accounts?</i>	<i>Interviewee</i>
Small entity A	unincorporated	Building services	1	No	Owner-manager
Small entity B	unincorporated	Structural engineering and surveying	1	No	Owner-manager
Small private company A		On-line training publications	8	No	Owner-manager
Small private company B		Engineering recycling	3	No	Owner-manager
Medium-sized company A		Manufacture of power decorating and cleaning products	160	Yes	Group financial controller
Medium-sized company B		Engineering	125	Yes	Managing director
Credit rating agency		Credit rating	-	-	Business development director
Credit insurer		Credit insurance	-	-	Underwriting consultant

As in Finland, the three main influences on the trade credit decision in the UK are: formal and report-based information; soft information; and contingency factors. The main formal sources of information were the financial statements and data supplied by credit rating agencies and credit insurers. The customer's assets and the overall cash position were considered as important indicators of trade credit risk for the larger SMEs in the study that analyse their customers' financial statements. However, in most cases where trade credit was given, greater reliance was placed on the customer's trade credit rating and/or credit insurance. Interviewees using these formal sources of financial information to assess new and existing customers were able to use on-line sources. Some reported that they also found useful information on the customer's website. This greatly improves the speed and efficiency of processing orders involving trade credit decisions.

Trust was a significant feature of the trade credit decision, and this was apparent even in the small unincorporated entities where the credit period was very short (typically, payment on invoice). This stemmed from the importance of soft information arising from personal relationships and networking and the length of the business relationship. In larger SMEs, it also included organisational behaviour such as the payment history. The relative size of supplier and customer appeared to be an important contingent factor that affected the terms of trade credit,

reflecting the economic power of large customers. However, prompt personal communication between the business and the buyer in the customer organisation to resolve late payment issues seemed to be effective in avoiding potential liquidity problems. As in Finland, the availability of on-line data considerably improved the speed and efficiency of the collection of data for making credit decisions. Table 3.4 provides a summary of the key themes that emerged from the interviews in the UK.

Table 3.4 UK: Summary of the main themes.

<i>Description</i>	<i>Formal information</i>	<i>report-based</i>	<i>Soft information</i>	<i>Contingency factors</i>
Assets and liquidity as risk indicators	✓			
Credit rating as risk indicator	✓			
Organisational behaviour	✓		✓	
Relationships and trust			✓	
Cash flow management/credit control			✓	
Business drivers			✓	
Size factors and economic power				✓
Availability of Internet data				✓

The USA

In the USA, a small business concern is a small enterprise that is not dominant in its field of operation and qualifies as a small business under the criteria and size standards in Title 13, Code of Federal Regulations, part 121 ([13 CFR 121](#)). These size standards are expressed as a measure of business's number of employees or its average annual receipts. Based upon those criteria, the US Small Business Administration (SBA) has established the following common standards for defining a small business, depending on its North American Industry Classification System (NAICS) code:

- 500 employees for most manufacturing and mining industries, and
- \$7 million in average annual receipts for most non-manufacturing industries.

Whilst these are the primary size standards for most industries, there are many exceptions, both between and within industries. As a result, to help small business owners assess their small business status and assess whether they qualify for government loan programs, the SBA has established a Table of Small Business Size Standards which is matched to the NAICS of each industry (US SBA, 2012).

Adopting the definition of a small business as an entity up to 500 employees, small firms represent 99.7% of the business population, provide 50% of jobs in the private sector and contribute more than 50% of non-farm private gross domestic product (Kobe, 2007). In 2010, there were approximately 27.7 million small private businesses in the US (US Department of Commerce: Census Bureau, 2012). According to ACCA (2013), there has been an increased focus on support for small businesses in federal policy since the economic recession. These include increasing export of small firm's products and services and policies to assist start-ups by women, military veterans and ethnic minorities.

In contrast to the UK, where the majority of small businesses are unincorporated, the vast majority of small businesses in the USA are one of the following four types of limited liability entity:

- Corporation
- Limited liability corporation (LLC)
- Limited partnership
- Limited liability partnership.

The LLC is the most popular and can be formed with a single member (a person or a corporate body). It does not issue shares but member contribute capital in the form of cash or other assets which may be quantified into membership interest or units (ACCA, 2013). An LLC must file a tax return (IRS form 1065) which requires information relating to gross sales, cost of goods sold and gross profit and the accounts can be prepared on a cash or accruals basis. The majority of LLCs are owner-managed and taxed as sole proprietorships (Hope *et al.*, 2011). In contrast to the UK, there is no requirement for any small business to publish financial information.

The Securities and Exchange Commission (SEC) requires that public companies with more than \$10 million in assets and more than 500 owners must produce periodic financial statements that are prepared in accordance with US GAAP. However, unlike many other countries, there is no statutory requirement for public accountability from private companies, other than companies operating in certain regulated industries such as financial services. Furthermore, there is also no statutory requirement for a privately held company to provide an external review or audit of its financial statements. Therefore, most small private businesses have no reporting requirements other than the completion of income tax returns, although a number of private companies may need to produce GAAP financial statements to meet demand by lenders, bonding companies, regulators and other bodies (AICPA, 2011).

As a direct result of the unregulated nature of financial reporting by private companies, ‘little is known about the factors associated with the production and use of financial statements by small businesses... There may be many forces besides firm size and the issuance of equity to outside shareholders that create a demand for financial statements’ (Allee and Yohn, 2009, p. 2). One factor that may influence the voluntary production and use of financial statements by small businesses is the reliance on trade credit for purchases, especially as trade credit normally represents a substantial fraction of corporate liabilities for US firms (Petersen and Rajan, 1997). In 2003, the Federal Reserve Board conducted the National Survey of Small Business Finances (NSSBF) for 4,240 US small businesses, and this found that trade credit was used by 60% of small businesses in 2003, an incidence of use that exceeded all other forms of financial services except the use of normal bank accounts. Use of trade credit varied with firm size, increasing from about one-third of the smallest firms to more than 85% of the largest firms. Young firms were less likely than others to use trade credit, and its use was most common among firms in construction, manufacturing, and wholesale and retail trade (Mach and Wolken, 2006).

Allee and Yohn (2009) used data from the 2003 NSSBF to test the importance of trade credit in the production, use and sophistication of financial statements by 4,004 small privately held businesses. They found a positive correlation between the use of trade credit and the production

and use of financial statements, which is consistent with the notion that US suppliers may demand financial statements to assess the firm's creditworthiness and to facilitate the monitoring of the firm. They concluded that 'firms with audited financial statements benefit in the form of greater access to credit' (Allee and Yohn, 2009, p. 1).

In many industries, the issues of personal liability and involvement of personal assets mean that a large proportion of small entities are registered as a limited liability company (LLC) or other corporate form. It was not possible to identify any unincorporated small business that received trade credit or offered credit to customers. The following quotation from one of the interviewees explains the reasons.

"I mean in this country, you know, the potential to lose everything you own if you're not incorporated is so significant that I would have to say it's pretty uncommon to find a business that's not incorporated, especially in an industry that deals with people's healthcare and the law suits." (*Owner-manager of small medical devices company*)

Four interviews with incorporated SMEs in the USA were conducted between September 2012 and January 2013. One of the interviewees was a certified public accountant (CPA) and the other three were involved in making trade credit decisions in their respective companies. Interviews were also conducted with the senior vice president responsible for data analysis from a credit rating agency and the president of a credit insurance broker. Table 3.5 provides a summary of the participants in the USA.

Table 3.5 Participants in the USA.

<i>Firm</i>	<i>Main activities</i>	<i>Number of employees</i>	<i>Audited Accounts?</i>	<i>Interviewee</i>
Small private company A	Manufacture of medical devices	8	No	Owner-manager
Small private company B	IT security systems	40	No	Owner-manager
Medium-sized company A	Supplier of healthcare products and services	500	Yes	Vice president of finance
Medium-sized company B	Manufacture of ice-making machines	250	Yes	Senior vice president of sales and marketing
Credit rating agency	Credit rating	-	-	Senior vice president of data analysis
Credit insurance broker	Credit insurance	-	-	President

It is normal practice for all of the SMEs participating in the US study to allow customers and clients trade credit, but only one requests a copy of the customer's audited financial statements. The other three companies rely on formal information provided by a credit rating agency or trust and grant credit without any checks in order to secure new business. However, if the order value is significant, the customer has a short credit history or the supplier is a large dominant company, the interviewees acknowledged that they were asked to provide suppliers with copies of their company's financial statements. In most instances, the SMEs used information about the customer's credit rating from a commercial rating agency as the primary factor in trade credit decisions. As in Finland and the UK, soft information such as the customer's payment history was also considered.

It would appear that the nature of the SME's business and the size of the sales order play a key role in shaping the types of information routinely used in trade credit decisions. While requests for the financial statements of SMEs may originate from large suppliers or arise due to the dollar value of an order, the majority of the SME interviewees indicated that this type of data was not the primary determinant of most trade credit decisions, at either their company or in their type of business activity. As in Finland and the UK, the availability of on-line data considerably improved the speed and efficiency of the collection of data for making credit decisions. Table 3.6 provides a summary of the key themes that emerged from the interviews in the USA.

Table 3.6 USA: Summary of the main themes.

<i>Description</i>	<i>Formal based information</i>	<i>report- information</i>	<i>Soft information</i>	<i>Contingency factors</i>
Credit rating as risk indicator	✓			
Database payment history as risk indicator	✓		✓	
Owner's credit rating as risk indicator				
Relationships and trust			✓	
Size factors and economic power				✓

South Africa

Small businesses play an increasingly important role in the economies of many countries any many jurisdictions focus on developing the SME sector as a means of promoting economic growth. In South Africa, the National Small Business Act of 1996 uses the total number of paid employees, the total annual turnover and the total gross assets (fixed property excluded) to define enterprises by size. For example, according to the Government Gazette of the Republic of South Africa (2003), definitions for the number of employees are:

- Less than 5 employees for a micro-entity (also 5 for the agriculture sector)
- Under 20 for a very small enterprise (10 for the agriculture sector)
- 50 for a small enterprise (also 50 for the agriculture sector)
- 200 for a medium-sized enterprise (100 for the agriculture sector).

The unemployment in South Africa is 25.5% (Statistics South Africa, 2012). One of the best ways to address unemployment is to leverage the employment creation potential of small businesses and to promote small business development (FinMark Trust, 2006). Abor and Quartey (2010) estimate that 91% of formal business entities in South Africa are SMMEs, and this category accounts for approximately 57% of GDP and 61% of jobs. The small business sector is expected to be an important vehicle to address the challenges of job creation, sustainable economic growth, equitable distribution of income and the overall stimulation of economic development in South Africa (Maas and Herrington, 2006). Despite the economic contribution of SMEs, the failure rate is much higher than that of larger organisations. SMEs in South Africa fail at a rate of between 70% and 80% (Adeniran and Johnston, 2012). The National Credit Regulator (2012) points out that South Africa has one of the lowest SME survival rates in the world.

One of the major problems is access to sources of external finance (Maas and Herrington, 2006; Herrington *et al.*, 2009) and the majority of SMEs depend on funding from the owner, family and friends, which is often inadequate for survival and growth (Carpenter and Petersen, 2002). The availability of alternative finance, such as trade credit, could provide a boost to growth and survival of SMEs.

Venture capitalists are mainly interested in SMEs with exit options. Shane (2008) contends that in the USA venture capital provides only a small proportion of the equity funding for SMEs. Venture capital funds are not interested in providing the small amounts of funding sought by many SMEs. According to the South African Venture Capital Association (2008) there are at least 65 venture capital funds in South Africa controlling a total of R29 billion with an average

investment size of R15.4 million. However, venture investment with a SME focus is approximately R1.1 billion which is just under 4% of the funds. This indicates that the availability of venture capital is limited for SMEs. The lack of access to external equity makes many SMEs dependent on bank loans and overdrafts and suppliers' credit.

Commercial banks and trade creditors hesitate to grant credit to SMEs. The National Credit Regulator (2012) estimates that South Africa has between 2.4 million to 6 million SMEs and some 20% are registered with Companies and Intellectual Property Commission (CIPC) and have a bank account. Of the formal SMEs, fewer than 100,000 (27%) successfully apply for and receive funds from the formal financial sector. Almost half of SMEs are not registered hence are operating informally and some 85% of them do not have access to the financial markets. However, access to trade credit is limited for SMEs especially new ones. FinMark Trust (2006) provides evidence that only 2% of new SMEs in South Africa are able to access bank loans and that the use of suppliers' credit for new SMEs is virtually non-existent.

A report by Forbes (2010) contends that credit is crucial for South African SMEs. Overall, the top forms of debt financing South African SMEs use today are secured bank overdraft (31%), trade credit (31%) and business credit cards (30%). Financial institutions are now more careful in approving funding as they need to conform to the provisions of the South Africa National Credit Act 34 of 2005 that strictly stipulate the prerequisites for credit granting (responsible lending). Trade credit is particularly important for medium-sized enterprises in South Africa. Those are also the main debt vehicles South African businesses intend to seek over the next two years. This suggests that while access to trade credit might be very limited for new SMEs, overall the use of trade credit has improved for SMEs.

According to the Republic of South Africa Close Corporations Act 69 of 1984 and the Companies Act 71 of 2008, close corporations and companies are required to prepare annual financial statements complying with applicable accounting standards (must be audited or independently reviewed for companies). Since 1 December 2012, companies must comply with full IFRS or the IFRS for SMEs. Companies with a public interest score of less than 100 do not have to comply with any particular standards (Company Regulations 2011, 4c). Close corporations and companies are also required to file annual returns to the Companies and Intellectual Property Commission (CIPC) within 30 business days from the anniversary date of incorporation. Failure to do so will result in CIPC assuming that the entity has ceased trading or cessation is planned in the near future. Non-compliance with annual returns may lead to deregistration. Companies that are required to be audited must submit a copy of their financial statements with the annual return. However, CIPC currently waives the requirement for financial statements to be filed for close corporations. CIPC will give notice on their website when such financial statements must be lodged with an annual return.

The South African Revenue Service (SARS) requires any company or any close corporation (CC) which becomes liable for any normal tax or becomes liable to submit a return of income in terms of section 66 of the Income Tax Act No. 58 of 1962, (the Act) is required to register as a taxpayer in terms of section 67 of the Act. Any such person must register as a taxpayer at SARS within 60 days after so becoming a taxpayer by completing an IT77(C) form. The South African Revenue Service requires sole proprietors and companies to keep records as they are liable to pay turnover tax.

The National Credit Regulator has responsibility for the registration of credit rating agencies in South Africa. According to the Credit Bureau Association, there are five full members (Compuscan, Experian, TransUnion, XDS and CPB) and five associate members (Accountability, Credit Data online, LexisNexis, Tenant Profile Network and Inoxico) of the association. Credit rating agencies obtain information from individuals and businesses which subscribers, such as lenders and suppliers, can use to evaluate lending and credit risk, thus allowing them to better manage risk and customer relationships. Consumers can also use the information to better manage their credit and achieve their financial goals.

The three major credit insurers in South Africa are Credit Guarantee Insurance Corporation, Coface and Lombard insurance. These firms issue credit insurance to suppliers in trade credit transactions. Credit insurance gives the supplier (trade creditor) the confidence to explore higher risk business opportunities and reduces the risk of non-payment. The credit bureaux and credit insurers use the financial statements of the debtor or potential debtor (if available) as part of the information set used to issue credit reports.

Interviews were conducted with six business owners and one credit rating agency in South Africa. All the interviews were conducted in November 2012. Table 3.7 provides a summary of the participants in South Africa.

Table 3.7 Participants in South Africa

<i>Firm</i>	<i>Main activities</i>	<i>Number of employees</i>	<i>Audited accounts?</i>	<i>Interviewee</i>
Small unincorporated entity A	Hair pieces and products	1	No	Owner-manager
Small unincorporated entity B	African clothes and bags	2	No	Owner-manager
Small private company A	Catering supplies	15	Yes	Owner-manager
Small private company B	Nature guides and tours	18	Yes	Owner-manager
Medium-sized company A	Retirement homes	417	Yes	Director
Medium-sized company b	Textiles	250	Yes	Director
Credit rating agency	Credit rating	-	-	Official

Unlike the other countries, the evidence from the interviews in South Africa shows that none of the SMEs uses information from the financial statements and only one of the interviewees (the owner-manager of a small catering company in a city location) mentioned the use of credit reports. Instead there was a heavy reliance on soft information, with trust playing a significant role. This stemmed from personal relationships and networking, reputation of the owner and the length of the business relationship. Apart from the name and address of the business, soft information also includes bank and trade references and previous payment history (for existing customers). Participants in the poorer and smaller communities appeared to give more trade

credit and suffer from a higher incidence of bad debts than those in the wealthier, more populous cities.

Although none of the SMEs uses financial information when making trade credit decisions, it was noted that both information such as audited accounts, transaction history and other account books/records are needed when seeking access to finance from institutional lenders. The study found that one participant (the owner-manager of the small catering company) gives a copy of the company's financial statements to a credit rating agency. Financial institutions rely heavily on the credit reports generated by credit rating agencies when assessing lending risk and credit rating agencies use both financial information based and non-financial models in the process. Unlike the other countries, there little mention of the use of Internet in connection with data gathering for making trade credit decision and a much greater emphasis on tacit knowledge. However, the small nature guide and tour company, which has large, international clients, checks customers' websites for information about their business operations. This suggests that access to the Internet for general searching purposes and for fast, efficient access to credit reports is a major contingency factor in South Africa. Table 3.8 provides a summary of the key themes that emerged from the interviews in South Africa.

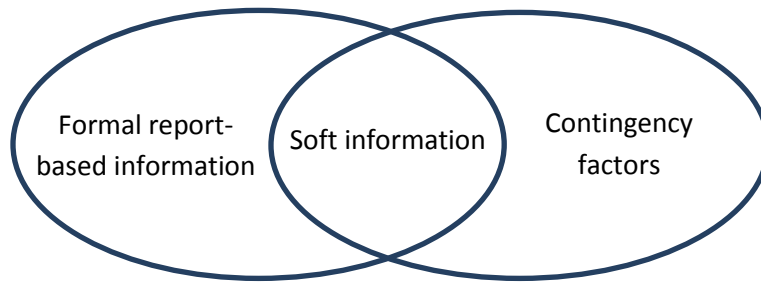
Table 3.8 South Africa: Summary of the main themes.

<i>Description</i>	<i>Formal report-based information</i>	<i>Soft information</i>	<i>Contingency factors</i>
Credit rating as a risk indicator	✓		
Payment history as a risk indicator	✓	✓	
Relationships and trust		✓	
Availability of Internet data			✓

Cross- country analysis

Previous research in Italy (Howorth and Moro, 2006) found that the bank lending decision is often based on the evaluation of the SME's financial statements and/or the provision of collateral, and/or credit rating score, together with soft information such as ethics, trust, relationships and networks. The findings of this study provide evidence that similar types of information are used for making trade credit decisions in SMEs. The evidence from our interviews in Finland, the UK, the USA and South Africa suggests that there are three main influences on the trade credit decision: formal and report-based information, soft information relating to social capital and contingency factors (see Figure 4.1). The contingency factors dictate the extent to which hard/formal information versus soft/informal information is used.

Figure 4.1 Soft information in the overlapping areas of formal information and contingency factors.



The discussion that follows is based on further analysis of the country-level findings. This is achieved by synthesising the concepts and categories that emerge from the interviews in each country chapter. Despite the intentionally diverse social and economic conditions represented by the case countries, a surprising consistency of themes emerges:

- The importance of economic conditions
- The importance of trade credit
- Transaction technologies
- Cash and cash management
- The role of information and information intermediaries in SME lending and trade credit
- Trust

Importance of economic conditions

The research took place during the worldwide pause in growth following the Global Financial Crisis that started in 2008. The impact on small business has been twofold: recession has caused difficulties in maintaining or expanding turnover for some companies and financing has been squeezed because banks are unwilling to lend, suppliers are reluctant to grant credit and customers have taken more credit by deferring payment.

In all of the countries it was found that small business played a similar role in the economy. SMEs are numerous in each country and together account for a significant proportion (one third to one half) of the private sector. This is enough to matter in whatever way it is measured, so that definitional issues are of little consequence and SME policy is worth worrying about in each economy. SMEs seem to account for a greater proportion of employment than they do of GDP everywhere. There are a number of reasons for this. Many SMEs are in relatively low technology, low capital investment businesses so that few of them have highly paid employees. Secondly, because of their flexible needs, they employ many part-time workers and hire and fire as needed although with the growth of zero-hours contracts many larger businesses are trying to emulate this flexibility.

Much has been made of the role of SMEs in job creation and growth. Our research was not of a kind that could make much contribution to the debate, but it is clear that without access to appropriate finance business expansion was a problem for SMEs in each country and they will be held back in making much contribution. The high rate at which SMEs are created and also disappear is a factor everywhere and it affects their ability to borrow and obtain credit. Credit

risk is the fundamental driver that determines the structure of transactions but different businesses have different methods of dealing with it in different environments.

Importance of trade credit

Not all SMEs give or receive trade credit, although even labour only businesses usually undertake work in advance of being paid at the end of the week or the end of the month. Nevertheless it is clear, that as a source of finance for SMEs, trade credit is about as important as bank lending as a source of finance in the SME sector. Up-to-date, definitive statistics are hard to come by, but this seems to be the case in all of the case countries. In some countries it is more important in some countries it is a bit less important.

Trade credit has some important characteristics that make it an important complement to bank lending and in some cases it can also be a substitute. Trade credit is potentially accessible to many SMEs although some of them may not need it. It can be a cheap form of finance if suppliers extend it without onerous terms, on the other hand there can be hidden costs to using it if early settlement discounts are forgone. Trade credit terms vary from industry to industry and from place to place. In the USA, for example, generous early settlement discounts seem to be common and elsewhere, in some industries, differential pricing may occur, so that suppliers recoup the cost of credit by higher prices. Nevertheless, credit is often cheaper than bank borrowing as a form of finance. As already noted, it has other advantages too, for example it is a flexible form of credit that tends to expand with the volume of business and it has a capacity for absorbing unexpected shocks.

Importance of financial statements

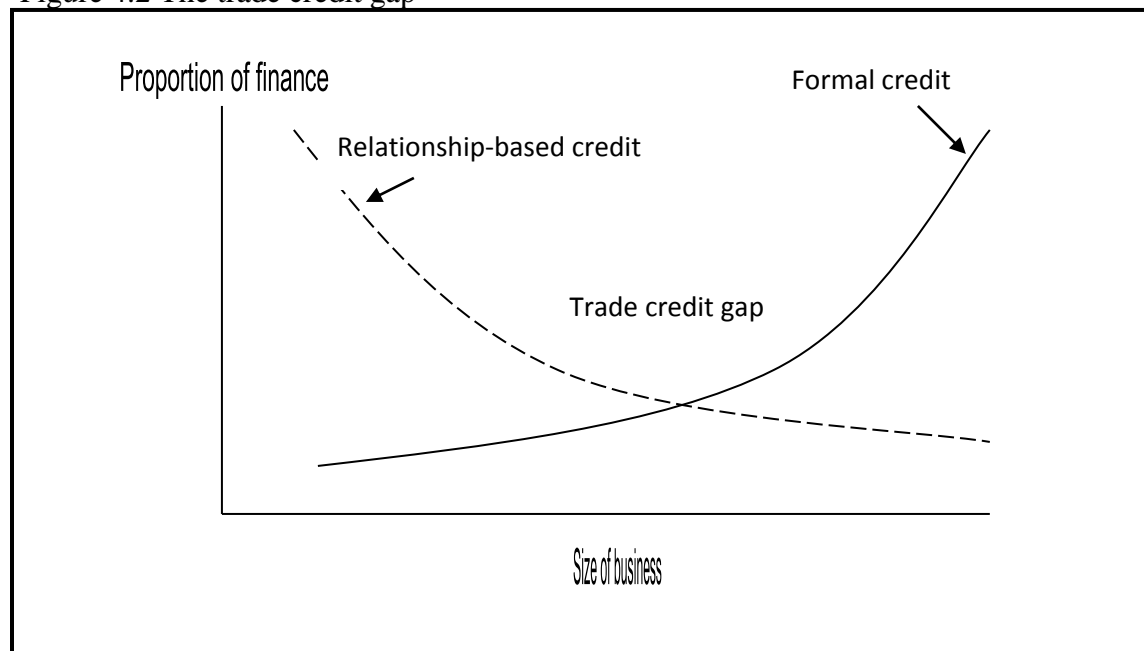
Prior research and the findings of our individual country studies show that where small entities contract only with other small entities, relationship-based credit relationships are most important. Small entities rely on trust, personal knowledge and reputation. However, when medium and larger entities contract with each other and with small entities, information derived from financial statements becomes an important part of the transactions technologies used in the SME sector. This is not to say that the contracting parties are, in all cases, physically consulting financial statements but the information they contain has been processed, analysed and accumulated with other information. The use of such information is not necessarily obvious to the SME to which it relates so that owner managers may not be aware of the extent to which the fact that they produce financial statements available for inspection, whether those financial statements are audited and the information they contain affects whether and how much trade credit is available and the terms of trade they are offered.

Where direct use of financial statement data was made, it was not used uncritically. Respondents in different countries remarked that the inventory figure was manipulable and not to be relied on. Figures for cash, investment and distributions (by way of dividend or owners' pay) were of more interest as were turnover and turnover growth. Credit reference agencies and insurers made more extensive use of financial statement information. Accounting ratios were calculated and factored into the agencies' proprietary scoring models to arrive at credit scores and recommended levels of credit.

Transaction technologies

One of the most interesting and significant findings of our research is the way in which finance transactions differ across the case countries. Berger and Udell's (2008) way of looking at these transactions is helpful in explaining what we have found. The smallest and most informal businesses have relationship-based (opaque) finance in all forms. Equity comes from the owners, their family and their friends. There is little loan finance and trade credit is relationship-based. For larger businesses the transparency model describes their financing. Equity and loan finance are acquired through formal processes. Financial statements, that may or may not be audited, and well-researched credit reports together with other information are used in the granting and receiving of trade credit. It is in the intermediate and transitional stage that SMEs become more complicated and where the institutions in place in the economy have most potential for stimulating growth by removing barriers to expansion. Figure 4.2 shows how relationship-based trade credit and formal credit may develop for SMEs.

Figure 4.2 The trade credit gap



For new or very small businesses the only trade credit available is relationship based.

As the business expands it needs more trade credit and the proportion of the financing it needs exceeds the amount that can be obtained through relationship networks. Larger businesses have grown to the point where trade credit can be obtained from formal sources because the business is transparent. It has a track record, a payment history, a credit rating and financial statements. At an intermediate size, however, it may be that the business has outgrown its access to relationship-based credit but has not yet become able to replace it with formal credit giving rise to a 'trade credit gap'. One way of filling such a gap is to accelerate the possibility of obtaining formal credit by becoming more transparent. In particular the business can make available credible financial statements that contain the information required to access formal credit. However, financial statements are only effective if a mechanism for making them available to users exists.

Our different country studies discovered how different solutions arose in the form of transactions technologies and use of information to mitigate trade credit gaps. For example, in Finland, although there is some evidence of use of small company financial reports, information on payment defaults is of most interest to granters of credit. In Finland, information on payment default is easily accessible. In a larger economy, such as the UK, it is harder to access comprehensive payment default information directly, so that credit reference agencies have a role in collating the information and incorporating it in their credit reports.

Use of deposits and pre-payments is one response where there is both lack of trust and inadequate formal information. Search for non-financial information by use of trade references or other sources is another. Personal guarantees and/or bank guarantees were also common in some countries. The internet is a relatively new and widespread source of information as were mystery shopping, discussions with low level staff and use of indicators such as the fullness of car parks to infer customers' business strength.

The case of the USA is different from the others we studied because there is no requirement for non-public entities to publish financial statements so they are not generally available. Respondents were supportive of this position but, as interviews progressed, it became clear that financial data were released by them in a number of ways to banks and credit reference agencies. In particular, it appears one agency (D&B) has achieved a dominant market position so that information is transmitted privately to D&B who incorporate it into a credit score. The apparent dominance of a single agency is not surprising as the market for credit scores, where company data is not publicly available, seems to be a natural monopoly because there are fixed costs to gathering data and the marginal costs of selling it are very small.

In the other countries that we studied, data is publicly available, so cheaper to obtain, and the market for credit reference agencies is, apparently, more competitive.

Table 4.1 shows how information availability and the power balance between supplier and customer affects the availability of trade credit.

Table 4.1 How relative size of supplier and customer affects trade credit decisions.

	<i>Small supplier</i>	<i>Medium supplier</i>	<i>Large supplier</i>
<i>Large customer</i>	Customer demands credit and extended payment deadlines Public information (including financial statements) about customer available	Customer demands credit and extended payment deadlines Public information (including financial statements) about customer available	Formal credit Supplier and customer have equal market power and can negotiate using transparent information
<i>Medium customer</i>	Customer has some procedures in place for assessing credit risk and uses what information is available	Partial information available and the parties have equal market power. A range of transactions technologies available	Customer has some procedures in place for assessing credit risk and extensive information is available to assess credit risk
<i>Small customer</i>	Relationship-based credit Credit decisions based on trust, personal relationships and reputation	Customer is 'opaque' to the supplier who may refuse credit or impose onerous terms	Take it or leave it. Supplier has dominant position and can demand cash up front or other safeguards

Some of the medium-sized firms used invoice discounting and credit insurance as both cash management and credit risk management tools. These are transactions technologies that associate third parties with the transaction but which some interviewees considered to be worth the cost in terms of losses avoided and comfort.

Cash and cash management

At first sight obvious, the maxim produced by one interviewee and echoed by others is 'Cash is cash'. The point is that cash realisation is the ultimate aim of nearly all transactions and transactions technologies that bring this forward reduce financing costs and enable the business to undertake a higher volume of business by reinvesting the cash in the business cycle. One means of doing this was to demand deposits from customers, especially when creating bespoke products, such as kitchens, that could not be sold elsewhere if the buyer failed to take delivery. This practice seemed to occur in different locations. The use of business credit cards was remarked upon in more than one country.

Large companies seem to take advantage of their dominance to defer payment of invoices in most places. While this presented difficulties for smaller entities, it was worth suffering the delay if it meant the business could grow.

Trust, personal relationships and reputation

As mentioned, when very small entities transact with each other the dominant factor determining the availability of trade credit is trust that can be derived either from the personal relationship between the two parties or from the reputations of the businesses and their proprietors either derived from the pattern of previous trading between the enterprises or from external qualitative

factors. However, trust as a basis for trading was by no means confined to the smallest enterprises and was found in all of our country studies.

Trust is an efficient, low cost governance mechanism where it can be relied upon (Rus and Iglic, 2005; Gulati and Nickerson, 2008). Our studies showed that trust was more likely to operate where there was a local close-knit community and qualitative information about the contracting parties, such as reputation for quality of work or ethical dealing, was available. One predisposing factor to use of trust is the knowledge that breaches of trust will be severely punished, for example by social ostracism or loss of good reputation and, hence, future business opportunities. In more than one example we found trust operating across international boundaries.

Several interviewees stressed the importance of personal contact with customers and felt that they could assess the trustworthiness of customers by meeting them face to face. There was little experience of bad debts in trust-based credit decisions.

Role of non-financial information and information intermediaries

Taken together, the different cases show the existence of a wide range of transactions technologies that can help to finance SMEs. Whichever technologies prevail in a given environment depends, among other things, on information available, on the institutions (legal framework, disclosure regulation, banks and banking traditions, etc.) and market conditions in the environment.

Our interviewees used a wide range of information apart from financial information. In many cases financial information was not available, but even where it was available, it was only part of a jigsaw of other information, both qualitative and quantitative. Much weight was attached to information about court judgements, which was regarded as timely and informative and to information about payments to other suppliers. Personal information about the owners of businesses was sometimes used where available and proxy information, such as the age of the business was used to infer stability.

Information intermediaries, especially credit reference agencies had an important role in collating information and using their expertise to analyse it. While some very small businesses did not use credit reference agencies, their use seemed to become more widespread as enterprises got larger, although they were not used for all transactions. Credit reference agencies and credit insurers provide a useful stewardship role. For example, the knowledge that poor payments to suppliers will be picked up by credit reference agencies and will result in a down-grade in credit score was a powerful factor driving good behaviour among customers.

Differences between countries

In many ways the similarities between the countries was more remarkable than the differences. The USA was different because of the lack of a requirement to produce public financial statements had caused a different pattern, in particular increased emphasis on credit scores. There were some differences that can best be described as cultural – in Finland companies experiencing temporary cash flow problems could expect support from their business contacts, elsewhere pride in prompt payment reduced cash flow problems. The emerging economy (South Africa) was different to the others mainly in terms of degree rather qualitatively. The system of

trade credit appeared less developed but South Africa has many more very small businesses using relationship based approaches than elsewhere.

Conclusions

This study adds to our knowledge of the processes involved in of the credit decision and identify what information is used and by whom. The findings contribute to the following literature:

- Access to finance, since trade credit is recognised as the most important source of short-term finance for SMEs
- Financial management, by promoting effective practices in relation to trade credit decisions in the context of customer-supplier relationships
- Financial reporting, to address the lack of empirical evidence on the users and uses of the financial statements of small companies and unincorporated firms.

The main limitation of the research is the resource constrained one that relatively few SMEs were interviewed in each country. This does not detract from the objective which was the generation of understanding of the importance of trade credit and the place of financial statements in the process. However, it would be desirable to follow up the work with more extensive surveys using the concepts generated in this work to extend and refine the findings.

Rather than set out recommendations from the research to parties who have not asked for them, we draw the following inferences from the work so far as it has relevance to different groups.

Lessons for SMEs

Although small businesses that trade only with other small businesses with which they have long standing relationships are not much affected by the availability and quality of their financial statements, almost all other businesses probably are. In particular, a business that is seeking to grow may well be able to improve the availability of trade credit if it promptly files full financial statements, preferably ones that have been audited. This may also be true of bank finance, although that was not part of our research.

Implications for professional advisers

Clients may not be best served by taking advantage of maximum disclosure exemptions. Unless there is reason to believe that proprietary costs (such as use of information by competitors or intrusion into owners' privacy) are high, it may be better to file full accounts available for public inspection. If the marginal costs of audit or some other form of attestation are not high it may be worth the cost, if the client is seeking to grow or raise loan finance. Providing more information may help to mitigate the trade credit gap for clients suffering from it.

Implications for professional bodies and business associations

Professional bodies and business associations play an important role not only in lobbying for the interests of individual members but also in channelling their members' experience to seek economic and institutional structures that provide collective benefits, such as environments where businesses can enter into a wide range of relationships with each other at minimum cost.

Implications for regulators

The prime responsibility for maintaining and improving the trading environment by reform of institutions lies with regulators, including national governments, national and international standard setters, the EU and other bodies. Providing companies with the choice to reduce the cash costs of financial reporting may have small benefits for some, even the many, who take advantage of it. Yet individual businesses may well be better off by publishing full financial statements and the possibilities for doing so need to be maintained and improved. Improving the content and availability of financial reports can help to relieve any trade credit gap that is holding back growing small businesses.

In the UK, for example, a relatively small number of potentially exempt companies publish full financial statements. The rest, mostly advised by their professional accountants, incur a small additional cost to file abbreviated accounts. Based on our research, we think many of them would have better credit scores if they filed full accounts and they might have cheaper finance and operating costs as a result. UK Companies House is the repository of company reports and, with the advent of electronic filing and XBRL, there is a sovereign opportunity to encourage companies to file full information at minimal, if any, cost to the exchequer or the companies themselves. The potential improvement to the pre-existing public database in terms of both access and content could provide a useful boost to the SME sector.

In the EU, the interaction between EU rules, the IFRS for SMEs and national rules, such as the UK's FRSE, provides potential for considerable complication which should not be allowed to entangle SMEs. Common sense requires some adaptation of EU and IFRS rules to national environments, especially for micro-entities, which do not trade much across international boundaries.

References

- ACCA/CBI (2010) *Small business finance and the recovery – Results of the 2010 SME credit and finance surveys*, London: Association of Chartered Certified Accountants.
- Adeniran, T. V. and Johnston, K. A. (2012) 'Investigating the dynamic capabilities and competitive advantage of South African SMEs', *African Journal of Business Management*, 6(11): 4088-4099.
- AICPA (2011), *Blue-Ribbon Panel on Standard Setting for Private Companies*, American Institute of Certified Public Accountants AICPA. Available from: http://www.aicpa.org/interestareas/frc/accountingfinancialreporting/pcfr/downloadabledocuments/blue_ribbon_panel_report.pdf [Accessed 1 December 2012]
- Allee, K. D. and Yohn, T. L. (2009) 'The Demand for Financial Statements in an Unregulated Environment: An Examination of the Production and Use of Financial Statements by Privately Held Small Businesses', *The Accounting Review*, 84(1): 1-25.
- Berger, A. and Udell, G. (2006) 'A more conceptual framework for SME financing', *Journal of Banking and Finance*, 30(11): 2945-2966.
- Carpenter, R. E. and Petersen, B. C. (2002) 'Is the growth of small firm constrained by internal equity?' *The Review of Economics and Statistics*, 84(2): 298-309.
- Carsberg, B. V., Page, M. J. Sindall, A. and Waring, I. D. (1985) *Small Company Financial Reporting*. London: Prentice Hall.

- Collis, J. and Hussey, R. (2013) *Business Research* (4th edition). Basingstoke: Palgrave Macmillan.
- Collis, J., (2003) *Directors' Views on Exemption from Statutory Audit*. London: DTI, URN 03/1342. Available from: <http://www.berr.gov.uk/files/file25971.pdf> [Accessed 1 December 2011].
- Collis, J., (2008) *Directors' Views on Accounting and Auditing Requirements for SMEs* [online]. Available from: <http://www.berr.gov.uk/whatwedo/businesslaw/corp-gov-research/current-research-proj/page18121.html> [Accessed 1 December 2012].
- Dawitt, K. (1983) Myths of Small Business Failure, *The CPA journal*, 53 (September): 73-74.
- DTI (2003) 'Raising the Thresholds', *Consultation Document*, July, Department of Trade and Industry.
- FinMark Trust (2006) *Finscope small business survey report*. Available from: <http://www.finmarktrust.org.za> [Accessed: 18 May 2010].
- Flanagan, J. C. (1954) 'The critical incident technique', *Psychological Bulletin*, 51(4): 327-358.
- Forbes (2010) Small and Medium-Sized Enterprises: Rebuilding a Foundation for Post-Recovery Growth, Forbes in association with ACCA and CGA. Available from: http://www.acca.co.uk/pubs/general/activities/library/small_business/sb_pubs/SMERebuildingAFoundation.pdf [Accessed 9 January 2012].
- Gulati, R. and Nickerson, J.A. (2008) 'Interorganizational trust, governance choice, and exchange performance', *Organization Science*, 19(5): 688-708.
- Herrington, M., Kew, J. and Kew, P. (2009) *Global Entrepreneurship Monitor, South African report*. Available from: <http://www.gbs.nct.ac.za/gbswebb/userfiles/gemsouthafrica2000pdf> [Accessed 15 October 2012].
- Hope, O.-K., Thomas, W. B. and Vyas, D. (2011) *Financial Reporting Quality in U.S. Private Firms*. Available from: <http://www.nhh.no/Files/Billeder/forskningogfagmiljo/RRR/Seminar/Financial%20Reporting%20Quality%20in%20U.S.%20Private%20Firms.pdf> [Accessed 20 April 2013]
- Howorth, C. and Moro, A. (2006) 'Trust within entrepreneur bank relationship: Insight from Italy', *Entrepreneurship Theory and Practice*, 5(2): 26-40.
- IFRS (2010) *The Conceptual Framework for Financial Reporting*, September, London: IFRS Foundation.
- Jackson, T. (2009) *Prosperity Without Growth: Economics for Finite Planet*, London: Earthscan.
- Kitching, J., Kašperová, Blackburn, R. and Collis, J. (2011) *Small company abbreviated accounts: A regulatory burden or a vital disclosure?* Edinburgh: Institute of Chartered Accountants in Scotland. Available from: <http://www.icas.org.uk/site/cms/contentviewarticle.asp?article=7529> [Accessed 1 December 2012].
- Kobe, K. (2007) *The Small Business Share of GDP 1998-2004*, Economic Consulting Services for the US Small Business Administration, Office of Advocacy. Available from: <http://archive.sba.gov/advo/research/rs299tot.pdf> [Accessed 1 December 2012].
- Kwok, H. (2002) 'The effect of cash flow statement format on lenders' decision', *International Journal of Accounting*, 37 (1): 347-362.
- Lennox, C. S. and Pittman, J. A. (2011) 'Voluntary Audits versus Mandatory Audits', *The Accounting Review*, 86(5): 1655-1678.

- Maas, G. and Herrington, M. (2006) *Global Entrepreneurship Monitor South Africa Report*. Available from: <http://www.gemconsortium.org/document.aspx?id756> [Accessed 6 June 2012].
- Mach, T. and Wolken, J. (2006) 'Financial Services Used by Small Businesses: Evidence from the 2003 Survey of Small Business Finances', *Federal Reserve Bulletin*, October: A167-A194.
- Marriott, N., Collis, J. and Marriott, P. (2006) *Qualitative review of the accounting and auditing needs of small and medium-sized companies and their stakeholders*. London: Professional Oversight Board. Available from: <http://www.frc.org.uk/documents/paganager/poba/Case%20studies%20report.pdf> [Accessed 1 December 2012]
- Miles, M. B. and Huberman, A. M. (1994) *Qualitative Data Analysis*. Thousand Oaks, CA: SAGE.
- Milne, T. and Thomson, M. (1986) 'Patterns of successful business start-up' in Faulkner, T. (ed.), *Readings in Small Business*, London: Gower.
- Morris, R. and Omrod, P. (1990) 'The Attitudes of Credit Analysts towards Reduced Disclosure by Small Companies', *Annual Congress of the European Accounting Association*, Budapest, April.
- Niskanen, J. and Niskanen, M. (2006) 'The Determinants of Corporate Trade Credit Policies in a Bank-dominated Financial Environment: the Case of Finnish Small Firms', *European Financial Management*, 12 (1): 81–102.
- Petersen, M. and Rajan, R. (1997) 'Trade credit: Theories and evidence', *Review of Financial Studies*, 10(3): 661-691.
- Porter, M. (1998) *Competitive advantage, creating and sustaining superior performance: with a new introduction*, New York: Free Press.
- Rus, A. and Iglič, H. (2005) 'Trust, governance and performance: The role of institutional and interpersonal trust in SME development', *International Sociology*, 20(3): 371-391.
- Shane, S. (2008) *The importance of angel investing in financing the growth of entrepreneurial ventures*. Available from: <http://www.sba.gov/adw/research/banking.html> [Accessed 15 April 2009].
- South African Venture Capital Association (2008) *Venture capital funding*. Available from: <http://www.savca.co.za/kpmgsurvey/default.aspx> [Accessed: 20 May 2012].
- Statistics Finland (2012) Available from: http://tilastokeskus.fi/til/syr/2010/syr_2010_2011-11-25_tie_001_en.html [Accessed 24 November 2012]
- Statistics South Africa (2012) *Quarterly Labour Force Survey*. Available from: http://www.statssa.gov.za/publication/find_publication.asp [Accessed 18 November 2012]
- Storey, D. J. (1994) *Understanding the Small Business Sector*, London: Routledge.
- US Department of Commerce: Census Bureau (2012) *Statistics of US Businesses 2010*. Available from: http://www2.census.gov/econ/susb/data/2010/us_state_totals_2010.xls, [Accessed 1 December 2012]
- US Small Business Administration (2012) *Table of Small Business Standards*. Available from: [http://www.sba.gov/sites/default/files/files/Size_Standards_Table\(1\).pdf](http://www.sba.gov/sites/default/files/files/Size_Standards_Table(1).pdf) [Accessed 1 December 2012]
- Wilner, B. S. (2000) 'The exploitation of relationships in financial distress: The case of trade credit', *Journal of Finance*, 55 (1): 153-178.
- Wilson, N. (2008) 'An Investigation into Payment Trends and Behaviour in the UK: 1997-2007',

Wilson, N. and Summers, B. (2002) 'Trade credit terms offered by small firms: Survey evidence and empirical analysis', *Journal of Business Venturing and Accounting*, 29 (3): 317-351.

ERG for MGT: A Practical Model for the Small Business Manager

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Abstract

Managers experience difficulty focusing their time on higher-level management activities (strategy, innovation, change, etc.) designed to promote the success of their company because lower-level issues arise requiring their attention. This is especially true for managers of small businesses. These issues are interruptions and are disruptive to managers because it takes them away from their work of creating opportunities for growth of their organization. This research introduces a model to enhance the understanding of an organization's composition and activity for the practicing manager, and focuses on the negative impact of these interruptions.

Introduction

“Growth will continue to be a desirable and indeed a necessary business objective.”

-Peter F. Drucker

The purpose of this exploratory research is to provide a model for practicing managers to more effectively operate within their organizations and to focus on particular factors which compromise management's engagement in organizational growth activities. Specifically, this project will examine the effects of interruption on managers' ability to dedicate their time to those responsibilities which will ensure the future of the enterprise.

Alderfer's (1969) Existence, Relatedness, and Growth (ERG) model is a theory of individual needs motivation. Alderfer's model is a refinement of Maslow's theory of the Hierarchy of Needs. Alderfer reformulated Maslow's five need levels into three more general need levels (Steers & Black, 1994). The ERG model differs from Maslow's model in two important regards. First, according to Maslow, individuals progress up the hierarchy as a result of the satisfaction of lower-order needs. In contrast, Alderfer's ERG theory suggests that in addition to this satisfaction-progression process, there is also a frustration-regression process. Hence, when an individual is continually frustrated in his or her attempts to satisfy growth needs, a lower-level need (such as relatedness needs or existence needs) will reemerge as a primary motivating force, and the individual is likely to redirect his or her efforts toward lower-level needs. Second, whereas Maslow's model has individuals focusing on one need at a time, Alderfer's model suggests that more than one need may be operative (or activated) at the same time. Thus, Alderfer's model is less rigid, allowing for greater flexibility in describing human behavior (Steers & Black, 1994).

Theory Development

In writing about the development of theory, Mintzberg (2007) wrote “...we need all kinds of theories—the more, the better. As researchers, scholars, and teachers, our obligation is to stimulate thinking, and a good way to do that is to offer alternate theories—multiple explanations of the same phenomena.” Although the ERG model is not a new theory, for the purposes of this project it will be used in a new way. In this exploratory research the ERG theory will not be used to study individual motivation, but to examine organizational composition and activity. This study aims to demonstrate the utility of the ERG theory in facilitating the exploration and

explanation of certain organization phenomena, the conceptualization of the organization and its function. The frustration regression process of Alderfer's ERG theory will be converted to the interruption regression process for purposes of explaining how managers are distracted from working on growth-related duties to attend to lower-level organizational needs.

Organization as a Living Entity

By taking a theory of individual motivation and using it to explain organizations and their "behaviors", it seems logical to take the next step and consider an organization as a single living entity. This metaphor has been used before. The "organic" view of the organization has been examined by many well-known researchers (Burns, 1961; Kast, 1973; Mintzberg, 1993). The term "organic" suggests that, like living things, organizations change their structures, roles, and processes to respond and adapt to their environments. Staw (1991) makes the argument that organizations tend to look like and act like individuals. And, because they do we should therefore use individual psychology as a helpful analogy in organizational theorizing.

Whetten et al. (2009) extended this idea by suggesting that organizations can be thought of as social actors, complete with motives, drives, and intentions. This perspective, among other things, allows for "vertical theory borrowing" of psychological phenomena to explain organizational action. It is justified by the fact that organizations are accorded the status of social actor in modern society—they are granted sovereignty and held accountable for their actions (Highhouse et. al., 2009).

Related Literature

This section will consist of an explanation of the ERG model by detailing the levels of existence, relatedness, growth, and the interruption process. The literature review will expound upon how the ERG model is mapped onto the organization and practice of management, and support the logic of viewing an organization from this perspective. The organizational components detailed (i.e. production, culture, strategy, etc.) are not meant as a comprehensive list of every organization process which fits into each particular level. Instead, they are meant as illustrations for the reader to gain understanding of the ERG theory as an organization level construct. The interruption principle will be the focus of this study and how it may be explained with the use of the ERG theory.

Existence

"We will now discuss in a little more detail the Struggle for Existence."

-Charles Darwin

Alderfer (1969) introduced an existence component as one of the core needs of human motivation. The existence needs comprise what is necessary for survival (i.e. food, water, sleep, shelter, etc.). For example, hunger and thirst represent deficiencies in existence needs. In the organizational context, existence needs would constitute those activities which are necessary for an organization's daily survival. Manufacturing, services, purchasing, distribution, and administrative duties would qualify as existence needs. Mintzberg (1993) classifies the employees of an organization who perform the existence needs as the operating core. Specifically, he writes that the operating core of the organization encompasses those members—the operators—who perform the basic work related directly to the production of products and

services. Mintzberg (1993) writes that “The operating core is the heart of the organization, the part that produces the essential outputs that keep it alive.” Organizations exist to satisfy society’s needs for goods and services. The operations function is responsible for creating those goods and delivering those services; without operations, there is no reason for the other functions to exist (Fogiel, 2000).

Relatedness

“All things appear and disappear because of the concurrence of causes and conditions. Nothing ever exists entirely alone; everything is in relation to everything else.”

-Buddha

Alderfer (1969) introduced a relatedness component as one of the core needs of human motivation. These needs include all the needs which involve relationships with significant other people. Family members are usually significant others, as are supervisors, coworkers, subordinates, friends, and enemies. One of the basic characteristics of relatedness needs is that their satisfaction depends on a process of sharing or mutuality. People are assumed to satisfy relatedness needs by sharing their thoughts and feelings. This process markedly distinguishes relatedness needs from the existence needs because the process of acceptance, confirmation, understanding, and influence are elements of the relatedness process.

In the organizational context, relatedness needs are those which describe how a company’s employees relate to each other and how a company relates to its environment. These needs would be comprised of a company’s culture, climate, and structure (both formal and informal), its marketing, and its efforts of social responsibility, if any. Schein (1997) defines culture as a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way you perceive, think, and feel in relation to those problems.

Social responsibility is a fitting example of relatedness as it pertains to an organization relating to its environment. As Highhouse [9] wrote, corporate social responsibility has emerged as an important factor in how an organization is perceived, its corporate reputation. Walton (1967) argued that the concept of corporate social responsibility is important because it recognizes the intimacy of the relationships between the corporation and society and realizes that such relationships must be kept in mind by top managers as the corporation and the related groups pursue their respective goals.

Growth

“Without continual growth and progress, such words as improvement, achievement, and success have no meaning.”

-Benjamin Franklin

In Alderfer’s (1969) ERG theory the level of growth is one of the core needs of human motivation. The growth needs include all of the needs which involve a person making creative or productive effects on oneself and the environment. A person experiences a greater sense of wholeness and fullness as a human being by satisfying growth needs. Thus satisfaction of

growth needs depends on a person finding the opportunities to be what he is most fully and to become what he can, to develop his or her full potential (1969). In the organizational context, it is the contention of this researcher that growth needs are those which are designed to ensure long-term success of the firm. Strategy, innovation, leadership, change, vision, and decision-making are examples of growth activities. Organizational growth can potentially provide businesses a myriad of benefits including: greater efficiencies, increased power, increase profits, and increased prestige for organizational members (Weinzimmer, 1997). Consequently, organizational growth is often used as an indicator of effectiveness for businesses and is a concern of many practicing managers (Weinzimmer, 1997).

The Oxford Dictionary (2001) defines growth as increasing in size or value, and it lists development, evolution, and advancement as synonyms. Growth in the business sense is often gauged by measurable indicators such as sales growth, revenue growth, profitability, and increase in the number of employees (Edelstein, 1992; Spital & Bickford, 1992; Venkatraman & Ramanujam, 1986; Pasanen, 2007). These financial indicators of success for the organization correlate very well with financial success of the individual. One can obtain a level of income which far exceeds what is necessary for existence (food, clothing, shelter, etc.) and the additional income can enable the individual to pursue avenues of growth other than monetary success. Therefore, just as the growth concept with the individual is not solely focused on the financial success of the individual or the physical growth of the body, the growth concept for the organization is not solely focused on increases in monetary or size measures.

Kaplan and Norton (2006) write that the traditional financial measures used for gauging organization growth can give misleading signals and are out of step with the skills and competencies companies are trying to master today. Kaplan and Norton (2006) advocate a learning and growth perspective focusing on human capital development, which includes career development and leadership development, and knowledge management with the positive outcome of enterprise-level synergies. In total, what is proposed is a balanced approach where the financial perspective of the organization is just one component in the system to be considered in the success and growth of the firm (2006).

Previous research reveals that firm growth is a multi-dimensional phenomenon (Pasanen, 2007). Pandey and Gupta (2008) classify a firm operating on this level to be a spiritually conscious organization. A spiritually conscious organization is the one engaged in meaningful work in whatever area it is operating. The Fortune list of best companies to work for in America reaffirms that these are the places where people find work meaningful. They feel they are contributing towards a larger cause (Colvin, 2006). More than just profits, this philosophy of growth concentrates on the universal well-being of the organization (Sharma & Talwar, 2007).

Interruption

“There cannot be greater rudeness than to interrupt another in the current of his discourse.”

-John Locke

The negative impacts of interruptions in modern work environments are well documented. They can increase job stress, task completion times, and error rates in individual activities (Kirkmeyer, 1988; Cellier & Eyrolle, 1992; Czerwinski et. al., 2000). Interruptions can also cause

coordination problems, work overload, and time pressure in team-based activities (Reder & Schwab, 1990; Jett & George, 2003). All of which may regress a manager down the ERG scale. Many researchers have also written about interruption as it pertains specifically to managers (Drucker, 2003; Mintzberg, 1973; Radner, 1975; Sayles, 1979).

Mintzberg (1973) posited that the manager could expect no concentration of efforts because his activities are characterized by brevity, variety, and fragmentation. In a quantitative paper, Radner (1975) elaborates on brevity, variety, and fragmentation by explaining that “A manager usually supervises more than one activity. For any given level of search effort per unit time, the opportunity cost of searching for improvement in one activity is at the neglect of others. A common managerial behavior is to pay attention only to those activities that are giving the most trouble; this is colloquially called “putting out fires.””

The activities of managers tend to be fragmented as well as varied. Interruptions occur frequently, conversations are disjointed, and important activities are interspersed with trivial ones, requiring rapid shifts in mood. A manager may go from a budget meeting involving decisions about spending millions of dollars to a discussion about how to fix a broken water fountain (Sayles, 1979).

Benefits of Interruption

The case has been made for the benefits of interruption. Although not as extensively written about, the standpoint exists that interruptions can possess positive aspects instead of the negative which has been the viewpoint of most researchers in their writings of interruptions in management. For example, Sikula and Sikula (2007) advocate for management by interruption, they write that management by interruption demands that we recognize the positive aspects of, rather than the negative connotations associated with, frequent interruptions.

Interruption Viewed as Disruptive

The proposal of this research is that an interruption is disruptive to an executive or manager because it takes him away from his work of creating opportunities for growth for his organization. Not only is the interruption itself disruptive, but studies have also evidenced the phenomena of *resumption lag* (Altmann & Trafton, 2007) and *warm-up effect* (Anderson et. al., 1999) to illustrate the time required after an interruption, to resume the original task. A practical justification for this study is the fact that researchers claimed as of 2005, interruption consumes 28 percent of the workday and costs \$588 billion in America (Spira & Feintuch, 1999). Another important reason for this study is its potential to be distinctive from other studies conducted about the interruption phenomenon. Many of the studies did not involve real-world interruptions, they were simulations such as programming VCRs or computer games. These studies did not address the real world complexities of how interruptions may affect managers in the performance of their intellectual, higher-level duties. Based on previous research and given the need to continue research into this subject, the following hypotheses are suggested: Hypothesis 1: There is an association between the number of interruptions and the level of interference with flow of thought. Hypothesis 2: There is an association between the number of interruptions and the level of interference with productivity. Hypothesis 3: There is an association between the duration of interruptions and the level of interference with flow of thought. Hypothesis 4: There is an association between the duration of interruptions and the

level of interference with productivity. Hypothesis 5: The mean level of disruptiveness for three methods of interruption (telephone, email, and in-person) is not the same.

Methodology

“If we knew what it was we were doing, it would not be called research, would it?”

-Albert Einstein

Qualitative and quantitative methods are not simply different ways of doing the same thing. Instead, they have different strengths and logics and are often best used to address different questions and purposes. The strengths of qualitative research derive primarily from its inductive approach, its focus on specific situations or people, and its emphasis on words rather than numbers (Maxwell, 1996). A particular strength of quantitative research is that statistical analysis allows for generalization, to some extent, and can provide methods and results that are repeatable. Given this logic, this research utilized both quantitative and qualitative methods.

The questions addressed in this study include: Do interruptions occur which require a manager's attention preventing him from fulfilling the organization's growth needs? If so, what can I learn about it? What is the nature of these interruptions? Are these interruptions regressive in nature? Are the interruptions disruptive or beneficial to the manager/organization? If they are disruptive or beneficial to the manager/organization, how are they disruptive or beneficial to the manager/organization?

Content analysis was used. This encompassed procedures which operate directly from text or transcripts of human communications and were chosen to provide insight into the research questions (Weber, 1990). Methods included a survey questionnaire, structured interview, and open-interview techniques with managers of small businesses. Open-ended questions were used. Flexibility to stray from the list of questions as needed was expected. The interviews were audio recorded. Notes were taken from the interviews. Survey methods involve and are most useful for gathering information about the current status of some target variable within a particular collectivity, then reporting the summary of findings. The summary includes data in quantitative form (Murray, 2008). The target variable for this study was interruption. Comparative statistics as well as analysis of variance was performed on the quantitative data collected. Correlation analysis was utilized to investigate the relationships outlined in several hypotheses.

Sampling: This research utilized purposeful sampling. Those selected for the research were all mid-level to executive-level managers. A total of forty five managers from six companies participated in the study. Revenues for these companies ranged from approximately two million U.S. dollars to approximately twenty five million U.S. dollars per year. The companies studied for this research would all fall into the category of small businesses. The range of employment for the participating companies was from approximately fifteen to three hundred people. The majority of the companies have bureaucratic structures with layers from front-line employees to supervisory level to middle management to upper management to the executive level.

Researching these companies resulted in data which is reliable and generalizable for two main reasons. One: when speaking of the U. S. economy, of the 119.9 million non-farm private sector workers in 2006, small firms employed 60.2 million and large firms 59.7 million. Businesses

employing less than 500 people are responsible for the employment of more than half of the private-sector workforce. Small businesses have generated 64 percent of net new jobs over the past fifteen years and create more than half of the non-farm private gross domestic product. Therefore when speaking of American business, one is largely speaking of small business (SBA, 2009). Two: even large corporations are divided by country, region, state, city, function, unit and/or branch. Often these smaller units or divisions operate autonomously. Some of the largest companies in their respective industries thrive from structuring themselves to operate like many small businesses, instead of one large corporation. Two examples of this are Edward Jones and Boeing (Edward Jones, 2010; Boeing, 2002; Boeing, 2010).

Edward Jones is a private company which is a leading investment and brokerage firm employing 33,000 people in more than 10,000 offices throughout the U. S. and Canada. Edward Jones's net sales in 2008 were \$3.86 billion. One of the strategies Edward Jones claims is integral to its success is its use of branch locations. A commonality of these locations is to employ only two people, acting as an autonomous unit to cater to the customers within its territory (Edward Jones, 2010).

Boeing is the world's leading aerospace company and the largest manufacturer of commercial jetliners and military aircraft combined. Throughout the United States and seventy countries Boeing employs more than 150,000 people and had gross revenues in excess of \$54 billion (Boeing, 2010). As of 2002, Boeing was organized into five main business units – Commercial Airplanes, Integrated Defense Systems, Boeing Capital Corporation, Connexion by Boeing, and Air Traffic Management. Of these five main units, three employed less than 500 people. Connexion by Boeing consisted of 300 to 400 employees, Air Traffic Management consisted of 200 to 300 employees, and Boeing Capital Corporation maintained 200 employees. Even more to the point, Boeing Capital was divided into three operating groups: Aircraft Financial Services, Commercial Financial Services, and Space and Defense Financial Services (Boeing, 2010).

Results

“We must reinforce argument with results.”

-Booker T. Washington

The Results section will provide details of the findings which address the research questions and the five hypotheses. *Do interruptions occur which require a manager's attention preventing him from fulfilling the organization's growth needs?* Managers expressed how interruptions and the potential for interruptions alter when they are able to concentrate on the responsibilities and projects which are oriented for the longer-term importance of their organizations. The following quotes are merely a sample of the many which support this claim and are evidence that interruptions can interfere with managers' attempts to fulfill their organization's growth needs. “I think it delays when I actually start working on them, so I think you can fill a day with probably not the priority type work items you need to be working on. You fill it with whatever comes through the door or through the email.”

“I've often thought if I just went home and worked for a day, would I be more productive, you know, to just not be available.” “It is extremely difficult for me to plan my daily activities. So many unexpected things arise throughout the day requiring my attention that often times the

important projects I need to and want to work on are severely delayed.” “I usually try to outline what I would like to do each day, but I know in advance that I will not be able to fully adhere to the schedule. Interruptions repeatedly occur and some days can have a large effect on what I can accomplish.”

If so, what can I learn about it? What I have learned is that the continuum from beneficial to disruptive can be rather wide concerning where an interruption may fall. Depending upon the manager, the company, and the particular interruption, managers believe interruptions can be both good and bad, and managers expressed both positive and negative feelings about interruptions.

What is the nature of these interruptions? Managers were asked to assign percentages to the content of the interruptions in four major categories: operations, services, employee relations, and strategy. The results are: Operations: Mean = 31%, Services: Mean = 36%, Employee Relations: Mean = 16%, Strategy: Mean = 13%. As the numbers show, 67 percent of interruptions are in regards to operational or service issues. Many of the managers claimed they rarely had interruptions concerning problems with employees. The lowest percentage of interruptions were strategic in nature. Managers also expressed in the interviews that common interruptions involve questions from others wanting information: “If an employee has questions then they will interrupt me. Basically, it’s people seeking information.” “...mainly just to ask for information or if they need assistance with something.” “.....somebody needing advice on how to handle a situation.” “I get a lot of questions from employees concerning production issues.”

Are these interruptions regressive in nature? The survey addressed the essence of the interruptions experienced by the participating managers. The two categories of: to solve an immediate problem and to further an organization’s goals, provide insight into the possibility of interruptions possessing a regressive element. A substantial portion of interruptions are of an immediate nature, to solve an immediate problem or to gain information. A low percentage of interruptions were reported to address organizational goals: Help to solve an immediate problem: Mean = 32%, To further an organization’s goals: Mean = 12%, To provide information: Mean = 31%, To receive information: Mean = 22%. Often interruptions involve the exchange of information. The person being interrupted is asked to provide information more often than he/she is provided with information. As shown by the results, the majority of interruptions are in regards to operations or service issues.

Other than interruptions which concentrated on the existence level needs of operations and services, the managers also described examples of interruptions which could be classified as relatedness level activity: “...sales people that have visited [a client] come back, they want me to know that so and so said “hi”. They could have put it in an email or they could, their contact report. They just uh, they kind of use that as a way to get their nose in the tent and then at the same time, all of a sudden they are telling me how their trip went and maybe who they took to dinner, how many attended the little lecture they put on or something like that. So, it kind of grows into something more than they originally showed up to share.”

“I get the occasional, just stop in, sit down, have a cup of coffee, how are you doing. You know, here is the latest joke I’ve heard or something like that or here’s how my kid did last night in his ballgame or something like that.”

How are they disruptive to the manager/organization? It seems interruptions can be disruptive to managers. So much so, that in order for managers to focus on their higher level projects and responsibilities they must adjust how, where, and when they work. One manager stated: “One of the things I do that I find really beneficial is if I’ve got a project that I really need to concentrate on, I absolutely leave the office. I’ll go offsite and I’m so much more productive because I’ve got a continuous thought process and workflow process that works for me. That’s what I often do when interruptions are coming too frequently. I’ll just step out of the office and work offsite, so that’s how I deal with things when they get crazy.”

Another manager expressed that: “I feel I don’t really start my, like the jobs that require sort of a concentrated effort and concentration and quiet time until 4:30 when everybody else goes home. So that time, you know I am really dealing with multi-tasking and working in several different fast-paced, easy-to-do things during the day. And I don’t get to the longer project stuff until later.” Another executive revealed “To get work done I’ll come in around seven o’clock to give myself an hour, hour and a half of quiet time because I know no one will be here.” Still another manager stated “For me interruptions are most annoying when I get one after another after another. It really makes it difficult to stay on task and get anything accomplished when you experience several interruptions back to back.”

The common theme from all of the preceding quotes is that the managers need more uninterrupted quiet time to attend to certain important management responsibilities and they are sometimes unable to do so because of interruptions. The immediate daily problems constantly arise, at least enough, to prevent the managers from achieving any real progress on their management projects during their regular hours in their office. Many of the managers expressed how they prefer to keep an open-door policy and welcome interruptions from employees, but their comments underscore the fact that often in order to work on their higher-level, long-term duties which require thought and concentration, they find they must take action to limit the possibility of interruption by leaving the office, working earlier, working later, etc.

Are the interruptions beneficial to the manager/organization? And, no, some managers feel interruptions are not disruptive. “Well, I guess I kind of feel that it is not that big of a disruption. I’ve come to expect it. It doesn’t bother me. So, it is generally a question and I will usually put whatever I am doing aside and discuss the problem or the situation with whoever it is. I will generally spend as much time as they need with it. Absent having to leave for a prescheduled meeting or something, I’ll give them all the time that they need.”

“I don’t get interrupted much, but what little I do, I consider most of it to be of a business nature that I welcome.” “There’s good interruptions, if someone has questions, I have a new team member that’s only been on board about five weeks and she’s learning. And, if she has a question I want to take the time to stop and help answer her questions because she will grow and learn through those questions. So, I never want to say that don’t interrupt me or don’t ask me

any questions. I want to be there for them and to support them and to teach people and help them grow.”

How are they beneficial to the manager/organization? “They [interruptions] keep me abreast of what’s going on. And so, the alternative is I shut my door or I don’t let anybody come and see me and I don’t want to work in a vacuum. I don’t want to be inaccessible to people. If there is a problem I want to be one of the first people to know about it. So, I want people to feel comfortable to let me know. If there is a question, especially if it is coming from a customer, I never want them to wait.” “They are beneficial because they are usually bringing me information that I would like to know.” “...cementing or forming those informal networks to help you get projects done. Because one day you’re being interrupted the next day you’re interrupting.”

Hypothesis 1: There is an association between the number of interruptions and the level of interference with flow of thought. The correlation between the number of interruptions per day and the level of disruptiveness to work flow/rhythm is 0.28.

Hypothesis 2: There is an association between the number of interruptions and the level of interference with productivity. The correlation between the number of interruptions per day and the level of interference to productivity is 0.36.

Hypothesis 3: There is an association between the duration of interruptions and the level of interference with flow of thought. The correlation between the duration of interruptions and the level of interference to work flow/rhythm is 0.16. Of the four hypotheses tests, this correlation was the lowest.

Hypothesis 4: There is an association between the duration of interruptions and the level of interference with productivity. The correlation between the duration of interruptions and the level of interference to productivity is 0.44. Of the four hypotheses tests, this correlation was the highest. Even so, the data for hypotheses one through four indicate there is not a significant correlation between the variables of duration of interruptions or number of interruptions and the levels of interference with productivity or interference with flow of thought. However, the findings for hypotheses one through four are important because they elicit the possibility that other variables should be considered when attempting to ascertain the determinants of the level of interference with flow of thought and productivity.

Hypothesis 5: The mean level of disruptiveness for all three methods of interruption is not the same. The means of the three methods are not equal. On a 0 to 5 scale, the mean for telephone was 3.3, in-person was 3.4, and email was 3.1. However, after an analysis of variance it is noted that the P-value is .6047. This means that 6,047 times in 10,000 all three of the interruption methods will display the same means (level of interruption).

Discussion

To summarize the quantitative data, the correlations for hypotheses one through four were too low to be considered significant. However, this does not mean that the quantitative data gathered has absolutely no value. The data clearly show that interruptions are disruptive to managers. For

example, the three methods: telephone, in-person, and email may not vary significantly in their means, but the data proves they are disruptive. All the means are higher than 3.0 on a 5.0 scale. In hindsight, it may have been wiser to propose a hypothesis for each method stating that the mean level of disruptiveness is greater than zero. In this case, all three hypotheses would have been proven true. The same can be said for the interference to flow of thought and interference to productivity. What may be more important to consider than if one method is more disruptive than the other is that all three methods have proven to be disruptive. In aggregate, all three methods have nearly the same mean level of disruptiveness. For the individual manager however, one method may prove to be more disruptive than the other two.

This raises a salient point concerning interruptions affecting managers at work. The situation is not as simple as when a manager receives X amount of interruptions or when the interruptions last X amount of time, then the manager experiences X amount of negative impact to his work. The human element makes the level of impact to each manager dependent upon the wherewithal of each manager. Continued research of the affect of interruption may prove more insightful if the variable of individual personality is brought into the analysis. Managers could be categorized based on personality. With the inclusion of this variable, the variables of interruption amount and interruption duration may increase in significance among managers who fit into particular personality categories.

Mangusson and Ekehammar (1975) explain that individuals differ with regard to the meaning they give to the same situation. Eminent personality psychologists have extensively studied the fact that people are different. This helps to shed light on why some managers view interruptions as distractions and some do not. It also helps to explain why some managers who experience a low number of interruptions may feel severely disrupted and other managers who experience a much higher number of interruptions feel much less disrupted.

For example, one manager in the survey answered that he/she receives 15-21 interruptions per day lasting between 4-9 minutes and rated the level of interference with flow of thought at 2 on a 0 to 10 scale. Another manager who also answered that he/she receives 15-21 interruptions per day lasting between 4-9 minutes rated his/her level of interference with flow of thought at 10 on a 0 to 10 scale. The individuality of these responses appears to be due to each manager's personal interpretation of what, how many, and how long, constitutes disruptiveness and how severely so.

As articulated by Mischel (2004) "For personality psychology, an especially important part of information processing concerns the ways we encode and group information from stimulus inputs . . . clearly, different persons may group and encode the same events and behaviors in different ways . . . a stimulus perceived as 'dangerous' or 'threatening' by one person may be seen as 'challenging' or 'thrilling' by the one next to him." Therefore, the subjectivity of a manager's answer to a question asking him/her to rate the level of interference or disruptiveness on a scale, prevents the phenomena from prediction by a mathematical formula consisting simply of objective data.

Reducing Unnecessary Interruptions

The nature of managerial work is to interact with people (subordinates, customers, etc.). Interruptions are widely accepted as a part of the job and can be beneficial to the manager and the organization. However, some interruptions can be seen as redundant and unnecessary. Measures could be taken to reduce these types of interruptions because analysis of the data has shown that interruptions do disrupt managers to some degree, and some managers more so than others. As many of the managers stated, they are often asked for information or advice for how to handle a situation. One manager expressed his greatest frustration was an interruption where the employee should have already known how to handle a situation and had the requisite information.

Therefore, two steps in reducing unnecessary interruptions are to provide the employees with the information they need and to empower them to make decisions when they have the information. Ideally, employees should be provided with comprehensive job descriptions, proper training and information so they fully understand their positions and have the tools they need to sufficiently perform their duties. An important part of empowering an employee to make decisions is to be certain they understand they have the authority to make decisions. This would help to prevent unnecessary interruptions requesting permission to make decisions they are already empowered to make.

Implications

This research has provided results important to the field of management. As is the general consensus of management: it is a profession where interruptions are known and expected as part of the job, and many managers welcome these as a means to assist their employees, their organization, and their customers. However, this research also discovered that even with this understanding of the nature of the management position, managers do experience interruptions, sometimes to the extent, that they are disruptive and regressive in nature. It is also sometimes necessary for managers to take action to attempt to avoid the potential for interruption in order to facilitate an environment where they can concentrate on their higher-level responsibilities which contribute to the long-term growth of their organizations. Managers feel it is necessary to take steps to avoid their employees by leaving the office, coming to work early, and/or working later to accomplish their tasks and fulfill their responsibilities.

The relevance to academics is the utility of the ERG model to understand the workings of an organization. The relevance to the practitioner shares this benefit and the knowledge gained that the typical structure of a manager's job may not be the most conducive to the effectiveness and efficiency of the manager's performance. This model helps to isolate the causes of the costly interruptions (the fulfilling of existence or relatedness needs) and increases the awareness for the possibility to ensure managers receive the necessary resources (time, periods of uninterrupted work, etc.).

Conclusion

"It is the loose ends with which men hang themselves."

-Zelda Fitzgerald

Continued research into the viability of the ERG theory as an organization-level construct is appropriate and may prove beneficial in future management analyses. To summarize the findings of this research: interruptions have been proven to be disruptive. The level of disruptiveness

may not be uniform from manager to manager and cannot be accurately predicted by the amount of interruptions one experiences or the duration of the interruptions one experiences. Some managers feel interruptions are highly disruptive to their productivity. Some managers feel interruptions are minimally disruptive to their productivity. The mean levels of disruptiveness for every measure and method are near or past the midline of their scales. This is important because a portion of the levels of disruptiveness are higher than the mean. In time, the mean levels of disruptiveness could increase. Therefore, this is a topic which deserves further investigation.

Concerning the issues raised by personality psychologists as it pertains to the variability in answers to the survey is to recognize that "...people differ significantly on virtually any dimension, showing stable overall individual differences: on the whole, some people are more sociable than others, some are more open-minded, some are more punctual, and so on" (Mischel et. al., 2004).

To this end, it is important to remember in researching and analyzing managers that they, just like their employees, are individuals and each may perceive situations, such as interruptions, in their own way. Context, duration, and the amount of interruptions may be categories which offer quantifiable data, but the overall impact, positive and/or negative is relative to the manager experiencing them. Future research may benefit from this perspective. Controlling for the variable of personality could provide valuable insight for gaining a better understanding into what affects the levels of interference with flow of thought and productivity of managers.

In conclusion, interruptions can be regressive in nature. The survey answers show that often interruptions are concerning lower-level, immediate issues such as operations and services. The interviews also provide data showing those who interrupt do so with the purpose of fulfilling a relatedness need. Interruptions are shown both in the quantitative data and the qualitative data to be beneficial to the manager and organization. They help to keep managers informed of the happenings in the organization. They also are important in guiding and mentoring the managers' subordinates. Considerations for future research may include controlling for managers' personalities, larger sample sizes, and participants from larger companies.

References

- Alderfer, C. 1969. An Empirical Test of a New Theory of Human Needs. *Organizational Behavior and Human Performance*, 4, 142-175.
- Anderson, J., Fincham, J., & Douglass, S. 1999. Practice and Retention: A Unifying Analysis. *Journal of Experimental Psychology: Learning, Memory, & Cognition*, 25, 1120-1136.
- Altmann, E. & Trafton, J. 2007. Timecourse of Recovery from task interruption: Data and a Model. *Psychonomic Bulletin & Review*, 14, 6, 1079-1084.
- Burns, T. & Stalker, G. 1961. *The Management of Innovation*. London: Tavistock.
- Cellier, J. & Eyrolle, H. 1992. Interface Between Switched Tasks. *Ergonomics*, 35, 1, 25-36.
- Colvin, G. 2006. The 100 Best Companies to Work For. *Fortune*, 153, 1, 50.
- Czerwinski, M., Cutrell, E., & Horvitz, E. 2000. Instant Messaging and Interruption: Influence of Task Type on Performance. In C. Paris, N. Ozkan, S. Howard, & S. Lu (Eds.), *OZCHI 2000 Conference Proceedings*: 356-361. Sydney: Ergonomics Society of Australia.
- Drucker, P. 2003. *On the Profession of Management*. Harvard Business School Publishing.

- Edelstein, J. 1992. *Adjustment and Decline in Hostile Environment*. New York: Garland Publishing.
- Fogiel, M. 2000. *The Essentials of Production and Operations Management*. Research and Education Association.
- Highhouse, S., Brooks, M., & Gregarus, G. 2009. An Organizational Impression Management Perspective on the Formation of Corporate Reputations. *Journal of Management*, 35, 6, 1481-1493.
- Jett, Q. & George, J. 2003. Work Interrupted: A Closer Look at the Role of Interruptions in Organizational Life. *Academy of Management Review*, 28, 3, 494-507.
- Kaplan, R. & Norton, D. 2006. How to Implement a New Strategy Without Disrupting Your Organization. *Harvard Business Review*, March.
- Kast, F. & Rozenweig, J. 1973. *Contingency Views of Organization and Management*. Chicago: Science Research Associates.
- Kirkmeyer, J. 1988. Coping with Competing Demands: Interruption and the Type A Pattern. *Journal of Applied Psychology*, 73, 621-629.
- Magnusson, D. & Ekehammar, B. 1975. Perceptions of and Reactions to Stressful Situations. *Journal of Personality and Social Psychology*, 31, 6, 1147-1154.
- Maxwell, J. 1996. *Qualitative Research Design* (vol. 41). Sage Publications, Thousand Oaks, CA.
- Mintzberg, H. 1973. *The Nature of Managerial Work*. Harper & Row, New York.
- Mintzberg, H. 1993. *Structure in Fives: Designing Effective Organizations*. Prentice Hall, New Jersey
- Mintzberg, H. 2007. Developing Theory about the Development of Theory. *Great Minds in Management*, Oxford University Press, New York.
- Mischel, W., Shoda, Y., & Smith, R. 2004. *Introduction to Personality: Toward an Integration*. New York: Wiley.
- Murray, T. 2003. *Blending Qualitative and Quantitative Research Methods in Theses and Dissertations*. Thousand Oaks, CA: Corwin Press, Inc.
- Oxford Dictionary. 2001. Oxford University Press.
- Culture, 15, 4, 317-338.
- Pandy, A. & Gupta, R. 2008. A Perspective of Collective Consciousness of Business Organizations. *Journal of Business Ethics*, 80, 889-898.
- Pasanen, M. 2007. SME Growth Strategies: Organic or Non-Organic? *Journal of Enterprising*
- Radner, R. 1975. A Behavioral Model of Cost Reduction. *The Bell Journal of Economics*, 6, 1, 196-215.
- Reder, S. & Schwab, R. 1990. The Temporal Structure of Cooperative Activity. *Conference on Computer-Supported Cooperative Work*.
- Sayles, L. 1979. *What Effective Managers Really Do and How They Do It*. McGraw-Hill.
- SBA. 2009. *Office of Advocacy News Release*. SBA.gov.
- Schein, E. 1997. *Organizational Culture & Leadership*. John Wiley and Sons.
- Sharma, A. & Talwar, B. 2007. Evolution of “Universal Business Excellence Model” Incorporating Vedic Philosophy. *Measuring Business Excellence*, 11, 3, 4-20.
- Sikula, A. & Sikula, J. 2007. Management by Interruptions (MBI): Mini not Micro Management. *SuperVision*, 68, 12, 3-4.
- Spira, J. & Feintuch, J. 2005. The Cost of Not Paying Attention: How Interruptions Impact Knowledge Worker Productivity. Basex, Inc.

- Spital, F. & Bickford, D. 1992. Successful Competitive and Technology Strategies in Dynamic and Stable Product Technology Environments, *Journal of Engineering and Technology Management*, 9, 29-60
- Staw, B. 1991. Dressing Up Like and Organization: When Psychological Theories Can Explain Organizational Action. *Journal of Management*, 7, 805-819.
- Steers, R. & Black, J. 1994. *Organizational Behavior* (5th ed.). Harper Collins College Publishers.
- Venkatraman, N. & Ramanujam, V. 1986. Measurement of Business Performance in Strategy Research: A Comparison of Approaches. *Academy of Management Review*, 11, 4, 457-476.
- Walton, C. 1967. *Corporate Social Responsibilities*. Belmont, CA: Wadsworth.
- Weber, R. 1990. *Basic Content Analysis* (2nd ed). Sage Publications, Newbury Park, CA.
- Weinzimmer, L. 1997. "Top Management Team Correlates of Organizational Growth in a Small Business Context: A Comparative Study." *Journal of Small Business Management*, 35, 3, 19.
- Whetten, D., Felin, T., & King, G. 2009. The Practice of Theory Borrowing in Organizational Studies: Current Issues and Future Directions. *Journal of Management*, 35, 537-563.

Back to the Future: Adaptation and Precognition in Venture Capital

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Abstract

In this paper we examined two factors considered vital for success in the venture capital industry: adaptation to changing conditions; and an ability to predict future trends. We conducted semi-structured interviews with eleven venture firms, asking about how they planned to adapt their investment strategies, on the stage and industry of companies in which to invest, and the future of their industry. We compared their views with industry results published year later in the National Venture Capital Association (NVCA) Yearbook, and found that the VC industry is undergoing significant changes that have far-reaching implications on the entrepreneurial landscape.

Background

Contributions to the entrepreneurial landscape made by the venture capital (VC) industry are widely known, longstanding (e.g. Gorman & Sahlman, 1989, Timmons, 1986), and well documented (e.g., Sapienza, 1992, Chou, 2008). The industry's beginnings in 1946 can be traced to a small group of investors led by MIT President Karl Compton, and General Georges F. Doriot, who started the American Research and Development (ARD) (Gompers & Lerner, 2001). ARD made high-risk investments in emerging companies using technology developed for World War II. The first VC firms were set up as closed ended funds. The risks associated with this type of investment, such as limited liquidity, meant that investment in venture capital was primarily restricted to individual investors (Gompers & Lerner, 2001; Liles, 1977).

The industry adapted to increasing demands for venture funding, and the firm of Draper, Gaither, and Anderson was formed as the first VC limited partnership in 1958. Unlike earlier closed ended funds, these partnerships had predetermined, finite lifetimes (usually ten years), providing additional liquidity and exit certainty for investors. Under this structure, a VC firm's management team (general partners) would raise capital from investors, who then became limited partners (LPs) in the venture. Fees were charged by the general partners, typically based on a percentage of the fund, as compensation for their expertise in finding appropriate deals and managing the fund. Successful investments usually exited before the life of the fund expired through private sale, acquisition, or public offering. At the end of the fund's life, general partners (GP) were required to return the assets remaining in the fund to the limited partners. In addition to the returned capital, the limited partners (LP) also got a percentage of the profits, called *carried interest* from successful investments, typically split on an 80 percent (LP) to 20 percent (GP) basis (Metrick & Yasuda, 2009).

Following the *prudent man* rule enacted by the U.S. Department of Labor in 1979, investments in venture funds were expanded to include pension funds and other institutional investors, and the number of institutional investors quickly rose from 15% to more than 50% (Gompers & Lerner, 2001). Predictably, the broader source of investors with substantial capital led to an increase in investment in new ventures by VC firms. The stellar returns realized by many VC

firms in the early to mid-1990s fueled continued growth through the internet boom, where investments by VC funds went from USD 11 billion in 1996 to USD 104 billion in 2000 (Metrick & Yasuda, 2009). The cyclical nature of the industry was evidenced by a substantial contraction and relatively low period, where investments fell to levels between USD 20 and 30 billion per year, to USD 12.3 billion in 2010. The National Venture Capital Association (NVCA) provided evidence of the dramatic change undergone in the VC industry in their annual Yearbook. The organization reported that the activity level of the industry in 2011, as measured by the number of firms and the amount invested, was roughly half the level found at the peak in 2000 (Thomson Reuters, 2012). Arguably, an ability to anticipate and adapt to dynamic changes in the economy, in the availability of capital from investors, and changes in the industries in which they invest were significant factors in differentiating the VC firms that survived and succeeded from those that did not.

Successful VC firms must effectively anticipate trends in both the supply and demand sides of their business. In essence, they are better at predicting the investment climate in order to raise funds and do so by being better at adapting to industry trends to determine the allocation of funds invested. Although closely linked, we examine the literature on both the supply and demand sides of the VC industry, and review aspects of firm strategy relevant to VC firms and their performance. These seemingly separate functions are closely related and interdependent.

Venture capital as an asset class: Supply side

For VC firms, the supply side is often regulated by the availability of capital, largely determined by the willingness and ability of institutional and individual investors to provide funds. Investments in a VC fund are viewed as an investment in an asset class, with the attractiveness of the investment determined by a collection of unique preference and aversion factors. These factors can be used by investors to compare VC investments with available alternatives, and translated into a relative cost. An investor requires compensation or returns from the investment in a given asset in exchange for bearing these costs. The expected returns, net of its associated costs, determines whether or not an investor would be willing to invest in a particular asset class, as well as the amount to be invested.

The attractiveness of VC investments to individual and institutional investors is largely dependent on their expected rate of return compared to that from investments in other asset classes. Factors such as the capital gains tax, higher GDP growth, the supply of substitute funding, the VC firm's reputation, stage of funding and the LPs loyalty to a particular geographic area have been found to influence investment or re-investment in VC firms (Gompers & Lerner, 2004). Some of these factors are systemic in nature, and are explained by models such as the Capital Asset Pricing Model (CAPM) (Sharpe, 1964). Other factors, such as reputation, stage of funding, geographic area etc., are non-systemic, and are largely unexplained by available formulas. These *non-risk* factors have been shown to be more important to investors than the risk characteristics of an asset (Ibbotson, Diermeier, & Siegel, 1984). Despite the important role of economic factors and various government regulations, Jeng and Wells (2000) found that Initial Public Offerings (IPO) were the strongest driver of total VC investments.

Venture capital as an asset class: Demand side

The importance of the VC industry to the entrepreneurial landscape is widely accepted among academics and practitioners, producing quantifiable measures of impact in the US economy. Groh and von Liechtenstein (2011) noted that the capital provided by a vibrant VC sector is a “cornerstone for commercialisation and innovation in modern economies” (p. 533). Since its inception, firms in the industry have provided investment capital for young, high-growth potential companies, has played a vital role in the startup and growth of a number of successful companies, serving as a catalyst for innovation and job creation (Sohl, 2003; Timmons & Bygrave, 1986). Familiar names like Google, Hotmail, Paypal, Yahoo, Microsoft, Apple computers, and Starbucks are some of the more notable companies that achieved success through VC investments. The impact on the US economy was quantified in a recent NVCA report that found VC-backed companies in the US had revenues equal to 21 percent of GDP, and were responsible for nearly 11 percent of all private sector jobs (Thomson Reuters, 2012). Considering that total investments in VC funds during the same period were less than 0.2 percent of US GDP, the overall impact of and return on investment by the industry on the US economy is noteworthy.

Another aspect of the demand side of VC firms is the activities in the informal venture capital or *angel capital* markets. Individual or angel equity investors often provide equity capital to earlier stage entrepreneurial ventures, enabling some young firms to grow sufficiently with smaller equity capital infusions than typically provided by VC firms. The Center for Venture Research (CVR) found that total investments by angel investors in the US totaled more than \$22.9 billion in 2012 (CVR, 2013) with a median investment round size in 2011 in excess of \$700K (Bank & Institute, 2012). As VC firms seek to provide higher returns for investors, they may be willing to invest in earlier-stage but potentially riskier ventures. Smaller investments in younger companies can be problematic for VC firms with large investment funds, as the ability to properly manage their investments is limited by the number of staff in the firm.

In addition to financial management of current and prospective entrepreneurial ventures, the advisory responsibilities of VC firms require high levels of industry-specific expertise. Of the more than \$26.7 billion invested in 3,143 companies in 2012, more than 31 percent went to software companies (Association, 2013), while in 2007 more than 31 percent of the \$30 billion invested went to firms in the life sciences industry (Association, 2008). Because most venture capital firms have industry specific expertise and existing portfolios of companies from their targeted industries, they must make strategic adjustments in order to keep pace with the dynamic markets served by the entrepreneurial companies in which they invest. For a VC firm, a change in industry focus would have far-reaching implications in the staffing, marketing, and management of the firm, and must have the skills *a priori* to be successful (Feaser & Willard, 1990).

Venture capital firm strategy

“Strategy underpins the success of the company” (Markides, 1999) (p. 6), a view that is likely as applicable to VC firms as it is to the companies in which they invest. In her study of strategic decision making, Eisenhardt (1999) argued that to create a flow of evolving competitive advantage in rapidly changing environments, excellent firms develop dynamic capabilities in their decision process. When we considered the investment and entrepreneurial environments in which VC firms operate and the competition among firms in their industry, an exploration of the decision-making performance processes of VC firms appeared needed. As a gatekeeper in the

funding process of new ventures, VC firms are generally believed to be adept at predicting new venture performance (Shepherd, Ettenson, & Crouch, 2000), but how decisions are made is not well understood.

We considered the importance of the industry, the dynamics of the companies and industries in which firms invest, and the challenges faced by VC firms in raising, allocating and managing capital, and developed the following central question to guide this research:

How do firms in the VC industry make effective changes to their strategies?

The current state of the VC industry

The previous section described the pivotal role played by the VC industry in the entrepreneurial ecosystem. Despite its well-established history of success in funding some of America's fastest growing companies, firms in the industry currently face a number of challenges. In a report published by the Ewing Marion Kauffman Foundation, Kedrosky (2009) stated, "The US venture capital industry is at an inflection point." (p. 1). He cited the need to offer investors competitive returns for their investment if the industry is to remain a viable source of capital for entrepreneurs, and to do so it "must shrink considerably" in response to a decline in investing expected to be half that of the past (Ibid. p. 8). Those working in the VC industry also expressed concerns about their future. A poll by Polachi Inc. of more than 100 venture capital executives (70% of which were partners or managing partners) found that 53% believed that the industry was broken. Similar articles have led to increased uncertainty among academics and practitioners on the industry's future. Although most agree that the industry will continue to be a catalyst for growth in the capital-intensive and risky sectors, there is no consensus on just how or if the industry will adapt to the challenges it now faces.

The first challenge is associated with an ability to raise investment capital. Although annual VC investment in dollars grew by 23 percent in 2011, this growth was based on a 2010 level that was 37 percent lower than the previous year (Thomson Reuters, 2012). Historic returns of VC investments compared to other asset classes are presented in Table 1 below.

Table 1. Venture capital performance comparison

	1-Year		5-Year		10-Year	
	Total	Annualized	Total	Annualized	Total	Annualized
NASDAQ	-41%	-41%	-21%	-4.7%	-28%	-3.2%
S&P 500	-38%	-38%	-19%	-4.1%	-27%	-3.0%
Russell 2000	-35%	-35%	-10%	-2.2%	18%	1.7%
Venture Capital	-21%		6%		16%	
Source: National Venture Capital Association/ Thomson Reuters (2012)						

Although the 10-year annualized returns from VC investments depicted in Table 1 were impressive, when the record number of venture-backed IPOs of 1999 is removed, the overall return for the period is negative. There are a number of contributing factors that explain this relatively poor performance, including a shrinking of the IPO and M&A markets and a maturing of many technology industries that were responsible for the attractive returns of the past (Kedrosky, 2009). In contrast to the robust appetite for IPOs of 1990s, there were few strong

IPO exists (Thomson Reuters, 2011) and only 12 venture-backed companies went public in 2009 and 21 in 2010.

One way to increase returns for investors in this asset class is to seek out earlier stage companies for VC investment. Although early-stage firms represent higher potential returns, they are also likely to be riskier than firms in the later stages of development. If VC firms are actively adapting their strategy to confront the challenge of increasing their returns to investors, a change in the stage of company will be evident in their investments. This leads us to research Question 1:

Question 1: Are VC firms changing their strategy to invest in earlier stage companies in order to increase returns for investors?

One of the contributing factors to the decline in returns from the VC asset class is the maturation of industries funded by VC firms. Telecommunications, for example, represented 11 percent of the total VC investments in 2007, but accounted for only 2 percent in 2011 (Thomson Reuters, 2013). Changing the focus of industries in which to invest is a potentially difficult adaptation for VC firms. Many VC firms develop industry-specific talent, networks, and expertise (Berglund, 2011), and their knowledge of customers and suppliers within specific industries (Sapienza, 1992) is not likely to readily transfer to another industry. This leads us to Research Question 2:

Question 2: Are VC firms changing the type of company and industry in which they invest?

Our approach to this study was a purposeful attempt to gather qualitative data. This data can provide rich descriptions of practices and strategies that can be used to develop theory. Our study followed a content analysis approach of formulating research questions, selecting our sample, and defining categories (Hsieh & Shannon, 2005). This is consistent with an observational approach that included using notes gathered from primary interviews to classify statements into categories. Based on our initial interviews, we added new categories and subcategories for the statements that did not fit our initial framework, and explored themes as well as concepts common to these two interviews. This process of discussion, reflection, and scrutiny of the interview instrument, notes, and coding scheme helped in refining our coding scheme. Consistent with an observational approach, we developed our third research question:

Question 3: What other steps are being taken by VCs to adapt to changes in the industry?

Research strategy

This study was designed specifically to gain insights into the VC industry, exploring the strategic decisions, behavior, processes and adaptation of firms. We chose a case study approach for two primary reasons: First, factors affecting strategy and behavior are complex and inter-related, and our goal was to capture this rich data in the context of the time. Second, we had an opportunity to solicit perceptions through open-ended questions, which can be used in future to build theory. Berglund (2011) noted in his comparison of Scandinavian- and US-based VCs that cultural, geographic, and institutional differences were often overlooked in the quantitative studies typically conducted in venture capital. He highlighted the roles of coaches and investors often

undertaken by some VCs, with some actually assuming the role of partner in one or more of their portfolio companies, noting that "...quantitative studies can only speculate about the underlying reasons..." (p. 120). Our choice to collect and present our data collection in this fashion is based on Hartley's (2004) assertion that since the context is a deliberate part of the research design, a case study is more of a research strategy than a research method, which enabled us to also employ a combination of methods. Our mixed methods approach is consistent with Johnson & Onwuegbuzie (2004) and Creswell's (2009) approaches to research design, who argued that the methodological pluralism of mixed methods frequently results in superior research when compared to that of a single method approach.

The design of a qualitative study depends on the nature of the inquiry, the type of information, and the credibility of the information collected. In Berglund's (2011) study of regional differences cited in the previous section, he found that semi-structured interviews revealed insights and improved his understanding of VC behavior beyond that possible in a quantitative study. Although there is no strict criterion in a qualitative study, and no statistical test to check for significance, previous research e.g., (Eisner, 1991, p.39; Morse, 1994; Patton, 1990) suggested that a sample size of six is sufficient when a study is centered on discerning the essence of experiences. To more closely examine the strategies of VC firms, we conducted semi-structured interviews with eleven VC representatives with more than 108 years of combined experience in the industry during the summer of 2011. The interviews lasted, on average 45 minutes each (Patton, 1990) with representatives currently employed in the venture capital industry. Our interviewees represented VC firms across the US, in order to reduce regional differences and enhance the generalizability of the study's findings (Merriam, 1998, p.207). We considered the issue of reflexivity, and proactively attempted to eliminate biases by being conscious of our interactions with participants (Rossman & Rallis, 2003, p.51). Data were analyzed using a qualitative descriptive approach (Sandelowski, 2000).

In addition to the specific insights gained in our interviews, we examined overall industry adaptation and changes on a national level. To do this, we chose the 2011 and 2012 National Venture Capital Association (NVCA) Annual Yearbooks, which provides a summary of venture capital activity in the US (Thomson, 2013). Tracking activity since 1985, the NVCA Yearbook provides a broad and longitudinal perspective of VC activity in US and quantifiable data gathered from its base of more than 400 members.

Results: Research Question 1

Research Question 1 examined the strategy of VC firms as it pertains to their supply of investment capital. In order to attract sufficient capital, VC firms will typically attempt to boost the returns on investment for existing investors to attract additional investors. One way to boost returns is to make investments in earlier stage, albeit riskier, companies. Specifically, we asked:

Is your firm changing its strategy to invest in earlier stage companies in order to increase returns for investors?

All VCs interviewed agreed that there is an insufficient supply of early stage investment capital, and that such investment in early stage companies is important. In the past, most VCs gradually moved away from early stage investments, in part because limited partners (LPs) viewed these

investments as riskier, and because it was easier to syndicate at later stages (Lerner, 1994). Another reason to change strategy pertains to the size of the funds being raised, because larger fund sizes typically require larger investments, those required in later stage companies. One VC described this issue in the following way:

There is a new segment emerging in the venture market. Angels are institutionalizing while VCs are raising micro funds to fill a market need. This smaller type of fund is easier to manage and what entrepreneurs are looking for.

Another VC clarified the need for early stage investment capital and some of the risks and rewards associated with these investments, stating:

Part of the rationale for investors investing in seed and early stage companies is that the companies can do something to become more valuable and then when they raise a subsequent round of funding, the early investors get a step up in valuation. And that is basically their reward for having taken that earlier risk. But we observed between 2001-2006, 2007 there really wasn't a big step up in value incurring between early and expansion stage deals. The early stage investors weren't being compensated for the risk they were taking at early stage investments... what we observed that a series B usually at expansion stage round was being done at approximately the same valuation as a series A round. Which meant you were taking less risk for basically the same valuation, so there wasn't a lot of reason to stay in the early stage. Now, I think from 2007 till now, it's been very hard to borrow money. There has been relatively less capital for relatively younger companies, and you know, it's a cyclical process so I think it's inevitable, that money will migrate toward some early stage deals. When we raise our next fund, which will presumably be a larger fund, then we will be able to do a combination of early and expansion stage funding.

Another perspective on a change in strategy toward smaller funds was provided by another VC, who noted the reduced demand for large sums of capital by early stage firms:

Thanks to enhancements in infrastructure and changes in technology, most IT firms are now using open source systems. Instead of traditional marketing, they are making use of social networks to get their word out. This means that they are doing a lot more with a lot less, and don't really need much in terms of funds. If we want to get to these potentially high growth companies early enough, we have to start investing earlier and with smaller amounts.

In addition to the potential for increased returns, a change in strategy to investments in early stage companies with smaller funds has potential benefits for VC firms. Smaller funds are also easier to manage, and smaller investments make it easier to raise subsequent rounds of capital as the company grows. Summarizing the views expressed by many participants in our sample, one VC opined:

"We don't have to take big risks early on in a company's life. It is a lot easier to write checks like a quarter to half a million and let those companies develop into winners. If and when that happens, we can write the three or five million checks."

Results: Research Question 2

Research Question 2 focused on the capital demand side issues faced by VC firms by examining the industry and type of business conducted by the companies in which VC firms invest. Capital is only one element of the contributions VCs make to growing businesses. They offer valuable business knowledge to entrepreneurs, such as how to effectively grow companies, how to build a distribution network, how to attract a top management team, and insights into the existing and potential market being targeted. VCs help entrepreneurs to better understand the life cycle of products and companies, how to successfully get acquired, or how to go the initial public offering process (Cumming, Fleming, & Suchard, 2005; Sapienza, 1992). Since many VC firms have very specific industry expertise and invest only in businesses engaged in these specific industries, changes in this aspect of their strategy may take considerable time, or require major changes in personnel. Specifically, we asked:

Is your firm changing the type of company and industry in which the firm invests?

When asked about a change in industry focus, one VC conveyed a lesson learned from the recent past:

Yes, and we regretted it. If you look at our portfolio, 95% of the companies are covered by the healthcare umbrella. The outlier has been areas where we struggled... We will not do that again.

Another VC highlighted the challenges associated with a shift in industry focus, stating:

Our focus has been on technology, healthcare, and software companies, but we invested in a restaurant in the past. Even though [we] didn't have any experience in that industry, we invested. I don't see that happening again.

One explanation for changes in industry focus is that firms may seek to diversify their portfolio in an attempt to mitigate risk, consistent with portfolio theory (Markowitz, 1991). Another potential explanation is that VC firms can make a small number of investments in industries where they have expertise and be actively involved with those investments, in what has been called the *batting average model* (Chou, 2008). Alternatively, VCs could make investments in industries wherein they have little or no expertise and let others worry about the development of those firms, known as the *spray and pray model* (Chou, 2008). VC firms that adopt this *spray and pray* model are more focused on providing capital than the coaching and mentoring aspect of equity investments, which may be inconsistent with the needs of earlier stage companies. One VC reinforced this perspective:

In the previous fund, we had a few investments here and there where we didn't have that much expertise, and in a way the whole fund was built around folks who had moderate levels of expertise in the area that they were targeting...[Now we don't invest in firms where our] experience is more than one degree removed. My partners and I do come

from linkedin, about.com and eBay; so I would consider that like our core, those kinds of businesses. I would consider SAP one layer removed – Understandable but not exactly what we did.

The insights related to industry focus gained through our interviews are consistent with empirical studies that revealed decreases in efficiency, valuation, and performance of companies that have adopted diversified strategies. For example, Berger and Ofek (1995) examined the market valuation of focused, single segment firms as compared to diversified firms and found that diversified firms sell at a discount to comparable single segment firms. Further, Berger and Ofek (1999) found that the performance of diversified firms improved after they divest unrelated divisions and focus.

Results: Research Question 3

What other steps are being taken by VCs to adapt to changes in their industry?

Our final question focused on other steps VCs were taking to adapt to changes in their industry environment. When compared to alternative asset classes, the VC asset class is somewhat unique, in that VCs are engaged in an information flow with investors and companies to an extent not found in other asset classes. Because of their advisory relationship with the companies in which they invest, VCs have timely and unique access to information from both investors and companies. Despite their information advantage, returns provided to investors in VC funds have been underperforming in recent years. Specifically, we were curious about how VC firms could increase the appeal of the asset class to potential investors at a time where the returns have not been enticing.

All interviewees agreed that persuading institutions and individuals to invest is probably their toughest job. Consistent with the work of Goetzmann and Ibbotson (2006) and Ibbotson, Diermeier, and Siegel (1984) the VCs in our sample confirmed that investors base their investment decisions on both *risk* and *non-risk* characteristics of the investment. Although investors evaluate risk characteristics, such as fund track record, deal flow, and access to transactions when deciding on a VC fund, they also consider non-risk characteristics, such as team member reputation, match of team strategy with investment strategy, and market experience.

VCs in our sample provided the following examples of changes they are making in their strategy to address some of the non-risk factors to more effectively attract investors:
According to one VC:

To raise money in the current environment, you have to be able to make the case that you are somehow different from the stereotypical venture fund. Because the stereotypical venture fund has not been particularly successful over the last decade. There are funds that have made money but you look across the whole asset class you can't say that the rising tide has raised all ships. So you have to be able to differentiate... If you have a skillful fund manager who is well connected and networked in the region, and can get access to good deal flow, ..., and can make smart decisions because of the inefficiencies in the market, it should be possible to make money. That's part of the message that has to be told.

Similarly, another VC stated:

Part of it is that the model is very different. Just by virtue of our fund size, we can tell the story that a lot of the dilution of returns came from the fact that early stage investors had gotten really really big, and had gone out of their core stage of investing by doing later stage deals and so forth which they could not handle. The second is the fact that we have a different investing model, so our follow on strategy is different, and our seed stage focus is unique and we have some early evidence from the west coast that the model is working out there, and there is an undersupply of this type of investors here in the east coast.

Another VC stated:

My guess is that as it relates to the specific investment process, the individual LP's will remain detached. My guess is that in the negotiation of terms about the fund itself, sort of things like fund life, management fees, sort of all the terms that have been set in stone for almost 15 years now since the internet bubble, those terms will probably become more fluid in the next generation of VC funds in the next decade or so.

Implications

This exploration of VC strategy highlights the value of adaptation by entrepreneurial firms and the firms who provide them with advisory services and capital. The background and insights provided in this paper are valuable to educators and students who are unfamiliar with the VC industry's role in the entrepreneurial landscape. It also serves as an example of the dimensions of strategy as a series of decisions in a dynamic and highly competitive environment.

Entrepreneurs make a number of strategic decisions, the first of which is whether or not to establish a company (Feaser & Willard, 1990). They then make a number of subsequent decisions that are key determinants of whether or not the venture will survive or succeed. It is reasonable to assume that VC firms also make many decisions that shape their strategy, which determine their ability to succeed in the volatile and highly competitive venture capital industry. Because many VCs assume an advisory role, providing valuable feedback and helping to shape the strategic decisions of the firms in which they invest (Chugh, Nicolaou, & Barnes, 2011), decisions made by VCs have far-reaching implications that extend beyond their industry. Shepherd, Ettenson & Crouch (2000) noted that despite their vital role in shaping the entrepreneurial landscape, only a small number of studies have focused on the decisions that make up the strategy of these firms, a problem that remains today. Changes in VC strategies are essential considerations for today's entrepreneurs and the practitioners that work with them. Equally important is the insights provided for educators, who prepare tomorrow's entrepreneurs for the future VC investing environment.

Most studies of VCs and their investments have focused on technology and technology-enabled, rapid-growth firms and their impact on these industries. An increasing number of venture capital firms have recently adopted a more complicated approach to investing, providing capital and advisory services to organizations embarking on social missions. Social Impact Bonds (SIBs)

and impact investing bring the capital and market-based solutions to some of the world's most intractable and persistent social problems (Entrepreneurship, 2012). These solutions bring complex formulas for impact measurements, fundraising, and a delicate balance of social and financial return on investment. Once confined exclusively for commercial entrepreneurs, VCs and the promise of new sources of capital and the business acumen are now becoming part of the social entrepreneurship landscape. The promise comes, however, with a cautionary note.

The decisions made by VC firms and investors in the years leading up to the *dot com bubble* followed a forms of irrational exuberance that led to skyrocketing valuations and equally rapid collapse (Valliere & Peterson, 2004). When large amounts of money are raised, the valuations of companies become artificially inflated, making subsequent investments unattractive (Gompers & Lerner, 1998). Too much money chasing marginal investments, many of which were the result of poor decisions and behaviors made by the firms in the VC industry (Mason, 2009). Should irrationality and behaviors of the *dot com* era re-occur in the social sectors or sustainable businesses in which VC firms and their investors now find attractive, the potential negative impact could be far-reaching. Today's venture capital firms play an increasingly important role in supporting the development and growth of innovative firms, enabling entrepreneurs to create both financial and social value.

Conclusions

Although this study was exploratory and employed qualitative methods, our interviews support the notion that VC firms are making strategic changes based on changes in their external environment. These changes are consistent with Eisenhardt & Zbaracki's (1992) view of strategic decisions, ones that are important, infrequent, and "critically affect organizational health and survival" (p. 17). We found that VCs in our sample were actively adapting non-risk factors associated with their funds, providing a better alignment of the fund with the changing requirements of investors. Consistent with the theoretical underpinnings presented earlier in this paper, the VCs in our sample are creating smaller funds to invest in earlier-stage technology companies, focusing on their core competencies, and looking for ways to differentiate themselves from other funds. Despite the insights into decisions made by VC firms in this study, a number of questions remain but a few common themes emerged.

The first theme that emerged is found in the stage of development of firms targeted for investment by VCs. The Venture View Predictions Survey conducted in December 2010 revealed that 49 percent of VC respondents indicated that they would increase their investment dollars in seed-stage companies in the upcoming year (NVCA & VentureSource, 2010). Pressure to produce returns for their investors appears to have led VC firms in our sample to invest in earlier-stage companies than in previous years. At the time of our interviews, VC firms faced a depressed environment for both IPOs and acquisitions that reduced the number of portfolio company exits, as well as constrained capital markets (Reuters, 2011). In their analysis of 2011 VC investments by company stage, 32 percent of the \$28.68 billion invested were directed toward seed- and early-stage companies (NVCA, 2012). A look at the trends over the past five years is presented in Table 2 below.

Table 2. Five-year VC investments by stage (\$ Millions)

Stage	2006	2007	2008	2009	2010	2011
Seed	1,253.7	1,755.0	1,788.5	1,806.6	1,758.6	930.9
Early Stage	4,489.6	5,873.4	5,446.5	4,840.2	5,679.3	8,369.8
Expansion	11,047.5	11,312.6	12,223.3	6,674.4	8,931.8	9,822.1
Later Stage	9,856.4	11,979.6	11,124.8	6,452.9	6,903.3	9,552.2
Total	26,647.2	30,920.6	30,583.2	19,767.1	23,273.0	28,675.0
<i>Source: (2013) 2012 National Venture Capital Association (NVCA) Yearbook (p. 31)</i>						

As Table 2 illustrates, the allocation of VC funds to seed- and early-stage firms in 2011 remained relatively constant over the 2009 and 2010 levels at approximately 32 percent of total investments. It does, however, represent a substantial re-positioning in strategy over the 2008 levels, which represented only 23.65 percent of the total. Also evident in Table 5, the amount of funds allocated to seed-stage firms decreased by nearly 50 percent from 2010 to 2011, while investment in early-stage firms increased by nearly 50 percent. Despite predictions for 2011 investments by VC firms across the country and the anecdotal evidence found in our interviews, the 2011 actual data demonstrated no substantial change in VC strategy toward earlier-stage investments. This shift away from seed-stage firms could be the result of increases in the *informal* VC market, where increases of 31 percent in seed and start-up investments were realized in 2011 (CVR, 2012).

A second theme that emerged pertained to industry focus. As expected, the VC firms we interviewed considered industry expertise as valuable attributes of their firms, and useful to differentiate themselves from their competitors. Of those VCs that had funded firms outside their niche industries, investing in what they now call *outliers* in their portfolio, most said that they learned from their mistakes. As described earlier in this paper, VC firms typically bring industry-specific advisory and managerial services as well as capital to young companies. Yet the innovation-driven nature of the entrepreneurial companies in which VC firms invest and the rapidly evolving markets targeted by these companies suggest that VC firms must often invest in industries that had not previously existed, such as social media.

As new industries emerge, VC firms must be at the leading edge of that emergence if they are to succeed. They must have the knowledge and expertise to make investments in the industries and opportunities of tomorrow, and do so today. Changes in industry attractiveness are evident in the Venture Prediction Survey, which highlighted the industries considered by most VCs to represent the best opportunities. For 2011, the largest percentage of VCs surveyed believed that the best industries were expected to be consumer internet (69 percent) and cloud-based software (47 percent) (NVCA & VentureSource, 2010).

Unfortunately, the industry classification system used in the Venture Prediction Survey did not exactly align with that of the NVCA reporting, creating a limitation in interpreting the differences between what was expected and the actual results. The NVCA data, however, does provide an opportunity to examine the change in industry focus from year to year. A change in industry focus for VC investment is apparent when the 2011 data is compared with that of 2009.

In just two years, medical devices and equipment contracted from 14 to 10 percent of total VC investments. When viewed in terms of actual dollars, however, the amount of investment in this sector actually increased from just above \$2.57 billion to \$2.86 billion from 2009 to 2011 (NVCA, 2012). In similar fashion, software grew from 18 percent to 24 percent of total investment during the two-year period, but grew more than 84 percent in terms of actual dollars invested from \$3.67 billion in 2009 to more than \$6.78 billion in 2011 (ibid.).

The primary determinant of profitability for a new venture was found to be industry-related competence (Shepherd et al., 2000), and a VCs ability to assess that competence is likely to be a major factor in the effective selection of firms in which to invest, which is likely to determine the success of the VC firm. Although significant relationships were revealed between the involvement of VCs and the development of strategic capabilities in the firms in which they invested (St. Pierre, Nomo, & Pilaeva, 2011), it remains unclear how VC firms adapt their strategies internally to the rapid changes in their industry and those in which they invest.

The third theme emerged from the questions and dialogue we had with interviewees focused on *Research Question 3*. Even in the best of economic times, starting a new VC fund is a “...test of nerves...” (Sahay, 2012). In retrospect, 2011 could not be categorized as one of the best economic times in the US, yet our interviewees conveyed optimism about the future of their industry. Their views on fundraising were consistent with the findings in the Venture View Predictions Survey, where 68 percent of VCs interviewed expected fundraising to increase or remain the same in 2011 (NVCA & VentureSource, 2010). Actual data from 2011 revealed that venture capital under management in the US increased by eight percent in 2011 over the previous year, and totaled nearly \$197 billion (NVCA, 2012), although only \$18.7 billion was raised compared to \$39.0 billion in 2001. In addition to the challenges of fundraising, changes in the industry’s competitive landscape mean changes for many VC firms.

Although the topic of organizational change did not emerge during this phase of the interviews, a number of structural changes in the VC industry were occurring. Table 3 illustrates how VC firms and funds raised by the industry have changed since 1999, and how the changes that have occurred in the 2009 to 2011 time frame have re-shaped the industry.

Table 3. Venture capital industry sector

	1999*	2009*	2011**
Number of VC Firms	753	794	842
Number of VC Funds	1,396	1,188	1,274
Number of Professionals	7,611	6,828	6,125
Number of First Time VC Funds Raised	90	21	45
Number of VC Funds Raising Money This Year	454	127	173
Average VC Capital Raised This Year (\$ billion)	55.7	15.4	18.7
Average VC Capital Under Mgmt. (\$ billion)	145.6	179.4	196.9
Average VC Capital Under Mgmt. per Firm (\$ million)	193.4	225.9	233.8
Average VC Fund Raised This Year (\$ million)	122.6	121.1	108.1
**Source: (2012) 2012 National Venture Capital Association (NVCA) Yearbook (p. 9)			

One indicator of a structural change in the VC industry is a substantial increase in the number of VC firms in the industry. It would appear that the competitive landscape of the VC industry has intensified in the 2009 to 2011 period, a factor that likely influenced the responses we received during our interviews. One of the more dramatic changes in the VC industry presented in Table 6 is in the 114 percent increase in the number of first-time VC funds raised in 2011 over the number raised in 2009. This significant increase in fundraising activity takes place at a time when the number of professionals in the industry declined by more than 10 percent and a similar decline in the average fund size. The VC industry was raising more funds for the first time, raising more capital, but doing so with fewer professionals in the industry. This finding coincides with the views expressed by our interviewees and substantiated by the NVCA data that VC firms increased their fundraising activities, and are targeting earlier-stage companies that require smaller amounts of capital. The decline in the number of professionals in the VC industry may also be an indicator that less advisory time will be available for entrepreneurs, as the industry becomes more competitive and fundraising activity increases.

As advisors to entrepreneurial companies in highly competitive markets, do VC firms follow the advice they provide, or does their approach more closely follow the idiom: *do as I say not as I do*? Is it reasonable to expect that VC firms have some of the same creativity, innovation, and opportunity recognition skills as they seek in the companies in which they invest and advise? Do successful VC firms possess certain *psi* phenomena, such as clairvoyance, premonition, or precognition (Bem, 2011), which enable them to foresee the future growth of companies like Twitter before the industry even exists? Are there indicators that serve to help predict the future for entrepreneurial companies, such as the predictive power of interest rates and their spreads in predicting the future course of the economy (Bernanke, 1990)? Just as trial lawyers make strategic decisions and provide advice to their clients based on their perceptions and ability to predict the outcomes of cases under a considerable degree of uncertainty (Goodman-Delahanty, Granhag, Hartwig, & Loftus, 2010), VCs make a number of strategic decisions that affect survival and success of their firms and the companies in which they invest. These and other questions remain largely unexplored, providing a fruitful area for further exploration.

References

- Association, N. V. C. 2008. Yearbook 2008: 1-102. New York, NY: National Venture Capital Association.
- Association, N. V. C. 2013. Yearbook 2013: 1-111. New York, NY: National Venture Capital Association.
- Bank, S. V., & Institute, A. R. 2012. 2011 Angel Group Year in Review, *HALO Report*: 1-21: Silicon Valley Bank Angel Resource Institute.
- Bem, D. J. 2011. Feeling the Future: Experimental Evidence for Anomalous Retroactive Influences on Cognition and Affect. *Journal of Personality and Social Psychology*: 1- 19.
- Berger, P., & Ofek, E. 1995. Diversification's effect on firm value. *Journal of Financial Economics*, 37(1): 39-65.
- Berger, P., & Ofek, E. 1999. Causes and effects of corporate refocusing programs. *Review of Financial Studies*, 12(2): 311.

- Bernanke, B. 1990. On the Predictive Power of Interest Rates and Interest Rate Spreads, *NBIR Working Paper*: National Bureau of Economic Research.
- Chou, S. 2008. *Maxims, Morals, and Metaphors: A Primer on Venture Capital*: A Primer on Venture Capital.
- Chugh, H., Nicolaou, N., & Barnes, S. 2011. How Does VC Feedback Affect Start-Ups? *Venture Capital*, 13(3): 243-265.
- Cumming, D., Fleming, G., & Suchard, J. 2005. Venture capitalist value-added activities, fundraising and drawdowns. *Journal of Banking & Finance*, 29(2): 295-331.
- CVR. 2012. The Angel Investor Market in 2011: The Recovery Continues: 1-2. Durham, NH: Center for Venture Research.
- CVR. 2013. The Angel Investor Market in 2012: A Moderating Recovery Continues: 1-2. Durham, NH: Center for Venture Research.
- Eisenhardt, K. M. 1999. Strategy as Strategic Decision Making. *Sloan Management Review*, 40(3): 65- 72.
- Eisenhardt, K. M., & Zbaracki, M. J. 1992. Strategic Decision Making. *Strategic Management Journal*, 13(Special Issue: Fundamental Themes in Strategy Process Research): 17- 37.
- Eisner, E. 1991. *The enlightened eye: Qualitative inquiry and the enhancement of educational practice*: Macmillan New York.
- Entrepreneurship, S. F. f. S. 2012. Investing for Impact: How Social Entrepreneurship is Redefining the Meaning of Return. Geneva, Switzerland: Schwab Foundation for Social Entrepreneurship.
- Feeser, H. R., & Willard, G. E. 1990. Founding Strategy and Performance: A Comparison of High and Low Growth High Tech Firms. *Strategic Management Journal*, 11(2): 87-98.
- Goetzmann, W. N., & Ibbotson, R. G. 2006. *The equity risk premium: essays and explorations*: Oxford University Press, USA.
- Gompers, P., & Lerner, J. 2001. The venture capital revolution. *Journal of Economic Perspectives*, 15(2): 145-168.
- Gompers, P., & Lerner, J. 2004. *The venture capital cycle*: The MIT Press.
- Gompers, P., Lerner, J., Blair, M., & Hellmann, T. 1998. What drives venture capital fundraising? *Brookings Papers on Economic Activity. Microeconomics*, 1998: 149-204.
- Gompers, P. A., & Lerner, J. 1998. What Drives Venture Capital Fundraising. *Brookings Papers on Economic Activity. Microeconomics*, 1998: 149- 204.
- Goodman-Delahunty, J., Granhag, P. A., Hartwig, M., & Loftus, E. 2010. Insightful or Wishful: Lawyers' Ability to Predict Case Outcomes. *Psychology, Public Policy, and Law*, 16(2): 133- 157.
- Grinblatt, M., Titman, S., & Wermers, R. 1995. Momentum investment strategies, portfolio performance, and herding: A study of mutual fund behavior. *The American Economic Review*, 85(5): 1088-1105.
- Hsieh, H.-F., & Shannon, S. E. 2005. Three Approaches to Qualitative Content Analysis. *Qualitative Health Research*, 15(9): 1277- 1288.

- Ibbotson, R. G., Diermeier, J. J., & Siegel, L. B. 1984. The demand for capital market returns: A new equilibrium theory. *Financial Analysts Journal*: 22-33.
- Kedrosky, P. 2009. Right-sizing the US venture capital industry. *Venture Capital*, 11(4): 287-293.
- Lerner, J. 1994. The syndication of venture capital investments. *Financial Management*, 23(3): 16-27.
- Liles, P. 1977. *Sustaining the venture capital firm*: Management Analysis Center.
- Markides, C. C. 1999. In Search of Strategy. *Sloan Management Review*, 40(3): 6-7.
- Markowitz, H. M. 1991. Foundations of portfolio theory. *The Journal of Finance*, 46(2): 469-477.
- Mason, C. 2009. Editorial: Venture Capital in Crisis. *Venture Capital*, 11(4): 279- 285.
- Merriam, S. 1998. *Qualitative Research and Case Study Applications in Education. Revised and Expanded from " Case Study Research in Education."*: Jossey-Bass Publishers, 350 Sansome St, San Francisco, CA 94104; phone: 415-433-1740; fax: 800-605-2665; World Wide Web: www.josseybass.com (\$21.95).
- Metrick, A., & Yasuda, A. 2009. *Venture capital and the finance of innovation*: Wiley.
- Morse, J. 1994. Designing funded qualitative research. *Handbook of qualitative research*, 2: 220-235.
- NVCA. 2012. Yearbook 2012: 1-122. New York, NY: National Venture Capital Association.
- NVCA, & VentureSource, D. J. 2010. Venture View 2011: Venture Capital Predictions Survey: 1-55. Arlington, VA: National Venture Capital Association Dow Jones VentureSource.
- Patton, M. 1990. Qualitative evaluation and research methods.
- Reuters, T. 2011. Depressed Second Half Exit Environment Drags on Short-Term Performance, *Long-Term Venture Returns Strongly Positive*: 1-3. New York, NY: Thomson Reuters.
- Rossmann, G., & Rallis, S. 2003. *Learning in the field: An introduction to qualitative research*: Sage Publications, Inc.
- Sahay, P. 2012. Creating a New WAVE: A Fundraising Journey. *Kauffman Fellows Report*, 4.
- Sandelowski, M. 2000. Whatever happened to qualitative description? *Research in nursing & health*, 23(4): 334-340.
- Sapienza, H. 1992. When do venture capitalists add value? *Journal of Business Venturing*, 7(1): 9-27.
- Sharpe, W. 1964. Capital asset prices: A theory of market equilibrium under conditions of risk. *Journal of finance*, 19(3): 425-442.
- Shepherd, D. A., Ettenson, R., & Crouch, A. 2000. New Venture Strategy and Profitability: A Venture Capitalist's Assessment. *Journal of Business Venturing*, 15: 449-467.
- Sohl, J. E. 2003. The US Angel and Venture Capital Market. *The Journal of Private Equity*, 6(2): 7-17.
- St. Pierre, J., Nomo, T. S., & Pilaeva, K. 2011. The Non-Financial Contribution of Venture Capitalists to VC-Backed SMEs: The Case of Traditional Sectors. *Venture Capital*, 13(2): 103- 118.

- Timmons, J., & Bygrave, W. 1986. Venture capital's role in financing innovation for economic growth. *Journal of Business Venturing*, 1(2): 161-176.
- Valliere, D., & Peterson, R. 2004. Inflating the bubble: examining dot-com investor behaviour. *Venture Capital*, 6(1): 1-22.

Military Veterans Marching Towards Entrepreneurship: An Exploratory Mixed Methods Study

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Abstract

Military veterans are interested in entrepreneurship; approximately 45% of military veterans returning to civilian life indicate that they are interested in pursuing entrepreneurial interests for self employment (Hope & Macklin, 2011). The authors investigate military veterans participating in a one year program that includes structured entrepreneurship training, business mentoring and integration into the local entrepreneurial eco-system via networking. Results of this research shed light by measuring quantitatively their networking and passion via three domains: inventing, founding and developing. Additional qualitative interviews conducted aid to understanding the integration of these military veterans into a primarily civilian based entrepreneurship eco-system.

Introduction

As the United States scales back on military presence abroad and military spending decreases, the number of military personnel returning to civilian life will increase dramatically. Over the coming months we can expect transitioning service members to be exploring new paths. Among these paths is the road to entrepreneurship. Military experience is credited for providing individuals with training to lead others and to deal with crisis situations (Waldman Associates & REDA International, 2004). These skills are widely recognized as necessary ingredients for successful entrepreneurs. Military service proved valuable to a number of successful entrepreneurs, including Sam Walton, founder of Wal-Mart, Malcolm Forbes, founder of Forbes Magazine, and Fred Smith, founder of FedEx. Although conventional wisdom suggests that military personnel are “natural” candidates for starting business ventures, empirical research on this population is limited.

The pool of data on the topic of veteran entrepreneurship is primarily focused on whether prior military experience increases the likelihood of choosing self-employment. The few studies published on the topic suggest that military service does have a positive impact on self employment (Moutray, 2007; Hope & Macklin, 2011), and veterans have a higher rate of self-employment than non-veterans (Fairlie, 2004.). The U.S. Census Bureau (2007) reports that military veterans have a majority ownership of 2.4 million businesses, accounting for 9% of all businesses nationwide. These veteran owned business account for employment of nearly 5.8 million people and generate approximately \$1.22 trillion in revenue (U.S. Census Bureau, 2007).

Since veterans are at least 45 percent more likely than those with no active-duty military experience to be self-employed (Hope & Macklin, 2011), and since our country is in the midst of a large transition of military back into civilian life, the research question in our study is whether an entrepreneurial education program for veterans can fuel entrepreneurial passion and improve

networking skills. Prior research has found that entrepreneurship education does improve entrepreneurial attitudes. For example, Harris, Gibson, and Taylor, (2007) found that completing a Small Business Institute course positively impacted entrepreneurial attitudes with respect to entrepreneurial innovation, entrepreneurial achievement, entrepreneurial personal control and entrepreneurial self-esteem.

Nearly every accredited business school in the world now teaches some type of course on entrepreneurship (Katz, 2003). In this paper we examine the effect of an entrepreneurial education program for veterans conducted by a large Midwestern University. We address two research questions: Will an entrepreneurial education program improve veterans' entrepreneurial passion scores? And, will an entrepreneurial education program improve veterans networking skills? We focus on passion because this construct is a key driver of entrepreneurial action (Cardon, Gregoire, Stevens & Patel, 2012) and has been associated with the ability to raise capital (Cardon, Wincett, Singh & Dmowsek, 2009), both critical components for nascent entrepreneurs. Likewise, we focus upon networking because these activities link the nascent entrepreneur to other business owners and to organizations offering support and services to them. Our aim is to contribute to the theory of planned behavior, which argues that attitudes precede intentions, which precede behavior (Ajzen, 1991).

The paper proceeds as follows: Initially we describe previous research, which provides the theoretical foundations for our constructs and includes our hypotheses. Next, we describe the research methodology, including an overview of the entrepreneurship program. Subsequently, we provide an analysis of the results followed by discussion and implications.

Theory Development and Hypothesis

Entrepreneurial Education

Graevenitz, Harhoff and Weber (2010) provide a learning model to investigate how entrepreneurial education affects entrepreneurial intentions and specifically the signals that students may use to evaluate their aptitude for entrepreneurial tasks. Education studies in general, continue to report that the effects and methodology of entrepreneurship education are still somewhat "poorly understood" as well as a need for a more systematic way for data to be collected and analyzed (Graevenitz, Harhoff, Weber, 2010; Gorman, Hanlon & King, 1997; Gibb, 1987; Dana 1987; Dainow, 1986; Kent, Sexton & Vesper, 1982). While some studies provide intriguing results, most are measuring without a control group and few employ pre-post design or longitudinal measurements from the core competencies of the courses learning outcomes data. There are a few exceptions such as studies by Oosterbeek, Praag and Ijsselstein (2010), Peterman and Kennedy (2003) and Souitaris, Zerbinak and Al-Laham (2007) that have utilized pre-post tests and control group design. The Peterman and Kennedy (2003) study finds that exposure to enterprise education did affect entrepreneurial intentions of the participants as did the Souitaris et al. (2007) semester long entrepreneurship program that also had positive results on entrepreneurial intentions. However, Oosterbeek et al., (2010) reported student's self-assessed entrepreneurial skills were insignificant and the effect of the course on entrepreneurial intentions was negative. Researchers are still calling for more research to be done to answer the question if entrepreneurship education can influence entrepreneurial perceptions and intentions

as well as develop more credible methods of testing hypotheses to move this research field forward (Alberti, 1999).

It has been established in the entrepreneurship literature that a person will be more likely to expand an opportunity if they are better educated (Henry, Hill & Leitch 2005; Peterman & Kennedy 2003; Gorman, Halon & King, 1982). This is based on information that they may develop a strategy and assemble resources, make a plan and execute with a level of skill. Skills such as analytics and an understanding of the entrepreneurial process are increased via education (Casson, 1995). Clouse (1990) found students approach to the entrepreneurial process changed as a result of teaching them new venture evaluation and a focus on cash flow and managerial fit. Management training and educational materials on starting a business has been demonstrated to make it easier for people to understand what it takes to start a business in other countries (Dana, 1987), as well as reduce perceptions of the difficulty of starting a business (Jackson & Rodkey, 1994).

Our study is set in the environment of a Midwestern community conducting entrepreneurship training programs using a nationally recognized curricula with cohort groups of 20-30 going through a structured class each fall and spring semester. These cohorts are comprised of enrolled military veterans awarded an entrepreneurship scholarship to participate in a holistic training and support program (Vetstart), including a structured class component for one year and civilians who are just enrolled in the structured class component. All participants identified themselves as entrepreneurs of startup businesses and self selected into the program via online registration (civilians) or applied for a military veterans scholarship to the Vetstart holistic one year program. This is an on-going research study such that a longitudinal profile of enrollees and their success building businesses will be documented.

Entrepreneurial Passion

Anderson (March, 2013) has described vision and entrepreneurial passion (EP) as key ingredients for entrepreneurial success and notes that scholars are actively researching entrepreneurial passion. Entrepreneurial passion appears to be an element in entrepreneurship that can foster creativity, as well as enhance recognition of new patterns for the discovery and exploitation of opportunities (Baron, 2008; Sundarajan & Peters, 2007). Entrepreneurial passion at a theoretical dimension falls in the domains of feelings and identity central, inventing, found and developing as described by Cardon et al., (2009) model of entrepreneurial passion. Passion has been identified as intense positive feelings for activities that are central and meaningful to an individual's self-identity. Therefore the measurements for EP must include the two dimensions of intense positive feelings and identity centrality (Cardon et al., 2009; Farmer, Yao, Kung-Mcintyre, 2011; Fauchart & Gruber, 2011; Murnieks & Mosakowski, 2006; Murnieks et al., 2012; Perttula, 2004). Each of these two domain tenants is separate and distinct. A study on the affective aspects of passion (Chen et al., 2009) supplemented work in this area, and when combined with Cardon et al., (2009) study added to our understanding of an entrepreneur's experience of passion.

There are three multidimensional entrepreneurship domain roles involved with measuring entrepreneurial passion (EP): 1) inventing; 2) founding and 3) developing. Passion for inventing involves new product development, scanning for new market opportunities, etc. (Cardon et al.,

2009). People that fall within this domain role enjoy and seek satisfaction by coming up with new solutions and new ideas for products and services. Passion for founding is the desire to found an organization (Aldrich and Zimmer, 1986); here the founder's role identity is central to the entrepreneur's self-concept (Hoang and Gimeno, 2010). Need to achieve is an element of creating an entrepreneurial endeavor (Katz and Gartner, 1988), thus supporting the passion for founding. The last domain, passion for developing, is identified by characteristics of growing and expanding a venture once founded (Cardon et al., 2009). This leads us to the following hypotheses:

Hypothesis 1:

Entrepreneurial education will positively impact military veteran's entrepreneurial passion level specifically the domain of inventing passion.

Hypothesis 2:

Entrepreneurial education will positively impact military veteran's entrepreneurial passion level specifically the domain of founding passion.

Hypothesis 3:

Entrepreneurial education will positively impact military veteran's entrepreneurial passion level specifically the domain of developing passion.

Mentoring

Mentoring is an important business factor for transferring knowledge. In business, mentoring is accomplished in many scenarios such as formal/informal. A generally accepted definition of a mentor is the one who draws upon knowledge to guide and teach (Healy and Welchert, 1990). Intangible knowledge exists in tacit dimensions of knowledge that is built up over time in people's heads, relationships and experiences. The transferring of knowledge and skills via coaching and mentoring has been found to be effective (Alleman, 1986; Murphy, 1986; Zey, 1984; Klopff & Harrison, 1981; Fagan & Walter, 1982; Philips-Jones, 1982; Levinson et al., 1978). It has been demonstrated that mentors can help novice entrepreneurs in the identification of business opportunities (Ozgen and Baron, 2007). Angel investors have been described as having much more hands on involvement with a company they invest in than Venture Capitalists and more involved in the operations and building a relationship with the entrepreneur (Benjamin and Margulis, 2001). This has been referred to as a mentoring type of relationship. Expert knowledge is called upon through pattern recognition that is developed via years of experience, depth of knowledge and level of expertise in a variety of settings whereby the mentor recalls/retrieves these recognized patterns to provide the entrepreneur mentee guidance, suggestions and potential resources to analyze. Some Angels and business mentors will work part time, some full time to help the entrepreneurs through challenging issues and decisions (Van Osnabrugge & Robinson, 2000). Each Vetstart participant was assigned a mentor to meet with them twice a month for nine months after the training classes ended. These business mentors were primarily Angel investors and other established community entrepreneurs.

Networking/Connections

Building and acquiring resources, tangible and intangible, is challenging for entrepreneurial startups and research suggests that there are various ways of constructing resources that net a

variety of capabilities among firms with similar constraints (Baker and Nelson, 2005). An entrepreneur's network serves as a means of identifying, building and acquiring needed resources (Sullivan and Ford, 2013). Network theory provides us with the understanding of why some entrepreneurs are better equipped to accumulate and construct valued resources as they develop their business venture and research has suggested that these networks may be prone to inertia or path dependency (Pfeffer and Salancik, 1978). Accordingly, successful growth oriented business networks should change in both composition and structure to include a mix of partners to gain access to needed resources (Elfring and Hulsink, 2007) implying that these network changes are a reflection of an entrepreneurs efforts to manage emerging resource dependencies (Ahuja, Polidoro, & Mitchell, 2009; Lin, Peng, Yang, & Sun, 2009). Network size is defined by the total number of people the entrepreneur interacts with for business purposes (Greve & Salaff, 2003; Gulati, 1999; Shan, Walker & Kogut, 1994). Further research has defined two levels of network ties – strong ties and weak ties. Strong network ties are described as frequent interactions with long duration of relationship and close socio-emotional bonds. Weak ties are described as network relationships with infrequent interaction and short duration of relations and a lack of close socio-emotional bonds (Granovetter, 1973; Greve & Salaff, 2003; McDonald & Westphal, 2003). We apply this network construct for this research study as well. This leads to our next hypotheses:

Hypothesis 4:

The holistic entrepreneurial education program will improve military veterans' level of networking.

Hypothesis 5:

Ongoing entrepreneurship mentorship will be perceived as an added value by the military veterans.

Method

Participants and procedures

The entrepreneurship training program was comprised of self-selected startup entrepreneurs who invested \$895 for a 10 week series of classes which met once a week for 3 hours. The entrepreneurship training classes consisted of the following ten topics: exploring entrepreneurship, defining the target market, conducting market research, testing your business concept, entering and capturing the market, planning for financial success, building and compensating your team, protecting the business and your intellectual property, indentifying funding and working with investors and managing cash and operating your business. Weekly subject matter experts would speak on various topics related to starting and building a business – such as an attorney, accountant and marketing expert. After the evening speaker, small groups of 4-5 participants were formed and an experienced business mentor was assigned to coach each member during the small group sessions for the 10 week training class component. The military veterans enrolled in Vetstart were part of an expanded program supported by grant funding whereby a selection committee awarded military veterans their tuition as well as a business mentor scheduled to meet with them twice a month for nine additional months after the training classes ended. This grant/donation funded 16 Vetstart military veteran entrepreneurs. There were approximately 25-30 total participants (civilian and veteran) in the entrepreneurship training

class. The Vetstart participants were also provided between \$1000- \$2500 of startup business expense reimbursed during the nine months of additional mentoring.

A pre (first day of class) and post (last day of structured class) confidential self report pen/pencil survey was distributed during the structured classes. The surveys were distributed over two years of a total of four training sessions, one fall 2012 and one spring 2012 and one fall 2013. The facilitator of the training course sessions identified each participant with a number and the veteran surveys were coded with this number and a star. The training facilitator provided basic demographic information for all training participants in an aggregated format with the military veteran participants summarized separately. All sample participants were starting or had been in business for less than one year and are privately held entities.

Measures

This study used a two phase approach. First a pen/pencil survey included 26 questions. Four questions were related to basic demographics of military service, male or female, age, level of education and homeownership (yes/no). The next 13 items utilized a 7 point Likert scale (strongly agree, neither agree nor disagree, strongly disagree) measuring EP's intense positive feelings across the three domains of inventing, founding and development (Cardon et al., 2013). This scale was recently validated and published in 2013 (Cardon et al., 2013). The final section of questions focused on the entrepreneur's network before class started and after class started. The second phase of the study consisted of qualitative interviews that were conducted with the Vetstart military veterans. Using qualitative interviews the researchers were able to understand the "fabric" and meaning these individuals attached to their experiences (Creswell 1998). Qualitative research design is appropriate when researchers want to build upon theory not necessarily just test theory as well as there were many embedded (Creswell, 1998; Seidman, 1998; Offstein & Childers, 2008), complex items to research (Strauss and Corbin, 1990) These interviews were conducted via email along with follow up phone call conversations to verify and garner additional information. These phone interviews were done within 1 year after the military veterans completed the training course to determine if their networks had expanded and if so, why and how.

Results

The descriptive statistics of the sample reveal that the veterans were primarily male, 69% aligning with the literature reporting that more men serve in the US military branches than women (U.S. Department of Veterans Affairs 2013). The primary branch of the military represented amongst the sample was the Army, 50%; followed by the Air force at 19%, the Navy at 12%, Marines at 12%, and the Coast Guard at 6%. While the sample base of 16 is small in this exploratory study, we did have representation of multiple ethnicities. Specifically, Caucasians represented 56% of the sample, African Americans 38% and Hispanic Americans 6%.

Both the pre- and post- pencil/pen surveys distributed to the 16 Vetstart participants resulted in a 100% response rate at each administration. We focused attention on the military veterans aggregate scoring.

Our study explored the impact of an entrepreneurial education course on military veterans' entrepreneurial passion and networking behaviors using a simple pre-post test design. Table 1 summarizes evidence on the ex-ante and ex-post assessments of military veterans' passion regarding the founding, inventing and developing of their own business, as well as their assessment of their own networking behavior with other entrepreneurs.

Table 1. Veterans Aggregate Survey Results plus Cumulative Networking Increase.

	Mean	Std. Dev.	t-test	p-value
Pre-Founding Passion	22.71	4.746	-3.741	0.002*
Post-Founding Passion	25.93	2.674		
Pre-inventing Passion	28.93	5.784	-2.813	0.015*
Post-Inventing Passion	32.00	3.088		
Pre-Developing Passion	21.50	4.848	-2.809	0.015*
Post-Developing Passion	24.71	3.173		
Pre-Networking – Business	2.00	1.18	-1.86	0.086**
Post-Networking – Business	2.71	0.83		

The means, standard deviations, and t-test results are detailed. Examination of the t-scores indicate a significant difference in change from pre-assessment to post assessment on the constructs of founding passion ($t(13) = -3.74, p < .01$); developing passion ($t(13) = -2.81, p = .02$); and inventing passion ($t(13) = -2.81, p = .02$), consistent with Hypothesis 1, 2 and 3. Hypothesis 4 stated that there would be a significant increase in veterans' networking behavior upon the completion of the entrepreneurial course. Examination of the t-score suggests the while the change in networking approached significance ($p = .08$), it did not meet the hurdle of .05.

We conclude from these answers that the entrepreneurship program had a significant positive effect on military veterans' entrepreneurial passion. While passion for entrepreneurial endeavors increased, changes to networking behavior were more moderate. Our conclusion regarding the lesser impact on networking behavior is centered upon the possibility that the Veterans' time was reduced by being enrolled in the course itself, limiting time for networking contacts. Upon completion of the course, and with on-going mentoring, we would expect the amount of networking with other entrepreneurs to increase.

Qualitative Results

Sampling of Qualitative interviews

Question: How did being involved in class with civilians help/not help broaden your network?

V16	"It was interesting the way the business people interacted with the military veterans enrolled in the class – it seemed as if we were treated in “special” ways—everyone went out of their way to help us source the resources we needed for our businesses –it was a great experience and yes, it expanded my network. Now, I’m moving to Florida and
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	would like to tap into some business network in my new city - do you have any additional business networks you could recommend? Yes, my network is more than doubled since the class and that is a direct result of being in the class and talking with other business people.”
V15	“Yes, I was even able to find full time civilian employment due to the business network I developed with my fellow classmates ---I have not launched my business yet because I really needed to get a steady job to pay my existing bills. By attending the class I do feel more comfortable attending business events with business civilians.”
V14	“This program has been invaluable to me because I’ve opened my BBQ food service business and have had several from our class (and even the facilitators) actually call me and have me cater some events. Most my friends are from the military so this was about the only way for me to figure out how to get comfortable calling on potential civilian based businesses to start to build a clientele. Also, during the course I was able to get accounting and legal help for my business – both of these resources were ones that I would have had to just search online and picked some folks randomly not knowing what I should pay and for exactly what...very helpful and supportive. This has made me realize that sometimes it’s not what you know but <i>WHO</i> you know. I would estimate that my business network grew 100% from being in this class!”
V13	“I currently work in a civilian setting however meeting business people who have similar passion and ideas to become self employed really encouraged me ---I feel like my business network not only includes everyone from class but everyone they know too ---because whenever I asked if “anyone knew someone who did...?” three or four hands would raise to provide me names/numbers and contact information of people I could talk with~~and once or twice when I contacted one of my classmates business contact person and they really were not in a position to help me they would give me more contact names/numbers to at least try---this is great support for someone just starting a business let alone the fact that I’m career military so most of my friends are retired/retiring military and do not own businesses.”
V12	“This class and me going back to school to finish my degree were two of the best things I did and yes, absolutely my business network has expanded greatly...how greatly?...it is hard to quantify but let’s say I relied on 2-3 people and now I have 10 key resources that I utilize. I still (1 year after class) meet with one of the guys I sat next to during the course and we meet periodically to talk about how things are going and trade ideas/and contacts to expand our business contacts.”
V11	“Yes, my network was tremendously impacted by being in a class with mostly civilians – I’ve been to some SBA Veterans workshops and obviously they were attended by all veterans so to be able to tap into our guest speakers networks each week as well as the other class participants was a true gift. I’ve been able to secure some rental space that is a sub-sub lease of one of the other participants who outgrew the space but still had 8-9 months left on a lease so they gave me the lease for half of what they were paying because they couldn’t get out of the lease---so they said they felt like they still had to pay and to help me would only charge me half of what they had to pay (something better than nothing). I wish there were more programs like this because a lot of times veterans are put in veterans programs and what we really need is to be integrated back into the communities we are going to live in.”
V10	It definitely helped to hear other people’s perspective on my business ideas. Since I have

	been in the military so long I think I just have a “military mentality” so it was great to have others give me feedback and suggestion. Now, I probably won’t take all the suggestions into consideration but it did make me decide to stream line (limit) my product offerings at first so I can get my feet on the ground. Everyone was so nice and I still meet with a few folks –well, in fact we are having a Vetstart dinner in October so I’m sure I will see and talk to several I know. Yes, to answer your question I was able to broaden my business network and it was definitely an advantage to the program.
V9	The Vetstart program is amazing. I dreaded the thought of the 10 week class but I really learned a lot. My business mentor talks/meets with me anytime I need her ---I can just pick up the phone and she will arrange to spend time with me. Sometimes I’m just asking her advice, sometimes for referrals to other resources I need and sometimes just to interact. The Vetstart program 100% broadened my network –I was able to meet an accounting firm that I now use, I was able to connect with the University and now have a student intern working for me, I learned about some other grants/monies that might be available to veterans. All in all it has been a blessing to be involved in this program and meet so many people (and resources) for small businesses in our community.

Implications

These findings have implications for military veterans seeking entrepreneurship education, business networking and community integration as well as business mentoring. Additionally, policy driven initiatives related to this sample can gain traction given the study’s findings.

Conclusion –Discussion, limitations and future research

The purpose of this study was to better understand military veteran’s entrepreneurial passion as well as determine if a structured classroom entrepreneurship training course along with a nine month business mentoring program assisted with integrating military veterans into the entrepreneurial community. The key questions embraced by this study were: (a) what level of entrepreneurial passion do military veterans have pre and post an entrepreneurship training course, as measured by a validated survey; and (b) will the military veterans expand their business network during and after the entrepreneurship training utilizing business mentors and the community network?

We found that military veterans are choosing self employment (based on national statistics) and that this structured classroom entrepreneurial training program provided significant changes in outcomes based on pre/post assessment of the course. These veterans were more passionate about founding, inventing and developing their start-up business than prior to the training. We also determined that integrating military veterans into these structured training classes provided the military veterans with additional networking resources as well as comradery with like-minded business startup civilians.

Though this study utilized a preexisting passion scale, this measure has not been factor analyzed for this population. Future research with a larger sample will investigate whether the survey maintains its factor consistency for this specialized population. As the networking construct did approach significance, examination will be conducted after the programs completion to determine if this, coupled with the on-going mentoring provided to the military veterans in the program, enhances their propensity to persist in networking entrepreneurial endeavors.

Finally, although the veterans sample size is small, the results are an early indication that the program is working. Further enrollees and study replication will expand upon these preliminary findings. Data will continue to be gathered as the mentoring and networking components are ongoing.

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
- Ahuja, G., Polidoro, F., & Mitchell, W. (2009). Structural homophily or social asymmetry? The formation of alliances by poorly embedded firms. *Strategic Management Journal*, 30(9), 941-958.
- Alberti, F. (1999). Entrepreneurship education: Scope and theory. In C. Salvate, P. Davidsson, & A. Persson (eds.), *Entrepreneurial Knowledge and Learning: Conceptual Advances and Directions for Future Research* (Research Report No. 1999-6). Jönköping: Jönköping International Business School.
- Aldrich, H. E., & Zimmer, E. R. (1986). Entrepreneurship through social network. In D. L. Sexton, & R. W. Smilor (eds.), *The Art and Science of Entrepreneurship*. Ballinger: Cambridge, MA; 3-24.
- Alleman, E. (1986). Measuring mentoring-frequency quality impact. W.A. Gray & M.M. Gray (Eds.), *Mentoring: An Aid to excellence in career development, business and the professions*. British Columbia; 44-51.
- Anderson, A. (2013, March 27). Does being passionate about the work you do increase your Chance of success?. *Forbes*, Retrieved from <http://www.forbes.com/sites/amyanderson/2013/03/27/does-being-passionate-about-the-work-you-do-increase-your-chance-of-success/>
- Baker, T., & Nelson, R. E. (2005). Creating something from nothing: Resource Construction through Entrepreneurial Bricolage. *Administrative Science Quarterly*, 50(3), 329-366.
- Baron, R. A. (2008). The role of affect in the entrepreneurial process. *Academy of Management Perspectives*, 20, 104-119.
- Benjamin, G. A., & Magulis, J. (2001). *The angel investor's handbook*. Princeton, NJ: Bloomberg Press.
- Cardon, M. S., Wincent, J., Singh, J., & Dmosek, M. (2009). The Nature and Experience of Entrepreneurial Passion. *Academy of Management Review*, 31(3), 511-532.
- Cardon, M. S., Gregoire, D. A., Stevens, C. E., & Patel, P. C. (2012). Measuring entrepreneurial passion: Conceptual foundations and scale validation. *Journal of Business Venturing*.
- Casson, M. (1995). *Entrepreneurship and Business Culture* (1st Ed.). Brookfield, VT: E. Elgar.
- Chen, X., Yao, X., & Kotha, S. (2009). Passion and preparedness in entrepreneurs' business plan presentations: a persuasion analysis of venture capitalists' funding decisions. *Academy of Management Journal*, 52, 199-214.
- Clouse, V. G. H. (1990). Modeling the New Venture Decision Process: A New Approach to Teaching Entrepreneurial Skills. *Journal of Education for Business*, 65(8), 363-367.
- Creswell, J. W. (1998). *Qualitative Inquiry and Research Design: Choosing Among Five Traditions*. Thousand Oaks, CA: Sage Publications.
- Dainow, R. (1986). Training and Education of Entrepreneurs: The current state of the literature. *Journal of Small Business and Entrepreneurship*, 3(4), 10-23.

- Dana, L. P. (1987). Entrepreneurship and venture creation: an international comparison of five commonwealth nations. *Frontiers of Entrepreneurship Research*. Wellesley, MA: Babson College.
- Elfring, T., & Hulsink, W. (2007). Networking by entrepreneurs: patterns of tie formation for emerging organizations. *Organization Studies*, 28(12), 1849-1872.
- Fagan, M. M., & Walter, G. (1982). Mentoring among teachers. *Journal of Educational Research*, 76(2), 113-117.
- Fairlie, R. W. (2004). "Self-Employed Business Ownership Rates in the United States: 1979-2003." Washington, DC: U.S. Small Business Administration, Office of Advocacy.
- Farmer, S., Yao, X., & Kung-Mcintyre, K. (2011). The behavioral Impact of Entrepreneur Identity Aspiration and Prior Entrepreneurial Experience. *Entrepreneurship Theory and Practice*, 35(2), 245-273.
- Fauchart, E., & Gruber, M. (2011). Darwinians, communitarians and missionaries: the role of founder identity in entrepreneurship. *Academy of Management Journal*, 54, 935-957.
- Gibb, A. A. (1987). Education for enterprise: training for small business initiation some contrasts. *Journal Small Business and Entrepreneurship*, 4(3), 42-47.
- Gibb, A. A. (1993). The enterprise culture and education: understanding enterprise education and its links with small business. *International Small Business Journal*, 11(3), 11-34.
- Gibb, A. A. (1994). Do we really teach (Approach) small business the way we should? *Journal of small business and Entrepreneurship*, 11(2), 4-27.
- Gorman, G., Hanlon, D., & King, W. (1997). Some research perspectives on entrepreneurship education, enterprise education and education for small business management: a ten-year literature review. *International Small Business Journal*, 15(3), 56-77.
- Graevenitz, G., Harhoff, D., & Weber, R. (2010). The effects of entrepreneurship education. *Journal of Economic behavior & Organization*, 76 (1), 90-112.
- Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, 78(6), 1360-1380.
- Greve, A., & Salaff, J. W. (2003). Social Networks and Entrepreneurship. *Entrepreneurship Theory and Practice*, 28(1), 1-22.
- Gulati, R. (1999). Where do interorganizational networks come from? *American Journal of Sociology*, 104(5), 1439-1493.
- Harris, M. L., Gibson, S.G., & Taylor, S.R. (2007/2008). Examining the impact of small business institute participation on entrepreneurial attitudes. *Journal of Small Business Strategy*, 18(2) 57-75.
- Healy, C.C. & Welchert, A.J. (1990). Mentoring Relations: A definition to advance research and practice. *Educational Researcher*, 19, 17-21.
- Henry, C., Hill, F., & Leitch, C. (2005). Entrepreneurship education and training: can entrepreneurship be taught? Part II. *Education+ Training*, 47(3), 158-169.
- Hoang, H., & Gimeno, J. (2010). Becoming a founder: How founder role identity affects entrepreneurial transitions and persistence in founding. *Journal of Business Venturing*, 25(1), 41-53.
- Hope, B.J., MacKlin, P. (2011). Factors affecting entrepreneurship among veterans. <http://www.sba.gov/content/factors-affecting-entrepreneurship-among-veterans>
- Jackson, J. E., & Rodkey, G. R. (1994). The attitudinal climate for entrepreneurial activity. *Public Opinion Quarterly*, 58(3), 358-380.

- Katz, J. A. (2003). The chronology and intellectual trajectory of American entrepreneurship education. *Journal of Business Venturing*, 18(2), 283-300.
- Katz, J., & Gartner, W. B. (1988). Properties of emerging organizations. *Academy of Management Review*, 13(1988), 429-441.
- Kent, C., Sexton, D. L., & Vesper, K. (1982). Encyclopedia of entrepreneurship. *University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship*.
- Klopf, G., & Harrison, J. (1981, September). Moving up the career ladder: A case for mentors. *Principal*, 41-43.
- Levinson, M., & McKee, B. (1978). *Seasons of A Man's Life*. New York: Knopf.
- Lin, Z. J., Peng, M. W., Yang, H., & Sun, S. L. (2009). How do networks and learning drive M & A's? An institutional comparison between China and the United States. *Strategic Management Journal*, 30(10), 1113-1132.
- McDonald, M. L., & Westphal, J. D. (2003). Getting by with the Advice of Their Friends: CEOs' Advice Networks and Firms' Strategic Responses to Poor Performance. *Administrative Science Quarterly*, 48(1), 1-32.
- Moran, G. (2012, February). *Soldiers of Fortune*. Entrepreneur Magazine, 76-81.
- Moutray, C. (2007). U.S. Small Business Administration, Office of Advocacy. *Educational attainment and other characteristics of the self-employed: An examination using data from the panel study of income dynamics* (313). Retrieved from website: <http://ssrn.com/abstract=1070835>
- Murnieks, C., & Mosakowski, E. (2006). Entrepreneurial passion: an identity theory perspective. Paper Presented at the Academy of Management Conference. Atlanta, GA.
- Murnieks, C. Y., Mosakowski, E., & Cardon, M. S. (2012). Pathways of passion: identity centrality, passion, and behavior among entrepreneurs. *Journal of Management*, February 3. Retrieved from website: <http://dx.doi.org/10.1177/0149206311433855> (February 3).
- Murphy, S. (1986, July). Mentoring and adult development. Paper presentation at first International Conference on Mentoring, Vancouver, British Columbia.
- Offstein, E. H. & Childers, J. (2008). Small business e-commerce adoption through a qualitative lens: Theory and observations. *Journal of Small Business Strategy*, 19 (1) 35-53.
- Oosterbeek, H., Praag, M. V., & Ijsselstein, A. (2010). The impact of entrepreneurship education on entrepreneurship skills and motivation. *European Economic Review*, 54(3), 442-454.
- Ozgen, E., & Baron, R. A. (2007). Social sources of information in opportunity recognition: Effects of mentors, industry networks and professional forums. *Journal of Business Venturing*, 22(2), 174-192.
- Perttula, K. (2004). The POW Factor: Understanding and Igniting Passion for One's Work. University of Southern California, Los Angeles, California.
- Peterman, N. E., & Kennedy, J. (2003). Enterprise Education: Influencing Students' Perceptions of Entrepreneurship. *Entrepreneurship Theory and Practice*, 28(2), 192-144.
- Pfeffer, J., & Salancik, G. R. (1978). *The External Control of Organizations: A Resource Dependence Perspective*. New York: Harper & Row.
- Phillips-Jones, L. (1982). *Mentors and Protégés*. New York: Arbor House.
- Reynolds, P., Hay, M., Bygrave, W., Camp, S. M., & Autio, E. (2000). *2000 Executive Report*. Retrieved from Global Entrepreneurship Monitor website: <http://www.gemconsortium.org/docs/download/2408>

- Seidman, I. (1998). *Interviewing as Qualitative Research: A Guide for Researchers in Education and Social Sciences*. Columbia, New York; Teachers College Press.
- Shan, W., Walker, G., & Kogut, B. (1994). Interfirm cooperation and startup innovation in the biotechnology industry. *Strategic Management Journal*, 15(5), 387-394.
- Souitaris, V., Zerbini, S., & Al-Laham, A. (2007). Do entrepreneurship programs raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. *Journal of Business Venturing*, 22(4), 566-591.
- Strauss, A., & Corbin, J. (1990). *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*. London: Sage Publications.
- Sullivan, D. M., & Ford, C. M. (2013). How Entrepreneurs Use Networks to Address Changing Resource Requirements During Early Venture Development. *Entrepreneurship Theory and Practice*.
- Sundararajan, M., & Peters, L. (2007). *Role of emotions in the entrepreneur's opportunity recognition process*. Paper presented at the Academy of Management Conference. Philadelphia, PA.
- U.S. Census Bureau. (2007). *Veteran-owned Businesses and their Owners—Data from the Census Bureau's Survey of Business Owners*. Retrieved from website:
<http://www.sba.gov/sites/default/files/393tot.pdf>
- U.S. Department of Veterans Affairs (2013, April). *Veteran Population Projections: FY2010 to FY2040*. Retrieved from
http://www.va.gov/VETDATA/docs/Quickfacts/Population_slideshow.pdf
- Van Osnabrugge, M., & Robinson, R. J. (2000). *Angel Investing: Matching Startup Funds with Startup Companies--The Guide for Entrepreneurs and Individual Investors*. John Wiley & Sons.
- Waldman Associates, & REDA International, U.S. Small Business Administration, Office of Advocacy. (2004). *Entrepreneurship and business ownership in the veteran population (SBAHQ00R0029)*. Retrieved from website:
<http://archive.sba.gov/advo/research/rs242tot.pdf>
- Zey, M. C. (1984). *The mentor connection*. Homewood, IL: Dow Jones-Irving.

Lessons Small Businesses Learn From Big Companies about Reputation Management

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Abstract

Technology, communication, and social media have changed the rules for monitoring and maintaining a strong corporate reputation. While reputation management has been a province of bigger companies, small businesses and even nascent ventures can learn from their bigger counterparts. The ability of an individual or group armed with a computer to tarnish a small business's reputation is astronomical. The benefits of a good reputation include financial, marketing, employee morale, and stakeholder confidence. Similarly a negative reputation can impact profitability and sales. A number of bigger companies such as BP have not effectively managed their reputations while organizations such as the U.S. Census Bureau have. While smaller organizations cannot afford to maintain reputation management employees, they can adopt some strategies such as preparing a series of responses, using customers or employee testimonials, and disclosing reasons for their questionable actions.

Definitions

Gotsi and Wilson (2001) define a corporation's reputation as: "various stakeholders' evaluation of a company over a long period of time based on the images it generates due to its behavior." It is also a representation of the company's past actions and possible future prospects (Fombrun, 1996). A reputation reflects past behavior and often behavior in the future (Dowling and Moran, 2012). A reputation may take years to build but can be destroyed in days.

The Benefits of a Good Corporate Reputation

A survey of top managers found that they believe a strong corporate reputation is a valuable asset like other assets they possess (Reddiar, Kleyn, & Abratt, 2013; Dowling, 2012). Tools are being developed by practitioner and consultants to measure the intangible (goodwill) to a brand based on reputation (Iwu-Egwuonwu 2011) thereby including the issue on internal audits (Begelfer, 2012). Scholars have found that many companies with good corporate reputations are more profitable and outperform their competitors (Dowling & Moral, 2012). Financially this group has lower costs of capital, easier access to funding, and increased attractiveness to potential investors (Boddy, 2012). Marketing benefits include: increased brand acceptance, higher possibility of future sales, better company image, and sometimes the ability to charge premium prices (Boddy, 2012).

Today's Environmental Impact

Historically, several companies failed to: recognize external signals, monitor their environment, recognize environmental clues, or adapt to changing environment. Examples include Xerox who was blindsided by rivals with cheaper models and then took at least 10 years to re-establish itself (Morris, 2003), Dixon Ticonderoga Company who had a majority of the pencil market but lost it to overseas producers, and Mattel who misread its external environment and lost considerable market share (Day and Schoemaker, 2005; Carnes, 1999).

In today's environment, social media negativity occurs with more speed, viciousness, and velocity. In the era of Web 2.0, social media have reduced the effectiveness of traditional approaches to reputation management (Gaines-Ross, 2010) which are too slow and usually reactive. Attacks can come from stakeholders or from a single individual armed with only a computer, internet access, and a grudge (Gaines-Ross, 2010).

While some negativity arises from true concerns about the environment, product safety, worker compensation, etc. and may be legitimate and documented, others may be totally irrational and unfounded (Gaines-Ross, 2010). If a negative message is received by an audience and then passed to other audiences, it may go “viral” and destroy a company’s reputation very quickly (Rhee & Valdez, 2009).

Various Definitions and Types of Social Media

Social media is defined as “the production, consumption and exchange of information through on-line social interactions and platforms” (Marketo, 2010). Social media is also defined as “the technological component of the communication, transaction, and relationship building functions of a business which leverages the network of customers and prospects to promote value co-creation” (Andzulus et al, 2012). Social media can be as simple as a blog which is a diary or journaling on a website, or YouTube where videos are posted and shared, or Facebook which joins “friends” together to talk, or Twitter which are texts limited to 140 characters.

History of Social Media:

The creation of the internet in the mid 1990’s allowed businesses to post websites displaying company information and products/services. Many brick-and-mortar stores became internet-based to save money and to capitalize on the internet's speed, reduced cost, and customer reach compared to a physical location (Andzulus et al, 2012). Customers began purchasing more on-line, thus dictating what technological approaches succeeded or failed (Andzulus et al, 2012). As ecommerce exploded, customers demanded more and more from their on-line shopping experience causing an evolution in the ecommerce space. Social networking companies, such as Facebook or MySpace appeared, and allowed individuals to socialize with one another and communicate easier and faster than ever (Andzulus et al, 2012). Due to the new “social network” experience, customers sought out blogs and commented on company websites where they could communicate with businesses. Facebook joined millions of consumers worldwide together, teaching companies that social media is a useful tool that can be used to help build intimate relationships with consumers.

For the first time ever, chat rooms, blogs, tweets and social networks give customers the power to dictate their relationships with whom they do business (Andzulus et al, 2012). It is important to note that with the advent of the internet and social media, customers world-wide adopted social networking sites, blogged on a continual basis, tweeted readily, used smart-phone applications to socialize and instantaneously retrieve the latest news feeds (Andzulus et al, 2012). Today it is simply impossible to ignore the internet and social media because they have an instantaneous and profound impact on the profits of a business both negative and positive if social media goes ‘viral’.

Examples from the Big Companies

British Petroleum (BP) 's licensed oil rig, the Deep Horizon, caught fire and sank in the Gulf of Mexico, spilling 200 million gallons of oil. The damage to the affected areas was extensive. Immediately 25,000 workers lost their jobs. Most of the affected businesses were in fishing and transportation (Alijani, 2012). A survey of three severely affected towns revealed that many small businesses lost considerable revenue. When asked if they would be in business in five years, 29% in one, 33% in another and 45% in the third stated yes but in a different city. (Alijani, 2012). As reported in BP's Annual Report (2012), the cumulative pre-tax charges totaled \$42.2 billion for the accident. The costs were related to cleanup, assessment, and monitoring, claims for economic and personal loss, seafood testing, as well as fines for criminal claims.

Initially BP focused on publishing its efforts to cap the leaking oil well. The public watched anxiously as B's initial efforts failed until a second bore plugged the line below the failed shut off valve.

Subsequently BP has paid various governments for the cleanup and donated money to help some of the business affected with a PR campaign that touts its efforts. Recent revelations of BP's cost cutting, shortcuts, managerial lapses, and safety issues completely neutralized their public relations campaign. The public sees it as just another ad campaign which, unfortunately, an insider verified (Dowling & Moran, 2012). The social media users put BP in the worst possible light because their ads seemed to be just another slick advertising campaign (Smith, 2012).

A Good Example- the U.S. Census Bureau.

Senator McCain publicly criticized the U.S. Census for expensive advertisements during the 2010 Super Bowl. His criticism was that such ads were very expensive and a waste of tax payers' dollars (Weaver, 2010; O'Keefe, 2010).

Censuses are important because they are constitutionally mandated, apportion seats in federal and state legislatures, and drive many federal and state funding programs (U.S. Constitution, Article I, Section 1, 1789). Consequently, the Census Bureau had to count as many Americans as possible- its target market, therefore, was every American.

While the stakes were high the challenges were higher: antigovernment sentiments were prevalent, public responses to mailed forms was dropping, education, literacy, poverty and language barriers made access difficult, the term housing included traditional homes but also apartments, condominiums, mobile homes, house boats, and Native American reservations (Desouza, 2012). To complicate these issues the form was very long, required modification resulting in decreasing response rates, and traditional forms of advertising such as TV were decreasing (Pew Research Center, 2010).

The Census Bureau was not the first government agency to use social media. The US State Department used it in its response to the Haiti tragedy and the U.S. Geological Survey had used it since 2006 (Scott, 2013). However GSA's use of an improperly managed web site backfired (Gaines-Ross, 2012; Dowling & Moran, 2012). Consequently, the Census Bureau used multiple methods, including mailed forms, social media and Super Bowl ads.

After Senator McCain's attack, the Census Bureau defended itself with social media and other rebuttals showing that Super Bowl ads reached more people at lower cost than other forms of advertising and were watched by 60% of the US population (Desouza, 2012; Weaver, 2010; O'Keefe, 2010). They pointed out that if only an additional 1% of the U.S. households returned the form it would repay the cost of the ad by 30 times. In addition, the census results were impressive: under budget by 25%, streamlined, and accomplished ahead of schedule with broader public support (Desouza, 2012; Weaver, 2010).

A Bad Example- Horizon Management Group

A tenant in an apartment managed by Horizon Management Group tweeted to her friends about the mold in her apartment (Gaines-Ross, 2010). After the tenant filed a suit against them for violating city housing ordinances, the company responded with a \$50,000 defamation suit for tweeting twelve friends. Their response was picked up by the social media, found by the major search engines, and created a public relations backlash against the company for overreacting (Gaines-Ross, 2010).

A Good Example- Royal Caribbean

The Royal Caribbean was severely chastised in the media for having its middle and upper income tourists on expensive vacations in the poor county of Haiti. Clearly the psychological message was financially able tourists taking advantage of the poor Haitians. The company quickly responded with support from the Haitian government and local businesses who all confirmed that they wanted the company's business as a way to revitalize their tourist industry (Gaines-Ross, 2011).

A Good Example- the Case of Primark

Primark is an Irish company with retail stores in Ireland, the UK, and Spain. Voted the most unethical retailer in 2005, it was attacked by mass media, blogs, review sites, and forums for its low costs. As BBC attempted to interview them they counter attacked on several fronts (Jones, Temperly, and Lima, 2009). They presented facts explaining that they provide low cost clothing at value price points to bargain oriented customers. More importantly they bypassed the mass media and went directly via social media to their customers. Their customers' social media response neutralized BBC's powerful negativity. The customers even developed a new nickname for the company which signified a good reputation (Jones, Temperly, and Lima, 2009).

Lessons from the Others- A Guide for Small Businesses

While experience may be a good teacher – the experiences of others is better- and less painful. Big and small businesses need to understand that their environment has changed. The older traditional methods used by bigger businesses are no longer valid. As mentioned above, social media attacks: can occur without warning, arise quickly, come from multiple stakeholders (Bitektine, 2011) can be based on fact or fiction, and require new response strategies. The older methods are too slow, appear as marketing gimmicks without substance, and are all one way communication – from a company to the general public.

Therefore small businesses need to prioritize their stakeholders, prepare in advance for negativity, prepare for different responses, select the appropriate social media, and if possible build a reputation management program into their strategic planning. Once these small

businesses develop their strategies, they can develop reputation management programs based on their strategic mission, vision, and values. If they do not have the expertise to monitor social media they will have to contract this function. Doing nothing is no longer an option, being small no longer means hidden from social media.

Companies MUST determine the types of social media they want to utilize and commit to them. They should research and identify which social media approach makes sense for the company, the industry, the type of business and customers they have, and they must commit the personnel to support, maintain and implement the social media efforts (Lanz, 2010).

Dowling and Moran (2012) strongly suggest that a reputation management program built into the corporate strategy is preferable to any, that in their terms is “bolted on, “assigned to a public relations person or marketing unit without emanating from the company’s strategy.

One of the changes in this paradigm shift is that many stakeholders want a two way interactive communication with the company. Therefore companies must spend time and energy creating and responding to iterative communications. In addition, the reputation management program may have to develop different responses for different stakeholders and for different product lines.

While no prior planning cannot protect them from all attacks, quick responses based on their preparedness with help from sympathetic customers or employees is their best defense. They may not be able to defeat all of the negativity but as Primark shows all they have to do is win enough hearts and minds to stay in business.

References

- Andzulus, J.M., Panugopoulus, M.G. & Rapp, A. (2012). A review of social media and implications for the sale process. *Journal of Personal Selling and Sales Management*, 32 (3), 305-316.
- Begelfer, K. (2012). Safeguarding the business’ reputation. *Internal Auditor* (December 2012) 29-33.
- Bitektine, A. C. (2011). Toward a theory of social judgments of organizations: The Case of legitimacy, reputation, and status. *Academy of Management Review* 36 (1). 151-179.
- Boddy, C. (2012). The impact of corporate psychopaths on corporate reputation and marketing. *The Marketing Review* 12(1) 79-89.
- British Petroleum Annual Report (2012). Retrieved September 27, 2013 from www.bp.com/en/global/corporate/investors/annual-reporting/archive.html.
- Carns, A. (1999, November 24). Point taken; hit hard by imports, American pencil icon tries to get a grip. *The Wall Street Journal*. A1-A6.
- Constitution of the United States* (1789). Article I, Section 3.
- Day, G.S. & Schoemaker, P.J.H. (2005, November). Scanning the periphery. *Harvard Business Review*, 135-148.
- Desouza, K.C., (2012). Leveraging technologies in public agencies: The case of the U.S. Census Bureau and the 2010 census. *Public Administration* 72 (4), 605-614.
- Dowling, G. & Moran, P. (2012). Corporate reputations: Built in or bolted on? *California Management Review* 54 (2) 25-42.

- Fombrun, C.J. (1996). *Reputation: Realizing value from the corporate image*. Boston, MA: *Harvard Business Press*.
- Gaines-Ross, L. (2010). Reputation Warfare: Odds are that a small-scale antagonist will target your business and pose a serious threat. Here's how to fight back. *Harvard Business Review*. (December, 2010).
- Gotski, M. & Wilson, A.M. (2001). Corporate reputation: seeking a definition. *Corporate Communications: An International Journal* 6 (1). 24-30.
- Iwu-Egwuonwu, Ronald C. (2011) Corporate Reputation and Firm Performance: Empirical Literature Evidence, *International Journal of Business and Management*, 6 (4), 197-206.
- Jones, B., Temperley, J., & Lima, A. (2009). Corporate reputation in the era of Web2.0: the case of Primark. *Journal of Marketing Management* 25 (9). 927-939.
- Lanz, L.H. (2010). Introducing the newest member of your hotel marketing team: The social media manager. *HVS International Journal*, 1, 1-3.
- Marketo (2010). The Definitive Guide to B2B Social Media: A Marketo Workbook, San Mateo, CA retrieved at <http://docs.cdn.marketo.com/Guide-B2B-Social-Media-Part2.pdf>.
- Morris, B. (2003, June 23). The accidental CEO. *Fortune*. 58-67.
- O'Keefe, E. (2010). Census's Super Bowl ad draws flag from McCain. *Federal Eye*. Retrieved 9/27/2013 from http://voices.washingtonpost.com/federal-eye/2010census_bureau_defends_super_bowl_hm.
- Parsons, B. (2010, June/July). Gulf of Mexico shows folly of complacency. *Canadian Consulting Engineer*. 4. Retrieved September 23, 2013 from www.canadianconsultingengineer.com.
- Pew Research Center. (2010, September 12). Americans spending more time following the news: Ideological new sources: Who watches and why. <http://www.people-press.org/2010/09/12americans-spending-more-time-following-the-news>
- Reddiar, C., & Kleyn, N. (2012). Director's perspectives on the meaning and dimensions of corporate reputation. *South African Journal of Business Management* 45 (3). 29-39.
- Rhee, M., & Valdez, M.E. (2009). Contextual factors surrounding reputation damage with potential implications for reputation repair. *Academy of Management Review* 34 (1) 146-168.
- Scott, H. (2013). The past, present, and future of social media at USGS. *Public Manager* 42 (1) 33-34.
- Smith, S. (2012, December). I'm mad as hell. *EHSToday*, 6.
- Weaver, C. (2010, February 8). Conceptual census Super Bowl ad: Bargain or Boondoggle? *NRP*. Retrieved 9/27/2013 from http://www.npr.org/blogs/health/2010/02/super_bowl_ad_hypes_us_census.html

Women Small Business Entrepreneurs in Albania: A Retrospective Evaluation

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Abstract

This research investigates women small business entrepreneurship in Albania. The purpose is to provide contextual information to potential future (women) entrepreneurs about how to get into business and overcome challenges. The 11 interviewed Albanian women entrepreneurs explain how they survive a difficult patriarchal society. Contemporary developments in Albania are explained and comparison is made to recent entrepreneurship research. The results of the research show seven themes: I) strong relationship between previous experiences and the decision to become self-employed, II) influence of educational and family background on women's motivation and career development, III) gender issues relating to start-up and operating of businesses, IV) major impact of gender on financial related issues, V) differences in creating networks between men and women, VI) perceived negative career influence because of being women, VII) similarities with the contextual characteristics of successful Dutch entrepreneurs as found in recent research (Gehrels, 2012). Overall conclusion: Albania is developing but still has challenging conditions for women small business entrepreneurs. Further research is suggested in other developing countries.

Keywords: women entrepreneurship, small businesses, Albania, gender challenges

Background and Justification

The 2nd OECD Conference of Ministers responsible for SMEs (2004) stipulated the need for researchers to address women entrepreneurship in small and medium-sized enterprises. Attention is needed for the matter because women entrepreneurship has been identified as an enormous untapped source for future economic growth. Furthermore, the participation of women in entrepreneurship has traditionally been significantly lower than that of men. As a group, women – and their potential contributions to economic advances, social progress and environmental protection – have been marginalized (OECD, 2012).

Sixty to ninety percent of all companies in the tourism industry sectors 'hotels' and 'travel agencies' can be categorized under SMEs or even micro enterprises (Keller, 2005). It is therefore fair to say that the issue of women entrepreneurship in SMEs is very important for the tourism industry and its further development. OECD (2004) concluded that better qualitative information, besides better statistics, is needed to profile women entrepreneurs. Research into the barriers to start-up and growth will create more awareness of the enormous important role of women entrepreneurs for the future of worldwide economy and the tourism industry in specific.

Since SMEs are also considered as the major drivers of economic growth in developing countries, it makes it even more interesting to look at women entrepreneurship in countries like Albania (Europe's poorest country). The issue of entrepreneurship for women in Albania remains challenging and limited research is available (UN Women Jobs, 2013). Beqo (2008) looked into women entrepreneurship in her home country Albania and came with findings about the situation based on the perceptions of 11 women entrepreneurs in the capital city of Tirana. Beqo's entrepreneurship narratives are compared to materials that became available after the

initial research took place. The purpose of this research paper is to provide more, although moderate, enlightenment about one of the most closed countries in Europe and its business climate for women small business entrepreneurs.

Literature Review

The role of women in society has evolved over time and the male-female relationship changed significantly over the past decades. Historically woman's responsibility was to look after the children and to take care of the household, which in today's society fortunately is no longer the sole case (McClure, 2009). At the beginning of the 20th century more jobs occupations became open to women. The first policewoman was appointed 1910 in Los Angeles. Even though it was still uncommon for married women to have jobs at the beginning of the century, WOII changed this significantly. Women had to work while the men were in the war away from home and this further progressed after the ending of the war (Lambert, 2012).

One of the acknowledged reasons for women to become self-employed is the glass-ceiling phenomenon. Most of the times, women start their own business after they have encountered institutional barriers and gender discrimination in their previous work positions. Hisrich & Brush (1983) reported that 42% of entrepreneurial women become involved in the new venture due to the job frustration in their previous position. Women choose to become entrepreneurs, more often than men, and as reasons they cite a better work-life balance and economic necessity as the main motivation for starting a business (OECD, 2012).

A woman entrepreneur is defined as a female who has initiated a business, is actively involved in managing it, owns at least 50% of the firm and has been in operation one year and longer (Buttner & Moore, 1997). According to this definition it is clear that for qualifying a woman as entrepreneur the willingness is needed to start an activity, to be able to manage it and to be involved in it. Related to the changes in the global market and the continuous flow of information, the importance of networking has to be taken into account. Women are sometimes excluded from informal networks and consequently lack access to real-time information through the grapevine (Buttner & Moore, 1997). Both women and men benefit similarly from associations created by their networks, although women's networks differ from men's networks in the sense that women consider personal and emotional connections more important than men.

Another important point to consider is the motivation of women to be self-employed. Monaci (1998) identified as the dominant factors that influence motivation of women entrepreneurs to be between 'compulsion' factors ('starting out of necessity') and 'attraction' factors ('seeing entrepreneurship as an opportunity'). As one of the 'attraction factors' self-employment can be seen as a way to supplement an inadequate household income. Women search for opportunities such as self-employment in order to increase the level of income which otherwise may be insufficient to meet their needs. Women get attracted to entrepreneurship because of the flexibility it can give to balancing work and family responsibilities. Entrepreneurship provides a channel for women deciding to leave dependent employment in organizations where they often have frustration in their work and lack of opportunities to progress. On the other hand, 'compulsion' factors can relate to a search for independence and autonomy in work, and for professional self-fulfillment. Entrepreneurship for women means more economic freedom, asset

and property ownership, decision-making, and therefore greater economic empowerment (UN Women Jobs, 2013).

The entry of women in entrepreneurship seems to be a complex mix of constraints and opportunities of external impulses and subject aspirations. The main sector preferred and attracting women entrepreneurs is the service sector (Bruni, Gehraldi & Poggio, 2005). The tendency for choosing the service sector is not random but has particular reasons:

- women have mostly knowledge of and experience in the service sector,
- when they lack specific technical skills it tends to keep women from starting businesses in the manufacturing and high tech sectors
- because of difficulties in obtaining financial resources, women choose low capital activities, like those in the service sector.

Fay & William (1993) consider the idea that the greater need of women to balance work and family commitments may make entrepreneurship more appealing than salary generating work to some women. Even though self-employment often requires long workdays, it can also offer the possibility for greater flexibility in structuring the day which is similar to findings among Dutch small business entrepreneurs (Gehrels, 2012). This can be considered an important factor, which influences the decision making for those women who have family and are willing to achieve their goals as well. In contrast, Bruni, Gehraldi & Poggio (2005), define gender as a linguistic artifact, a theoretical framework, a feminist invention, an effect or a consequence of a system of difference, as well as a quasi-object whose meaning is enacted in appropriate situations.

This research into women entrepreneurship focusses on Albania a parliamentary republic in southeastern Europe. Albania was a communist country for more than 50 years in which Enver Hoxha's dictatorship was the most consistent Stalinist of the socialist regimes in Europe and together with that of Romania, the most brutal. Centralization was maximal, politically and economically. Zickel & Iwaskiw (1994) explained the way of governing in Albania as where the isolation from the outside world was achieved through a combination of enormous restrictions on movement and a government stranglehold on the dissemination of information. The Marxism feminism school makes a strong claim about the relationship between a woman's domestic labor and her market labor. This is a key determinant in understanding the disadvantaged economic position of women compared to men in Albania as Stalinist society (Butler, 2003).

According to INSTAT (2005), Albania has the youngest population in Europe. More than 39% is under 25 and the median age is 31.2 (CIA, 2013). It is the poorest country in Europe (ranked 120 on a World level) with the highest level of unemployment and the lowest GDP per capita income. The communist government's first priority on coming to power in 1945 was restraint of private ownership. Collectivization of land began in 1946; by 1967 private agriculture and properties had been eliminated. To fulfill its second most important objective of full employment, it was necessary to disguise unemployment by over staffing. Much of the surplus was carried by the agricultural sector in which 50% of the workforce worked. Industry was primarily based on mineral extraction and consumer goods manufacture. In the last months of communist rule in early 1991, there was almost total economic breakdown (Zickel & Iwaskiw, 1994).

At the end of 1995, according to INSTAT (2005), private enterprises run by women constituted 21 per cent of the total compared with 79 per cent conducted by men. The percentage of women owning is growing and at present women own 25.7% of businesses. (UN Women Jobs, 2013) The percentage of business ownership in Albania is significantly lower than commonly in developed countries. For example in the UK, 48% of female entrepreneurs own businesses in the service sector, compared with 36% of male entrepreneurs (Small Business Service, 2003)

The largest number of registered businesses is in the capital Tirana with 31% and a smaller percentage in the other nine cities (Bezhani, 2001). INSTAT (2005), marks that 85% of businesses are in urban areas and 15% in rural. The women's businesses are concentrated in commerce, services, and less in other sectors. The reasons for the high percentage of women in commerce and services are connected to the system of privatization in the early 90-s that passed the shops or property to the shop assistants, who were mainly women. This system has been further developed into family business with the spouses. Women working in the service sector, especially those with a university degree are more professionalized to offer their services on private-business basis. (Bezhani, 2001) Education is one of the values that traditionally has been looked up to in Albanian society, especially by women since the communist regime. Albanian women in general have higher educational standards than men.

In recent years, significant progress has been made in developing the national legislation to promote the protection of women's rights as basic human rights, and encourage equality between men and women in economic and public life. The Albanian government has legally sanctioned the equality between men and women as a subject of law, and women now enjoy equal treatment while having equal rights and obligations. As far as international documents are concerned, the Constitution, in Article 122, Section 2, states expressly the supremacy of ratified acts over domestic laws that are at variance with these acts or agreements (Fullani, 1999). According to the Ministry of Work and Social Affairs (2005), the platform of the Albanian government on the equality between men and women for the period, 2002-2005 has the following major directions: (1) gender equality in power and decision-making; (2) economic and social affairs; (3) health, and (4) education. Even with the existence of legislation on women's rights today, Albania still is going through a transitional period. The present lack of political mechanisms to effectively enforce existing laws has resulted in drastic gender inequality, which directly affects the efficiency of the economic development process. Gender stereotypes and traditional mentalities, especially patriarchal ones, defend the structural inequality between men and women and the unequal power relations between them.

Violence against women may appear in the workplace as well. This kind of violence, even though in many cases not recorded in judicial decisions, exists in many forms. As Bezhani, (2001) stated, the reluctance of women to denounce this kind of violence has to do with the fear of losing their jobs, as it is known that over 85% of managers at workplaces are men. It is a fact that women by having fewer possibilities in finding a job position try to maintain what they have despite the discrimination towards them. Economic violence is another form of abuse in which women are the major victims. Traditionally men have controlled and dominated the financial income of the family, and have enjoyed the power of making financial decisions in the family. The patriarchal mental picture of Albanian society and the evaluation of women as non-trustable figures affect money matters. The current practices and approaches of men in many cases and

areas create the mentality that property belongs to men and that a woman cannot enjoy the right to property, even though such a legal right in fact exists. This is a dangerous suppressing of women's substantive rights which hinders women's entitlement to ownership (Bezhani, 2001).

Positive signs of Albania becoming more open and accessible for the rest of the world can be found in the past few years. Tourists visiting Albania claim to experience an unexpected open atmosphere, improved infrastructure and entrepreneurship in the service industry, making a strong effort to please their customers (Janssen, 2013). The American Hotel and Lodging Educational Institute (AHLEI), the world biggest provider of training courses for the hospitality industry became active in Albania between 2011 and 2013 with the help of USAID. In order to improve professionalism in Albania's hospitality sector, AHLEI established working partnerships with the University Marin Barleti University (UMB) to set up diploma programs in tourism and with the Destination Management Organization (DMO) to offer certified hospitality training programs for working professionals (AHLEI, 2013). In line with positive signals coming from Albania, the UN Women in July 2013, started an application procedure for an international consultant (United Nations Development Programme (UNDP, 2013). who is expected to promote women entrepreneurship in Albania.

Methodology

For explaining the nature of women entrepreneurship in Albania we considered a sample of 11 women entrepreneurs in the capital Tirana. Because chances for finding entrepreneurs who would be able and willing to speak to the researcher could be expected in an urban environment, Tirana was chosen. Semi-structured interviews were done in 2007 by the female native Albanian researcher in order to have a trustworthy interview setting in which the women entrepreneurs would be willing to share their experiences. In table 1 below age, education, marital status, family composition (children), and type of small business of the 11 respondents are given.

Table 1. Respondents.

	Age	Education	Marital & Children	Small Business
1.	32	university degree (UD), law	Married & None	Consultancy in law
2.	44	UD, engineer	Married & 2	Constructing firm
3.	34	UD, economics, finance	Divorced & 1	Fashion atelier
4.	40	UD, economic/planning/commerce	Married & 3	Insurance agency
5.	26	UD, foreign language	Married & 1	Language center
6.	21	UD, electronic engineering	Married & 1	Consultancy: licenses & brands
7.	29	UD, chemical engineering	Married & 1	Decorating & color advising
8.	43	UD, medicine	Married & 2	Medical service center
9.	30	UD, design	Married & 1	Beauty parlor
10	37	UD, history, geography	Married & 2	Coffee bar & kindergarten
11.	30	UD, economics, business	Married & none	Advisor in home appliances

The transcripts of the interviews were analyzed one by one and through reading and re-reading, themes were generated. The themes were put into structure to identify their meaning and relevance. In 2013 the co-author of the research went back to the literature which included a research among entrepreneurs in The Netherlands (Gehrels, 2012). He compared the Albanian women entrepreneurs' narratives to the contextual characteristics of successful Dutch small business entrepreneurs. Furthermore, recent publications were consulted to investigate what the current situation was in Albania. Finally, an international expert on Albania was interviewed to verify the findings. This second round of investigation was aimed at putting the original interviews in a broader perspective.

Results

The 11 interviews generated seven important themes.

1. A strong relationship exists between Albanian women's previous employment experiences and the decision to become self-employed.

This relationship is derived from the negative atmosphere that the women faced while being employed. Respondent.2 expresses the feeling in detail:

The women's had to work very hard ... at home and with their children. Working schedule started at 6 AM ... So working ... was very hard because at the same time I had to send my kids to the nursery at 5 30 AM and leave them with the guard or cleaner of the nursery as the nursery used to open at 6 AM. After that I used to ride the bicycle to work which was few km from my house. Work was asked on 8 formats during the 8 hours shift so I could not leave anything for tomorrow because I would be labeled a deserter and could end up in prison for agitation and propaganda up to 10 years. If you could not finish the job you would be given a warning and if it happened for a second time it could have penalty consequences. The stress working at that time was immense.

Important and vivid issues such as low salary, long working hours, and insufficient time which can be dedicated to family and children make it for the women unpleasant to be employed. R.10 who owns two small business explains about the motives to start her own businesses like this:

My sole motivation in opening my first business was to go out of the house and work ... to have my own money and to be independent economically ... for my second business it was passion to take care for kids and to teach them

Entrepreneurship appears to be most like a necessity, although there is also the pull factor of being able to build a more balanced life in terms of family commitments.

2. Educational and family background influence women's motivation and career development.

The women entrepreneurs interviewed considered it indispensable to have at least a university degree in order to obtain the skills needed to be able to perform independently and successfully in the market. R.1 made an appeal about the matter to all females.

I would like to make an appeal to all females in general and the new generation in particular to dedicate more time to education because it's the door that will open the opportunities for independence and self-respect as well as respect from others.

Secondly, family business- inheritance, guidance and trade tradition, inspired and motivated the women entrepreneurs in this research. However, more than just for inspiration they evaluate their families as an enormous help in their success. This logic originates from the tradition in Albanian society, in which the phenomenon of collectivity among family members is visible and strong. R.2 said:

I see my business as the main tool to maintain my family as well as to invest for my children's future in education and life. At the same time I see my business as a strong family business which I will pass on to my children.

On the other hand, the women's motivation for being economically independent especially from their spouses visualizes and marks the influence and pressure by men, and the desire and needs of women to minimize this influence in order to live a harmonious life. Thirdly, it became clear that some of the women entrepreneurs benefitted from some international exposure of either studying or working abroad, or in international contexts. R.1 even encouraged her husband to take the opportunity for getting work experience abroad despite the fact it meant they would see each other scarcely:

Yes, I know the value that I have gotten from a foreign diploma, in Albania and this is why I encouraged him (her husband: added by researcher) to take this initiative.

3. There are gender issues in Albania relating to start-up and operating of businesses.

Arbitrary taxes are imposed by the Tax Institution in Tirana, at which the employees are mainly men. R.3 described the mistreatment as follows:

Whenever I went there, they would see me as a female and they would go forever with my documents. For example when I needed to pay the taxes they would immediately charge the maximum taxes.

This is usually done in order just to exploit the women entrepreneurs by considering them as weak and without protection and this shows how gender influences the professional development of women entrepreneurs. The fact that they, as a solution to the problem, try to find a man figure to get along with the employees in order just to get a fair treatment means that they find it impossible to fight for the right themselves. The same scenario as described applies to the License Institution. In their private lives, women entrepreneurs do not hesitate to build a family and have children. Most of them have argued with their spouses, who in the beginning showed skepticism about their abilities to enter the entrepreneurial field. R.10 remembers:

At the beginning it was difficult not to see myself as a slave but as a female.

These arguments most of the times were the biggest challenge to face not only in the beginning but also on the long run. Husbands of women entrepreneurs started appreciating them and their professional aptitude only after seeing the financial well-being coming from their wife's business. R.7 said:

... my husband ... is still surprised that everything is the fruits of my own work and determination ...

It stipulates the strong personalities of the women entrepreneurs if one realizes how they persisted in their efforts, despite the enormous challenges they faced.

4. Impact of gender on financial related issues is obvious and vivid.

Finance and specifically acquiring the start-up capital is a big challenge for any entrepreneur starting a new business. In Albania the banks give loans only through mortgage on owned object like houses, cars etc. Because of being in a patriarchal society, the properties that a family owns are always registered in the name of the man of the house meaning in the name of the spouse thereby leaving starting women entrepreneurs without any financial possibilities. R.11 states about this:

Then again it was my brother who was working and he took the credit from the bank. At those moments I was very angry because ... how can it be that I can't take the credit... for the starting of my business? ...

To overcome the situation, the Albanian women entrepreneurs looked for capital to be acquired from family relations, like the respondent mentioned in the example, or by saving every penny they could earn themselves.

5. The creation of female networks is not done in the same way as male networks.

It is important to mark that networks created by women were suggested to them in most cases by parents or spouse. The women entrepreneurs generally preferred women networks as R.2 explained:

I feel more comfortable when I work with women but in my line of work there are more men than women. I feel satisfied when a deal or work relation has to do with women. For example when the finance manager is a woman, our communication goes more smoothly, the payments are done on time without reminding ...

The women entrepreneurs usually accepted the suggested networks and built a strong connection with them because of the trust generated by the personal support from their source of information. In addition, the unavailability and non-existence of alternatives most of the times pushed them into creating connections with male networks as these are the dominant ones in the market. Some women entrepreneurs actually preferred to work with men and explicitly had lower appreciation for dealing with other women in creating their networks.

6. Women entrepreneurs consider gender to have a negative influence on their career.

The women entrepreneurs in this research see their position in Albanian society and in the business environment in general as awkward and under stressful conditions. R.7 described:

Most of females here are discriminated related to males because they (the husbands) think that we are their property.

Nevertheless, concerning their success women feel changes in their position compared to men, which generates greater appreciation for them. In their perception, however, it will take another few years to narrow down the gap. On the other hand, controversially, women seem to have been producers themselves of this aggressive society towards them and their emancipation. R.6 defines the feeling as follows:

The females themselves are a product ... of this society ... they ask to be treated the same but they do not treat themselves the same ... I do not blame them but in some cases they are responsible for it themselves.

In order to express their force, capability and determination they defined themselves not as successful women but instead profile more like men. This phenomenon of trying to resemble the dominant part of society occurs because of the patriarchal nature and pushes true women's influence in the wrong direction in order to achieve empowerment. This situation emphasizes the ongoing strong influence of men within the Albanian society.

7. Similarities with the successful entrepreneurs' contextual characteristics (Gehrels, 2012)

Interestingly, there appeared to be significant overlap between the concepts and theoretical themes as Gehrels found in his research into successful Dutch entrepreneurs and the Albanian women entrepreneurs. The elements of strong will, determined and persisting individuals highly connected to their direct social environment, a strong striving for independency as well as the ability to face challenges successfully were shared. Differences appeared in the sense that the Albanian women entrepreneurs managed to overcome the enormous pressures of a highly traditional and 'women discriminating' patriarchal societal structure. Successfully dealing with the remainders of the former Stalinist communist environment presented the entrepreneurs as extremely strong individuals who face and manage their lives. Comparing their stories to the entrepreneurs in the Gehrels (2012) research confirms that these Albanian women entrepreneurs are true examples of small business initiative and entrepreneurship.

Finalizing, it can be said that gender is strongly influencing entrepreneurship participation of women within the Albanian service industry. There are two major factors: work setting and social/personal factors. Obviously differences in pay between men and women, discrimination in hiring practices, lower access to financial and loans services and violence in the work place make employed women consider other ways to escape the workforce and to build up their career. Furthermore, the major other factors influencing women entrepreneurs' entrance into the market are: the difficult situation in terms of ownership rights for women and balancing professional with family life. Educational background (having a degree) and family inheritance are seen as important drivers for entering the market and success of women entrepreneurs.

Conclusion

It is important to mention that the aggressive working environment, unfair and risky, pushed and sometimes forced Albanian women to think about alternative ways to develop their career, such as becoming self-employed. The findings on this issue confirm the phenomenon mentioned by Hisrich & Brush (1983) where they found that women become involved in their new venture due to the job frustration generated in their previous positions. Hence, the decision to become self-employed looks like a necessity and a forced choice. On the other hand, as Fay & Williams

(1993) stated, the greater need of women to balance work and family commitments may make entrepreneurship more appealing than employed work to some women. Entrepreneurship then also becomes a mode to balance professional and personal lives.

Secondly, according to INSTAT (2005), women in general have a higher education level than men, which is confirmed in the sample of this research. All the eleven interviewees were highly educated and held university degrees. They acknowledged the importance of education to their career developments. The biggest obstacle that the women entrepreneurs had to overcome was the challenge to get funding for their new enterprises. Mostly parents, friends and family members were the sources providing them with the starting capital. Getting funding from the official institutions proved to be virtually impossible because of the high interest rates and substantive paperwork needed to get through the application process.

Thirdly, several authors have referred to the situation that traditionally men have controlled and dominated the financial incomes of families. Thereby the men have the mentality that property belongs to them, and this denies women's right of ownership. This was confirmed by the research, as the majority of women entrepreneurs did not consider taking loans from banks or were not able to do so. In general, women interested in becoming entrepreneurs have few possibilities or none to be able to achieve economic independence. Choosing networks for the majority of these women is strongly related to the recommendations coming from parents, friends or important persons in their lives. This finding confirms what Buttner & Moore (1997) distinguish to be the main difference between male and female networks. Overall it can be said that the success and positioning of women entrepreneurs are strongly influenced by the sum of early experiences relating to generating awareness, education, work experience and value systems and driving powers of the particular individual (Gehrels, 2007)

The Albanian women entrepreneurs in the research were definitely influenced because of being women. The challenges faced in employment pushed them to entrepreneurship. Low salary, long working hours, mistreatment and insufficient time for family and children were main factors to become self-employed. The transfer was more a necessity than a choice. All interviewees held university degrees which allowed them to base their careful decision on balancing pros and cons. Women in Albania find themselves severely discriminated by men. Becoming entrepreneur gave women a more independent position in terms of finance and power in the relationship with spouses who usually resisted their wife's business intentions. After observing the financial benefits, spouses became more cooperative. Albanian women entrepreneurs' experiences follow what can be found in the literature and because of the extreme male dominated society in Albania they are very interesting to research. The interviews confirmed the extremely traditional and conservative values of Albanian men. This pattern is alive in many other countries in the world. Albanian women who want to start a business have to be resourceful to get financing because the banks will only sign off against property which traditionally is owned by men.

Entrepreneurs in this research indicated to connect to networks, preferably women led, suggested by parents and family. In the absence of alternative (women) networks they entered the male networks that dominate the market. Developments in Albania appear to be moving in a positive direction when looking at the pieces of information that were found in recent publications. Women entrepreneurship is expected to increase in the coming years thereby benefitting from

the growing exposure of Albania and the further interest of both international political organizations and commercial parties. The situation in Albania at face value is not yet as suggested in recent US research (McGrath Cohoon, Wadhwa, & Mitchell, 2010).

... findings show that ... successful women and men entrepreneurs are similar in almost every respect ...

It was interesting though to see that the Albanian women entrepreneurs shared many contextual characteristics with the successful entrepreneurs in the Gehrels (2012) research, but adding extra strong qualities of determination and perseverance to deal with the dark side of a communist and traditional heritage’.

Recommendations

Further research is needed to uncover the nature of women entrepreneurship in other areas than the Albanian capital. Most certainly research should be undertaken in other developing countries to compare how women entrepreneurs deal with their environment and personal situations. Because of the predicted positive impact that women’s entrepreneurship will have on the SME sector and particularly in the service and tourism industry, the continuation of research efforts like in this case example is needed. The direct value of disseminating the results of this research lay in the providing of information to potential women entrepreneurs in other (developing) countries.

References

- AHLEI. (2013). *EI Continues Development Work with USAID in Albania*. Retrieved August 31, 2013, from American Hotel & Lodging Educational Institute:
https://www.ahlei.org/Newsletters/Articles/EI-Continues-Development-Work-with-USAID-in-Albania/?hq_e=el&hq_m=2702693&hq_l=19&hq_v=04e5a2ae5f.
- Bego, I. (2008). Gender and Female Entrepreneurs within the Service Industry. *Unpublished Master Dissertation*. Leeuwarden: Stenden University of Applied Sciences.
- Bezhan, M.(2001). *Grate Sipermarrese ne Shqiper*. Series on Women’s Entrepreneurship Development and Gender in Enterprises — WEDGE. Accessed on 01-09-2007.
- Boushey, H. (2010). *Families can't afford the Gender Wage Gap*. Accessed on 28-10-2010 from American Progress: http://www.americanprogress.org/issues/2010/04/equal_pay.html.
- Bruni, A., Gheraldi, S., & Poggio, B. (2005). *Gender and Entrepreneurship: An Ethnographical Approach*. U.S.A: Routledge.
- Butler, E.J.(2003). *Women Entrepreneurs*. USA: Information Age Publishing Inc.
- Buttner, E. H. & Moore, D. P. (1997). Women’s Organizational Exodus to Entrepreneurship: Self-reported Motivations and Correlates with Success. *Journal of Small Business Management* 35, 34–47.
- CIA. (2013). *The World Fact Book*. Accessed on 30-08-2013 from Central Intelligence Agency: <https://www.cia.gov/library/publications/the-world-factbook/geos/al.html>.
- Fay, M & Williams, L. (1993). Gender Bias and the Availability of Business Loan, in: *Journal of Business Venturing*. Elsevier.
- Fullani, A. (1999). *Women’s Legal Rights*. Tirane, Albania.
- Gehrels, S. A. (2012). *How the Contextual Characteristics of Successful Small Upper Segment Culinary Restaurant Owners potentially can be used in Hospitality Management Education*. EdD Thesis. Stirling: University of Stirling.

- Gehrels, S.A. (2007). How Hospitality Industry Managers' Characteristics Could Influence Hospitality Management Curricula. in: *Electronic Journal of Business Research Methods Volume 5 Issue 2 2007* pp. 37-48.
- Grant Thornton. (2009). *Global Combined Revenues*. Accessed on 14-11-2010 from Grant Thornton: http://www.gti.org/Press-room/Grant_Thornton_International_global_revenues_2009.asp.
- Hafizi, M. (2002). *Female Entrepreneurship in Republic of Albania*. International Symposium on Learning Management and Technology Development in the Information and Internet Age. Accessed on 5-04-2007.
- Hisrich, R.D. & C.G. Brush (1983). The Woman Entrepreneur: Implications of Family, Educational, and Occupational Experience. in: *Frontiers in Entrepreneurship Research*. pp. 255-270. Wellesley: Babson College.
- INSTAT, (2005). *Men and Women in Albania*. www.instat.gov.al. Accessed on 10-10-2007.
- Iverson, K. (1999). *Cracks in the Glass Ceiling?* Accessed on 20-09-2010 from Chrie; International Council on Hotel and Restaurant: <http://jht.sagepub.com/content/23/1/4>.
- Janssen, J. (2013). Albania: Unexpectedly Open. *De Telegraaf Reiskrant*, p. 11.
- Keller, P. (2005). Global Tourism Growth: a Challenge for SMEs. in: *Opening Session, Conference on Global Tourism 2005*. Gwangju: OECD.
- Kotter, J. P. (1990). Wat Leiders echt doen. In R. Harvard Business, *Leiderschap*. pp. 27-43. Zaltbommel: Thema.
- Lambert, T. (2012). *Women in the 20th Century*. Accessed on 09-09-2012 from local histories: www.localhistories.org/women20th.html.
- Lang, I. (2010). *Have Women Shattered the Glass Ceiling?* Accessed on 28-10-2010. from USA today: http://www.usatoday.com/news/opinion/forum/2010-04-15-column15_ST1_N.htm.
- McClure, R. (2009). *How Male and Female Roles are Changing in Relationships*. Accessed on 21-11-2010 from Helium: <http://www.helium.com/items/1376114-changes-in-relationship-roles-between-men-and-women>.
- Ministry of Work and Social Affairs (2005). *Perkatesia Gjinore dhe Punesimi ne Shqiperi*, UNDP, Albania, www.undp.gov.al, Accessed on 01-11-2007.
- Monaci, M. (1998). *L'impreditorialita Femminile: Tendenze, Teorie, Interventi*. Internal Working Paper, ISTUD, Accessed on 25-05-2007.
- OECD (2004). Promoting Entrepreneurship and Innovative SMEs in a Global Economy. Towards a more Responsible and Inclusive Globalisation. in: *The OECD Ministerial Conference on SMEs, Istanbul 2004*.
- OECD (2012). Gender Equality in Education, Employment and Entrepreneurship. *Final Report to the Meeting of the OECD Council at Ministerial Level 2012* Paris, 23-24 May 2012.
- Potter, W. (2010). *The Gender Wage Gap: 2009*. Accessed on 28-10-2010 from Institute for Women's policy research: www.iwpr.org/pdf/C350.pdf.
- Small Business Service (2003). *A Strategic Framework for Women's Enterprise*. Accessed on 15-07-2013. from Prowess 2.0 Women in Business: <http://www.sbs.gov.uk>.
- Tijdens, K. V. (2012). *Frozen in Time: Gender Pay Gap unchanged for 10 years*. Brussels: ITUC.
- UN Women Jobs. (2013). *UN Women: International Consultant for Drafting an Action Plan for Women Entrepreneurs in Albania*. Geneva: United Nations Development Programme.

Vanovac, N. (2010, April 14). *Why Women Earn Less than Man*. Accessed on 28-10-2010 from Australian centre magazine for independant journalistic: www.reportaeonline.com.
Zickel, R. & Iwaskiw R. W. (Eds) (1994). *Albania Country Study*. 2nd edition, Headquarters. Department of the Army. Library of Congress, US.

Small Business Use of Management Accounting Systems

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Abstract

Management accounting systems facilitate decision making for stronger business performance. This research provided the first known empirical evidence on use and outcomes of a broad range of management accounting system elements in small U.S. businesses. Data gathered from a sample of 55 micro-SMEs revealed that small businesses use many elements of management accounting systems and that more frequent use of management accounting systems has significant effects on return on investment. Implications of the results for both practice and future research are discussed.

The smallest of small and medium-sized enterprises (SMEs) – micro enterprises (or microbusinesses) account for a relatively small percent of business receipts in the U.S. (U.S. Census, 2012) but they constitute the vast majority of all businesses (97.7%) (SBA Office of Advocacy, 2012; U.S. Census, 2012) and employ approximately 42 million workers with an annual payroll approaching \$300 billion (U.S. Census, 2012), depending on how broadly defined. These micro enterprises constitute an important segment of the U.S. economy.

Management accounting systems support business performance by facilitating decision making. While larger firms routinely use such mechanisms to enhance performance, there is little known evidence on the use and effects of management accounting systems in micro enterprises (micro-SMEs) in the U.S. (see, for example, NFIB, 2007; Wijewardena, De Zoysa, Fonseka and Perera, 2004). There is surprisingly little information given standard business advice exhorting the importance of planning and control functions (U.S. Small Business Administration, 2013) such as establishing a budget, computing breakeven to determine pricing, and comparing actual to budgeted expenses. For example, breakeven analysis, computation of the point where revenues equal costs (Garrison, Noreen and Brewer, 2012), is viewed as a “key part” of a business plan that provides an “important reality check” (Baron and Shane, 2008, p. 217). Attention to financial considerations is said to be integral to small business success (d’Amboise and Muldowney, 1988) but we don’t know the extent to which elements of management accounting systems are employed in micro-SMEs, much less their relationship to performance.

This research seeks to address this gap in our understanding of micro-SME management. Information on the use and outcomes of management accounting systems in micro-SMEs will extend understanding of the management of very small businesses, as distinct from larger SMEs and large firms. Acknowledgement of these businesses as a separate category (e.g., European Commission, 2005) denotes not only their importance to the economy but also their distinctive characteristics and potentially different management requirements and problems. Information from this research can help small business owners target their efforts to achieve gains by incorporating practices that lead to successful outcomes. Small business counselors can use this information as well to pinpoint important areas for advice and training.

This study provides evidence on the following research questions:

- 1) Do micro-SMEs use management accounting systems?
- 2) If micro-SMEs do use management accounting systems, then which elements of management accounting systems do they use?
- 3) Does the use of management accounting systems affect micro-SME performance?

Review of the Literature

Management Accounting Systems

Management accounting systems are a subsystem within management control systems (Davila and Foster, 2005). Management control systems are “recurring and formalized set of institutionalized protocols, routines or information gathering mechanisms designed to assist managers to make decision or fulfill their responsibilities” (Davila and Foster, 2005). These include “procedures and routines used by managers to establish and maintain patterns of organizational activities” (Simons, 1995).

Management accounting systems are used to reduce agency costs and to facilitate decision making (Baiman, 1982). Agency costs occur when there is a separation of owners and managers. In micro-SMEs, the separation of ownership and management is minimal. In fact, most micro-SMEs are operated by the owners themselves (U.S. Census, 2012). Therefore, the primary function of management accounting systems in micro-SMEs is to facilitate decision making.

Two major categories of business decisions are planning and control. Planning is the process of “selecting organization goals, predicting results under various alternative ways of achieving those goals, deciding how to attain the desired goals, and communicating these goals and how to attain them to the entire organization” (Horngren et. al., 2012) Control is “taking actions that implement the planning decisions, deciding how to evaluate performance, and providing feedback and learning to help future decision making” (Horngren et al., 2012). Management accounting systems for planning include budgets, breakeven analysis, and use of budgets to set performance targets (Garrison et al., 2012). Control (management accounting) systems involve evaluating performance relative to targets, computing differences between actual and budget amounts, computing product or service profitability, and taking remedial actions if performance is unfavorable (Garrison et al., 2012).

Management accounting systems are adopted to assist organizations to improve their performance. This includes the ability to deal with increasing complexity both internally and externally as the business grows and to deal with a variety of problems and opportunities. There is evidence in large start up SMEs (50-150 employees) that the adoption and use of elements of a management accounting system varies by the complexity of the management accounting system. Management accounting system elements like calculation of customer profitability, assessment of customer acquisition costs, and product profitability analysis that are complex are adopted later in time relative to less complex management accounting system elements like operating budgets or comparing financial performance against targets. The latter are adopted and used sooner relative to startup in these larger SMEs (Davila and Foster, 2007). The adoption and use of MAS has been shown to have positive effects on performance (Lee, Fin and Cobia, 2013; Davila, Foster and Jia, 2010).

Micro Enterprise

Like the term “small business”, there is little agreement on the definition of a micro enterprise. The U.S. Small Business Administration offers no clear guidelines (e.g., SBA Office of Advocacy, 2012) and no common definition exists. One widely employed definition in the U.S. is a business with five or fewer employees (e.g., Association for Enterprise Opportunity, 2013). Yet a recent opinion poll conducted jointly by the Association for Enterprise Opportunity, the National Association for the Self Employed, and Small Business Majority (Opinion Poll, 2012) viewed a micro business as having 10 employees or fewer, the definition adopted by the European Union in 2005 (European Commission, 2005). Other definitions are used as well; for example, the State of California defines a microbusiness as one having gross annual receipts less than \$3.5 million or a manufacturer with 25 or fewer employees (California Department of General Services, 2013).

While there is little agreement on the specific definition, there are data that highlight the importance of this segment of all small businesses to the entire U.S. economy. Micro-SMEs with solo owner/operators and up to 20 employees make up 97.67% of the total number of businesses in the U.S. (SBA Office of Advocacy, 2012; U.S. Census, 2012). Nonemployer businesses, those without employees, alone constitute 78.5% of small businesses (SBA Office of Advocacy, 2012). These businesses employ approximately 42 million workers with an annual payroll approaching \$300 billion (U.S. Census, 2012).

Management Accounting Systems and Micro Enterprise

There is a dearth of research on the use and effects of management accounting systems in small and micro-SMEs. Several authors have noted the lack of empirical evidence on financial accounting systems and reports in small and micro-SMEs (McMahon, 2003; Walker and Brown, 2004; Dyt and Halabi, 2007) and a similar situation exists with respect to management accounting systems and reports. Yet such systems are important, with implications for performance. For example, in a study of predominantly micro-SMEs in Kenya, both financial management and budgeting, a subset of the management accounting system, were identified as major problems that suggested a need for greater training for business owners in these areas (Mwobobia, 2013). The recent U.S. recession led to lost sales for many SMEs (Dennis, 2010; National Small Business Association, 2010) and micro-SMEs may be those affected most acutely by such business cycles due to their size and access to available funding (Miller, Gratton, Reynolds, Shah and Zeidler, 2011). Business skills, presumed to include accounting, and the experience of the owner appear to have significant effects on micro and small businesses' performance (Tundui and Tundui, 2012).

There is some indication that micro-SMEs may not make extensive use of management accounting systems, though available evidence is far from complete. Fifty-eight percent of micro-SMEs were found not to use a budget, a single element of a management accounting system (NFIB, 2007). Based on the apparent deficit of information about micro-SME use of management accounting systems, we posed these two research questions:

- 1) Do micro-SMEs use management accounting systems?
- 2) If micro-SMEs do use management accounting systems, then which elements of management accounting systems do they use?

Similarly, there is limited evidence that the use of management accounting systems in the form of a budget and comparing actual to budgeted amounts has positive effects on small business performance. Wijewardena et al. (2004) and Wijewardena and De Zoysa (2001) found that the use of detailed budgets over simple budgets or not using budgets in SMEs (not exclusively micro) was associated with increased performance in the form of sales growth. SME's that made many comparisons between actual and budgeted amounts had higher levels of sales growth over SMEs that made few or no comparisons between actual and budgeted amounts (Wijewardena et al., 2004; Wijewardena and De Zoysa, 2001). This evidence of the performance effects in SMEs from the use of management accounting systems to facilitate planning and control decision making is consistent with the general expectation that the use of management accounting systems will lead to better performance by micro-SMEs. Based on this prior evidence, our third research question was:

3) Does the use of management accounting systems affect micro-SME performance?

Following from this literature, the hypothesis that we employed to examine our third research question was: ***More frequent use of management accounting system elements will be associated with higher levels of micro-SME performance.***

Methods

Sample and Data Collection

A convenience sample of small businesses was provided by the statewide Small Business Development Center (SBDC) in a state in the northeast United States. The 507 small businesses were clients of the SBDC during the prior two years.

A mail questionnaire collected the data via three timed mailings conducted according to the survey mailing methodology recommended by Dillman, Smyth and Christian (2008). Potential respondents received a letter from the state director of the SBDC letting them know that they would be receiving a survey in a few days. The questionnaire was mailed two days later with two cover letters, one from the principal investigator and one from the state director of the SBDC. Two weeks later, a second mailing with replacement surveys was mailed to those who did not respond to the initial mailing. One hundred and four surveys were returned for a response rate of 20.5%. For purposes of this study, micro-SMEs were defined as those businesses having 20 or fewer employees. After selecting micro-SMEs with no more than 20 employees and those that had been in business for a minimum of one year, the usable sample consisted of 55 businesses.

Respondents' reported business types included retail (32%); arts, entertainment, and recreation (22%); wholesale (16%); restaurant (10%); agriculture, forestry, hunting, and fishing (9%); tourism-related (7%); and lodging (4%). A third (33%) reported no employees aside from the owner. A somewhat larger number of respondents (41%) had two to five employees, (16%) had six to ten employees, (7%) had 11-15 employees, and even fewer (3%) had as many as 16-20 employees. Respondents' average annual sales ranged from \$300,000 to \$349,000.

Measures and Analysis

A questionnaire instrument was developed to measure the use of management accounting systems. Items for the questionnaire were based on Davila and Foster (2005). The frequency of the use of management accounting systems was measured by seven point Likert-type scales. The stem was worded, “For each of the management accounting systems below, please use the following categories to indicate the frequency it is used in your business.” Anchors were labeled as follows: 1 = “Rarely or Never”, 2 = “Annually”, 3 = “Semi-annually”, 4 = “Quarterly”, 5 = “Monthly”, 6 = “Weekly”, 7 = “Daily”. The items were: “Prepare an operating budget”, “Compare actual performance to budgeted”, “Compute breakeven”, “Compute product/service profitability”, “Assess customer profitability”, “Assess customer acquisition costs”, “Use operating budget to set performance targets”, “Evaluate performance relative to your target”, “Compute differences between actual and budgeted amounts”, and “Take remedial actions if actual performance in unfavorable relative to budgeted performance”.

Additional measures were taken of total sales revenue, total asset balance for the last fiscal year, and business income for the last fiscal year. These measures employed ranges in order to encourage disclosure and potentially avoid missing data given the potentially sensitive nature of the financial information requested. The ranges spanned \$0- \$9,999 to \$5,000,000 or greater. The variable Return on Investment (ROI) was computed with data from the variables Business Income, Total Sales Revenue, and Total Asset Balance.

Data were analyzed using SPSS. In the next section of this paper, results of the analysis are presented.

Results

The first research question guiding this study asked: Do micro-SMEs use management accounting systems? As shown in Table 1, t-tests indicated that the means all of the measures of management accounting systems elements were significantly different from one.

Table 1. Use of the Elements of Management Accounting Systems (N=55).

Variable	Mean	t	p
Compute product/service profitability	3.84	11.23	.000
Take remedial actions if actual performance in unfavorable relative to budgeted performance	3.66	9.73	.000
Assess customer profitability	3.51	9.93	.000
Compare actual performance to budgeted	3.47	10.05	.000
Compute differences between actual and budgeted amounts	3.24	8.33	.000
Evaluate performance relative to your target	3.16	8.80	.000
Compute breakeven	3.00	8.84	.000
Prepare operating budget	2.96	8.16	.000
Use operating budget to set performance targets	2.73	6.81	.000
Assess customer acquisition costs	2.57	7.14	.000

The ranked order of the means ranged from a high of 3.84 (Computing profit and service profitability) to the lowest at 2.57 (Assessing customer acquisition costs). This ranking addresses the second research question: If micro-SMEs do use management accounting systems, then which elements of management accounting systems do they use?

From the most frequently used to the least frequently used elements of management accounting systems, respondents reported: Compute product/service profitability, Take remedial actions if actual performance is unfavorable relative to budgeted performance, Assess customer profitability, Compare actual performance to budgeted, Compute differences between actual and budgeted amounts, Evaluate performance relative to your target, Compute breakeven, Prepare an operating budget, Use operating budget to set performance targets, and Assess customer acquisition costs.

The third research question was: Does the use of management accounting systems affect micro-SME performance? The hypothesis examined was: *More frequent use of management accounting system elements will be associated with higher levels of micro-SME performance.* Stepwise regression analysis was used to investigate the effects of management accounting systems on micro-SME performance.

Regression analysis was run with management accounting system elements as the independent variables and ROI as the dependent variable. The regression analysis resulted in a series of three regression models. The first regression model was significant ($F = 5.02$, $p = .03$) with an adjusted R^2 of .07 (see Table 2).

Table 2

Regression Analysis: First Model (N=55)

Dependent Variable: ROI

Independent Variables: Elements of Management Accounting Systems

Independent Variables	Regression Coefficient	t for Variable	F for Equation	Adjusted R^2	Sign F Change
Compute product/service profitability	.287	2.24**	5.02**	.07	.03

*** $p \leq .01$ ** $p \leq .05$ * $p \leq .10$

The coefficient for the variable Compute product/service profitability was significant and positive ($b = .287$, $t = 2.24$, $p = .03$). The second model was significant ($F = 5.35$, $p = .00$) and had a significant F change of .03 with an adjusted R^2 of .13 (see Table 3).

Table 3

Regression Analysis: Second Model (N=55)

Dependent Variable: ROI

Independent Variables: Elements of Management Accounting Systems

Independent Variables	Regression Coefficient	t for Variable	F for Equation	Adjusted R ²	Sign F Change
Compute product/service profitability	.387	.452***	5.35***	.13	.03
Assess customer acquisition costs	-.329	-.3.02**			

*** $p \leq .01$ ** $p \leq .05$ * $p \leq .10$

The coefficient for the variable Compute product/service profitability was significant and positive ($b = .452$, $t = 3.17$, $p = .00$). The coefficient for the variable Assess customer acquisition cost was significant and negative ($b = -.329$, $t = -2.30$, $p = .03$).

The final regression model was significant ($F = 5.18$, $p = .00$) and had a significant F change of .05 with an adjusted R² of .18 (see Table 4).

Table 4

Regression Analysis: Final Model (N=55)

Dependent Variable: ROI

Independent Variables: Elements of Management Accounting Systems

Independent Variables	Regression Coefficient	t for Variable	F for Equation	Adjusted R ²	Sign F Change
Compute product/service profitability	.269	-1.63*	5.17***	.18	.05
Assess customer acquisition costs	-.465	-.3.02***			
Assess customer profitability	.371	.2.05**			

*** $p \leq .01$ ** $p \leq .05$ * $p \leq .10$

The coefficient for the variable Compute product/service profitability was marginally significant and positive ($b = .269$, $t = 1.63$, $p = .10$). The coefficient for the variable Assess customer acquisition cost was significant and negative ($b = -.465$, $t = -3.02$, $p = .00$). The coefficient for the variable Assess customer profitability cost was significant and positive ($b = .371$, $t = 2.05$, $p = .05$).

Discussion

The results of this study show that micro-SMEs use management accounting systems to facilitate decision making for both planning and control purposes. Specifically, the business owners in our sample reported that they compute product/service profitability, compare actual performance to budgeted performance, assess customer profitability, take remedial actions if actual business performance is unfavorable relative to budgeted performance, compute differences between actual and budgeted amounts, evaluate performance relative to a set target, prepare an operating budget, compute breakeven, use an operating budget to set performance targets, and assess customer acquisition costs.

Our results provide the first known evidence on the relationship between management accounting system use and micro-SME performance. Consistent with expectations (Wijewardena et al., 2004; Wijewardena and De Zoysa, 2001), the results provide evidence which supports the hypothesis that more frequent use of management accounting system elements will be associated with higher levels of micro-SME performance.

Micro-SMEs' use of the management accounting system elements that include computing product/service profitability, computing customer profitability, and assessing customer acquisition costs affect ROI. The observed results provide evidence that those micro-SMEs that more frequently compute product/service profitability and those that more frequently assess customer profitability have higher ROI. Implications of these actions for micro-SMEs are discussed further below.

Findings also suggest that micro-SMEs that more frequently assess customer acquisition costs have lower ROI. This may seem contradictory to the expectation that MAS have positive effects on performance (Wijewardena et al., 2004; Wijewardena and De Zoysa, 2001) but taken in context with the positive effects of the computation of product/service and customer profitability, it appears logical. Frequent assessment of customer acquisition costs may lead to micro-SME business owners taking actions to reduce these costs, e.g., by reducing targeted advertising. If more profitable customers have higher acquisition costs, then more frequent actions to reduce customer acquisition costs could result in acquiring less profitable customers and result in a lower ROI. Conversely and ironically, it is possible that those micro-SMEs that do not assess customer acquisition costs as frequently may end up acquiring (and retaining) higher profitability customers resulting in a higher ROI. The importance of business skills would seem to be relevant here (Tundui and Tundui, 2012) in helping micro-SME owners understand the long run effects of actions taken in response to data on customer acquisition costs.

Implications

This study has implications for practice. It offers clear evidence that management accounting systems can lead to higher performance even among very small businesses. This should encourage micro-SME owners to become more aware of and institute commonsense management accounting systems that can help them make better decisions.

Information about the profitability of products and services allows for better decisions about the product/service mix that a micro-SME should carry (Garrison et al., 2012). Similarly, micro-SME assessment of the profitability of individual customers and customer segments can allow them to adjust the product/service mix to better serve more potentially profitable segments, increase the profitability of customers by providing better product features and/or customer service, or increase the profitability of customers by more deliberately and strategically managing either costs or revenues (Kaplan and Narayanan, 2001).

Policy makers and providers of training and advice to micro-SMEs can use the evidence provided by this research to add to or reinforce their programs for micro-SME owners. These small businesses need to begin or further develop their efforts at using management accounting systems. They should be trained in the use of product/service and customer profitability

techniques. In particular, they should be assisted in developing a full understanding of customer acquisition cost assessment, in order to understand its full ramifications and to learn to develop a sensible frequency with which to employ it based on their products and services, competitors, etc. Using the assessment of customer profitability to better understand and profile the characteristics of profitable customers would be useful to parse the information and potential actions to be taken from assessing customer acquisition costs.

Finally, this study has implications for scholars interested in developing a better understanding of micro-SME startup and management. Future research might more closely examine the sequence of adoption of management accounting systems by micro-SMEs. Which elements are adopted first and what events- external or internal - precipitate the adoption and use of a particular element of management accounting systems will extend our understanding of these issues. Given the small sample size of this study, future research could examine a larger sample and businesses in diverse geographic locations. Research might also examine the influence of scarcity of resources (e.g., time, money) on facilitating or inhibiting the adoption and use of management accounting systems by a micro-SME and the time lags with respect to effects on the business from the use of these systems.

Conclusions

This paper has provided the first known detailed information on the use of management accounting systems by a sample of small U.S. businesses. Results show that these micro-SMEs use elements of management accounting systems for planning and control purposes, ranging from computing product/service profitability to using an operating budget to assessing customer acquisition costs. Further, findings of this study supported the hypothesis that more frequent use of management accounting system elements will be associated with higher levels of micro-SME performance, providing the first known empirical evidence on the relationship between management accounting system use and micro-SME performance.

Evidence from this study offers important information to guide the actions of small business owners who frequently must make hard choices about the allocation of their time and money. This evidence also benefits policy-makers and advisors who now have better information to target training in the areas suggested here as important to micro-SME performance.

References

- Association for Enterprise Opportunity. (2013). One in Three: The Power of One Business. Washington, DC. Retrieved on September 19, 2013 from:
<http://www.aeoworks.org/index.php/site/page/category/research/>
- Baiman, S. (1982). Agency Research in Management Accounting: A Survey. *Journal of Accounting Literature* (Spring), 154-213.
- Baron, Robert A. & Scott A. Shane. (2008). *Entrepreneurship: A Process Perspective* (2nd ed.). Mason, OH: South-Western Cengage Learning.
- California Department of General Services. (2013). Eligibility Requirements. Retrieved from:
<http://www.dgs.ca.gov/pd/Programs/OSDS/SBEligibilityBenefits.aspx> on September 19, 2013.
- d'Amboise, G. & Muldowney, M. (1988). Management Theory for Small Business: Attempts and Requirements, *Academy of Management Review*, Vol. 13, No. 2, pp. 226-240.

- Davila, A., Foster, G., & Jia, N. (2010). Building Sustainable High-Growth Startup Companies: Management Systems as an Accelerator. *California Management Review*, (May), pp.79-105.
- Davila, A. & G. Foster. (2007). Management Control Systems in Early-Stage/Startup Companies. *The Accounting Review*, Vol. 82, No. 4, pp. 907-937.
- Davila, A. & G. Foster. (2005). Management Accounting Systems Adoptions Decisions: Evidence and Performance Implications from Early-Stage/Startup Companies. *The Accounting Review*, (80) 4, 1039-1068.
- Dennis, W. (2010). Small Business Credit in a Deep Recession. Washington, DC: NFIB Research Foundation.
- Dillman, D. A. Smyth, J.D., & Christian L.M. (2008). *Internet, Mail, and Mixed-Mode Surveys: The Tailored Design Method* (3rd edition). New York: Wiley.
- Dyt, R. & Halabi, A.K. (2007). Empirical Evidence Examining the Accounting Information Systems and Accounting Reports of Small and Micro Business in Australia, *Small Enterprise Research*, (15) 2.
- European Commission. (2005). The New SME Definition: User Guide and Model Declaration. Publications Office, ISBN: 92-894-7909-4. Retrieved from: ec.europa.eu/.../files/sme_definition/sme_user_guide_en.pdf on September 18, 2013.
- Garrison R.H., Noreen, E.W., & Brewer P.C. (2012). *Managerial Accounting*, 14th Ed. McGraw Hill Irwin. New York NY.
- Hornigren C. T., Datar, S.M., & Rajan, M. (2012). *Cost Accounting: A Managerial Emphasis*, 14th Ed. Prentice Hall, Upper saddle River, New Jersey.
- Kaplan, R. and Narayanan V.G. (2001). Measuring and Managing Customer Profitability. *Journal of Cost Management* (Fall), 5 - 15
- Lee, M., Fin, S. & Cobia, S.R. (2013). Management Accounting Systems Support Startup Business Growth. *Management Accounting Quarterly*, (14) 3,1-17.
- McMahon, R.G.P. (2003). An Exploratory Study of Under- and Over-investment amongst Manufacturing SMEs from Australia's Business Longitudinal Survey, *International Small Business Journal*, (21), 29-53.
- Miller, R-A., Gratton, H., Reynolds, L., Shah, D. & Zeidler, K. (2011). Feature Article: Microenterprise Development: A Primer. Federal Deposit Insurance Corporation (FDIC). Retrieved from: http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=8&ved=0CFYQFjAH&url=http%3A%2F%2Fwww.fdic.gov%2Fbank%2Fanalytical%2Fquarterly%2F2011_vol5_1%2FFDIC_Vol5No1_Article_1.pdf&ei=5IhIUou2Bcfh4AP79oCQCw&usq=AFQjCNEfj5_dDcMH28tfVok3DozjW28YtaQ&sig2=nOsj on September 19, 2013.
- Mwobobia, F. M. (2013). The Role of Banks in Empowering Women Entrepreneurs in Small and Micro Enterprises (SMEs) in Kenya: A Case of Cooperative Bank of Kenya, *International Journal of Business Administration*, Vol. 4 No. 3.
- NFIB. (2007). NFIB National Small Business Poll: The Budget, NFIB Research Foundation, (7) 4.
- National Small Business Association. (2010). 2009 NSBA Economic Report. Posted January 20, 2010. Retrieved from <http://www.nsba.biz/?p=1076> on September 29, 2013.
- Opinion Poll. (2012). The Role of Micro Businesses in Our Economy, October 9. Washington, DC: Association for Enterprise Opportunity, National Association for the Self-Employed, and Small Business Majority. Retrieved from:

- http://www.aeoworks.org/index.php/site/page/category/opinion_poll_-the_role_of_micro_businesses_in_our_economy on September 19, 2013.
- SBA Office of Advocacy. (2012). Frequently Asked Questions about Small Business, September, p. 1. Retrieved from: <http://www.sba.gov/advocacy> on September 19, 2013.
- Simons, R. (1995). *Levers of Control: How Managers Use Innovative Control Systems to Drive Strategic Renewal*. Boston MA., Harvard Business School Press.
- Tundui, C. & Tundui, H. (2012). Survival, Growth Strategies and Performance of Women Owned Micro and Small Businesses in Tanzania, *International Journal of Business and Management*, (7) 8, 143-155.
- U.S. Census. (2012). Statistics about Business Size (including Small Business) from the U.S. Census Bureau. Retrieved from: <http://www.census.gov/econ/smallbus.html> on September 18, 2013.
- U.S. Small Business Administration. (2013). Create Your Business Plan. Retrieved from: <http://www.sba.gov/content/financials> on September 18, 2013.
- Walker, E. & Brown, A. (2004). What Success Factors are Important to Small Business Owners. *International Small Business Journal*, (22), 577-594.
- Wijewardena, H. De Zoysa, A., Fonseka, T. & Perera, B. (2004). The Impact of Planning and Control Sophistication on Performance of Small and Medium-Sized Enterprises: Evidence from Sri Lanka. *Journal of Small Business Management*, (42) 2, 209-217.
- Wijewardena, H. and De Zoysa, A. (2001). The Impact of Financial Planning and Control on Performance of SMEs in Australia. *Journal of Enterprising Culture* (92) 4, 353-365.

Dissecting Kickstarter Failures: Lessons learned from unfunded projects

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Abstract

Kickstarter is a web-based crowdfunding platform which began operations in 2009. Since that time, small businesses and prospective entrepreneurs have successfully funded 50,000 projects raising in excess of \$688 million in capital. With a successful funding rate around 40% and individual million dollar projects funding, popular and academic media is fixated on the successes of Kickstarter. Little work, by comparison, is done examining the failures in the Kickstarter system. This paper details five technology projects which listed on Kickstarter and failed to raise their funding goals. We discuss the details of each project, the characteristics of the failure, and identify how small business research could inform and potentially salvage these failed projects.

Introduction

Ordanini, Miceli, Pizzetti and Parasuraman (2011) refer to crowdfunding as “a collective effort by consumers who network and pool their money together, usually via the internet, in order to invest in and support efforts initiated by other people or organizations.” Of the myriad web-based, crowdsourcing entities, Kickstarter has emerged as a prominent and powerful force. Formed in 2009 and initially focused on the creative and performing arts, Kickstarter has led to approximately 50,000 projects receiving some \$688mm in capital.

Crowdfunding appears to be a powerful complement to institutional venture capital channels. Indeed, Greenwald (2012) estimates that Kickstarter generated roughly 10% of angel capital for the year 2011. For some entrepreneurs, Kickstarter offers an alternative channel for pursuit after institutional channels fail (Gobble, 2012). In other cases, a successful Kickstarter campaign provides a proof of concept useful in attracting future venture capital participation (Arizona, 2013).

Research interest in Crowdfunding, and Kickstarter by extension, is growing rapidly. At this time, though, the primary research tends to be descriptive focusing on detailing the phenomenon (Castelluccion, 2012) or as part of implications and evaluation of the Jumpstart our Business Startup (JOBS) Act (Williamson, 2013). To the extent that studies address the success or failure of crowd funding efforts, they largely focus on the process from the perspective of the funder (Burtch, Ghose, & Wattal, 2013; Franke, Keinz, & Klausberger, 2013), not the solicitor.

Popular media and the business press offer more insights into the successes and failures of specific crowd funding ventures. Stories of the successes and failures of Kickstarter projects (McCracken, 2012), backlash against these successes and failures (Jefferson-Graham, T, N.D.), issues related to potentially fraudulent promotions (Grimaldi, 2013), and questions pertaining to rights and responsibilities when a funded Kickstarter fails (Kohler, 2013) are increasingly prevalent in the media.

We lack an empirical analysis of the drivers of Kickstarter failures and successes. Certainly, Kickstarter themselves provides data driven information in their “Kickstarter School

(Kickstarter, N.D.).” They offer important insights into designing, positioning, and promoting a Kickstarter campaign. Similarly, a cottage industry in both the popular media (Conner, 2013) and within the blogosphere (Erickson, 2012) offers suggestions for making a Kickstarter work.

This paper begins the process of identifying practices important in the success or failure of a Kickstarter effort. Specifically, the focus of this paper is on failed Kickstarter promotions. We detail several Kickstarter projects that failed to receive their targeted funding. Each project, and its promotion, is described. In doing so, we seek to identify common patterns in these failed projects.

What is Kickstarter?

Kickstarter is a web based company that provides for the hosting and intermediation of crowdfunding efforts. Many existing small businesses and perspective entrepreneurs use Kickstarter as their crowdfunding promotions. Kickstarter works off a fundable project model, so the businesses and entrepreneurs interested in using Kickstarter must state their funding needs in the form of a project.

In the creation of a Kickstarter project, the small business must detail the use of funds, provide information on the current status of the project for which funding is solicited, and offer incentives for contribution to the Kickstarter project. Kickstarter is not a channel for equity or debt financing, contributions to a Kickstarter campaign may therefore only be incented through thanks, recognition, or exchange of goods and services. In practice, many Kickstarter projects include a pre-purchase option, often at a discount from anticipated retail price, as an incentive to contribute.

Once created and hosted with Kickstarter, this project gains a funding window. Typically this window is thirty-days in length, although sixty-day promotions are also offered. Kickstarter follows an all or nothing model. Firms that fail to raise 100% of their funding request receive nothing. Firms that meet or exceed their funding target receive the balance of the contributions, less hosting and transaction costs leveraged by Kickstarter. For individual patrons supporting Kickstarter projects, funds are not charged until a promotion has successfully completed. Kickstarter works with Amazon.com for billing, while they place a hold on funds at the time of pledge, funds are only charged if the project itself succeeds.

Throughout the course of the funding period, Kickstarter offers a number of mechanisms to promote the campaign. Social media is easily integrated and reached through the promotion hosting. Additionally, the funding seeker has the ability to post updates directly to the project homepage and they can also email people who have already contributed. Many web-based magazines and blogs routinely follow Kickstarter and discuss “hot projects” and Kickstarter itself provides quick links for people to find hot projects, new projects, and projects coming to the end of their funding window.

Roughly 40% of Kickstarter projects meet their funding goals, although that varies noticeably by project category. Although today’s Kickstarter categories include technology, Kickstarter initially formed as a funding vehicle to support the creative arts in New York City. Staying true

to these origins, the creative arts seem to enjoy a supernormal project approval rate with Theater and Dance projects each enjoying in excess of 60% successful funding rates.

Most Kickstarter projects have small funding goals with the typical successful Kickstarter raising between \$1000 and \$10,000. The size of projects being funded through Kickstarter has been rising, though. Through 2013, approximately fifty projects have raised in excess of \$1 million, with nearly another one thousand projects raising in excess of \$100,000.

Currently, these large scale projects have come from the more high-tech categories in Kickstarter. Video Games and technology (hardware and software) make up the bulk of the \$1 million fundings. These categories along with Film and Video and Design also make up the bulk of the \$100,000 fundings.

In general, the projects receiving in excess of \$1 million did not set out seeking such a large sum. As an example, the current technology fundraising leader, the “Form 1” 3D printer sought to raise \$100,000 when the project posted on September 26, 2012. Enthusiasm for a relatively inexpensive, desktop, 3D printer was impressive, though and this project created by MIT engineering students ultimately raised nearly \$3 million. On Table 1, we document the top five funded technology projects, as of September 2013. We include their initial targeted fund solicitation, actual funding, and number of backers.

Table 1: Characteristics of the top-five funded technology projects.

Project	Description	Sought	Received	Backers
Form 1	3D Printing	\$100,000	\$2,945,885	2,068
Oculus Rift	Virtual Reality	\$250,000	\$2,437,429	9,522
3Doodler	3D Printing	\$30,000	\$2,344,134	26,457
the Buccaneer	3D Printing	\$100,000	\$1,438,765	3,520
LIFX	WiFi lightbulb	\$100,000	\$1,314,542	9,236

Anatomy of a Kickstarter Failure

While some Kickstarter projects greatly exceed their targets, most successful Kickstarters reach their goal without much overage (Jeanne, 2013). Additionally, it appears that the projects that fail, typically fail big. Michael Wolf at Gigaom reports that the odds of a successful Kickstarter promotion succeed dramatically once a project passes the 20% funding level (Wolf, 2012).

The current analysis on Kickstarter projects, such as it is, emphasizes successful launches. This is understandably an important focus and it stands to reason that identifying what works is a key question in any business venture. Just as important, though, is the question of what doesn't work. While often the difference between does and doesn't is a matter of degree, where the does has more/less to the does not's less/more. But, this is not always the case, sometimes the drivers are themselves different. Having a complete focus on success is a good way to identify issues of degree, focusing on failure may help illuminate differences in kind.

For this project, we are examining failed Kickstarter promotions. Finding failed Kickstarters is challenging. While Kickstarter itself maintains a database of successes and failures and regularly updates their stats page, the actual failed Kickstarters are moved into a "no index" status and no longer update on Google searches. You can still find the failed project if you happen to know the name or if you get lucky with a keyword search on Kickstarter itself.

Fortunately, Kickspy.com has begun indexing failed Kickstarters. Our work began at Kickspy itself. We focused on technology projects, specifically apps for mobile devices, for this examination. Additionally, we only examine Kickstarter promotions that ran their full duration and failed to obtain their funding targets. We omitted projects that were cancelled by either Kickstarter or the entrepreneur.

rEvolve Disc Golf

This project sought \$1,000 in funding for ongoing development of an iPhone app. The app already exists, as freeware, and according to the developer has several thousand users. The purpose of the funding was for feature enhancement to the existing product. The funding solicitation period for this project was 7-Sep, 2013 to 21-Sep, 2013.

rEvolve Disc Golf is listed as an app for Disc Golf fans. The app provides a database of courses, including a map search for courses near your current location. Additionally, the app tracks tournaments and competitions in Disc Golf.

Joel Anders, the creator of the app, has a relatively large social network. His Kickstarter profile lists 391 Facebook friends. Joel has, himself, never backed a Kickstarter project. This was Joel's second attempt at funding rEvolve, the prior one also failed.

The Kickstarter promotion for rEvolve listed a single pledge level. For \$15, a contributor was offered a bumper sticker. As is common with Kickstarter promotions, Joel included a video for his promotion. The video is a walk-through on the installation and user guide for the app itself. While the video has high production value, it does not communicate the benefits of the product. It is a useful, and commendable, video for someone who has already downloaded the app, but it does not help one understand if they should download the app.

Over the course of the solicitation period, there are no apparent updates to the Kickstarter page. A Google search on the product name, restricted to the funding period, shows evidence of a viral promotion on Facebook. A number of Facebook pages affiliated with Disc Golf show a post which reads: "Howdy [name], Your Facebook page looks great! You should check out rEvolve Disc Golf (RDG) sometime ~ it's a free IOS Apple App that's disc golf related."

Ultimately, rEvolv raised \$25 from two backers, only a fraction of its modest target.

The Grafi App

This project sought \$5,000 in funding for initial development of an iPhone app. The product existed in a prototype stage and funding was sought for software development and deployment. The funding solicitation period was 4-September, 2013 to 18-September, 2013.

The Grafi App uses the mobile device to record handwriting. This handwriting can then be used in email, text messaging, Twitter, or other social media posts.

Michael Kourmoulis and Zappend, Inc. are listed as the developers for this project. Michael's Facebook profile lists 1221 followers. He has created one additional Kickstarter projects and backed five projects. The prior project, was also grafi related and also failed to reach its funding goals. The initial project raised \$7000 against a \$25,000 goal and that appears to have influenced the target for the second campaign.

The campaign launched with seven pledge reward levels. At \$5 you received a copy of the app before it went to the app store, 20 people backed the project at this level. Slightly higher levels allowed for multiple copies of the app. Higher levels of funding (\$25) allowed input in the development and testing stages. Even higher levels (\$100) included invitations to the launch party and participation in choosing default settings for the app.

The promotion included a video. The video explained the motivation for the product and also demonstrated the functionality of the app. Unfortunately, the production quality was fairly low and the audio in particular is not professional quality. The page also includes a video from a television segment on the "Talk of Alabama." The page itself has no other updates over the course of the promotion.

Google searches confined to the solicitation period identifies a handful of promotional hits. In particular, the Webutation website along with Kictraq (a site that tracks current Kickstarters) promoted the Kickstarter.

Ultimately, the promotion raised \$3000 of its \$5000 goal from 85 backers. On its second search for funding, the solicitation resulted in less than half the pledges than its initial attempt.

News.Sport.Weather

News.Sport.Weather is an aggregation app, for which the developers sought £7,000. This funding was to cover design and development costs. The solicitation period was from 28-Aug, 2013 to 27-Sep, 2013.

News.Sport.Weather aggregates news from a number of sources ranging including local, national, and global news. The stories are stripped to the bare-bones, graphic free, content and are then neatly displayed on phones and mobile devices. The app sorts the stories, by source, into the News, Sports, and Weather categories.

Anthony Anderso is listed as the project coordinator. Anthony also lists the organization "Bright and Shiny" as part of the developmental process and identifies himself as the Creative Director

for Bright and Shiny. Anthony does not provide a link to a Facebook profile. He has also not previously listed, nor backed, other Kickstarter projects.

The campaign launched with three pledge levels, a £1, thank you, a £10 offer to be part of the design process, and a £1,000 offer to have “much more say on the final product.” Their promotion indicates they have yet to decide on a price point for the application.

The promotion includes a video. The video has no sound, and no explanations, it simply walks through the use of the app. The video has moderate production value, with clear “shaky camera” effects in play. The video does a very good job of demonstrating the functions of the product. In their initial posting, they also indicate that the product is winning awards, specifically identifying its featured status at One Page Love. Nothing on the accompanying link indicates that an actual award was one, merely that the product exists or is in development.

A Google search confined to the solicitation period does not reveal any specific success in promotional efforts during this time. Indeed, the first few pages of the Google search actually depict local new channels from around the world who routinely describe their activities as “news, sports, weather” related.

Ultimately this project raised £22 from four backers.

JasperBox

The JasperBox is an app and hardware combined product for which the developers attempted to solicit \$32,000. This funding was intended to cover the post-prototype development and ultimate manufacturing of the JasperBox hardware and its accompanying software app. The product existed in prototype stage at the time of the solicitation. The solicitation period for this project was 28-Aug, 2013 to 27-Sep, 2013.

The JasperBox intends to bring Cloud functionality to starting an automobile. The product included a hardware piece that is installed into an automobile. Once installed, the JasperBox software app can be used to start the automobile from any location. Additionally, the developer suggests that one software app could be used to simultaneously start multiple JasperBox installed vehicles. The JasperBox allows a car to be started using the web app, a phone call, or an SMS text.

Adam Johnson is listed as the project manager for this promotion. Adam has backed three prior Kickstarters, but has never before listed a Kickstarter promotion. Adam’s profile also lists 99 Facebook friends.

The solicitation campaign included six pledge levels. These ranged from a \$5, “thank you” level pledge up through a \$500 pledge which included a JasperBox and a 5-year subscription. The pledge details list the retail price of the JasperBox at \$189, but they do not detail the purpose or value of the subscription anywhere in the promotion.

The JasperBox includes a video with high production values. The video suggests that the core customer is disappointed with the range of their automobile’s remote starting keys. They provide examples such as starting a car while on a train, plane, or bus.

A Google search restricted to the terms of the solicitation period evidences a reasonably successful promotional effort. Several web-magazines and blogs, such as Ayudos, Inagist, and 40billion, provided at least some visibility for the product.

Ultimately, the JasperBox raised \$830 from 13 backers against its \$32,000 goal

GearTag

GearTag is another software app with accompany hardware device combination. Its creators sought \$25,000 for final production design, packaging determination, and shipping. The prototype was listed as existing and working as intended in the initial posting. The solicitation period for this project was 28-Aug, 2013 to 27-Sep, 2013.

The GearTag seeks to help prevent lost items. The tag part of the GearTag references an orange (at least the prototype) clip-on device that can be attached to an object. The device communicates via BlueTooth and interacts with the software app. The Software App can prompt the tag to “beep” to assist with locating the tagged object.

Michael Crockett is listed as the project manager for the solicitation. This was his first Kickstarter promotion and he has previously backed no other Kickstarter projects. Michael’s Facebook profile lists 551 friends.

The promotion lists four pledge levels. These range from a \$20 pledge to pre-buy one GearTag and the app software to a \$100 pledge to get four GearTags. He used a “early bird special” at the \$20 level with a maximum of 100 possible pledges at that level, the early bird special was entirely filled. The promotion does not suggest a retail price for the product, but the next GearTag pledge level of \$30 is likely the price point for the product.

The video for the promotion has audio problems with the speaker’s voice tinny and distant. The video details the need for the product and discusses how the product works. Michael describes the purposes of funding as production related, but does not indicate any due diligence in the production phase. While he provides extensive documentation for prototyping, there is nothing that clearly indicates that the solicited funds will cover an initial production run and its ancillary costs.

A Google search restricted to the solicitation period indicates some success with promotional outreach. Several website, such as prweb, dual-ring.net, nfcworld, and geardiary.com each covered the product and its Kickstarter promotion.

Ultimately, GearTag raised \$14,731 from 348 backers against its \$25,000 goal.

Dissecting the Failures

In each of the cases documented, the solicitor failed to raise funds for their project. In all five cases, these projects significantly missed their mark. Additionally, these projects failed to reach an audience. GearTag had the broadest outreach and managed to pull in 348 backers while rEvolv only succeeded in finding funds from two backers.

rEvolue is a particularly interesting failure. The app is finished, on the market, and has an installed user base with less than 10,000 users. Additionally, this was the smallest solicitation in the group, seeking only \$1000. The intended product enhancements include items that are voiced in product reviews in the iPhone app store. This was the second funding failure for rEvolue, the prior iteration raised \$253 from 11 backers against a \$2,000 goal.

With the GrafiApp, the project never really conveys a sense of purpose. The creator has a very emotional story explaining his motivation to build the software, but its not really clear why a user would want to send a handwritten email. Indeed, one of the FAQ questions inquires “what if my handwriting is illegible,” for which the reply is that GrafiApp will provide a default handwriting font. This means that sloppy handwriters could send a handwritten email in someone else’s hand? As with rEvolue, this is the second fund raising failure for the product. Indeed, in this round, GrafiApp failed to reach a target that was itself below the pledged support in the prior round. Whatever promotional buzz was created around the initial funding search appears to be dwindling in the second round.

News.Sport.Weather suffers from being a bit too early to Kickstart. It’s hard to figure out how this app will work. An increasing number of news organizations gate their web content behind paywalls (e.g. the Washington Post, Harvard Blogs, and the New York Times each significantly limit the number of free views in a month). Additionally, there are other aggregator products on the market such as Google Currents or Feedly which perform similar functions. Whether this is a problem of the product or the messaging is difficult to determine in the Kickstarter itself.

JasperBox seems to be a solution without a problem. The video asks how often have you been upset by the range of your keyless car starting tools? Is this a common problem? Do people often find themselves wanting to start one or more cars without being inside the car itself? Quite a bit of work has gone into developing this solution, one would assume this solved at least some problem for the developer. However, nothing in the messaging for this promotion helps people understand why or where they might need this product. Just because a problem isn’t immediately visible to a customer doesn’t mean that the solution isn’t important, but if you fail to make the consumer see the problem, then its hard to find the solution meritorious. Additionally, this project suffered from not being clear on its pricing model. The retail value appears in one of the promotional pledge levels, but a subscription is also introduced with no further details offered.

GearTag was the closest product to funding, exceeding 50% of its targeted funds. It’s also a product that addresses a genuine problem. People do lose important things and it would be great if a simple software tool helped us find those lost things. The idea of tagging important items and then using your mobile device to find them has some merit and a visible working prototype helps quite a bit in visualizing the product. However the visualization hurts somewhat too. Given the nature of the Bluetooth communication between the Tag and the mobile device, you have to be fairly close to the tag in order to find your missing item. It doesn’t help if you aren’t sure where you lost it to begin with. Further, the tag itself is easily removed (it clips to a strap or keychain), the product works if you lost your bag, it won’t help if the bag was stolen. Finally, it’s unclear if the solicitor has fully developed a production model for the product. In successful production Kickstarters it is typical to see acknowledgement of a sourced manufacturer, evidence

of production proofs, and thus more confidence that the solicited funds will actually cover the initial production run. While that may be true for GearTag, it's quite possible that the \$25,000 would finish development, but leave the developer shy of funds to produce the first manufactured batch.

Discussion

An examination of this size is certainly unable to identify all of the causes of failure for a Kickstarter promotion. However, examining these five failures provides some insights into the likely domains of failure. While there may be other problems in each of these projects, there are clear business problems present. Indeed, the traditional marketing mix of product, place, price and promotion seems a reasonable starting point for considering these failures.

Several of these projects have product problems. Either the product is ill defined or undefined. With the exceptions of rEvolve and GearTag, it's difficult to visualize the target customer for the other three projects. It's not that the inherent technology ideas themselves are problematic, it's that they do not clearly articulate why someone would use this product in this way.

It's also likely that the framing of the product simply doesn't work well. GearTag and GraphiApp may ultimately prove useful in some other function. If GearTag provided an embeddable RFID chip (or at least a hidden one instead of a large orange tag) along with some method for remote location, it might be a more viable product. GrafiApp is focused on the importance of sending handwritten messages, but what about the value of handwritten notes or even a software app that captures an actual signature? The technologies involved in each of these products may prove more useful solving a different set of problems.

Despite a user base rEvolve doesn't seem to succeed at mobilizing that user base to fund development for features that the user base itself requests. This is likely a dilemma common to free software. It could be that the end-user is the wrong place to solicit funds. Perhaps this is an app better funded by the courses themselves. While the app is a convenience for Disc Golf fans, it is publicity for the courses themselves. It might prove easier to motivate participation from the parties who monetarily benefit from this application.

Pricing problems manifest in a trio of these promotions as well. News.Sports.Weather acknowledges that they have no idea of what the price point for their product. It makes it very difficult to generate useful pledge levels when there is such uncertainty on the price point for the product. rEvolve faces a similar problem, when the price point is free, what is the motivation to contribute? In their case it's not so much a problem with free software as it is thinking through how free works. Finally, JasperBox fails to disclose its pricing system. They clearly aim for a purchase plus subscription model, but they only provide information on the purchase side of the model. They then use a 'free subscription period' as part of the promotion pledging levels. It becomes difficult to evaluate the product, or the value of the pledge level, without knowing the underlying subscription price.

Ultimately promotion is a major problem in all five projects. None of these projects made updates to their Kickstarter over the course of its life. By contrast, successful projects routinely provide frequent updates, offering insights into what's happening and keeping the excitement

going for their promotion. Additionally, or perhaps as a result, there is very little coverage for any of these projects. While there is some web coverage for a pair of the projects, these are not at higher impact websites nor are they sites which would logically appeal to potential consumers or funders of the product. The closest to this latter point is rEvolve and their apparent viral efforts to bombard Disc Golf courses Facebook pages.

It would seem, though, that in many of these cases the problems are solveable problems. They may not be easily solveable, some may in fact require multiple iterations to resolve, but they are projects that could work. Indeed, it seems that a number of these promotions might have been better visualized with a bit of entrepreneurship education or assistance through a business development center.

Ultimately, this paper focuses on a very initial stage of problem identification. With 50,000 funded Kickstarter projects at a 40% success rate, there exist an abundance of failed projects. Analysis of successes are important, they help identify best practices, such as building and promoting through your social network. However examination of failure seems valuable as well.

In the cases of failure, it's unlikely that a seven-step recipe will lead to success. However, it seems that success may have been within the grasp for some of these failures. While it is likely that an examination of failure will lead to a number of idiosyncratic recommendations, it is also likely that a set of patterns or categories for typical failure points can be identified. Given the transparency and access of Kickstarter, such diagnostics might prove useful to the launch of many new projects and ventures.

References

- Burtch, G., Ghose, A., & Wattal, S. (2013). An Empirical Examination of the Antecedents and Consequences of Contribution Patterns in Crowd-Funded Markets. *Information Systems Research*, 24(3), 499-519
- Castelluccio, M. (2012). Opening the Crowdfunding Release Valves. *Strategic Finance*, 93(8), 59-60.
- Conner, C. (2013). From Salt Lake Comic Con: 9 Secrets for a Successful Crowdfund Campaign. *Forbes.com*, published 21-Sep, 2013
- Erickson, C. (2012). 5 Kickstarter Champs Share the Secrets of Their Success. *Mashable*.
- Franke, N., Keinz, P., & Klausberger, K. (2013). "Does This Sound Like a Fair Deal?": Antecedents and Consequences of Fairness Expectations in the Individual's Decision to Participate in Firm Innovation. *Organization Science*, 24(5), 1495-1516.
- Gobble, M. M. (2012). Everyone Is a Venture Capitalist: The New Age of Crowdfunding. *Research Technology Management*, 55(4), 4-7.
- Greenwald, T. (2012). 10 Emerging Technologies. Retrieved from <http://www.technologyreview.com/article/427675/crowdfunding/>
- Grimalsi, Paul. "System Is Not Without Scams." *Providence Journal*. (June 23, 2013 Sunday): 426 words. LexisNexis Academic.
- Jeanne (2013). The Untold Story Behind Kickstarter Stats. *PPSBlogger*. Retrieved 1-Oct, 2013. <http://www.appsblogger.com/behind-kickstarter-crowdfunding-stats/>
- Jefferson-Graham, T. (n.d). Kickstarter gains horsepower. *USA Today*.

- Kohler, Chris (2013). Opinion: Failure of Neal Stephenson Kickstarer is Apparently Everyone's Fault But the Developer's. WIRED
- Kickstarter, N.D. Retrieved 1-October from Kickstarter.com:
http://www.kickstarter.com/help/school#defining_your_project
- McCracken, H. (2012). The Kickstarter Economy. *Time*, 180(14), 32-36.
- Ordanini, A., Miceli, L., Pizzetti, M., & Parasuraman, A. (2011). Crowd-funding: transforming customers into investors through innovative service platforms. *Journal of Service Management*, 22(4), 443-470.
- Williamson, J. J. (2013). The JOBS Act and Middle-Income Investors: Why It Doesn't Go Far Enough. *Yale Law Journal*, 122(7), 2069-2080
- Wolf, M. (2012). Analyzing Kickstarter: What succeeds, by how much, and how often? Gigaom

Entrepreneurial Motivation and Gender: Examining the Interaction between Gender and Motivation from a Self-Determination Theory Perspective

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Abstract

The purpose of this paper is to examine the interaction between gender and motivation of entrepreneurs through the theoretical lens of self-determination theory (SDT) which is concerned not only with the quantity of a person's motivation, but also the quality of motivation (Sheldon, 2004). SDT qualitatively divides motivation between "controlled" forms (extrinsic and introjected) which reflect more external control, and "autonomous" forms (identified and intrinsic) which reflect more internal motivation. Previous research has confirmed that more autonomous forms of motivation are significant predictors of firm survival (Wilbanks, Bradshaw, and Dougherty, 2011). We tested the interaction between autonomous motivation and gender empirically with longitudinal data from the Panel Study of Entrepreneurship (PSED-II) on new venture founders (n=1214). Results of binary logistical regression replicated earlier findings that autonomous motivation was a significant predictor of firm survival for both men and women, but moderated binary logistical regression analysis indicated that autonomous motivation was not significantly different for men or women.

Introduction

The purpose of this study is to examine the initial motivation of entrepreneurs and how this motivation influences new venture survival. We examined the motivation of entrepreneurs through the theoretical lens of self-determination theory (SDT) which is concerned not only with the quantity of motivation, but also the quality of motivation (Sheldon, 2004). SDT qualitatively divides motivation between controlled forms (extrinsic and introjected) and autonomous forms (identified and intrinsic). More autonomous forms of motivation have been found to lead to higher quality outcomes in terms of both a person's creativity and persistence (Deci & Ryan, 2000). Thus, we hypothesized that entrepreneurs with more autonomous forms of initial motivation will be more likely to survive the early phases of the new venture start-up. We tested our hypotheses using longitudinal data.

The Entrepreneurial Context

The appropriate definitions of entrepreneurship, entrepreneurs, and new ventures (Shane & Venkataraman, 2000) has been the focus of much debate. Some scholars define entrepreneurship as the creation of new ventures and entrepreneurs as those who create new ventures (Chrisman, Bauerschmidt, & Hofer, 1998; Gartner, 1988). Others define entrepreneurship as the study of how opportunities are discovered, evaluated, and exploited (Shane & Venkataraman, 2000). There is also debate as to whether small businesses or family owned businesses are necessarily entrepreneurial (Upton & Heck, 1997). Shane and Venkataraman (2000) observed that entrepreneurship research appears to include any activity taking place within small or new firms. Many scholars have used as their definition of entrepreneurial firms the Small Business Administration's most common definition of small business, which is a privately held business with less than 500 full-time employees. Thus, many studies of entrepreneurship include samples

of firms with median ages well over 10 years (e.g. Eggers & Leahy, 1995) -- clearly small firms but not necessarily new ventures.

Our focus in this paper is upon entrepreneurs in new venture settings. We acknowledge the distinction between the entrepreneur of an established firm and the entrepreneur of a new venture. In this vein, Chrisman, Bauerschmidt, and Hofer (1998) defined a new venture as one that “has not yet reached a phase in its development where it could be considered a mature business” (p. 4).

Entrepreneurs in new ventures face many unique challenges. The scarcity of resources is one challenge that an entrepreneur must overcome. Greene, Brush, and Hart (1999) identified five theoretically derived resource categories for new ventures: Human, social, organizational, physical, and financial capital. In a new venture, all of these resource categories tend to be in short supply (Ensley, Pearson, & Pearce, 2003). A new venture is typically not able to recruit top talent in competition with major corporations, and does not have the same level of resources in terms of time and finances. The lack of key resources tends to create an unstable environment and an uncertain future. This scarcity of resources also adds enormous pressure to the strategic decision making process (Ensley et al., 2003), which could cause further problems.

Entrepreneurial Survival

Chrisman and colleagues (1998) defined new venture performance along the dimensions of *survival* and *success*. Survival is the opposite of failure, which occurs when a venture ceases to exist as an economic entity. Success for a new venture is a relative measure of the firm’s sustainable and economically efficient performance (Barney, 1991; Chrisman et al., 1998). And sometimes growth can be a challenge to a firm’s survival. Covin and Slevin (1997) pointed out that many growing ventures have failed because they were unable to handle the increasing complexity that comes with greater size. Gatewood, Shaver, and Gartner (1995) defined “entrepreneurial persistence” as entrepreneurial behavior manifested in the form of persistence of actions that lead to successfully starting a new business. Star and Fondas (1992) argued that the eventual outcome of organization formation can be either survival or discontinuance of the venture. Shane (2003) defined survival as the continuation of the entrepreneurial effort. Clearly, if a venture cannot survive, it cannot be considered successful. A key goal of entrepreneurs is the continued viability of their new ventures.

Self-Determination Theory

Self-Determination Theory (SDT) is concerned, not only with the *quantity* of motivation, but with the *quality* of one’s motivation to perform tasks or achieve goals (Deci & Ryan, 1985, 2000; Sheldon 2004). This theory offers a unique perspective on entrepreneurial motivation with implications for our understanding of new venture survival.

Deci and Ryan (2000) noted that SDT is based upon the premise that the extent to which goals can meet the individual’s innate psychological needs of *autonomy*, *competence*, and *relatedness* determines the quality of the motivation. They defined autonomy as “the organismic desire to self-organize experience and behavior and to have activity be concordant with one’s integrated sense of self” (Deci & Ryan, 2000, p. 231), noting that some confuse this need with the idea of independence or individualism. They defined competence as “a propensity to have an effect on

the environment as well as to attain valued outcomes within it” (Deci & Ryan, 2000, p. 231). Finally, they defined relatedness as “the desire to feel connected to others – to love and care, and to be loved and cared for” (Deci & Ryan, 2000, p. 231). These three needs can be met by a variety of behaviors and can influence the quality of an individual’s motivation.

SDT further divides motivation into (a) amotivation, (b) extrinsic motivation, and (c) intrinsic motivation. First, amotivation refers to one’s complete lack of motivation and a perception of no control, which seems very similar to the notion of learned helplessness. Next, extrinsic motivation is further divided into three forms. The first of the extrinsic forms, *external regulation*, is based purely upon one’s desire to earn external rewards and/or avoid punishments, and is considered a controlled form of motivation. The second form, *introjected regulation*, is based upon guilt if one does not perform an action, and is also considered to be a controlled form of motivation, although more autonomous than external regulation. The third form, *identified regulation*, occurs when the individual agrees that what he/she is doing is important, and is considered to be an autonomous form of motivation, and therefore the highest quality among the three types of extrinsic motivation. Finally, considering amotivation, extrinsic motivation, and intrinsic motivation, the most autonomous form of motivation is intrinsic motivation, which involves one’s performing a task or achieving a goal for interest and enjoyment.

In general, research shows that people with a high quality of motivation (autonomous motivation) tend to have higher persistence, higher creativity, better conceptual understanding, high-quality learning, and greater well-being (Deci & Ryan, 2000; Reeve, 2005; Sheldon, 2004). As described above, autonomous motivation includes both identified regulation (as a form of extrinsic motivation) and intrinsic motivation. Since entrepreneurship is a dynamic and creative process that calls for a great deal of persistence, we extend the entrepreneurship literature by applying self-determination theory as potentially important factor that explains the survival of new ventures.

For example, some individuals may seek to start new businesses in order to “get rich quick.” This form of controlled motivation may make it hard to persist when times are tough, friends and family doubt them, and financing is hard to come by as is often the case when starting a new business (Bricklen, 2001). In contrast, other entrepreneurs are driven by a strong desire to pursue what they feel is important, to share their vision, and to create something meaningful (Baum & Locke, 2004). Similarly, others might pursue a new venture that reflects a lifelong source of interest or enjoyment. They would be especially likely to persist with these forms of autonomous motivation and this should also improve the likelihood of innovative and creative problem solving. Specifically, we propose that more autonomous forms of entrepreneurs’ initial motivation will increase the likelihood of new venture survival, while more controlled forms of entrepreneurs’ initial motivation will decrease the likelihood of new venture survival.

Hypothesis 1: Autonomous motivation of the entrepreneur will increase the likelihood of long-term new venture survival.

Hypothesis 2: Controlled motivation of the entrepreneur will decrease the likelihood of long-term new venture survival.

Methods

Data and Sample

The sample was derived from the Panel Study on Entrepreneurial Dynamics (PSED II) database, which includes a nationally representative sample of U.S. business founders (n=1214) who were interviewed in four phases at 12 month intervals from 2005-2008 (Reynolds & Curtin, 2008). The codebook and dataset for the initial survey and four interviews conducted in 2005, 2006, 2007, and 2008 are in the public domain and are made available by the University of Michigan at <http://www.psed.isr.umich.edu/psed/home>.

Measures

Entrepreneurial Survival (the outcome variable) was operationalized as a dichotomous variable coded 0 = disengaged, 1 = survival, indicating whether or not the entrepreneur was still actively engaged in the entrepreneurial activity at the end of the 4th annual survey stage of the PSED-II. Of the 1214 entrepreneurs identified at the beginning of the panel study, 511 had disengaged from their new ventures and 703 survived until the fourth stage, three years later.

Autonomous Motivation was measured using a scale consisting of four items included in the initial survey administered at the beginning of the three-year study. These items were determined by a panel of three experts in self-determination theory to represent autonomous motivation. This panel consisted of doctoral students who have studied SDT at the doctoral level and who were provided with definitions and asked to judge whether the items were autonomous or controlled forms of motivation. There was 100% agreement on the items which were included. These four items, measured on a 5-point Likert scale, indicated the extent to which the entrepreneur reported being motivated by the following: to achieve and be recognized; to continue family tradition; to fulfill a personal vision; and to follow the example of a person they admire. Cronbach's alpha for this scale was 0.65.

Controlled Motivation was measured using a scale consisting of three items included in the same initial survey administered at the beginning of the three-year study. These items were determined by the panel of experts cited above to represent controlled motivation. These three items, measured on a 5-point Likert scale, indicated the extent to which the entrepreneur was motivated by the following: to earn a larger personal income; to gain higher position in society; and to build great wealth. Cronbach's alpha for this scale was 0.70.

In addition to the expert panel to select the items for autonomous and controlled forms of motivation, we conducted a principle components factor analysis with varimax rotation to determine the discriminant validity of the two scales and found that there were in fact two factors with Eigenvalues greater than 1 and that the items loaded as expected on the two factors for controlled versus autonomous motivation.

Entrepreneur's gender as a control variable was operationalized as a dichotomous variable (1 = male and 2 = female).

Entrepreneur's age was included as a control and operationalized as a categorical variable with 1 = 18-20 years, 2 = 21-24, and continued in increments of 5 years (i.e 3 = 26-30 and 4 = 31-34) up until the final bracket of 13 = 75 and up.

Entrepreneur's education was included as a control and measured as a 7-point categorical scale ranging from 1 = 8th grade or less, to 7 = Postgraduate degree.

Results

The means, standard deviations, and correlations for the outcome, predictor, and control variables are presented in Table 1.

Table 1. Means, Standard Deviations, and Correlations.

	Mean	S.D.	1	2	3	4	5	6
1. New Venture Survival	.58	.494	-					
2. Gender (1=male, 2=female)	1.37	.484	-.08*	-				
3. Age Bracket	6.27	2.63	.02	.02	-			
4. Education	4.62	1.56	-.02	.06*	.22*	-		
5. Autonomous Motivation	2.51	0.92	.14*	-.05	-.16*	-.17*	(.65)	
6. Controlled Motivation	2.79	1.02	.04	-.10	-.31*	-.24*	.49*	(.70)

n = 1214

* p < .05

Numbers on the diagonal are Cronbach's Alpha

The dependent variable, new venture survival, was negatively related to gender, indicating that without controlling for any other factors, more of the surviving firms were founded by male entrepreneurs. The independent variable of interest, autonomous motivation was the only other variable significantly correlated with new venture survival, indicating that an entrepreneur's initial autonomous motivation was related to subsequent firm survival. We note that the mean of controlled motivation (2.79) was higher for this sample of 1214 entrepreneurs than the mean of autonomous motivation (2.51) and that the two forms of motivation are related with a .49 correlation. However the relationship between controlled motivation and new venture survival was not significantly different from zero. Not surprisingly, age and education are positively and significantly related with a .22 correlation. Interestingly, both age and education are significantly negatively related to both forms motivation.

The results of the binary logistic regressions are presented in Table 2.

Table 2. Binary Logistic Regressions.

	Model 1 New Venture Survival		Model 2 New Venture Survival	
<i>Control Variables</i>	B	Exp (B)	B	Exp (B)
Gender (1=male, 2=female)	-.32*	0.73*	-.31*	0.74*
Age	.03	1.03	.03	1.03
Education	-.04	0.96	-.02	0.98
<i>Independent Variables</i>				
Autonomous Motivation			.36*	1.43*
Controlled Motivation			-.06	0.94
Chi Square	8.85*		33.05*	
Chi Square Change	8.85*		24.20*	
-2 Log Likelihood	1612.56		1588.35	

n = 1214

* p < .05

Cohen, Cohen, West, and Aiken (2003) note that interpretation of logistic regression coefficients can be complicated because the coefficients are in log-odds units. They recommend converting the coefficients into odds ratios. This is accomplished by exponentiation of the coefficients, which results in the exponential Beta listed in the columns of Table 2 under "Exp (B)." An odds-ratio above 1 indicates that for each increase in the predictor unit, the probability or odds increase and an odds-ratio below 1 indicates that for each increase in the predictor unit the probability or odds decrease.

Hypothesis 1 predicted that autonomous motivation on the part of the entrepreneur would increase the likelihood of long-term new venture survival. The binary logistic regression indicated that autonomous motivation was in fact a significant predictor of new venture survival ($B = .36$, $p < .05$; Exponential $B = 1.43$, $p < .05$) after controlling for gender, age, and education. This indicates that in this sample, for each increase of one unit above the mean on the 5 point scale for autonomous motivation at the first wave of interviews in 2005, the odds of the entrepreneur's new venture surviving until the fourth wave of interviews in 2008 are multiplied by a factor of 1.43. Thus Hypothesis 1 was fully supported.

Hypothesis 2 predicted that controlled motivation on the part of the entrepreneur would decrease the likelihood of long-term new venture survival. While the direction of the effect in the regression was negative as predicted ($B = -.06$ and $\text{Exp (B)} = 0.94$), the result was not statistically significant ($p > .10$). Thus hypothesis 2 was not supported.

Discussion

The results of our study provide support for our thesis that more autonomous forms of motivation on the part of the entrepreneur increase the likelihood of new venture survival. While more controlled forms of motivation were not found to be related to new venture survival, they were definitely not found to increase the likelihood of survival. These results suggest that not all forms of entrepreneurial motivation are equal when it comes to new venture survival. This paper contributes to the entrepreneurship literature by further refining our understanding of the

influence of individual level entrepreneurial variables upon important firm level outcomes in the form of new venture survival. By demonstrating this we also address the calls in the literature to further integrate self-determination theory into organizational research (Sheldon, Turban, Barrick, Brown, & Judge, 2003).

This study also has implications for entrepreneurship practitioners and educators as well as researchers. In addition to furthering our understanding of the difference between successful and unsuccessful entrepreneurs, we provide prescriptive measures for evaluating the likelihood of new success a priori. Perhaps potential entrepreneurs should examine their personal motives for forming a new business in advance, with an understanding that some sources of motivation are likely to be linked to their own creativity and persistence in a new venture. Furthermore, perhaps angel investors should probe the specific reasons for entrepreneurs' aspirations to start new businesses in addition to standard financial measures when making financing decisions.

While our present research effort examines the effect that the quality of motivation has on venture survivability, future research could yield meaningful results by applying the same questions to other points along the new venture life cycle. These issues might include the quality of the motivation to seek growth through additional funding, and the motivation to seek harvest through IPO or acquisition. Another question for future research involves the interplay of motivations to create a new venture between various members of a new venture team. In other words, how does the quality of the motivation of each member of a new venture team affect outcomes such as venture survival and subsequent firm performance?

Future research could also explore the quality of motivation for social entrepreneurs. It seems intuitive that social entrepreneurs are likely to experience identified regulation, an autonomous form of motivation, in that they believe that what they are doing is right, and not as likely to experience external regulation, since financial gain would probably not be as much of an incentive. However, some potential social entrepreneurs may consider starting a new pro-social venture out of introjected regulation, in order to avoid guilt. Based on SDT and our findings in the entrepreneurial context, it seems that the controlled motivation created by introjected regulation would not have the same likelihood of success as a pro-social venture built from the social entrepreneur's autonomous motivation.

In conclusion, this study underscores the potential importance of the quality of individuals' motivation in the entrepreneurial context with regard to the most important new venture outcome--survival.

References

- Barney, J. B. 1991. Firm resources and sustained competitive advantage. *Journal of Management*, 17: 99-120.
- Baum, J. R., & Locke, E. A. 2004. The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth. *Journal of Applied Psychology*, 89, 587-598.
- Bricklin, D. 2001. Natural-born entrepreneur: Lessons of a serial entrepreneur. *Harvard Business Review*, 79, 53-59.
- Chrisman, J. J., Bauerschmidt, A., & Hoffer, C. W. 1998. The determinants of new venture performance: an extended model. *Entrepreneurship Theory and Practice*, 23: 5-29.

- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. 2003. *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*. 3rd Ed. Mahwah, NJ: Laurence Erlbaum Associates.
- Covin, J. G., & Slevin, D. P. 1997. High growth transitions: Theoretical perspectives and suggested directions. In D. L. Sexton & R. W. Smilor (Eds.) *Entrepreneurship 2000*. 99-126. Chicago: Upstart.
- Deci, E. L., & Ryan, R. M. 1985. The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality*, 19: 109-134.
- Deci, E. L., & Ryan, R. M. 2000. The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11: 227-268.
- Eggers, J. H., & Leahy, K. T. 1995. Entrepreneurial leadership. *Business Quarterly*. 59: 71-76.
- Ensley, M. D., Pearson, A., & Pearce, C. L. 2003. Top management team process, shared leadership, and new venture performance: A theoretical model and research agenda. *Human Resource Management Review*, 13: 329-346.
- Gartner, W. B. 1988. Who is an entrepreneur? is the wrong question. *American Journal of Small Business*, 12: 11-32.
- Gatewood, E. J., Shaver, K. G., & Gartner, W. B. 1995. A longitudinal study of cognitive factors influencing start-up behaviors and success at venture creation. *Journal of Business Venturing*, 10: 371-391.
- Greene, P. G., Brush, C. G., & Hart, M. M. 1999. The corporate venture champion: a resource-based approach to role and process. *Entrepreneurship Theory and Practice*. 23(3):103-122.
- Reeve, J. 2005. Understanding motivation and emotion. NJ: Johnson Wiley & Sons.
- Reynolds, P. D., Curtin, R. T. 2008. Business creation in the United States. *Panel Study of Entrepreneurial Dynamics II Initial Assessment, Foundations and Trends in Entrepreneurship*: 4:155-307.
- Shane, S., & Venkataraman, S. 2000. The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25: 217-226.
- Shane, S. 2003. *A General Theory of Entrepreneurship: The Individual-Opportunity Nexus*. Cheltenham, UK. Edward Elgar Publishing.
- Sheldon, K. M. 2004. *Optimal human being: An integrated multi-level perspective*. Mahwah, NJ: Laurence Erlbaum Associates.
- Sheldon, K.M. & Kasser, T. 1998. Pursuing personal goals: Skills enable progress, but not all progress is beneficial. *Personality and Social Psychology Bulletin*, 24: 1319-1331.
- Sheldon, K.M., Turban, D.B., Brown, K.G., Barrick, M.R. & Judge, T.A. 2003. Applying self-determination theory to organizational research. *Research in Personnel and Human Resources Management*, 22: 357-393.
- Starr, J. A., & Fondas, N. 1992. A model of entrepreneurial socialization and organization formation. *Entrepreneurship: Theory and Practice*, 17: 67-78.
- Upton, N. B., & Heck, R. K. Z. 1997. The family business dimension of entrepreneurship. In D. L. Sexton & R. W. Smilor (Eds.) *Entrepreneurship 2000*. 243-266. Chicago: Upstart.

XYZ Compounding an Analysis of a Pharmaceutical Company and It's Industry

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Abstract

XYZ Compounding Pharmacy was founded in 1995 and operates within the highly regulated pharmaceutical industry. (The company name has been changed to protect its proprietary information). Since its creation, the company has experienced rapid growth, from having sales representatives in only two states in 1995 to having sales reps in forty-nine states in 2013. While the company has experienced a great deal of growth in its eighteen-year life, there are a number of opportunities that are currently missing when it comes to improving its profitability.

Introduction

The most significant opportunity that is being missed relates directly to the company's veterinary segment. Currently, the vast majority of sales from the veterinary segment of the business come from horse trainers and owners; however, there are many more people to be reached within the veterinary market. Owners of cats, dogs, and other small animals comprise a much greater percentage of the population than do horse owners and trainers. The problem that is facing XYZ Compounding is how to establish points of contact with owners of small animals. Many such people shop at large pet stores such as PetSmart and PetCo and simply are not aware of the XYZ Compounding brand. Putting a sales rep in such large pet stores could boost sales for pet medications as well as get the brand name out to a whole new market.

Another opportunity that is being missed is the utilization of the juggernaut that is social networking. Sites such as Facebook provide companies like XYZ Compounding with access to a very cheap form of advertising. Companies can create and update a Facebook page free of charge and delegate the job to people who are already on the company's payroll. Doing so would minimize the costs associated with such marketing efforts. On the other hand, even companies who choose to outsource such tasks can still do so relatively cheaply considering the vast amount of potential consumers that such marketing efforts can reach.

Still another opportunity that XYZ Compounding is currently missing is the potential to provide a healthier alternative to the energy drink industry. Currently, the industry is generating millions of dollars in sales and is dominated by such brands as Red Bull, Monster, and 5-Hour Energy. However, the ingredients used in such drinks, particularly the large amount of caffeine, have raised a number of health concerns including heart disease and anxiety. Because there are so many consumers out there who are health conscious but still feel that they need an extra boost of energy to get through the day, a natural and healthier alternative to energy drinks would be a dream come true. XYZ Compounding has already begun producing a line of natural OTC drugs and it is reasonable to believe that an increase to Research and Development (R&D) in that area could potentially result in the development of a natural, energy-boosting product.

Clearly, XYZ Compounding has been and will continue to be a wildly successful company. It has managed to expand its product lines to include so much more than just simple medications. This has ensured the company's ability to thrive in the pharmaceutical industry thus far. However, the

industry dictates that its companies continue to adapt and evolve to effectively compete. For this reason, XYZ Compounding could stand to benefit a great deal from forming partnerships, utilizing social media marketing, and really thinking outside the box in diversifying its product lines. Taking such steps could potentially drive the company to the top of the pharmaceutical industry.

Company History

XYZ Compounding was founded in 1995. When it was founded, the company employed just four people who included local sales representatives in two states. Initially, the company was involved with distributing medications where they could be commercially available to consumers; however, the company discontinued this service in 2003 and instead focused solely on compounding medications and making them available to patients through prescriptions written by their personal physicians.

Compounding medications is the practice of combining raw drug ingredients to form personalized prescription drugs to fit the needs of individual patients. This is necessary in a number of circumstances. First of all, consider a patient who comes to his or her doctor for a sleeping medication; however, there are no prescription sleep aids that are free of a certain ingredient to which the patient is allergic. In such a case, the physician can contact a company such as XYZ Compounding Pharmacy and instruct them of the ingredient to which the patient is allergic. The lab workers at the pharmacy can then create a prescription sleep aid that does not contain that particular ingredient and is thus specifically designed for that particular patient.

Another common example of the usefulness of XYZ Compounding's operations is an incident in which a pediatrician has a patient in need of a medication that is only available for adults. Companies such as XYZ Compounding can take such medications and reduce their strength in order to make them safe for children to take. In this way, XYZ Compounding is able to create prescription strength medications that would otherwise be unsafe for children to take.

Currently, the company is making small steps toward getting back into the over-the-counter medication market. The Chief Financial Officer of XYZ Compounding, has said that the company is currently developing drugs that are made from natural ingredients and are being made available to individual consumers online. The first such drugs that have been developed are a natural sleep aid as well as a natural headache medication. Such a line of medication would be widely useful because it would make for a more natural and healthy alternative to prescription drugs and would have little to no negative side effects.

Because of the usefulness of its operations, XYZ Compounding has experienced rapid growth in the past fifteen years, employing more than fifty at its headquarters. In addition to this, the company has a number of distributors as well as sales representatives in 49 states, Washington D.C., and Puerto Rico. Currently, the company is looking into expanding into other countries such as Canada and Mexico. Furthermore, the company has experienced an average sales increase of 41 percent per year over the past five years and the company itself is expected to continue to grow in the coming years.

Industry Overview

As one may have guessed, XYZ Compounding operates within the pharmaceutical industry. The pharmaceutical industry is a research-based industry from which the majority of medical innovations originate. Companies operating within the industry spend an average of seventeen percent of sales on research and development in order to continue turning out innovative products. Due to the nature of the products being turned out, the pharmaceutical industry is heavily regulated by the FDA. Obviously, drugs must meet certain safety and manufacturing quality regulations. Such regulations are the major cause of the large R&D requirements of the industry. Furthermore, drug prices must also be regulated in compliance with health insurance companies. The reasoning behind this is that the rate of third-party payment is so high that most customers are insensitive to price. Without such regulations, companies would be able to charge unreasonably high prices for their products (Danzon, 2006).

Industry Attractiveness

In 1979, Michael Porter introduced five competitive forces that make up the overall attractiveness of a given industry: threat of new entrants, bargaining power of suppliers, bargaining power of buyers, threat of substitute products or services, and rivalry among existing competitors (Porter, 1979). As is the case with other industries, Porter's Five Forces Model can be used to determine the attractiveness of the pharmaceutical industry.

1. *Threat of New Entrants* – Due to high R&D requirements and the immense regulations that are imposed on products and services, the threat of new entrants is quite low.
2. *Bargaining Power of Suppliers* – Pharmaceutical companies are able to choose where they obtain their raw materials; therefore, the bargaining power of suppliers is relatively low.
3. *Bargaining Power of Buyers* – There are only a few large pharmaceutical companies that provide commercially available medications and prices are largely non-negotiable; therefore, the bargaining power of buyers is low.
4. *Threat of Substitute Products or Services* – When patents are still in effect for newer drugs, it is difficult to find acceptable substitutes; however, when patents expire, generic substitutes are much easier to find. As a result, the threat of substitute products is moderate.
5. *Rivalry Among Existing Competitors* – Due to the great investment in R&D that is required to provide innovative products and the fact that innovation is the key to survival within the industry, the rivalry among existing competitors is fierce.

Given the above criteria, it can reasonably be stated that the overall attractiveness of the pharmaceutical industry is highly attractive to potential investors because the threat of new entrants is low and the few large pharmaceutical companies that exist have a great deal of power in the way they conduct their business. They only real hurdles to this are the previously mentioned regulations that are imposed.

Major Industry Trends

In the past, major pharmaceutical companies have been driven by the hope of finding the next “blockbuster” medication and R&D efforts have been used primarily for the pursuit of such breakthroughs. Because of this, the pharmaceutical industry has been viewed as a high-risk, high-reward industry. However, pharmaceutical companies are beginning to realize that high-risk, high-reward industries are not very attractive to investors and have begun to focus more on

diversification. Diversification consists of three major components: scientific diversification, diversification into new business areas, and geographic diversification (Rusu, Kuokkanen, & Heier, 2011).

1. Scientific Diversification – Major pharmaceutical companies have recently been investing in smaller biopharmaceutical companies, companies that use proteins, nucleic acids such as DNA and RNA, and living microorganisms like viruses and bacteria to create medications. Such medications are more beneficial because they are formed from biological sources.
2. New Business Areas – Some pharmaceutical companies have ventured into other similar business areas by acquiring smaller companies in industries such as consumer healthcare and animal health. Consumer healthcare companies deal with the distribution of over-the-counter brand medication and animal health obviously includes veterinary clinics and drug companies that produce medications for animals. Such industries are similar enough to the pharmaceutical industry that R&D investments can largely be shared to produce a greater return on the investment.
3. Geographic Diversification – As its name implies, geographic diversification refers to companies relocating parts of their business, particularly R&D, to other emerging markets in foreign countries such as China, India, and Brazil in order to take advantage of the high potential for growth over the coming years. Not only does this boost a company's potential for growth, it also saves the company money because of the lower costs and wages in such countries.

Unfortunately, the different variations of diversification carry with them their own problems. Scientific diversification and diversification into new business areas require companies to either purchase a smaller company or start another branch of the existing company to perform a different function. Both avenues would require a great deal of capital to pursue. Geographic diversification presents a problem that is perhaps the greatest threat to pharmaceutical employees in the United States: the relocation of key business components to emerging markets in lower-cost countries. Such a trend could put countless United States pharmaceutical employees out of work in the coming years. This is a problem that may need to be addressed by pharmaceutical companies in the near future.

Other emerging trends relate to the business function known as pipeline management. According to Rusu, Kuokkanen, and Heier, success or failure in the pharmaceutical industry depends largely on an organization's ability to "maintain a constant pipeline of new compounds and time their introduction to compensate for losses as medicines become open to generic competition" (Rusu, Kuokkanen, & Heier, 2011). Because of this need, there are a couple of trends that are beginning to prevail within the industry. First of all, some pharmaceutical companies are looking into merging with other smaller companies. An obvious benefit to this is that companies involved in such mergers stand to broaden their pipeline of available drugs as well as drugs that are still in development. While mergers can offer obvious benefits, it still must be noted that they can bring with them a couple of issues. If a company involves itself in too many mergers, it can exhaust the company's ability to integrate its strategy into the different required channels. Furthermore, engaging in too many mergers can potentially make a company appear unstable to outside investors and thus limit potential funding in the future.

Another emerging trend that addresses the issue of pipeline management is the manner in which companies invest in R&D. According to Rusu, Kuokkanen, and Heier, “having too many drugs under development can be as risky as having too few of them and pharmaceutical companies need to balance investments between disease areas of unmet medical needs as well as scientific and commercial opportunity” (Rusu, Kuokkanen, & Heier, 2011). Basically, this means that if there is commercial need for a drug, it may be unwise to pursue the development of a drug to meet the need if there are already a good number of them in development. On the other hand, it may also be unwise to pursue the development of a drug that meets a previously unmet need if the need for it is not strong enough to be economically feasible. When companies abandon such ventures, they may choose to either purchase patents for other more beneficial drugs from other companies, sell their own research for an abandoned product to another company that is in a better position to pursue its completion, or a combination of the two. The problem with such trends is that it could lead a company to abandon the development of a drug that could possibly turn out to be wildly successful. For instance, the development of Lipitor, one of the best selling drugs of all time, was almost abandoned because it was not believed to be economically feasible at the time (Rusu, Kuokkanen, & Heier, 2011).

Emerging Markets

The market for pharmaceutical goods is increasing due to an aging global population, advances in drug-based treatment research, increased investment in healthcare and consumer-driven private health coverage, and rising numbers of patients suffering from cardiovascular disease, cancer, and degenerative diseases. Currently, the United States stands alone at the top of the global pharmaceutical market and is expected to hit almost \$345 billion in sales revenue in 2014 (Pharmaceutical Industry: Market Research Reports, Statistics and Analysis, 2010). Because the United States is at the top of the pharmaceutical industry, growth for the industry in the country stands to slow down. However, there are a number of emerging markets within the pharmaceutical industry. Countries such as China, Brazil, India, Russia, Mexico, Egypt, and Pakistan comprise three segments of emerging pharmaceutical markets that are predicted to grow at an increasing rate over the coming years. The Brazilian market itself is expected to grow rapidly in the coming years, reaching a net worth of almost \$35 billion in 2015 (Pharmaceutical Industry: Market Research Reports, Statistics and Analysis, 2010). Growth in such developing markets is expected to grow at a rate of about sixteen percent as opposed to an expected growth rate of about six percent in developed markets such as the United States.

SWOT Analysis of XYZ Compounding

The following is a brief SWOT analysis of XYZ Compounding Pharmacy. It will lay out a number of the company’s strengths, weaknesses, opportunities, and threats. Strengths and weaknesses stem primarily from the operations of the company itself. On the other hand, the company’s opportunities and threats stem primarily from the environment within the industry and the tactics utilized by competitors. In viewing all of these aspects collectively, it becomes clearer as to what the company needs to do to be more successful (Renault, 2013).

Strengths

XYZ Compounding has a number of strengths. First of all, the company has a very strong management core with people who genuinely care about the consumers that they cater to. This is evident by the very nature of the business because most compounding drugs are designed for specific patients. In addition, the company has very knowledgeable pharmacists who are highly

skilled in creating unique and useful drugs for the consumers. Many of the company's practicing pharmacists are also licensed chemists. In addition to having effective management and pharmacists, XYZ Compounding also has a broad market reach within the United States. The company has sales representatives in forty-nine states as well as in Washington D.C. and Puerto Rico.

Weaknesses

Despite such strengths, XYZ Compounding has its share of weaknesses. First of all, the company has yet to make any progress in pursuing markets in foreign countries. Management is attempting to move into Canada and Mexico but has been unable to thus far. Issues with customs officials have made this more difficult than anticipated. In addition to this, the company has been ineffective in taking advantage of the very cheap marketing possibilities that exist in social networking. Such marketing efforts could produce great returns if managed properly; however, no one is on staff to manage the company's online presence. Another weakness of XYZ Compounding is that the company's veterinary segment is having difficulty in reaching potential consumers who have animals such as dogs and cats. Currently, the veterinary segment's primary reach is to horse owners and trainers because it has sales representatives in close proximity to many of the popular race tracks throughout the country. Still another weakness is that the company has been a non-factor in the over-the-counter market since 2003 despite the fact that it has recently begun to develop a line of natural-based drugs that can be sold without a prescription. OTC drugs comprise a large market in the United States and failing to get a piece of that large pie could be detrimental to the company in the future.

Opportunities

Within the pharmaceutical industry, there lie a number of opportunities on which XYZ Compounding could capitalize. First of all, a recent study has shown that "a significant 83% of marketers said that social media was important to their businesses...it increases exposure as well as traffic" (Stelzner, 2012). With little to no presence in social media, XYZ Compounding could stand to benefit a great deal from social media marketing. Another opportunity on which the company could potentially capitalize is the quantity of the unique sales opportunities that is offered by partnering with large chain pet stores such as PetSmart and PetCo. XYZ Compounding currently has no direct line to small pet owners and such partnerships could provide closer ties to such consumers. In addition to this, pharmaceutical markets in foreign countries such as Brazil and Russia offer a greater potential for growth than the pharmaceutical market in the United States: sixteen percent growth as opposed to six percent growth. The opportunity to capitalize on the increased growth in such markets could provide XYZ Compounding with greater returns than it is currently experiencing. Still another existing opportunity is the recent scrutiny of the energy drink market. The market itself has been growing rapidly as of late; however, there are very few healthy alternatives within the market. XYZ Compounding could be just the type of company that could develop a line of healthy alternatives.

Threats

In addition to the aforementioned opportunities, XYZ Compounding must also be aware of a number of threats within the industry. First of all, the FDA imposes heavy regulations on the pharmaceutical industry in order to ensure the safety of the industry's consumers. Because of this, the company must constantly be aware of regulation updates and alterations in order to ensure that its operations meet the FDA's standards. Another threat that XYZ Compounding must be aware of

is the fact that many compounding pharmacies already have a presence in foreign markets which would make it more difficult for the company to establish itself in such markets. A final threat that the company must be aware of is the fact that other pharmacies that have a great presence in the over-the-counter market stand to maintain a much greater market share than pharmacies that only deal in prescription medications. Furthermore, the fact that there are a number of other pharmacies in the OTC market will make it more difficult for XYZ Compounding to reestablish itself within the market.

Recommendations for XYZ Compounding

Upon close examination of XYZ Compounding's strengths, weaknesses, opportunities, and threats as well as the trends within the industry, there are a number of recommendations that could be made in order to improve the profitability of the company. Each of the following recommendations represents a different aspect of managerial responsibility.

Recommendation A: Pet Store Partnership

A recent discussion between the researchers and the CFO of XYZ Compounding stated that the veterinary segment of the business has had great success in meeting the needs of horse owners and trainers. The company has done this by placing sales representatives close to the major race tracks throughout the country. Sales reps often converse with the trainers about the many beneficial drugs that the company offers and are able to provide the drugs to the trainers in an efficient manner.

Despite the great success that XYZ Compounding has experienced in serving horse trainers and owners, The CFO has stated that the company has struggled a great deal in reaching the owners of small pets such as cats and dogs. The company has medications for smaller animals; however, it has simply found difficulty in making contact with pet owners and getting the word out about the products. A possible recommendation that could alleviate this problem is to partner with a large chain of pet stores such as PetSmart or PetCo and form an agreement that would allow XYZ Compounding to place a sales representative on-site in the pet store itself. If the company is having an issue with reaching the market of the owners of small pets, it stands to reason that there is likely a great deal of such pet owners that simply have no knowledge of the company's products. Placing a sales rep in pet stores that have a presence throughout the United States can go a long way toward reaching a whole new market that may have had no prior knowledge of XYZ Compounding Pharmacy's existence, which would boost sales in the small pet medication market.

Because XYZ Compounding is a privately held company, management is not obligated to share specific financial information of the company; however, the CFO was kind enough to share that the cost of maintaining a sales representative is between \$25,000 and \$30,000 annual salary plus ten percent commission on sales. Depending on the annual salary of the sales rep, he or she would only have to sell between \$27,778 and \$33,333 worth of products annually in order for the company to break even. Table 1 below reflects the impact of sales on profitability for a sales rep receiving a \$25,000 salary plus ten percent commission. Table 2 reflects a sales rep receiving a \$30,000 salary plus ten percent commission.

Table 1. Annual Salary A.

\$25,000 Salary	
Annual Sales	Profit
\$ 27,777.78	\$ 0.00
\$ 30,000.00	\$ 2,000.00
\$ 35,000.00	\$ 6,500.00
\$ 40,000.00	\$ 11,000.00
\$ 45,000.00	\$ 15,500.00

Table 2. Annual Salary B.

\$30,000 Salary	
Annual Sales	Profit
\$ 33,333.33	\$ 0.00
\$ 35,000.00	\$ 1,500.00
\$ 40,000.00	\$ 6,000.00
\$ 45,000.00	\$ 10,500.00
\$ 50,000.00	\$ 15,000.00

As the tables above illustrate, once each sales representative reaches the “break-even” point, the potential profit for the company begins to increase rapidly. With low break-even points as well as getting the company’s name out to a whole new market, this would clearly be a project that would warrant consideration by the company.

Recommendation B: Social Media Marketing

The next recommendation for XYZ Compounding relates directly to how the company utilizes key marketing opportunities. According to the CFO, the company once attempted to establish a social media presence through the use of Facebook; however, the endeavor was unsuccessful due primarily to a lack of personnel who were social media savvy. It is one thing to design a Facebook page and get a huge number of likes; however, according to USA Today, “...many [businesses] fail to follow through and capitalize on their early efforts” (Komando, 2012). In order for a Facebook page to effectively meet its purpose, it must be properly maintained and updated every day, whether it be with updates about products that are in development or about upcoming specials that the company is about to start running.

Fortunately, maintaining and updating a Facebook page is quite simple to do if the right person is given the responsibility. Furthermore, such advertising carries relatively small costs for the company. Setting up and updating a Facebook page is free. The only significant cost associated with such marketing would be the wages or salary paid to the person to whom the company delegates the job of creating and maintaining the page. Luckily, the skills necessary to create a sharp and useful Facebook page can often be found in-house, perhaps even in an intern. However, if the company decides to look elsewhere to create and maintain its Facebook page, management should find little trouble finding someone to perform the job for anywhere between \$500 and \$5,000 annually (McKee, 2011).

Perhaps the most exciting aspect of utilizing social media marketing on Facebook is the potential dual-benefit that it offers. First of all, as one would guess with using such a site, Facebook marketing provides XYZ Compounding a great opportunity to create awareness about the company itself as well as its current and future products and special offers that it has. This alone could increase traffic with each of the company’s sales representatives. In a study conducted by Aggregate Knowledge, a company which analyzes and attributes media buys, the company found

that, on average, media plans that included Facebook saw 24 percent more new sales than those that did not (Peterson, 2013). In addition to this, XYZ Compounding can use its Facebook page to help get its brand back into the over-the-counter market by dovetailing traffic to the company's main website. By placing the company's URL on its Facebook page, the company could effectively direct its Facebook visitors to a page dedicated to its OTC medications. Furthermore, the website itself could be updated to contain an OTC order form that would enable consumers to place orders for over-the-counter medications and have them delivered directly to their homes. This would prove to be a much more economically feasible method of getting back into the OTC market than trying to get the products into stores. Such a method would be more beneficial after the company establishes a strong OTC brand.

Recommendation C: Branching Out

The final recommendation for XYZ Compounding involves branching out into new but similar markets. The company has already had experience in branching out into another market and has proven itself successful at it. The new business and product line featured products that offered two benefits to their users: a cosmetic benefit as well as a health benefit to the skin.

Today, the energy drink market is one that is rapidly growing. When you go into practically any gas station, you see brands such as Red Bull, Monster, Rockstar, and 5-Hour Energy. Each brand promises to boost your energy and improve your performance. Such claims have made the energy drink industry a multimillion dollar industry; however, concerns are beginning to arise regarding the safety of such products. Many such drinks contain gratuitous amounts of caffeine which can cause "heart palpitations, anxiety and can leave users more prone to dehydration" (Perez, 2010). With such health concerns related to the use of energy drinks, it is very likely that consumers would be scrambling for a healthier alternative if it were made available to them. XYZ Compounding is already developing a line of natural OTC drugs and additional R&D investments could lead to healthy and natural ways to boost the energy of consumers. Such a development would be a major breakthrough for any company.

Conclusion

In conclusion, XYZ Compounding Pharmacy is a company that is experiencing very rapid growth. Its prescription medication, veterinary medication, and cosmeceutical lines have worked together to form a well-rounded, cleverly diversified company that has been able to thrive in the ever-changing pharmaceutical industry. It is for this very reason that the company is sure to continue to experience a great deal of growth in the coming years.

However, despite the huge success that the company has been and will undoubtedly continue to be, there are still areas through which it can strive to improve its profitability. Reaching out to the owners of small pets, developing a presence in social media advertising through Facebook, and venturing into the "energy market" are but three small recommendations that could potentially drive the company to heights unseen in recent years.

References

Danzon, P. M. (2006). *Economics of the Pharmaceutical Industry*. Retrieved February 10, 2013, from <http://www.nber.org>: <http://www.nber.org/reporter/fall06/danzon.html>

- Komando, K. (2012, June 7). *Secrets of Facebook Marketing*. Retrieved March 30, 2013, from USA Today: <http://usatoday30.usatoday.com/tech/columnist/kimkomando/story/2012-06-08/facebook-marketing-tips/55444700/1>
- McKee, D. (2011, January 19). *How much should a small business expect to pay for setup and maintenance of a Facebook Page, with ads?* Retrieved March 30, 2013, from Quora: <http://www.quora.com/How-much-should-a-small-business-expect-to-pay-for-setup-and-maintenance-of-a-Facebook-Page-with-ads>
- Perez, A. (2010, August 17). *Growth of Energy Drinks Speeds Debate on Their Dangers*. Retrieved March 30, 2013, from AOL News: <http://www.aolnews.com/2010/08/17/growth-of-energy-drinks-speeds-debate-on-their-dangers/>
- Peterson, T. (2013, January 23). *Study: Facebook Leads to 24% Sales Boost*. Retrieved March 30, 2013, from Ad Week: <http://www.adweek.com/news/technology/study-facebook-leads-24-sales-boost-146716>
- Pharmaceutical Industry: Market Research Reports, Statistics and Analysis*. (2010). Retrieved March 20, 2013, from ReportLinker: <http://www.reportlinker.com/ci02257/Pharmaceutical.html>
- Porter, M. E. (1979). The Five Competitive Forces That Shape Strategy. *Harvard Business Review*.
- Renault, V. (2013). *SWOT Analysis: Strengths, Weaknesses, Opportunities, and Threats*. Retrieved March 30, 2013, from The Community Toolbox: http://ctb.ku.edu/en/tablecontents/sub_section_main_1049.aspx
- Rusu, A., Kuokkanen, K., & Heier, A. (2011). Current trends in the pharmaceutical industry – A case study approach. *European Journal of Pharmaceutical Sciences*.
- Stelzner, M. A. (2012). *2012 Social Media Marketing Industry Report*. Social Media Examiner.

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Dollar Enterprise – Where Dreams (or Nightmares) Come True

The Justification of the Best Practice

Kathleen Liang, University of Vermont

Dollar Enterprise, an award winning entrepreneurship curriculum, is considered a best practice because (1) it introduces innovative and unconventional pedagogy through experiential learning exercises that motivate learners to directly apply community entrepreneurship theories to plan and operate small ventures on campus; (2) it creates the maximum impacts on generating value added and learning by using \$1 seed money per person and a combination of recycle, reuse, renew, and up-cycle concepts; and (3) it allows 120-140 young entrepreneurs-want-to-be each semester to gain the knowledge, skills, and practical experience simultaneously about entrepreneurial transformation, new venture creation, and community engagement.

Background and Overview of the Dollar Enterprise

In 1998, the CDAE faculty began to renovate our old Small Business concentration, and to design a new Community Entrepreneurship major and minor. Between 2002 and 2005, we successfully modified and introduced the Community Entrepreneurship curriculum, and began teaching new courses. One of the new courses was “CDAE 166 Introduction to Community Entrepreneurship” offered to all majors on campus without pre-requisite for undergraduate and graduate students. In 2005, I started teaching CDAE 166 and introduced Dollar Enterprise and experiential learning into the course, because (1) it would be unrealistic to teach entrepreneurship if we could not practice entrepreneurship in real life; (2) students had to learn the true spirit and contents of innovation and new venture creation beyond textbook information; and (3) UVM had a strong emphasis to promote experiential/service learning, and to encourage students to generate positive impacts on local communities. The purpose of CDAE 166 and Dollar Enterprise is to help students learn more about how and why people become entrepreneurial, how successful entrepreneurs make decisions, and why entrepreneurs fail utilizing critical thinking to actually plan and run new ventures on campus. I supply the seed money (\$1 to each individual, \$11 to \$12 per team) for each new venture team, and that is the only seed money each team may use. This activity runs twice a year in each semester with 120-140 students who form 11-14 teams. Here is a summary of timeline for Dollar Enterprise preparation and execution:

- I apply for location permit and event announcement 8 months prior to the beginning of a new semester (there is no store space, only outdoor locations available). I use lectures and speakers to introduce course contents in the first 4-6 weeks of each semester. We need to correspond to weather conditions in Vermont to operate Dollar Enterprise since most of the teams need to set up tables outdoors given UVM policies. Course contents include: brainstorm ideas, team building and structure, product design, workload assignment, communication strategies, resources and opportunities, business plan and business model, networking and competition, market and marketing, financial analysis, daily operations and quality control, and internal assessment/peer reviews. I also work with the teams to apply for food/product permits after final products are determined by each team.

- Each team is required to design and conduct workshops 2 weeks prior to operation to prepare for their products and to ensure the quality. Each team runs their business for 4 weeks on campus (at least 3 hours every day from Monday through Friday, 8am-5pm) during the semester in various pre-reserved locations only. No UVM resources such as rooms, tables and chairs will be utilized. Each team is required to identify a charity organization to which it will donate all proceeds, and to provide additional volunteer services for the charity.
- I design and arrange daily/weekly team evaluations throughout the semester prior to, during, and after Dollar Enterprise activities, and evaluations are conducted by Teaching Assistants, secret shoppers/judges, peer reviews among team members, and community partners. Team evaluation includes team work, planning and operation procedures, professionalism, effectiveness in communication, customer service, and innovation. At the end of the 4-week business activity, each team concludes with a business report, financial report, self- assessment, and final team member assessment. Each team donates all proceeds to local charities and a Community Entrepreneurship Education fund that has been established to assist future students to become successful Community Entrepreneurs.

Outcome and Impacts

Since 2005, over 2000 UVM students have participated in Dollar Enterprise activities that generated over \$40,000 for more than 300 charity organizations. More than 25 organizations have donated ingredients/materials to support student teams in the past 8 years. The course and the instructor have received university and national awards. CDAE 166 has become one of the most popular and highly recommended courses on campus for all advisors across disciplines. The course materials and Dollar Enterprise book have been widely shared with K-12 schools and other colleges/universities nationally and internationally. I have presented and published more than 15 articles to share the impacts and innovative nature of the course. UVM students and faculty members overwhelmingly identify Dollar Enterprise to be an exemplification of learning experience and a legacy. UVM Admission's office also designates Dollar Enterprise to be a must-see stop for all campus visitors and guided tours to demonstrate the impacts of innovative curriculum. Most importantly, students learn the first hand about the complexity of entrepreneurship, whether it is a successful venture or a failure through daily practices of various knowledge and skills in a safe, guided environment.

Preparing and Developing Students for Entrepreneurship Opportunities in Franchising

Wilbur Krueger, Missouri Western State University

Introduction

In teaching performance management what has emerged in higher education is an attempt to train students using The “Great Entrepreneur-Leader Model” particularly in graduate business programs (McFarlane, & Taylor, 2011). McFarland and Taylor explain that attempting to train students using exceptional entrepreneur examples such as Jack Welch, Steven Jobs, Sam Walton, Warren Buffet, and others is insufficient to meet the highly competitive environment present in different national economies. The successes of Walton, Jobs, Welch, Buffet, and others do not provide the necessary practical examples for students to emulate. These examples are personal exceptions and do not represent the necessary performance management considerations needed to train students on how to systematically manage an initial startup business. Today, an organizational and management system represents a number of interrelated parts that come together to form a managerial process (Pidwirny 2006). This management process is extremely complex and requires multiple different teaching systems that develop the individual’s necessary business skills.

Twenty years ago many universities began to expand their business curriculum to include small business and entrepreneurship courses. From these initial courses many schools have expanded small business management and entrepreneurship into respective majors. In the last ten years a number of business schools have specialized even more by establishing and developing entrepreneurship centers. However, one specific area of business training that most colleges and universities have overlooked and that long ago has been identified as a significant growth area is franchising (Justis & Chan, 1991). Rather than embracing franchising as an option for students the higher education focus has been on supervisory training using internships and other types of management development programs. Only recently, have colleges and universities recognized the entrepreneurial opportunity for placing students into an immediate entrepreneurial situation.

Management Development

Management Development has been around for years and one of the first articles on management development indicated the different management phases associated with training individuals for different types of management positions (Bennett, 1956). These phases included selection of eligible candidates, basic instruction, and some type of internship that prepared the students for supervisory training or the possibility of starting their own business. Recent research has suggested that besides the actual internship or supervisory training a student’s perception and personality play a role in the development process (Moghaddam, 2008). The results indicated business student perceptions about internships were positive and personality traits of those students that were scheduled for internships had more of an impact on student perceptions of internships than those students that had already completed an internship.

Additional behavioral research on personality provides a framework for evaluating prospective candidates for managerial positions or identifying possible entrepreneurial types. The difference between Type A and Type B personalities may help begin the selection or categorization process. Type A personalities exhibit excessive competitiveness, (Robbins, 2004) whereas Type B personalities do not exhibit any sense of urgency or competitiveness (Plous, 1993). The

difference between Type A and Type B indicates the former as being more proactive (Fischhoff, Slovic, & Lichtenstein, 1977).

By measuring franchise owners using the Big Five personality assessment recent research found significant differences on four personality measures: conscientiousness, emotional stability empathetic perspective taking and emotional intelligence for franchise ownership, and for service type groups two dimensions were identified: extraversion and empathic perspective (Weaven, Grace, & Manning, 2009). In attempting to further identify potential entrepreneurs, additional research using demographic variables found academic marks and father's occupational status did not to have any influence on identifying any prospective entrepreneur (Kumara & Sahasranam, 2009).

From the personality assessment research these grouping help to classify potential entrepreneurs. Although these personality groupings help identify potential entrepreneurs they do not predict entrepreneurial success.

Therefore, since the demographic and personality research does not conclusively identify potential entrepreneurs. The next step requires educational institutions to provide successful performance management training for prospective small business entrepreneurs.

Franchise Growth

Because of the recession of 2008 and 2009 overall business growth has been sluggish including the franchise industry, but the latest information from the magazine Entrepreneurship indicates that franchise companies that target specific populations have an opportunity for growth (Stapp, 2012). The article ranks 500 franchise companies based on the following criteria.

- Company can't be in Chapter 11
- Have a minimum of ten units
- Number of years in business
- Financial strength and stability
- Terminations
- Startup costs
- Provides company financing
- Growth rate

Although the article provides a ranking for the 500 franchises listed, the other franchises not listed possibly could meet the Entrepreneurship criteria assuming they provided the information. For more information on franchising including the economic impact check the International Franchise Association on internet (en.wikipedia.org), which indicates 3.3% of all businesses are franchises, and 8.1% of private sector jobs are attributed to franchises. Also, the top franchises and the top ones for sale are listed under the International Franchise Association link (franchises.about.com). Although most magazines list only the top 500 franchisees the Franchise Association link lists at least 1200 international franchises. Many may not make the top 500, but these franchisees may prefer not to provide the necessary formation for evaluation purposes and yet are undergoing substantial growth.

Franchise Training and Higher Education Training

Since 1991 the franchise ownership and training has seen different approaches to developing individuals. Many training programs exist for the franchisee, but few actually prepare the franchisee for success. For example, the recent research reports broadly indicate college students lack the basic and practical work place skills to immediately enter the workforce let alone start a small business (Casner-Lotto, Rosenblum & Wright, 2009). As a result to develop student's creative and practical ability before graduation requires universities to move from just teaching students to answering questions, solving problems, and teaching special competencies (Edwards, McCormick, & Oliver, 2006). Also, identifying behavioral patterns that lead to successful performance management system becomes a priority (Aguinis, 2009). However, there are few higher educational programs that encourage students to become immediately involved in a franchise or small business.

Franchise Ownership Programs

For the specialized franchisee training only a small number of higher education training programs exist. For example, the Metropolitan State College of Denver started in 2007 ((Jackowski, Phillips, Bacalzo 2011), and another program started four years ago at Missouri Western State University.

The Metropolitan State College Program grew out of the entrepreneurship center at the college and now functions as a method to hook up interested students with appropriate training in franchising, which becomes a part of performance management). Both the Denver Program and the Missouri Western Program require special course enrollment in order to provide an intensive training and screening process for the students. During this process the students are evaluated by faculty and usually a special committee that is composed of business professionals.

The older Denver program has nine franchisors offering opportunities for students whereas the Missouri Western Program currently has partnered with two franchise corporations: Rocky Mountain Chocolate and Aspen Leaf Yogurt. Both the Denver and Missouri Western programs provide special financing on a private basis between the franchisor and franchisee. These funds are used to purchase the inventory and the equipment needed to open the store.

Missouri Western State University Franchise Process

Missouri Western State University provides a one semester course for current students and former graduates of the Craig School of Business if they want be considered for a franchise with either Rocky Mountain Chocolate or Aspen Leaf Yogurt franchise. To insure proper planning for successful ventures students are provided with specific demographic data from the corporation that has been screened by faculty and advisors. From this data the prospective franchisees have to develop a business plan. The business plan has to be presented to selected faculty and business professionals. From the presentation the depth of the business plan the business professionals select the student to either take over a corporate franchise or start a new store. The choice is the students, but the older research indicates little or no difference in profitability or performance between corporate stores or franchise stores (Wade, & O'Hara, 1990).

To finance the franchise venture each franchise opportunity is evaluated by the faculty and business professionals to insure the price for the franchise, the equipment, and inventory is appropriately tied to the marketing potential of the location. These various locations are usually

tied into tourist areas or malls that have sufficient customer flows to insure a degree of profitability. Once the price of the franchisee is determined by the university faculty and business professionals Rocky Mountain Chocolate and Aspen Leaf then provide the financing and payback flexibility to enable the students to successfully operate the franchisee.

After the financing has been agreed between the franchisor and new franchisee, Missouri Western business faculty is made available to the new graduate franchisees. These faculty are given release time to work with the new franchisees to solve problems particularly in marketing and accounting. For example most new franchisees are not familiar with the practical aspects of following government regulations associated with periodic reporting requirements for filing taxes, social security and other state and federal requirements. The purpose of this free consulting is to reduce the risk and at the same time provide an additional form of practical training for the franchisee.

To promote the program and franchisee flexibility after one or two years' experience Rocky Mountain and Aspen Leaf provide the new franchisees with the opportunity to move to another more favorable store location. If a franchisee decides to move from one store location to another students that have just completed the course work are then give the opportunity to take over the vacated franchise.

Implications

From an educational viewpoint these successful franchise programs reinforces a new avenue for higher education to pursue educational creativity using performance management training. However, when you factor in the cost of the franchise program per student, the question arises whether university should try to expand the program or use the funds to enhance the overall business program for all students, not a select few (3-4 per year)? The cost entails a part time faculty member to coordinate the program, release time for two other faculty one in marketing and the other in accounting. To establish a firewall an attorney reviews all the contracts and the estimated total cost for the attorney and release time for faculty is estimated to be \$80,000 to \$100,000 a year.

Historically, at MWSU a small business emphasis area graduated about 17-18 students per year out of 250 majors in Finance, Accounting, Marketing, Management and Human Resources for 6.8 Percentage. Therefore the projections for increasing the number of students that desire to open and operate a franchise remained less than 10 percent. A similar result came from, a government grant that was award to one faculty member to develop an eighty hour entrepreneurship course. The course was advertised and taught to six different Northwest communities. The class size average was ranged from 10 to 14. The class was free and almost all the participants were 35 to 55 years old and over a three year period about 15-20 businesses started or expanded during this time period creating about 200 jobs. However, many prospective entrepreneurs that took the course decided their business idea did wasn't feasible.

The question is should universities divert funds and faculty time to a very small group of students and if not how does the university offset the cost of a franchise program. A couple of suggestions appear focus on increasing the cost by charging more for the course or requiring the new franchisee to pay a portion of the profits back to the university as a requirement for participating in the program. At present the amount given back to university amounts less than \$25,000 per year

using five tenths percent times the total sales. As the program expands the objective is to cover all administrative and teaching costs sometime in the future.

Another issue that has not been revolved pertains to students who are not selected for a franchise or does not do well, which at this point has not happened at Missouri Western with the special help provided the graduates, but as the program grows this issue has to be addressed along with how to handle who can sign up for the course. At present the students have to have a 3.00 grade point average.

Missouri Western State University Results

The Missouri Western State University Program has been in operation for the past four years and fifteen Rocky Mountain Chocolate franchises have been award and two new Aspen Leaf stores. This past year several of the students that were award franchises have decided to move from their existing store location to another new store location that has a more favorable sales and profitability projection , which has allowed newly selected students with the opportunity to take over the store that was vacated.

For continuation of the franchise program Missouri Western State University, Rocky Mountain is planning thirty to forty new store opportunities in the next few years. At this time none of the students that have been award the opportunity to obtain a franchise have failed. The program has been very successful and the university intends to continue and possible expand the program by attracting other franchises. In addition, the current success of these special entrepreneurial programs, which includes the Missouri Western Program, opens the door for any School of Business to obtain possible grant opportunities from foundations, and also pursue other possible outside investment opportunities such as Real Estate Investment Trusts. Recently, Missouri Western State University obtained \$200,000 grant from a Kansas City Foundation. The grant requires the university to provide small business opportunities for women and minorities. For the university expanding the franchisee opportunities becomes a challenge. However, one of the latest Entrepreneur Magazine lists child care franchise opportunities (Herold, 2013).

References

- Aguinis, H. (2009). *Performance management*. 2nd ed. Upper Saddle River, NJ: Pearson/Prentice Hall.
- Bennett, W. (1956), Master plan for management development. *Harvard Business Review*. Vol. 34 Issue 3, 71-84.
- Casner-Lottto, J., Rosenblum, E., & Wright, M. (2009),. The ill-prepared U.S. work: Exploring the challenges of employer –provided workforce readiness training. Corporate Voices for working Families. ASTD workplance Learning and Performance, Society for Human Resource Management, The Conference Board Research Report, BED-09Workforce RR. Retrived July 16, 2009 from [Http://store.astd.org](http://store.astd.org).
- Edwards, M., McGoldrick, C., & Oliver, M. (2006). Creativity and curricula in higher education: Academics' perspectives. In N. Jackson, M. Oliver, M. Shaw & J Wisdom (EDS.), *Developing creativity in higher education: a imaginative curriculum* (pp. 59-73) London England: Routledge.

- Fischhoff, B., Slovic, P., & Lichtenstein, (1977). Knowing the importance of appropriate extreme confidence. *Journal of Experimental Psychology: Human Perception and Performance*. November, 552-64.
- Herold, Tracy (2013), The Personal Touch. *Entrepreneur*. September 2013, 101-114.
- Jackowski, Mick, Phillips, Kenneth, & Bacalzo, Dean., (2011). Innovative fundraising: creating a franchise ownership program. *Journal of Marketing Development and Competiveness*, Vol.5, issue 4, 70-75
- Justis, Robert T., & Chan, Peng S., (1991). Training for franchise management. *Journal of Small business Management*, Vol.29 issue 3, 87-91.
- Kumara, S.A., & Sahasranam, C., (2009). Entrepreneurial characteristics among business management students: An empirical study. *Journal of Management Research Vol. 8, issue 6*, 7-29.
- Moghaddam, J.M. (2008). Perceived effectiveness of business internships: student expectations, experiences, and personality traits. *International Journal of Management*. Vol. 28 No. 4 Part 2, 287-303.
- McFarlane, D. A., (2011). The “great entrepreneur-leader model” in MBA Programs: impracticability and change. *Journal of Business Studies Quarterly*, Vol. 3 issue 2, 84-92.
- National Science Board Report Focuses on Developing Future Innovators (January/February 2010) in *Research Technology Management (2011)*, (54) 1, 6-7.
- Pidwrny, M., (2006). *Fundamentals of physical geography, 2 edition*. University of British Columbia Okanagan: Physicalgeography.net web link; <http://www.physicalgeography/fundamentals/4b.html>.
- Plous, S., (1993). *The psychology of judgment and decision making*. New York: McGraw Hill, 217.
- Robbins, S. P., (2004). *Decide and conquer: Making winning decisions and taking control of your life*. (upper Saddle River NJ) Financial Times/ Prentice/Hall, 13.
- Stapp, T., (January, 2013). The power of numbers. *Entrepreneurship*, 84-220.
- Wade, T., & O'Hara, M. J., (1990). The effects of ownership and investment upon the performance of franchise systems. *American Economist*, (34), 54-58.

Experiential Entrepreneurship and Assessment in Practice: The Spartan Trader

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Abstract

This Best Practice describes the Spartan Trader Retail Store. Experiential Learning takes place not in a simulation on the computer but in a real live store where profit and loss is determined by those students running the store. We assess the students' individual entrepreneurial propensity with a pre- and post- test developed by one of the authors. Through running the Spartan Trader store, entrepreneurial propensity should go up, which we argue will lead to a higher success rate, lower failure rate of business start-ups by the students. The Spartan Trader is a student-run retail store on campus that consigns first-hand student, faculty, and staff handmade art and crafts and manages all aspects of the store from product procurement, social media, marketing, pricing, point-of-sale systems, events, and security with limited resources. The purpose of the store is to provide hands-on experiential learning in small business management to our students. With a failure rate of approximately one-third of all retail businesses the first year in the United States and 75 percent of our students wanting to open a retail business, we opened the Spartan Trader to give them real experience *before* leaving school to have a greater chance of business success. Seventy percent of our students are on some form of financial aid and have no businesses in their extended families to learn from.

Specific Need Addressed

Self-employment skillsets are developed through our Entrepreneurship Program. The Cross-Disciplinary Entrepreneurship program responds to educational demands created through dramatic changes in the nature of business. Entrepreneurship has revolutionized all aspects of business. In response to the role of the university in economic development and to develop new kinds of learning, we aligned our curricula more closely with the needs of all students to develop an entrepreneurial mindset *and skill set*. These students need to be self-sufficient through self-employment, and experience entrepreneurship not only in the classroom but in a learning lab experience *before* they graduate.

Overall Project

Over 94,000 retail businesses started in the United States in 2011 and 44,173 survived for a failure rate of 33.3%, according to *Bizminer*, 2011. This major segment of our economy is not getting the attention it deserves on college campuses. The Spartan Trader gives real hands-on experience to apply learning from the classroom to the real world and experience success and failure before the student graduates-building core self-employment skills. This experience should increase their chances of success and get experience "making payroll" in a store open to the public-this is a collaborative effort between academic programs and the community. This project has students figure out what works and what doesn't, in a real world situation, we must make a profit to support the store expenses. The Spartan Trader is the 3rd cornerstone in our Entrepreneurship Program: Living Learning Community (LLC) (located across the street) with 54 freshman and sophomores living on one floor in Entrepreneurship, the CEO Club, and the Spartan Trader Retail Store. The CEO Club members have the store as their project-this increases the quality of experiential and co-curricular activities, while increasing stakeholder engagement. The advisor for the LLC is also the

faculty advisor for the CEO Club and has two of the LLC classes run through the store working and completing projects aimed at increasing sales.

Why a Best Practice

The Spartan Trader Retail Store fits number one-efforts to improve academic curriculums ability to build core self-employment skills by providing an experiential learning lab to gain knowledge in all aspects of retail entrepreneurship to further successful self-employment and small business development success. We assess their experiential propensity by a pre- and post-test when they start at the store and at the end of the semester. The Spartan Trader also fits number two-efforts to increase the quality and frequency of experiential/co-curricular activities. The Spartan Trader gives students the opportunity through class projects, practicums, internships, and cross-disciplinary entrepreneurship classes conducted on-site to really understand all aspects of running a retail store and experience what it is like to be self-employed to a great extent. This practical knowledge gained before the student leaves campus hopefully would result in less failures and more successes for retail businesses.

How it Works

The Spartan Trader Retail Store is a student-run retail store for first-hand consignments made by students, faculty, and staff. We actively seek consignments from artists, craftspeople, and other items from the university community-students, faculty, and staff. Students learn all aspects of business that directly translate into self-employment skills. Fall 2013 we have 26 students from across campus working in the store, through either a practicum or internship experience. Spring 2012 classes are doing projects and/or completing a practicum included 82 students. Fall 2012, we had 85 students involved in some aspect of retail operations. In the fall of 2011, we had the graduate business plan class write the business plan for the store. All three Coleman Fellows grants include classes or projects that involve the Spartan Trader Retail Store in the Spring of 2013-Entrepreneurship and Dance (community performance at the Spartan Trader)-revision of a current dance course, Creative Space: The Meeting of Art and Entrepreneurship (ART/ENT 276), and a course with the Community, Entrepreneurship, and Art in the fall of 2013 (ART/ENT 394). We combine the community with the store by offering seminars and programs open to the campus and the community. Spring 2013 the ENT/DCE 455 Entrepreneurship in Dance students offered a workshop on how to start a dance studio and fall 2013 an open mic night was held attended by 60 students and a speaker on art and entrepreneurship that is an illustrator for the *NY Times*, and other publications attended by 100 (ENT/ART 394).

Evidence of Success

Our first full year we accomplished the following:

- I. Increase the number of classes held at the Spartan Trader by two.
 - ✓ Increased the number of classes by four during spring 2013.
- II. Increase the number of projects completed through the Spartan Trader by two.
 - ✓ Increased the number of projects by over four during spring 2013.
- III. Implement 50% of the student projects completed through the Spartan Trader.
 - ✓ Implemented 100% of the projects completed by students in some capacity during spring 2013.
- IV. Increase the number of public relations contacts-coverage on TV, newspapers, newsletters, social media hits both on and off campus by 10 contacts.

- ✓ Increased the number of public relations contacts by over 10 more for a total of over 40 contacts.
- V. Record the number of website visits by adding a counter function.
 - ✓ Utilized Google Analytics and Facebook metrics to measure site visits.
- VI. Improve the website to comply with UNCG colors and format.
 - ✓ Website completely redesigned in fall 2012 to comply.
- VII. Increase the revenue generated at the store by 5%.
 - ✓ Revenue increased by 14%, from \$2,923.02 in fall 2012 to \$3,330.99 in spring 2013.
- VIII. Record store customers by forming an email list.
 - ✓ Email list and survey created, implemented fall 2012.
- IX. Record repeat customers by asking if they have been to the store before and # of times.
 - ✓ Survey implemented in Fall 2012 to record this, along with other information.

P.O.T.L.U.C.K.: Integrating the SBI Model & Social Entrepreneurship Practices to Design a Sustainable University Campus Kitchen

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Abstract

The mission of the Small Business Institute® (SBI) is to foster professional development for those engaged in experiential student team consulting and related entrepreneurship education, research and activities. A major part of this experience includes engagement and empowerment for universities and the communities they serve. Highly regarded as the link between 1) education, 2) business, and 3) community, the SBI Model became a catalyst for designing and launching “People Organized Together for Lindenwood University’s Campus Kitchen” (P.O.T.L.U.C.K.), a sustainable university “campus kitchen” to help feed families who are homeless and hungry in the St. Charles, MO. This paper will highlight best practices associated with the intersection of the SBI model, university community impact, and social entrepreneurship.

Experiential Education

A hallmark of the SBI model is providing an opportunity for the seamless integration of real-world problem-solving for students and the community. P.O.T.L.U.C.K. became the perfect opportunity to achieve this goal. A feasibility study was created to help Lindenwood University faculty, N.A.S.A. (Nonprofit Administration Student Association), and community partners evaluate the proposed Campus Kitchen Project. This feasibility study offered a practical guide to new opportunities, reasons why or why not to proceed, and gave greater clarity and focus for the purpose of the P.O.T.L.U.C.K. proposal.

Nonprofit organizations require good working boards along with a great staff. The board plays a critical boundary- spanning role in the system of a nonprofit organization, connecting the nonprofit to its community and constituencies (Worth, 63). P.O.T.L.U.C.K. has a unique organizational structure because it is not the traditional nonprofit organization. P.O.T.L.U.C.K. will come under the umbrella of Lindenwood University’s 501c3 status and does not need a traditional nonprofit governing board. However, an advisory board can play a powerful role in bringing together key players necessary for the organization’s success. An advisory board is defined as a “supporting group that advises or supports a nonprofit and its board and usually focuses on a specific issue,” in this case ending hunger (Worth, 359). A good place to find advisory board members are individuals and organizations already engaged in helping end hunger in the St. Charles community. This includes local churches, homeless shelters, food pantries, or schools within the nonprofit sector. In addition, for profit organizations such as Pfoodman Catering (Lindenwood University’s food service provider) and restaurants may also be good sources for potential advisory board members.

P.O.T.L.U.C.K. can be staffed by undergraduate work-study students as well as master-level students working as graduate assistance. These positions naturally connect in experiential leadership education. With a competitive job market, leadership skills for students are crucial. Working on a team, effective communication, and problem solving are all leadership skills desired by today’s employers. P.O.T.L.U.C.K. gives a practical outlet for students to gain

practical work training that enhances the educational experience. Lindenwood University will be able to bring greater value to an already existing work-study program by adding P.O.T.L.U.C.K. as a new position. In addition to work study positions, P.O.T.L.U.C.K. also has the powerful opportunity to integrate learning within the classroom to develop classroom curriculum that uses real-world projects to empower students and create real social change. Universities across the country recognize the importance of networking, work experience, and resume building; however, few have actually developed opportunities in the classroom to do so.

With P.O.T.L.U.C.K., Lindenwood University has the opportunity to examine the success of this classroom project and expand to other departments throughout the University. For example, management and marketing classes can plan fundraising events for the organization. Part of their final exam experience can take place through staffing the actual events. Social media is another area often talked about within the classroom but rarely integrated within courses.

Business Engagement: Practice and Principle

Organizations such as soup kitchens and University campus kitchens require sound business practices and partnerships with for-profit and nonprofit business enterprises. According to the Internal Revenue Service, a 501 © 3 nonprofit organization can be defined as an organization may qualify for exemption from federal income tax if it is organized and operated exclusively for one or more of the following purposes: religious, charitable, scientific, testing for public safety, literary, educational, fostering national or international amateur sports competition, the prevention of cruelty to children or animals. Lindenwood University operates under this status, and so will the Campus Kitchen. According to the criteria set by the IRS, the term educational relates to: the instruction or training of individuals for the purpose of improving or developing their capabilities, or the instruction of the public on subjects useful to individuals and beneficial to the community. P.O.T.L.U.C.K. will fit both of the statements provided with its mission of empowering students to help the community.

P.O.T.L.U.C.K. partners include the agencies that serve and help the distribution of food to hungry people in the St. Charles area: food banks, food pantries, soup kitchens, and shelters. It is important to know that food banks are distribution centers; they do not serve directly people, they supply food to soup kitchens, food pantries and shelters. According to the Community Council of St. Charles country there are 20 food pantries around this area. Some examples of nonprofit organizations that operates as Emergency Food programs provided through Food Pantries and Soup Kitchens in Saint Charles area are Sts. Joachim & Ann Care Service, Salvation Army, Powell Terrace Baptist Church, New Life food pantry, Harvester Christian Church, Life Changers, Midwest, Foster Adoptive support team (FAST), Loaves and Fishes, Inc, New Hope Pantry, Outreach Assistance Serving Individuals in St. Charles County (OASIS), Holy Spirit, Hallelujah House, Trinity Parish, St. Vincent De Paul society, Caring and Sharing, Bread for Life, The Salvation Army and O'Fallon Corp.

Liability and operational questions typically arise for initiatives such as P.O.T.L.U.C.K. The following liability issues have been considered:

- The facilities will be covered under the existing food license that the Campus Kitchen Project offers; this is the parent company for all University-operated campus kitchens;
- The Emerson Good Samaritan Food Donation Act (Pub.L. 104–210, 110 Stat. 3011,

enacted October 1, 1996) was created to encourage food donation to nonprofits by minimizing liability, in accordance with the Model Good Samaritan Food Donation Act;

- Signed into law by President Bill Clinton, this law, named after Rep. Bill Emerson makes it easier to donate food by allowing donor liability only in cases of gross negligence;
- In almost 12 years of operating, there has not been a single liability issue at any Campus Kitchen regarding client food safety;
- Campus Kitchen is licensed by the Health Department and is inspected by Food & Milk Division. Campus Kitchen Project currently holds an "A" rating.
- Campus Kitchen maintains a general liability and product liability policy in an amount above the normal school or corporate requirements. We will name the school as an additional insured.

Real Community Entrepreneurship

Several initiatives have been created to emphasize the importance of partnering with key business stakeholders in the local community to deliver meals to the homeless and hungry. This concept will be instrumental in providing the following services:

- **Food recovery:** Campus Kitchen volunteers pick up unused, quality food from campus dining providers, as well as from local grocery stores, food banks, farms and farmers' markets. Trained volunteers cook and store the donations according to established food handling regulations. The federal Good Samaritan Act for Food Donations protects schools and food donors who participate in food recovery programs.
- **Meal preparation:** Using donated kitchen space during off hours; volunteers utilize the food donations to prepare balanced and nourishing meals. Often, Campus Kitchens are able to prepare meal boxes or backpacks with shelf stable items which allows clients to create meals on days when there is no delivery scheduled.
- **Meal delivery:** Volunteers deliver prepared meals to organizations as well as to low-income families and individuals. Often, volunteers stay to share conversations, education and sometimes a meal with recipients. This exchange provides valuable interaction for our recipients and greater understanding of poverty for students.
- **Empowerment and education:** Each Campus Kitchen engages in empowering educational programs such as culinary job training for unemployed or underemployed adults, healthy cooking classes for families and nutrition education for kids. Most Campus Kitchens are empowering their communities through the development of gardens and the use of the fresh produce grown. Some kitchens have even created their own farmers' market, which accept SNAP (formerly food stamps) to provide the community with access to farm fresh products.

Key to P.O.T.L.U.C.K.'S sustainability is nonprofits connecting with other nonprofits food providers to create synergy. Nonprofit organizations "are increasingly forming alliances, partnerships, and collaborations, both within and across sectors, to achieve important purposes" (Guo and Acar, 2005). There are many factors to consider when understanding the factors associated with the choice of collaboration forms by nonprofit organizations (Hettche and Walker, 2010). Establishing a network of clients and donors, therefore, while simultaneously attending to the mission and goals of feeding hungry and homeless individuals, requires astute attention to the

interests of those in the community, awareness for potential conflicts of interest, and a general sensitivity to complex stakeholder preferences.

P.O.T.L.U.C.K. intentionally emphasizing collaborations between for profit and nonprofit businesses is certainly one important type of strategic alliance. The growth rate of the nonprofit sector, recognized for outpacing both the business and government sectors, is largely spawned by need-based community activities and ideologically led mission programs (Wing, Pollak, and Blackwood, 2008). Nonprofit leaders and nonprofit boards of directors similarly have a responsibility to understand their organizations' economic and service niches as they plan for the future (Wing, Pollak, and Blackwood, 2008). Coordinating the resources and assets of the community, therefore, is an opportune occasion for collaborative partnerships.

Conclusion

Emphasizing education, business, and community, the SBI Model serves as a conceptual framework both for small businesses and nonprofit organizations. Only a few universities in the USA operate a campus kitchen; for these institutions, implementing key business practices that embrace the art and science of social entrepreneurship are essential to their survival. Critical to a university campus kitchen's success will be an alignment among key university officials, student advocacy, and networking with community business partners. Consequently, P.O.T.L.U.C.K. will be launched during the spring 2014 semester.

References

- Alter, Sutia Kim. Managing the Double Bottom Line: A Business Planning Guide for Social Enterprises. Washington, D.C.: Save the Children, 2000.
- Alvord, S. H., L. D. Brown and C.W. Letts (2004). 'Social Entrepreneurship and Societal Transformation', *Journal of Applied Behavioral Science*, 40 (3), 260-282.
- Alvord, S., L. Brown and C. Letts (2002). Social entrepreneurship and social transformation: An exploration study. *The Hauser Center for Nonprofit Organizations and the Kennedy School of Government*. Harvard University Press.
- Andersson, F. O. (2001). Finding New Ways to Understand and Teach Entrepreneurship in the Nonprofit Sector: Introducing the Nonprofit Entrepreneurship Tree. *Journal of Nonprofit Education and Leadership*, 1(2), 78-90.
- Austin, J., Stevenson, H., & Wei-Spiller, J., (2006). Social and commercial entrepreneurship: Same, different, or both? *Entrepreneurship Theory and Practice*, 30(1), 1-22.
- Bornstein, D. (2004). *How to change the World: Social Entrepreneurs and the power of new ideas*, New York: Oxford University Press.
- Boschee, J. (2006). Migrating from innovation to entrepreneurship: How nonprofits are moving toward sustainability and self-sufficiency. Minneapolis, MN: Encore! Press.
- Brooks, A. C. (2008). Social entrepreneurship. A modern approach to social value creation. Upper Saddle River, NJ: Pearson Prentice Hall.
- Brush, C. G., Greene, P. G., & Hart, M. M. (2001). From initial idea to unique advantage: The entrepreneurial challenge of constructing a resource base. *Academy of Management Executive*, 15(1), 64-78.
- Burlingame, D. (n.d.). Nonprofit and Philanthropic Studies Education: The Need to Emphasize Leadership and Liberal Arts. *Journal of Public Affairs Education*, 15(1), 59-67.

- Carroll, A. B. (1999). Corporate social responsibility. Evolution of a definitional construct. *Business & Society*, 38(3), 268-295.
- Cheng, W. (2008). *Doing Good Well: What does (and does not) make sense in the nonprofit world*. San Francisco: Wiley.
- Crutchfield, L. R., & Grant, H. M. (2012). *Forces for Good: The Six Practices of High-Impact Nonprofits*. San Francisco: Jossey-Bass.
- Cyert, R.M. (1988). The place of nonprofit management programs in higher education. In O'Neill, Michael and Young, Dennis R. (Eds.). *Educating Managers of Nonprofit Organizations*. New York: Praeger.
- Dart, R. (2004). The legitimacy of social enterprise. *Nonprofit Management and Leadership*, 14(4), 411-424.
- Davidsson, P. (2002). What entrepreneurship research can do for business and policy practice. *International Journal of Entrepreneurship Education*, 1(1), 5-24.
- Dees, J.G. (1998). 'Enterprising Nonprofits', *Harvard Business Review*. January- February 1998, 55-67.
- Dees, J., J. Emerson and P. Economy (2002). Strategic tools for social entrepreneurs: Enhancing the performance of your enterprising nonprofit. Wiley Press.
- Emerson, Jed and Fay Twerksy, eds. September 1996. *New Social Entrepreneurs: The Success, Challenge and Lessons of Non-Profit Enterprise Creation*. San Francisco, The Roberts Foundation, Homeless Economic Development Fund.
- Flamholtz, E. G. (1986). How to make the transition from an entrepreneurship to a professionally managed firm. San Francisco: Jossey Bass.
- Grant, Alexis. "Rise in Social Media Jobs Means Opportunity." *US News RSS*. U.S. News and World Report, 28 Dec. 2010. Web. 17 June 2013.
- Guo, C., and Acar, M. (2005). Understanding Collaboration among Nonprofit Organizations: Combining Resource Dependency, Institutional, and Network Perspectives. *Nonprofit and Voluntary Sector Quarterly* 34,340-361.
- Hettche, M., Walker, P. (2010). "B-Harmony: Building Small Business and Small Private Nonprofit Partnerships that Thrive – A Framework for Collaborative Competition," *Competition Forum Vol. 8, No.1*.
- Johnston, R. (2001). Defining your mission. In G. Dees, J. Emerson, & P. Economy (Eds.), *Enterprising nonprofits. A toolkit for social entrepreneurs* (pp. 19-42). New York: Wiley.
- Kitzi, J. (2001). Recognizing and assessing new opportunities. In G. Dees, J. Emerson & P. Economy (Eds.), *Enterprising nonprofits. A toolkit for social entrepreneurs* (pp. 43-62). New York: Wiley.
- Knight, F. H. (1921). Risk, uncertainty and profit. New York: Augustus Kelley.
- "National Education Association." *NEA.org*. National Education Association, n.d. Web. 15 June 2013.
- O'Neill, M. (2005). Developing contexts of nonprofit management education. *Nonprofit Management & Leadership*, 16(1), 5-15.
- Perri 6. (1993). Innovation by nonprofit organizations: Policy and research issues. *Nonprofit Management and Leadership*, 3(4), 397-414.
- Salipante, P. & Aram, J.D. (2003). Managers as knowledge generators: The nature of practitioner-scholar research in the nonprofit sector. *Nonprofit Management & Leadership*, 14(2), 129-150.

- Sharra, S. (2005). From Entrepreneurship to Activism: Teacher Autobiography, Peace, and Social Justice in Education. *Social Entrepreneurs and Education*, 8(1), 7-15.
- Wilson, Mark I. & Larson, Sam R. (2002). Nonprofit management students: Who they are and why they enroll. *Nonprofit and Volunteer Sector Quarterly*, 31(2), 259-270.
- Wing, K.T., Pollak, T.H., Blackwood, A. (2008). Nonprofit Almanac. Washington D.C.: The Urban Institute Press.
- Worth, M. J. (2012). *Nonprofit Management*. Los Angeles: SAGE Publications.
- Young, D. (2001). Organizational identity in nonprofit organizations: Strategic and structural implications. *NonProfit- it Management and Leadership*, 12(2), 139-157.

Embracing Change: Higher Education Learners in the Virtual Teaming Environment

Andryce Zurick, Kaplan University

Abstract

After teaching business school online for close to seven years, it is interesting how undergraduate level student learners appear to be apprehensive about the process of virtual teaming projects. This behavior is learned from past unsavory experiences either in the workplace and or from higher education course requirements. The challenge is to motivate and help the learners to create their own rules of the road in how to work together in virtual team projects, and to conduct and realize effective meetings in goals and objectives setting. This involves a dynamic change for some learners and how models can help them embrace it. The idea is to share a model of the rules of the road for teamwork efficiencies and a quality-oriented process to schedule and facilitate meetings in general emphasizing best practices i.e. PAL.

Keywords: virtual teams, change management, higher education

Embracing Change: Higher Education Learners in the Virtual Teaming Environment

After teaching business school online for close to seven years, it is interesting how undergraduate level student learners appear to be apprehensive about the process of virtual teaming projects. This behavior is learned from past unsavory experiences either in the workplace and or from higher education course requirements. The challenge is to motivate and help the learners to create their own rules of the road in how to work together in virtual team projects, and to conduct and realize effective meetings in goals and objectives setting. This involves a dynamic change for some learners and how models can help them embrace it. The idea is to share a model of the rules of the road for teamwork efficiencies and a quality-oriented process to schedule and facilitate meetings in general emphasizing best practices.

If this sounds familiar, there is an approach to help higher education learners adapt to and adopt the virtual teaming environment that is presented in on-line courses taught. It is a good idea to allow the learners to vent in the live course Seminar when discussing the teaming assignment or project. Share real-world experiences from both the learners and instructor. The teaming may occur over a few weeks or just one. There are pre-existing conditions that have painted the learners' perceptions when thinking about any type of team work in general. These conditions may have developed from the workplace, academia, and or other organizations / clubs whether in an on-site or virtual environments. Learners who have chosen to realize their dreams in earning higher education degrees must become masters in time management when balancing life in general, family, work, and the new challenges presented from an academic curriculum.

One of the biggest complaints from learners is team members who do not pull their weight once assigned tasks and deadlines. There is something to be said about responsibility and accountability. Another issue is that of having to meet over multiple time zones. Scheduling team membership meetings to discussion and plan for an assignment or project can be daunting for virtual learners, especially if they have never had this type of teaming experience. Time is precious but if managed

effectively, the life balance can be realized; maybe not easily, but it is possible. In most cases, learners are excited about meeting others who share the common goal through higher education. In the past, some research has been conducted through control group experiments relative to virtual teams in the workplace (Kostner, 1998) (Friedrich et. al, 2011). Factors that influence virtual teamwork are:

- Trust within the team is important.
- Building relationships through sharing knowledge.
- Create a common spirit by defining a clear purpose / set of objectives.
- Share the same information among all team members simultaneously.

Internal and external factors also challenge a virtual team. External factors (virtual team givens) are distance, time, and technology which are outside the team's control (p. 160). Internal factors (virtual team creations) are culture, trust, and leadership which are within the control of the team (p. 160).

In one of the courses that the author teaches, the focus is upon team dynamics and managing conflict. Learners quickly understand the differences between a group and a team in the first unit week. It is a bi-directional continuous four or five stage cycle of which a group transforms into a functioning team i.e. forming, storming, norming, performing, and adjourning (Zeus & Skiffington, 2008, p. 134). Allow the learners to become acquainted with the team members to discover personal and professional backgrounds, common interests, strengths, and challenges. This provides a wonderful arsenal and foundation for the virtual team to effectively move forward. A sense of comfort and belonging begins to surface within the membership. Slowly the original perceptions of a team shared by the learners start to acquiesce and an appreciation of each member is realized.

In the virtual classroom, the team members should have a place within the course to initially share their backgrounds and the like in an asynchronous team discussion board area. Albeit this sounds trivial, it is essential to the membership for bonding and empathy purposes. Learners might choose to plan the first meeting via chat rooms, Skype, Adobe Connect, instant messaging, and other well-fitted social media platforms. Assignment of roles and responsibilities should be conducted in the initial meeting to build the structure of this small organization such as Team Lead, Team Facilitator, Team Scribe, Team Project Manager, or any other applicable roles that are necessary for the project. The idea is for the teams to get their tasks completed and build upon these to support the common goal, the assignment or project. All of this while still having fun too.

One method learned in conducting meetings, virtual or on-site, is to utilize a PAL (Purpose Agenda Length). How many times have you been invited to a meeting where it turns into a marathon and eats up hours of your valuable and precious time? The PAL is a business or academic tool that should be created and sent out via email or some type of meeting maker to all concerned team members, at least 48 hours before. In the workplace, meetings might have to be scheduled out at least two weeks in advance due to a very diverse membership and or industry environment. In the case of virtual learning, the turnaround will be determined by the assignment or project.

The PAL should present the attendees invited or required; it should clearly state the purpose of the meeting; the agenda should list the items of discussion; and the length of the meeting should be listed in minutes and or hours. Figure 1 lists a sample PAL for a meeting.

Figure 1. Sample PAL for a Meeting.

Attendees:	Joe Green, Team Lead Mary Jones, Team Facilitator Gregg McMillan, Team Scribe Jack Stone, Project Manager Lisa White, Team Member
Purpose:	Review and discuss the results of the pilot.
Agenda:	Quick meet and greet. Review / discuss the results of last week's pilot implementation. Open items. Next steps. Action items. Parking lot items (time permitting). Closing.
Length:	90 minutes or less.

Such simple steps can go a long way to engage team membership as well as allows for all invitees to fully understand what items will be covered and how to properly prepare for the event. There is an item in the Figure 1 Agenda that lists out the term, Parking Lot. This is where issues or concerns raised during the meeting that do not fit into the agenda are set aside for later in the meeting, time permitting, or at another meeting date. Generally the Team Facilitator will make note of this and anyone in the membership can call the raised topic to be placed into the Parking Lot. The Parking Lot can be the grease board, easel, laptop, scratch pad, or tablet where new ideas, thoughts, or concepts shared are captured for discussion after the meeting or at another time and date. The Facilitator will also watch the clock and alert the Team Leader when it is either time to move to the next item or start to wrap up the meeting, say five to ten minutes before time is up. This virtual teaming process enables the membership to effectively practice meeting management (Beyerlein et al., 2008; Reina & Reina, 2006; O'Neill et al., 2008; Obradovich & Smith, 2008; Duarte & Tennant Snyder, 2006).

Since the sharing of the PAL with virtual learners in the aforementioned course, the teaming experiences realized have been positive and some have adopted this best practice in their own workplace. The virtual learners have embraced change; a new way to meet and collaborate across the digital divide. When used, these learners specifically realized that their co-workers and superiors actually enjoy attending these PAL oriented meetings, on-site or virtually. PALs are gold nuggets that can be added to anyone's business toolkit whether higher education learners and or professionals in the workplace.

References

- Beyerlein, M., Nemiro, J., & Beyerlein, S. (2008). A framework for working across boundaries. In J. Nemiro, M.M. Beyerlein, L. Bradley, & S. Beyerlein (Eds.), *The handbook of high-performance virtual teams* (pp. 31-58). San Francisco, CA: Jossey-Bass.
- Duarte, D.L., & Tennant Snyder, N.T. (2006). *Mastering virtual teams: Strategies, tools and*

- techniques that succeed. San Francisco, CA: Jossey-Bass.
- Friedrich, R., Bleimann, U., Stengel, I., & Walsh, P. (2011). VTMM: Virtual team maturity model. *Proceedings of the European Conference on Management, Leadership & Governance*, 159-166.
- Kostner, J. (1998, December). *Virtual leadership: Secrets from the Round Table for the multi-site manager*. Eastbourne, UK: Gardners Books Ltd.
- Obradovich, J.H., & Smith, P.J. (2008). Design concepts for virtual work systems. In J. Nemiro, M.M. Beyerlein, L. Bradley, & S. Beyerlein (Eds.), *The handbook of high-performance virtual teams* (pp. 295-328). San Francisco, CA: Jossey-Bass.
- O'Neill, T.A., & Rhys, L.J., & Hmbley, L.A. (2008). Leading virtual teams: Potential problems and simple solutions. In J. Nemiro, M.M. Beyerlein, L. Bradley, & S. Beyerlein (Eds.), *The handbook of high-performance virtual teams* (pp. 213-238). San Francisco, CA: Jossey-Bass.
- Reina, D., & Reina, M. (2006). *Trust and betrayal in the workplace: Building effective relationships in your organization*. San Francisco, CA: Berrett-Koehler.
- Zeus, P. (DBA), & Skiffington, S.M. (PhD). (2008). *The complete guide to coaching at work*. North Ryde, NSW: McGraw-Hill Australia.

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Discussion with the Journal Editors

Gerry Hills, Journal of Small Business Strategy
Michael Harris, Small Business Institute Journal
Shanan Gibson, Small Business Institute Journal
William McDowell, Small Business Institute Journal
Noel Campbell, Journal of Entrepreneurship and Public Policy

Publishing continues to be a primary objective for most faculty. A critical component of the process is the selection of the appropriate publication outlet. This session has been designed as an opportunity to interact with multiple journal editors to learn more about the submission process and how to maximize your potential for publication success.

Is Your School Next? The Future of E-Learning

Deborah Cours, California State University Northridge

Joy Griffin, California State University Northridge

Whitney Peake, University of North Texas

The credibility of online learning is shifting up as top-tier schools implement million-dollar technology platforms to grow online degree programs. 100% online degrees and hybrid classes are now more popular than ever. What does this mean to our industry? To the SBI program? To your school? Join us as our expert panel discusses the future of e-learning and how it might impact your college or university.

Export Odyssey: Empowering Students in the Area of Exporting

Nicholas Williamson, University of North Carolina Greensboro

This pre-conference workshop discusses how to train students to be able to perform all of the export transaction “creation” functions necessary for success in exporting.

Enhancing Your SBI Program: How to Take Your SBI to the Next Level

Neal Pruchansky, Keene State College
Dianne H.B. Welsh, University of North Carolina Greensboro
Ron Cook, Rider University
Harriet Stephenson, Seattle University
Deborah Cours, California State University Northridge

Dianne H.B. Welsh, Ph.D. Hayes Distinguished Professor of Entrepreneurship & Founding Director of the Entrepreneurship Program

- What to Do if Your University Does Not Have a Dedicated SBI Class
- How to Get Faculty Excited and Involved
- What is in It for the Students, Faculty, and the College?
- New AACSB Standards
- Using Publicity to Benefit the SBI Program

Neal Pruchansky, Ph.D., MBA. Professor of Management, Director of Small Business Institute, Keene State College

“Recruitment and Retention of Students”

- Recruitment
- Selection
- Your students first
- Students referred from a colleague
- Students referred by SBI participants
- Formal letter of application
- Retention
- Make experience Special
- Support from faculty and administration
- Office for SBI 24.7 access
- Professional experience
 - a. Business Cards
 - b. Team expense budget

Harriet Stephenson, Seattle University

“Exploring trends and opportunities in ‘traditional’ SBI consulting projects”

- Social enterprise for non-profits;
- Economic development projects including several projects in concentrated geographic area;
- Hybrid-delivery/communication projects with limited ability to meet face-to-face with client, and/or with team members with each other, and/or with instructor including working on plans for incarcerated individuals or projects for microloan borrowers in village in developing country or for client in another country who wants to sell product in US ...should s/he export it or establish manufacturing operation here.
- On-line offering of “SBI” consulting?

Deborah Cours, Ph.D. California State University, Northridge
Professor of Marketing and SBI Director
Director, Graduate Programs in Business
“Using SBI as a Cornerstone of an Experiential Curriculum”

Curricular Importance of Experiential Learning

- Point of differentiation
- Learning styles
- Employer demands
- Fundraising

SBI Consulting Projects throughout the Curriculum

- Start small or go big
- Assignments in courses
- Dedicated course
- Role in Culminating Experiences
- Undergraduate Capstone
- Graduate Project in lieu of Thesis

Implementation

- Database of projects
- Faculty guidance and support
- Student recruitment
- Client recruitment

Approaches to Helping Educators and Students Learn About Entrepreneurship

Kathleen Liang, University of Vermont

Abstract

This workshop is designed to create a dynamic discussion about entrepreneurial educators, entrepreneurship education, and effective curricula in teaching entrepreneurship. This 90-minute session will lead participants to actually transfer theories to reality through experiential learning and collaborative learning exercises. Participants will generate supportive and successful practices that will advance knowledge and skills for us to teach entrepreneurship across disciplines and to assess the impacts of learning.

Introduction

The Small Business Institute (SBI) Model has been around for many years and is well accepted. In recent years, many SBI Directors, small business instructors, and other educators have been asked to expand the more traditional small business programs to include entrepreneurship at the undergraduate and graduate levels and across colleges. This growing interest in entrepreneurship education has required educators to learn new knowledge and skills required to develop entrepreneurship curriculum, courses and appropriate teaching approaches to accommodate diverse students and learning environments.

Purpose of the Workshop

The purposes of this workshop include: (1) to introduce two effective entrepreneurship curricula that have been implemented in two universities; (2) to offer workshop participants an opportunity to actually be a part of one of the curricula in 90 minutes to gain first hand experiences about the contents, challenges, and interactions of learning entrepreneurship; and (3) to allow the participants to interactively share their own experiences, opportunities and challenges in becoming an entrepreneurship professor, developing a curriculum, courses and developing appropriate teaching methods. There are three focuses in our workshop and they are described below.

Focus 1 - Developing Entrepreneurship Professors

We hope to utilize this workshop to stimulate discussions and reflections on several questions that have not been thoroughly explored with respect to development of entrepreneurial educators: How did you learn entrepreneurship? What was your educational background? Were you an entrepreneur? Did you take courses? What experience did you have in teaching before entrepreneurship?

Focus 2 - Developing the Curriculum

How was the decision made to position the curriculum in the University? What decision was made? How was the decision made to position the curriculum in a college? What college houses the curriculum?

Each participant is asked to bring or present their curriculum and their experiences developing the curriculum. Workshop facilitators, one in the College of Agriculture and Life Sciences

and the other in the College of Business with combined experience of 50+ years teaching entrepreneur

Focus 3 - Developing Entrepreneurship Courses

How was/were the course(s) developed? Who decided what courses? What courses were developed? Why? What is the content of each course? What is your approach to helping students learn entrepreneurship?

Hands-on Learning for Workshop Participants about Implementing an Effective Entrepreneurship Curriculum

In this part of the workshop one coordinator will present a unique course and approach to helping students learn entrepreneurship. The course, Introduction to Community Entrepreneurship, is open to any student at the university. Dollar Enterprise is a unique, innovative and collaborative approach to help students learn entrepreneurship. A text written by the professor, Dollar Enterprise: From Theory to Practice is used in the class.

The introductory part of the course involves a series of exercises designed to help the students get to know one another and “get in the mood” for the approach. Mini lectures are intermingled with the exercises to introduce definitional and descriptive information about entrepreneurs and entrepreneurship.

In phase two, students are asked to think about and identify opportunities for an on campus venture and submit it to TAs. The TAs then combine the ideas into categories. These summary categories are presented to the class and students join teams based on the categories. The teams then begin to work collaboratively to develop specific products that they will produce and sell in their on campus venture. The teams also identify a local charity that will receive their profits after the project is completed.

Mini lectures are used on an as needed basis to provide students information they need throughout the course. “Just-in-time” information if you will.

Students are provided \$1 each by the instructor for their project and must find and acquire the resources needed to implement their venture. The ventures are run for a period of four weeks during which students must acquire resources to assure continuance, produce products, sell products and maintain good records. Of course, conflicts, miscommunication and mistakes occur within and between teams. Mini lectures and interactive classroom discussions about leadership, team work, communication, ethics, conflict resolution and so on are presented by the instructor or guest experts.

Students are then required to develop a report, with reflections, about their experiences during Dollar Enterprise. A business plan is then developed by each team based on their experiences.

Assessment is continuous during the class and students actively participate in the process. The instructor has a unique tool, network analysis, to help assess the teamwork results before and after the on campus venture to demonstrate how and the extent of interpersonal and intrapersonal learning occurs. The collaborative learning outcomes are analyzed based on students’

demographics, class, interests in entrepreneurship, characteristics, and earnings. This tool will be presented and demonstrated during the workshop using the workshop participants' data as examples.

Workshop Participants Take Aways

The workshop facilitators will provide copies of their curriculum and course descriptions to participants. Participants are encouraged to bring hard copies and/ or present/share their programs and courses. Copious notes will be taken of the discussions and later shared with participants. This workshop will provide a rich, sharing experience for those of us who teach entrepreneurship and help us improve ourselves, our curriculum and our courses to improve the learning experiences of our students. Workshop participants are encouraged to bring and/or present their unique approaches to helping students learn entrepreneurship.

United States Supreme Court Decisions Affecting the SME: What "LAWS" Ahead

Stephanie Bardwell, Christopher Newport University

This workshop describes the use of LIDM [Legal Insight Decision Making] for the SME in light of key case law decisions. The top 10 cases from the PPACA to Copyright law are briefed; policy and principles are explained and the impact on the SME is described. The author provides expertise in four areas: the classroom, consulting, the community and the courtroom. The workshop will include economic, legal, ethical and strategic perspectives which are useful for all business disciplines, particularly management, marketing, finance, accounting and law.

How to Create and Run an SBI Program at Your University

Ron Cook, Rider University
Leo Simpson, Seattle University

The mission of the Small Business Institute® is to be the premier provider of professional development for those engaged in experiential student team consulting and related entrepreneurship education, research and activities. As a member of the SBI, you are entitled to start and be director of an SBI program at your school. While this may seem like a daunting task, Ron Cook and Leo Simpson break down exactly what to do in order to develop an effective, highly regarded SBI at your school. Whether you are new to the SBI or if you have been a member for years, this session will give you the necessary tools to find great success with SBI at your institution.

DreamSpark and BizSpark for Entrepreneurs!

Brad Jenson, Microsoft

Come and learn how to leverage DreamSpark in your classroom if you are an educator and how to become a BizSpark partner if you are a Start-up. DreamSpark Premium is an offering of many of Microsoft's major software titles like Windows 8 client, Windows Server 2012, Visual Studio 2012, etc. These titles are fully functional and provide students and faculty developing and delivering courses where they are used with thousands of dollars of software. The DreamSpark Premium license is for STEM courses. Learn how to take advantage of this incredible library of resources for STEM faculty and students. The BizSpark license includes all of Microsoft's titles and \$150 of Azure each month. This is a great way for Incubators, Accelerators, and Start-ups to have hundreds of thousands of dollars of software available during their critical initial years.

Creating an Award Winning Project of the Year (POY)

John Jackson, California State University Fullerton

The purpose of this workshop is to provide training, tools, and resources to faculty who direct student field-based consulting projects. John Jackson currently oversees one of the largest SBI programs with nearly 100 projects completed each year. He will share his experiences and ideas for guiding students to develop an award winning Project of the Year.

Leading an Online Business Plan Training Program

Blake Escudier, University of Fredericton

This workshop will show how a business plan training program may be managed through a virtual environment. The virtual program extends an organization's market reach in providing services. The limits of an organization's market reach are based on scope of marketing activities.

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Governance Insight for Social Entrepreneurs, Nonprofit Advocates, & Other Catalysts Who Work to Change the World through Cultural Dialogue & Exchange

Patrick Walker, Lindenwood University

Abstract

The Niagara Foundation of Missouri sponsored a ten day summer 2013 dialogue trip to Turkey with the following goals in mind:

- a means of building bridges and strengthening friendships between the East and the West to find common ground which we can share with others;
- an opportunity to network with Turkish scholars, social service, business and legal professionals as a way of strengthening a commitment to a global ethic of dialogue and mutual understanding.

Sound governance principles are key to any global undertaking that involves community, collaboration, and cultural dialogue. The trip to Turkey enlightened and equipped academic professionals with knowledge who were unaware of the governance required to foster intercultural connectedness, nonprofit collaboration, and global nonprofit advocacy in our society. This approach supports an academic, service, and research-based pedagogical model that connects local, national and global communities with the academy, and is aligned with the interests of many universities who support faculty scholarship that is responsive to local needs. With an emerging Middle East and Islamic presence in the St. Louis region, this project became relevant in achieving our University's mission and responding to the President's vision. These premises can be tested and will contribute to a body of emerging social entrepreneurship research involving global perspectives of governance and the collaborations required to promote cultural dialogue and exchange.

Survival Rates of New Firms Created in the Recession: A Multi-Year Study

Ron Cook, Rider University

Abstract

This study examines the survival patterns of new firms that were created during difficult economic times and how these rates might compare to earlier research, given the macro-climate conditions and a more comprehensive measure of births. Our findings indicate a significantly worse survival rate in the second year than previous studies but reverting to previous norms by year three. We discuss the implications of these findings in light of definitional issues in past studies, our more inclusive sample, and whether the macro-climate impact is different given the 2008 recession.

The Job Characteristic Model: An Extension to Entrepreneurial Motivation

John Batchelor, University of West Florida

Abstract

Previous findings on job characteristics with samples of those employed by others show that certain job characteristics can lead to desirable outcomes such as high levels of motivation, performance, and satisfaction (Fried & Ferris, 1987). Research within the field of entrepreneurship has shown that the promise of more desirable job characteristics can motivate those currently employed by others to start their own ventures (Cromie, 1987). Further, Schjoedt (2009) was the first to test whether the job characteristic findings of previous studies concerning managers were generalizable to entrepreneurs. His findings were that while the job characteristics of entrepreneurs and business managers were significantly different from one another they still were significant predictors of job satisfaction for entrepreneurs. The purpose of the current research is to further explore which outcomes can be explained by the unique job characteristics of self-employment and entrepreneurship. We propose that certain job characteristics (skill variety, task identity, autonomy, and feedback) do indeed differ significantly between entrepreneurs and those employed others. Further, we propose that the outcomes of internal work motivation and satisfaction functions differently for entrepreneurs than those employed by others. And finally, we present propositions adjusting the meaning of the outcomes of performance and turnover from that of the original Job Characteristics Model (Hackman & Oldham, 1975) to one relevant to entrepreneurship.

A Breakdown of the Informal Retail Economy in Cameroon (West Africa): From Street-Walker to Street-Corner to Store-Owner Retail Entrepreneur

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Abstract

It is called the informal economy because those operating in it do so under the radar of government institutions. They are unregistered, and for tax and/or benefit purposes, are not counted as part of the formal economy. However, they are legal in all other respects. In the recent past, research has focused on macro issues affecting entrepreneurship in Africa and very little on the growing informal economy. A closer look reveals three sub-categories of informal retail entrepreneurs in developing countries: the Street-Walker, the Street-Corner and Store-Owner entrepreneur. The Street-Walkers have no fix location. They carry their merchandise with them everywhere along city streets. Street-Corner retailers are those who have a temporary location on the street (a kiosk) with a few more product lines to sell. Store-Owners have earned enough capital to afford a permanent location along the streets or in a designated market center. The progression from Street-Walker to Street-Corner and then to Store-Owner represents a unique entrepreneurial ecosystem and is the central thesis of this paper. The Street-Walker and Street-Corner retailers make up the core of the informal economy. The progression from Street-Corner to Store-Owner signals the transition from the informal to the formal economy. Survey data from Cameroon in all three sub-categories will be used to analyze a number of key hypotheses, the most significant of which is the hypothesized progression from Street-Walker to Street-Corner and ultimately to Store-Owner status and the correlation to key success determinants? The findings should reveal policy implications for the informal entrepreneurial economy.

Implications of Return on Corporate Social Responsibility for SME's

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Abstract

This paper seeks to present an examination of the validity of these methods for determining Return on CSR and the implication that this holds for small and medium sized enterprises. Adam Smith's description of the purpose of the firm holds that the success of the firm is determined by the ability of the firm to increase shareholder wealth by maximizing current profit and optimizing future profit potential. The dimensions by which success are measured are growth and profitability. The theory of corporate societal strategy suggests that maximization of current profit and optimization of future profit potential are dependent on the ability of the enterprise to balance power and to develop legitimacy by satisfying stakeholder aspirations and expectations (Ansoff, 1979; 1985). While Corporate Social Responsibility has been seen as an increasingly visible part of corporate strategy the lack of clear linkage between CSR and Profitability and/or CSR and Market Value, has led many firms to consider CSR as a "nice if you can afford it but not critical" element in corporate culture, a marketing tool or a method of creating employee involvement. (Ahmed, Nanda, Schnusenberg, 2010) Economic down swings over the past 15 years have seen the contraction of spending by corporations on CSR elements followed by an uptick in the emphasis on these same CSR when the economy recovers. (Luo, Bhattacharya, 2006) Raymond Kao (1985) suggests that, in as much as "a corporation is a community of entrepreneurs created for the purpose of creating personal wealth and adding value for society", part of the mandate of corporate strategy is the linking of the corporation to the environment through the establishment of understandable, stakeholder expectations. Corporate reputation is built on the public recognition of the ability of the firm to live up to this expanded purpose. The quality and innovativeness of the products and services sustain the corporation's reputation (Luo, 2010).

Small Business and the Inner City Entrepreneurial Environment

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Abstract

This paper explores the many sources of data surrounding the relationships of small businesses and their effects on the inner cities; and vice versa. For purposes of the paper, inner cities are defined as being the older, or densely populated central areas of a designated “city.” The main sources used in this study are statistics from the Bureau of Labor Statistics, The Department of Labor Census Data and data from job portals. Also, some widely circulated periodicals are referenced such as Bloomberg BusinessWeek. Along with the national data, there is also particular data in this paper from the following three cities: Newark, Trenton and Asbury Park, New Jersey. These three cities are chosen because they are situated in three very distinct locales and their economic environments are distinguished based on these locales. The main problem researched centers around the state of the entrepreneurial business environment of many inner cities and how some economic issues have disrupted the effort of entrepreneurship by small business. This paper also examines the roles of macroeconomic factor and microeconomic factors in the growth rate of certain cities economic environments. Included is the role of the government, both federal and state, the roles of banks and the role of a cities ethnic and cultural components that come together to determine the entrepreneurship environment of that particular city. The emergence of microloans, bridge-loans and the resources provided by banks are discussed as well as the resources provided by federal and state governments. Lastly, the ethnic makeup of the inner cities will be touched upon as well as the inner city history and any other significant recent evolutions of the inner cities business environment.

Gender and Opportunity Identification: Some Evidence From France, Italy, and Tunisia

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Abstract

Recently, we noticed that there is a critical mass of literature centered on Opportunity Identification (OI). Some of them focused on the process of OI and tried to model it (Ardichvili et al., 2003). All these attempts didn't focus on opportunity recognition process used by women entrepreneurs. We found one single work in the literature on the role of gender in OI which is the work of DeTienne and Chandler in 2007.

As part of this paper, we propose, in light of ten in depth case studies with ten women entrepreneurs in three different countries to first describe their OI processes and then emerge some similarities or differences between them.

The first finding of our study is that women in our sample utilize different OI sequences regardless to their country. DeTienne & Chandler (2007) identified that OI consisted of four possible sequences: Learn/replicate, Learn/innovate, Learn/acquire and innovate/educate. We find that women were more likely to utilize a Learn/innovate sequence. For the Tunisian cases, the necessity entrepreneurship is very clear especially after the revolution. Italians and French cases are almost the same. Women entrepreneurs found their business because they faced a negative displacement and were obliged to find a business.

There are also some implications for our findings. Making researches on OI with a gender perspective advances our learning of OI and consequently our understanding of entrepreneurship. Moreover, searching women entrepreneurs and OI is a new path in entrepreneurship research and we knew a little on this issue. We can also have implications for entrepreneurship education.

When and How Does Size Matter? A Comparison of the Deployment and Efficacy of HR Practices in Small and Medium Sized Organizations

Andrew Herdman, East Carolina University

Abstract

This study explores the patterns of deployment of progressive high performance work practices (HPWP) among hotels of varying size. A variety of hypothesis are offered related to the reliance of more formalized HR practices as hotel size increases. Additionally, we argue that hotel size, as measured by employee count, will moderate the relationship between the presence of HPWP and critical work outcomes, like organizational commitment and organizational citizenship behavior (OCB). Specifically, we hypothesize that that smaller hotels will experience greater benefit for the deployment of HPWP than larger hotels,. Hypotheses will be tested using a unique sample of 204 franchised hotel operations ranging in size from 10 to 250 employees that includes measures of human resource practices and employee reports of satisfaction, commitment and OCBs.

Student Consulting Projects and Critical Thinking: Monitoring the Use of Judgment Heuristics

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Abstract

This paper uses a case study to examine linkages between student consulting and critical thinking. Student outcomes were measured with an adapted version of the American Association of Colleges and Universities' (AACU) Values Rubric for Critical Thinking (aacu.org, 2013), with explicit focus on three dimensions: *explanation of issues*, *evidence*, and *influence of context and assumptions*.

Data comprise faculty observations from: (a) documented notes from group meetings and (b) formative and summative instructor evaluations of students (undergraduate and MBA). Gaps in student critical thinking are further explained in terms of the literature on judgment heuristics. Judgment heuristics were defined as ways actors introduce bias into their decisions, for example, due to overconfidence, representativeness errors and belief in the law of small numbers (Bryant, 2007; Busenitz and Barney, 1997; De Carolis and Saporito, 2006; Ennis, 1962; Forbes, 2005; Tversky & Kahneman, 1974).

Our findings indicate that students exercise subjective judgments of probability. Students also have difficulty making judgments about the similarity of client context and the context in which secondary data was collected or meant to be used. We additionally see that students can be swayed by the illusion of authority, and neglect to triangulate information with alternate evidence. We believe that many of these satisficing behaviors can be ameliorated through increased attention to good research methods practices and guided meta-consciousness perhaps achieved by continually requiring students to reflect on their judgment processes. We conclude that business students can improve critical thinking by reflecting on heuristic behaviors throughout the student consulting project.

The Impact of Family Support on Turkish Women Entrepreneurs

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Esra Memili, University of North Carolina at Greensboro

Eugene Kaciak, Brock University

Abstract

It is well documented that women entrepreneurs add exponential growth to the economic well-being of countries. We examine the impact of family moral support on Turkish women entrepreneurs' major challenges (i.e. personal problems and recognition of poor managerial skills and knowledge) and advantages (i.e. perceptions of helpfulness of education and work experience). Our findings show that family moral support can have both positive and negative impact on Turkish women entrepreneurs. Implications and future research are discussed.

Keywords: Women Entrepreneurs, Turkey, Family Moral Support, Entrepreneurial Challenges and Advantages

Incentive Based Compensation for CEOs in Small and Medium Sized Enterprises: Does Pay for Performance Matter?*

Joshua Aaron, East Carolina University
William McDowell, East Carolina University
Michael Harris, East Carolina University
Brandon Cline, Mississippi State University

Abstract

This study assesses the impact of incentive-based compensation for chief executive officers (CEOs) within small and medium-sized enterprises (SMEs). Specifically, this study compares the influence of incentive-based compensation on performance for SMEs to larger organizations as well as younger to older organizations. The sample included over 24,000 CEO observations from ExecuComp. The results indicate partial support for a greater benefit on performance of using incentive-based pay for SMEs over larger organizations and full support for a greater benefit on performance for younger organizations than older organizations.

*Full paper available upon request to authors.

Financial Literacy within the Family Firm: An Exploratory Examination and Opportunity for Learning*

Denise Dickins, East Carolina University
Shanan Gibson, East Carolina University
Michael Harris, East Carolina University
William McDowell, East Carolina University

Abstract

Results from a sample of owner-managers of small family-owned businesses indicated that while they are reasonably satisfied with their overall performance, they are not particularly well versed in the basics of financial literacy frequently necessary for long-term business success. In fact, when completing a short “test,” none of the study’s participants responded correctly to all five questions, and nearly ten percent failed to answer one question correctly. In an effort to remedy this situation, this paper provides a review of five major areas – the costs associated with obtaining capital, financial statements, causes of fiscal failure, tax implications of succession, and business valuation, that is both easily accessible and highly informative.

*Full paper available upon request to authors.

Creating an Experiential Program: Center for Commercial Entrepreneurship of Invasive Species

Blake Escudier, University of Fredericton
Blair Lipsett, University of Fredericton

Abstract

This paper presents a process for developing an academic program for experiential learning. Experiential learning within this proposed program presents a reality based situation for a practicum learning methodology. Commercial Entrepreneurship for Invasive Species is a program designed to incorporate cross curriculum in which business and science students participate on teams developing a product and business plan utilizing raw material sourced from an invasive species. Invasive species may be a plant, insect, animal or other biologic. The program's goal is to incorporate synergy between science and management entrepreneurship resulting in a commercial plan.

Sustainability and the Business Plan

Francis Amatucci, Slippery Rock University of Pennsylvania
Mary McKinney, Duquesne University

Abstract

This paper discusses the need for inclusion of sustainability, or ‘triple bottom line’ thinking, to the traditional business planning process. We describe the sustainability revolution of the 21st century that produces numerous challenges and opportunities in terms of innovative products/services and business processes. We present a framework for incorporating sustainability into each section of the business plan. We urge entrepreneurship educators to revise their traditional entrepreneurship training practices for a future that views concerns for people and the planet, as well as economic profit, as an imperative rather than a choice.

Teaching Students How to Make a Difference - An Activity to Build Confidence in Media Studies Students in a Social Entrepreneurship Course

Debra Sea, Bemidji State University

Abstract

Studying social entrepreneurship is a well-made match for Millennial Generation Media Studies students (or any Liberal Arts students) because they enjoy working together, care about social problems, and want to make a difference (Howe and Strauss, 2003). This paper presents an activity designed to build the confidence of these students studying social entrepreneurship, demonstrating that they can make a difference.
