Career Impacts of Entrepreneurship Education: How and When Students Intend to Utilize Entrepreneurship in their Professional Lives

Nathalie Duval-Couetil & Ziyu Long, Purdue University

INTRODUCTION

In a recent opinion piece in Wall Street Journal, Carl Schramm, former President and CEO of the Kauffman Foundation said that despite colleges churning out entrepreneurially-minded students, the "teaching of entrepreneurship gets an incomplete" due to a lack of evidence of benefits (Schramm, 2014). Schramm highlights the growth in entrepreneurship educators, yet a decline in new businesses created. He also points to the lack of meaningful metrics to measure the value of entrepreneurship education stating that "there is no employer demand for people trained in the 'art' of entrepreneurship, nor does the training offer any recognized value in other jobs." During Schramm's tenure at Kauffman, the Foundation invested millions of dollars in programs designed to catalyze the growth of entrepreneurship education across campuses and academic disciplines.

From an outcome standpoint, it is fair to say that the jury is still out on the value of entrepreneurship education if the metric is short-term new venture creation. While economic development is the premise for the creation of many entrepreneurship education programs, research suggests that venture development may not be a representative outcome in the near term, particularly for undergraduates. In general, limited research has explored how entrepreneurship is constructed as a career goal or professional identity among the increasingly diverse students studying entrepreneurship. The purpose of this study to is to examine career goals through narratives written by entrepreneurship students to understand their motivations for studying entrepreneurship, the manner in which they expect to utilize it during the course of their careers, and their timelines associated with doing so.

LITERATURE REVIEW

The growth in entrepreneurship education across the country and increasingly around the world has been well recognized (Katz, 2003; Kuratko, 2005; Torrance, 2013). Over the past two decades, a proliferation of entrepreneurship programs, credentials, experiential and co-curricular activities have been made accessible to undergraduate students in a wide variety of academic disciplines beyond those enrolled in business schools. Programs vary widely, emerging from various academic units; employing tenured faculty, non-tenured faculty, or practitioners; and taking the form of majors, minors, and certificates (Duval, Shartrand, & Reed-Rhoads, in press; Shartrand, Weilerstein, Besterfield-Sacre, & Golding, 2010). Engaging students from a wide variety of academic disciplines has expanded the discourse surrounding the value of entrepreneurship education beyond that of venture creation. Recognizing that starting a company is not an immediate goal for many students, today entrepreneurship programs tout associated benefits, including the development of leadership, communication, business literacy and intrapreneurial skills, in order to draw a broader audience to programs.

Schramm's comments highlight the ambiguity around *what* meaningful outcomes should be for contemporary entrepreneurship programs, as well as *how* and *when* they should be measured. These challenges have been discussed extensively in the literature (Duval-Couetil, 2013; Fayolle, Gailly, & Lassas-Clerc, 2006; Pittaway, Hannon, Gibb, & Thompson, 2009; Rideout, 2012) and the topic continues to stimulate active debate at meetings of entrepreneurship educators. Within the academic field there is a lack of consensus in defining the knowledge domain of entrepreneurship or how it should be taught – ranging from a set of terms, skills and competencies that students acquire, to the development of an "entrepreneurial mindset" enabling them to identify opportunities and be more proactive (Haynie, Shepherd, Mosakowski, & Earley, 2010; Neck & Greene, 2011). Varied pedagogical approaches lead to ambiguity related to *how* outcomes should be measured. A broad array of measures for entrepreneurship education have been proposed, ranging from student awareness and interest, to skills and knowledge, entrepreneurial intention, venture creation innovation, growth and development of enterprises, and community impact (Falkang & Alberti, 2000; Fayolle et al., 2006; Pittaway et al., 2009; Vesper & Gartner, 1997; Wyckham, 1989). Scholars have discussed the need to tailor evaluation criteria to the educational level, program goals, target audience, and stakeholders (Duval-Couetil, 2013; Fayolle et al., 2006).

This leads to the question of *when* outcomes should be measured. As Fayolle states, "venture creation' cannot possibly be measured during or after an [entrepreneurship education program] since venture creation usually takes time. On the other hand, the more delayed the measurement, the harder it is to isolate the role played by a single factor regarding its impact on a specific outcome such as venture creation" (p. 704). Due to challenges inherent in longitudinal research, many studies rely on short-term measures of self-efficacy and career intention to examine the impact of entrepreneurship education programs. Longitudinal studies conducted have found positive outcomes in favor or entrepreneurship education (Charney & Libecap, 2003; Lange, Marram, Jawahar, Yong, & Bygrave, 2011). More recently, the Entrepreneurship Education Project (Vanevenhoven & Liguori, 2013) is collecting longitudinal, cross-cultural quantitative data over the next decade in order to follow students' careers, motivations and identities to offer insight into the impact of educational practices on student outcomes.

Entrepreneurial Intention and Career Decision Making

With decreasing stability in the economy, work environment, and growing needs for personal control and fulfillment at work, entrepreneurship has been proposed as a viable alternative career model to traditional organizational employment. Previous research has examined factors influencing intention to become an entrepreneur, which include perceptions of entrepreneurs and entrepreneurship, self-efficacy, differing motivations for pursuing entrepreneurship as a career, as well as the influence of gender and family background. This body of literature is summarized below.

Gender plays an important role in shaping individuals' perceptions of entrepreneurship as a career option. A number of studies have shown that men have stronger intention to pursue entrepreneurial careers than women (for a review see, Shinnar, Giacomin, & Janssen, 2012). Gupta and Turban (2009) found that the gender imbalance of entrepreneurial intention can be partially attributed to gender stereotypes. They argued that men and women in our society are labeled with different stereotypical characteristics that are suitable for different types of jobs (for a review on gender stereotypes see, Gupta, Turban, Wasti, & Sikdar, 2009). In their empirical research, they found that individuals who have high male-gender identification, compared to those who have low male-gender identification, had

higher intentions of starting a business. Entrepreneurship continues to be "a manly career" which discourages women from participating (Gupta & Turban, 2009).

In addition, extensive research has studied how entrepreneurial self-efficacy influences entrepreneurial career preferences. Research suggested that individuals with higher entrepreneurial self-efficacy have higher entrepreneurial intentions (for a review, Wilson, Kickul, & Marlino, 2007). It also indicated that the presence of a parent in an entrepreneurial career appears to increase entrepreneurial self-efficacy (Scherer, Adams, Carley, & Wiebe, 1989). Gender differences are also observed in the assessment of self-efficacy. Thébaud (2010) in her study of the Global Entrepreneurship Monitor's annual survey found that that women were about half as likely as men to think they had the ability to be an entrepreneur in the U.S. although women and men have approximately equal amounts of human, social, and financial capital.

Furthermore, research has employed motivation theory to understand individuals' career decisions to become entrepreneurs. Based on perceived benefits and cost, individuals are either pulled or pushed toward a career in entrepreneurship (for a review, Schjoedt & Shaver, 2007). Schjoedt and Shaver (2007) analyzed whether the potential for increased life satisfaction pulled, or job dissatisfaction pushed individuals toward entrepreneurial careers. They found that nascent entrepreneurs were not pushed to entrepreneurship by low job satisfaction but instead chose to become entrepreneurs to create life and job satisfaction. Other motivations to become an entrepreneur include market opportunities, family commitments, career frustrations, dissatisfactions, flexibility, achievement, need for independence, or a feeling of not having other alternatives (Cabrera, 2007; Patterson & Mavin, 2009).

Extant research provides limited insights about students' motivations for studying entrepreneurship, the manner in which they expect to utilize it during the course of their careers, and the timeline associated with doing so. Schramm's comments imply that entrepreneurship education "should accelerate near term venture creation and economic development. Leading to interesting questions such as: When can we expect a payoff from entrepreneurship education? Will entrepreneurship education decrease the average age of entrepreneurs? And, if entrepreneurship education is not resulting in accelerated involvement in venture development, why are students studying it and how do they intend to use it?

METHODS

The purpose of this study is to explore why students are studying entrepreneurship and how and when they intend to use it. The research questions are the following:

- What are entrepreneurship students' goals post-graduation?
- In what manner and when do students expect to utilize entrepreneurship education in their careers?
- To what extent to gender and family background influence students' perceptions of entrepreneurship as a career goal?

To address these questions, a two-phased, sequential, explanatory design model was used (J Creswell & Clark, 2007). In this exploratory research, quantitative content analysis followed by qualitative thematic analysis were used to examine the written narratives from 110 undergraduate students about their career goals. As Creswell (2003) noted, mixing methods allows a researcher "to better understand a

research problem by converging (or triangulating) both broad numeric trends from quantitative research and the detail of qualitative research" (p. 100).

Sample and Data

The source of these data were narratives referred to as "personal business plans" which were a required assignment in an undergraduate entrepreneurship capstone course from fall 2011 to spring 2013 (n=110, 31 female, 79 male). Students in the class had taken at least three entrepreneurship classes and were from a wide variety of academic disciplines. The intent of the 2-3 page assignment was to have students, who were close to graduation, reflect on and articulate a path for their short-term and long-term career and life goals in an essay. As part of the assignment, students were also required to to meet with a professional from a field or position that aligned with their goals, to obtain feedback that could be integrated into their essays. The narratives were stripped of all identifiable information. Each personal business plan was read carefully prior to beginning analysis in order to develop the coding schemes necessary for quantitative and qualitative analysis.

Content Analysis

Content analysis was used in the first round of data analysis to develop a quantitative coding scheme. A coding spreadsheet was created to record the following overarching categories of data: 1) demographic information, including gender, major, ethnicity, and year in college; 2) participants' current involvement in entrepreneurial activity and family entrepreneurial status; and 3) participants' immediate, short-term, and long-term career goals. Representative quotes were also highlighted during this round of analysis.

Thematic Analysis

The narratives are also analyzed using thematic techniques. According to Owen (1984), interpretive thematic analysis is especially well suited to studies that require an open analysis that does not impose a unit of analysis. As such, *repetition* of terms, *recurrence* of ideas, and *forcefulness* were leveraged as criteria to identify themes. Our thematic analysis focused on participants' perceptions of entrepreneurship, and their constructions of career plans. Through constant comparison, open coding was employed where as many categories as possible were coded. Axial coding techniques were then employed to establish linkages between constructs that emerged from open coding. As a result, new categories or/and overarching themes, such as entrepreneurship as *ultimate* and *idealized* career goals, were created (Lindlof & Taylor, 2002).

RESULTS

For clarity, we present findings from the quantitative and qualitative and analysis separately, noting the connections.

Quantitative Findings Based on Content Analysis

Three common career goals emerged from the student narratives: 1) obtaining paid employment in an existing company, 2) starting one's own company, and 3) applying for graduate school. The content analysis revealed that 97 participants (88%) planned to pursue paid employment in corporate settings, 49 participants (44.5%) were interested in pursuing graduate education, and 71 participants (64.5%) were interested in starting up their own company after graduation.

Result suggested that students had career goals and orientations that integrate multiple paths or activities (see Table 1). Among those who intended to become entrepreneurs, 58 students (83% of those who were interested in entrepreneurship) reported that they expected to start their own company after they had spent a number of years gaining experience in a corporate setting. Thirty-two students (45% of those who are interested in entrepreneurship) planned to start their venture after they had worked in the industry and obtained a graduate degree. Finally, 36 students (51% of those who were interested in entrepreneurship) planned to get an MBA degree before starting their own ventures.

As shown in previous studies, female students tended to be less likely to demonstrate a strong interest in an entrepreneurial career (see Table 2). To further investigate whether intention differed significantly for female and male undergraduate students, a Chi-square test was conducted crossing the variables gender (female, male) and intention to start one's own business

Table 1: *Students' Multiple Career Goals and Paths*

Career Goals and Paths				Percentage of all students	Percentage of students who plan to become entrepreneurs
Entrepreneurship	Graduate Education	Corporate Work	N		
Yes	Yes	Yes	32	29%	45%
Yes	No	Yes	26	24%	37%
Yes	Yes	No	4	4%	6%
Yes	No	No	9	8%	12%
No	No	Yes	26	23%	-
No	Yes	Yes	13	12%	-

(yes, no). Results revealed a statistically significant difference, X^2 (1) = 7.087, p = .008, Φ = .25, reflecting that a larger percentage of male students (57 of 79 male students, or 72.2%) planned to start their business compared to their female counterparts (14 of 31 female students, or 45.2%). Thus, gender had a statistically significant, medium effect on whether participants actually considered starting up their own business as a career goal.

Table 2: *Gender and Ultimate Career Goals*

Gender	Entrepreneurship	Corporate Work
Female		
Number (Total=31)	14	17
Percent	20%	44%
Male		
Number (Total=79)	57	22
Percent	80%	56%
Total	71	39
	65%	35%

Qualitative Findings Based on Thematic Analysis

For most of the students who intended to pursue it, entrepreneurship was positioned as a longer term goal. Most planned to start a business after spending a number of years working for an existing company, and/or after having received an MBA or advanced graduate degree. Themes and benefits associated with entrepreneurship education beyond startup activity were intrapreneurship, transferrable skills, life skills, and choices. These are discussed in the following sections.

The Value of Entrepreneurship Education to Students

Among the sample (n=110), only five students had already started a venture. The ventures were at early stages and were in the fields of technology and construction. Two of the five indicated that they planned to have a long-term entrepreneurial career, intending to sell their current business and become a serial entrepreneur or venture capitalist. For them, family and financial support contributed to making entrepreneurship an accessible career option in the short-term:

> *"College is the right time to start doing something on my own, for example starting my own business. The reason for this is that we learn a lot of new things both practical and theoretical in college, so we can use them to create new opportunities as most of the people are not utilizing the new technologies and discoveries that have been made. Another reason for me is that I can afford to make mistakes while I am in college as my father is there to support me if something fails. Also for the initial financing for my business I don't have to go to anyone else since my father has agreed to finance me."* (participant #1123)

In sharp contrast, over a third of entrepreneurship students had no intention of starting a business. These students were determined to pursue corporate careers and wrote about using the knowledge learned from the entrepreneurship educational program to enhance their competitiveness in the professional world. They recognized the transferable values and skills that they acquired through entrepreneurship education.

> *"I hope to achieve a stable financial career in the field of sales management, along with using my entrepreneurial skills to help enhance my opportunities in the business world."* (participant #1214)

> *"My strong marketing and management degree, accompanied with my entrepreneurial skills will hopefully put me in a position to choose between a few companies."* (participant #1219)

Another student also wrote that although he did not plan to become an entrepreneur, he found entrepreneurship education highly valuable to his career and life in general.

> *"Receiving my [credential in entrepreneurship] is very important to me because I believe that we are all entrepreneurs even if we do not start our own company – we are all the CEO's of our own lives and these courses have helped me become aware of important characteristics needed to not only succeed in life as an entrepreneur, but simply succeed in whatever we choose to do."* (participant #1104)

The other two-thirds of students viewed entrepreneurship as a career possibility in the future. Participants wrote that exposure to entrepreneurship in their undergraduate education had broadened their spectrum of career choices and self-efficacy.

> *"I do know that I either want to own my own business or climb the corporate ladder in an enjoyable company that shares the same values and beliefs as me…Since I have been taking entrepreneurship classes, it has allowed me to see that there is much more available than working for a large corporation." (participant #1209)*

> *"Combined with what I've learned in the entrepreneurship program, I feel capable of creating a sustainable business, which will empower people to be creative and innovative through technology…I expect to bootstrap my way into a niche market and attempt to procure outside funding. I think that at this point, my degrees and work experience will improve my chances of funding significantly." (participant #1220)*

> *"[My first entrepreneurship class] showed me that it was possible to be an entrepreneur. It showed me that it was a viable career and path and it gave me some guidance on how to get started." (participant #1233)*

Entrepreneurship as a Long-term Career Goal

For many students, entrepreneurship was positioned as a long-term career goal, which was illustrated in students' projected career trajectories over the next 5-20 years.

> *"My personal goals that I aim to achieve in the next 5-20 years are to graduate from college, be financially independent, get married, and start my own business."(participant #1220).*

> *"1. Graduate from [X University] – December 2012*

> *2. Working in industry for 1/1.5 years – May 2014*

> *3. Get into MBA school and graduate – May 2016*

> *4. Full time focus on the business venture*

> *5. Buy a house (property:fixed asset) within approximately 2 years - 2018*

> *6. Get rid of all loans (educational / for business) within approximately 2 years – 2020*

> *7. Get married and grow the business." (participant #1234)*

Entrepreneurship was positioned as a long-term goal because most students perceived that they had to perfect their skills, expand their competency, and accumulate social and financial capital before they could be successful entrepreneurs. Generally speaking, participants viewed employment and corporate working experience as a way to improve their professional capital (industry knowledge and social network). In addition to improving one's professional skills to be able to operate independently, students wrote about working for others to gain a clientele before launching their own businesses.

> *"I plan to work my way up from assistant designer positions to head designer positions, and one day I will have my own fashion line." (participant #1204)*

> *"Once in the advertising profession, I plan on moving myself up through the ranks until I receive a position where I have clientele under my supervision and I have full driving force upon the creativity involved in their advertising campaigns. As I become more successful with my campaigns and receive more responsibility, I will have developed credibility among my peers and in the advertising profession. This is where I will implement my entrepreneurial experience." (participant #1115)*

Similarly, the following participant talked about developing professionally in a corporate job before taking over and reinventing his family business.

> *"After I graduate in May I want to go work for an industrial chemical company on the West Coast. The size of the chemical company does not matter to me because it is not going to be a permanent job. I plan to work for that company for a couple years and learn all about industrial lubricants and cleaners. Then I plan on heading back to [town] to take over my dad's business. I then would like to expand my dad's already growing company. I'm not sure exactly how I will do that but by that point I should have enough experience to start developing my own formulas. I would run the company until I plan on retiring or until I feel as though I have nothing more to offer. I will then pass it on to either the most qualified employee or to one of my kids." (participant #1107)*

In the following description of his future career as a doctor, a student described his plans to perfect his skills through employment in different settings, and start his own practice when he has achieved "high prestige."

> *"I hope to land a spot in a residency in cardiology which will last for three years before practice. Residency is a place in which I perfect my skills before I start independently practicing. This is a time period in life that I want to spend in Chicago, where I know I will be able to enjoy life while simultaneously working long shifts as a hospital resident. Afterwards, after ten years, I aim to work as a cardiologist in a hospital setting…After twenty years, I hope to be in a position of high prestige running my own private practice in cardiology." (participant #1302)*

Furthermore, participants framed receiving formal education in business, such as an MBA, as an important step on the path to becoming an entrepreneur.

> *"By having a Master's degree, I could understand more about the financial and business industry besides expanding my network which could absolutely help my future business." (participant #1307)*

> *"Looking about five years down the road, I want to be settled into a job that has opportunities for career growth. Along with that, if I hadn't already done so, I would want to pursue my MBA. I've decided that I would take time off from school after I graduate so I could settle into a new home and life, but I do plan on earning my MBA within the next five years, or at very least be on the path to earning it. I want to find a company that would support me financially through school so I can minimize my cost of going back to school and hopefully open some career doors." (participant #1106)*

Many participants also talked about the financial aspects of starting a business early in their careers. The consensus among participants was that they could only start their own ventures after they had accumulated enough start-up capital. A senior in building construction management, talked about taking a job in an established company. He viewed this job as providing the foundation he needed to secure the financial capital (loans) for his venture:

> *"My goal is to work for five years in industry to become financially stable. This in turn will allow me to more susceptible to receiving loans for my future business startups." (participant #1207)*

Another student addressed the need for capital and the right opportunity to start his venture, instead of rushing to it.

> *"The faster I can save up my money, the sooner I will be able to invest in a company or begin my own. I have a friend who plans to do the same, and we are eventually going to become partners on a business venture of some kind. Ultimately my goal is to own my business. I have always wanted a sports bar or restaurant. However, this is the area that I am most flexible. I know that opening a restaurant could be dangerous because many of them fail. I will wait for the right opportunity and jump on it. I would never pass down a good opportunity if it led me in another direction." (participant #1231)*

Students viewed their paid employment in the beginning years as an important source of income to make entrepreneurship possible. Others wrote that the lack of capital or the fear of financial risks involved in the venture creation have made them wondering whether entrepreneurship can be an attainable career option.

> *"While it is a goal to start an entrepreneurial venture, I'm constantly questioning financial feasibility and sustainable without putting a certain amount of my own money into a venture." (participant #1211)*

Entrepreneurship as an Idealized Career Goal

In students' descriptions of their aspirations, entrepreneurship appeared to be not only an *ultimate* career goal that requires preparations, but also an *idealized* career to which they are pulled. This is evident in students' perceptions of entrepreneurship as a means for them to realize their dreams and aspirations, enjoy the autonomy as their own bosses, follow their passions, and make a difference.

> *"In twenty to thirty years is when I plan on executing my entrepreneurial dreams. I would love to have a small family business to pass on to my kids or have them grow up working there. The goal is to still have a business to run after I retire from my regular job so I can stay active after I am done working the normal nine to five." (participant #1106)*

> *"I don't know what I want to start yet, nor do I have any ideas. I just know that there's something I've kept inside my head that I when I plan to retire, I plan on retiring solely on the fact that I have sustained my retirement through money I've made being my own boss…I plan on starting this business based on a problem that I want to solve for the greater good. This is the reason I am not sure about what exactly my business will be. I want to wait until I feel that I am financially and personally stable before identifying something in my life that I want changed that will also provide me income." (participant #1110)*

As illustrated in these quotes, the student assigned meaning to entrepreneurship beyond its economic value. In this case, it is framed as ways to nurture the next generation and enrich life after retirement. Interestingly, some students also perceived holding a full-time "regular" job and being an entrepreneur as something they could do concurrently.

> *"If I go the part-time job and full-time start up route I feel I will be happier and I will dedicate days I have off to working regular independent hours on my own. The part time job would be retained as long as it did not risk my image at the company I was starting or until my new company could afford to give me a better benefits plan. My real hope is to come up with an*

> *innovation, invention, or unique product line that I can sell for a large payoff or that I can continue to expand and sell for my lifetime. This is a common dream but a rare success I believe I am truly capable and I have always been told I can accomplish. Retirement is not out of the question but I do not see myself doing nothing because I do not like to sit still or waste time."* *(participant #1117)*

Some framed venture creation as an activity one can pursue after they retire. Starting one's own business is an active and interesting way to "pass the time."

> *"Start a small business in my mid 50's while maintaining my current job (long-term). The location for this small business would be relatively close to the location of my permanent residence. My reason for this goal is because if I were to get bored with my current job later on in life, I will want to start up a small business in order to help me pass the time."* *(participant #1241)*

In these excerpts, students talked about making a difference through entrepreneurship. Similar to others, they planned to embark on the entrepreneurial journey when they are "qualified" and "financially and personally" stable. Again, this highlights students' perception that one needed to have a certain level of stability in their life to weather risks and ambiguities associated with the entrepreneurial process.

Gender Differences in Career Aspirations

Consistent with prior research, and content analysis associated with this research, gender differences were pronounced in participants' personal business plans. Female participants tended to choose a corporate career path and aimed to achieve a managerial positions. Fewer female participants considered starting their own businesses than their male counterparts. The following narratives were very representative of those of female participants.

> *"The position I ultimately would like to have in seven years is to be a manager of a major account in a mid to large-sized public relations firm. With over seven years of job experience, I feel that I would have enough knowledge in the field to start at that high of a position. I will keep on adding to my professional network to look for jobs in that position to apply to. Moving to other agencies and other companies in general will help keep my job fresh, new, and exciting."* *(participant #1248)*

> *"My objective for the next three years is to get into the real world with either of these jobs, gain a fair amount of real life work experience and to start making a name for myself in one of these two companies. After my initial three years I plan on climbing the corporate ladder at either of these companies and eventually running my own portion or branch somewhere. I know I will succeed in whichever I choose because I am an honest, diligent person that values hard work and loyalty above all else."* *(participant #1111)*

The majority of the young women constructed climbing up the corporate ladder as their primary career goal and explained it explicitly. This was echoed by a few participants.

> *"I would gain the skills necessary to accomplish my goal of transferring to a company that specializes in pharmaceuticals. I plan spending five to ten years gaining experience before trying to advance into a segment that is so competitive. My dream job would be to work for a company like Eli Lilly as a sales representative."* *(participant #1250)*

> *"My life career goal has always been to work for ESPN as an analyst or sideline reporter. I am well aware that in order to achieve that goal I have to start in a small market and work my way up to the ESPN market. (participant #1254)*

However, there were exceptions. One participant planned to start her own law firm after gaining significant experience in her family's firm.

> *"I will gain fifteen years of experience by working closely with other lawyers in a family law firm. Once I have enough money saved and enough experience to do it on my own, I will start my own practice. I will find a small office space in [town] and rent it. I will grow the firm from there." (participant #1317)*

Another female student planned to work for a company in the near term but would consider starting her own business, which was not closely related to the degree she was pursuing in college.

> *"I really want to continue learning and hopefully explore my interest in HR and become either a full or part-time recruiter for [Company] as well. During this period I also want to be taking night classes to obtain my cosmetology license. My ten year goal is to have started a family and be either in upper management with XX company or on my way to opening my own business. The business I want to start is a salon. I have a passion for creativity and cosmetology, but I wanted to get a solid bachelor's degree and some working experience before going to cosmetology school." (participant #1319)*

Family Influence in Career Aspirations

Lastly, we found that those whose parents are/were entrepreneurs leaned strongly toward an entrepreneurial career path.

> *"In the long-term, I plan to start my own venture. I hope to emulate my father in terms of the decisions he made before and during the start of his venture. He started his own export business of shoes and other apparel… He has been my role model throughout and I hope I can reach the level of success he has envisaged for me. Starting my own venture is something I have always wanted to do right from when I was in middle school. I have a few ideas, which I plan, to research on in the upcoming years. In every situation, I take the advice of my father very seriously and plan to work very hard in order to not disappoint him." (participant #1330)*

Some reflected on the experience they gained in growing up around entrepreneurs, which strongly influenced their goals.

> *"I realize that many venture capital firms focus on large margins and strong growth, but forget about the importance of the knowledge the instill in their start-up companies. I have always had a strong desire to help others succeed and want to be able to not only help them fund their venture, but to also work with them and not only suck every penny out of them possible. Having grown up around many successful business owners I have come to learn and respect that some of the best businessmen are ones who care about what they do. Touching back on who I am today, I want to work with people that like what they do, since that is the whole reason I studied business in the first* place." (*participant #1124*)

A participant also shared how his family experience shaped his goals.

> *"My professional story began in [city] where my father had left his job as an engineer at [Company] and opened his own consulting firm. I am tied into the story because this is where I grew fond of the entire concept of having one's own business. My parents organized the company together and I was alongside them through the whole tedious process. I actively participated in the managing the company as much as I could as a teenager and as high school came around. I became my father's right hand man. I came to college and although I wanted to pursue medicine, opening my own private practice was my dream."* (participant #1302)

Taken together, the findings of the data expand our understanding of how undergraduate students from across disciplines articulate their career goals and the role of entrepreneurship education within them. Examining these data can offer insights into the value students place on entrepreneurship education and when and how they intend to utilize it in their careers.

DISCUSSION

The purpose of this study was to examine the career goals and narratives of students to understand their motivations for studying entrepreneurship, the manner in which they expect to utilize it during the course of their careers, and their timelines for doing so. From the analysis it is clear that with few exceptions, most students consider starting their own business a long-term goal. Despite this, students in the sample had chosen to take multiple entrepreneurship courses during their undergraduate programs, suggesting that they had clearly received the message that entrepreneurship education could be valuable to their near term career paths and lives in general.

Unlike the "image" of contemporary student entrepreneurs who start ventures right out of school, when they have minimal responsibilities and relatively little risk, most students felt that entrepreneurship was something that was more feasible after they gained experience and perfected their skills working for others. This finding is supported by data reporting that the average age of an entrepreneur is 40 and high growth startups are almost twice as likely to be launched by people over 55 as by people 20-34 (Wadhwa, Aggarwal, Holly, & Salkever, 2009), suggesting that it may be too early to assess the benefits of the past two decades of growth in the field of entrepreneurship education if measured solely on the basis of venture creation. However, it also suggests that if the goal of entrepreneurship education is to accelerate the formation of new ventures, and decrease the age at which graduates become entrepreneurs, it may not be achieving its goals. In another words, results of this study indicated that entrepreneurship education might not likely decrease the start-up age of students exposed to such education. Hence, the effectiveness of specific pedagogy and/or experiential learning activities in shortening time-to-venture should be examined.

Similarly, instead of viewing entrepreneurs as young risk-takers, student narratives positioned the "ideal entrepreneur" as highly educated, well-networked, and elite. Financial stability prior to pursuing entrepreneurship was considered a requirement for many. While students felt strongly that entrepreneurship education would provide them a competitive advantage in the workplace, many also felt that an MBA would better prepare them to be an entrepreneur. This implies that some students see entrepreneurship education as an introduction to business but insufficient in fully developing their self-efficacy. Throughout the narratives, it is clear that students are balancing experience, financial stability and timing in deciding when to become an entrepreneur.

Interestingly, these students rejected the notion that the ideal entrepreneur should be young and in the field of high tech. Instead, they talked about taking over and expanding family businesses, starting a hair salon, launching a fashion line, and becoming doctors and lawyers. While a few students mentioned social entrepreneurship, most focused on for-profit ventures. These findings could be due to the particular program and sample of students studied, however, it is reflective of the diversity of students increasing enrolled in contemporary entrepreneurship programs. The range of entrepreneurial interests highlights the value of interdisciplinarity but also the challenges associated with meeting the interests and needs of a wide variety of backgrounds and career interests, which has implications for curriculum and pedagogy.

Students also idealized an entrepreneurial career, equating it with freedom and quality of life in addition to economic benefits. Clearly, students are pulled to entrepreneurship by opportunity rather than by necessity. Despite having been fully exposed to the challenges and time commitment associated with launching a startup through their courses, some students expressed the desire to hold a "regular job" while starting a company. This may be due to naiveté, a lack of professional experience, or perhaps due to their exposure to entrepreneurship education which has made this career path appear very accessible. Generally speaking, student narratives seldom mentioned barriers and potential negative effects of starting companies.

Similar to previous research, family influence was a very strong factor in students' desire to pursue an entrepreneurial career. Through the narratives, it is clear that instead of being a deterrent, watching their parents struggle in entrepreneurial pursuits appears to have inspired students to choose this path and they expressed deep respect for them. This suggests that the more "real world" experiences that can be delivered through entrepreneurship education, the more inspired students might be.

The lower level of interest female students had in entrepreneurial careers reinforce the importance of creating experiences that resonate with a more diverse audience. The lack of female role models in entrepreneurship has been well documented. Despite some progress, male protagonists are more commonly highlighted in books, cases, videos, and other media associated with entrepreneurship education (Gatewood, Brush, Carter, Greene, & Hart, 2004). Programs must be proactive in addressing this issue to reach the untapped economic potential of this population.

The expansion of entrepreneurship education beyond business schools is likely to add complexity to assessing the value of entrepreneurship education. As these narratives suggest, students have a very wide variety of career goals and interests requiring very different timelines to gaining the experience necessary to pursue an entrepreneurial career. In past decades, when the delivery of entrepreneurship education was limited primarily to business students (MBA students with professional experience, in particular), it likely attracted a subset of students who had a strong interest in venture creation in the near term. Delivering entrepreneurship education to undergraduate students, with limited professional experience, and with career aspirations in areas such as medicine and engineering, adds complexity to understanding its value and measuring its returns over time. Further, the expanding discourse around the benefits of entrepreneurship beyond venture creation (e.g., leadership, intrapreneurship, business literacy), which is necessary to appeal to a wider cross-campus audience, may be attracting students with lower interest in venture creation. This leads to interesting questions such as: Does wider delivery of entrepreneurship education to a broader audience dilute its standing as an academic discipline? And,

is entrepreneurship becoming the "new" business education and business literacy that all students need to be successful in the contemporary economy?

To sum up, the primary contributions of this research are two-fold. First, the mixed method study provides more nuanced and situated insights of students' perceptions of an entrepreneurial career. These insights help answer questions of important theoretical and practical value having to do with why students choose entrepreneurship as a career path, when they plan to become entrepreneurs, and what path will they take to get there. In analyzing students' narratives, we are able to identify how they assess feasibility and obstacles related to becoming entrepreneurs. Second, our research privileges students' words about the role entrepreneurship education plays in influencing their career self-efficacy, expectations, and goals. Such an exploratory study provides the first steps in articulating what entrepreneurial education affords to students, using a grounded, bottoms-up approach to generate insights from data, as opposed to a top-down one.

These findings have important implications for pedagogy and assessment. They suggest that a one-size-fits-all approach to entrepreneurship may not be appropriate given students' differing career interests. It is clear that more research on the background, entrepreneurial experiences, and career goals of students is necessary in order to develop archetypes among students studying entrepreneurship. This could be useful in aligning student interests with courses and programs that meet their short and long-term entrepreneurial interests (e.g. venture creation versus intrapreneurship). However, the movement to more diverse students and programs, with goals beyond venture creation could add significant complexity to the assessment of programs. While being an intrapreneur and a more productive employee due to entrepreneurship education can clearly have positive economic outcomes, measuring them will never be as straightforward as counting startups.

We acknowledge that generalizability of the findings may be limited by the sample as students who participated in this study were from a large mid-western public research university. Future research should explore career impacts of entrepreneurship education in regional universities, and universities in different geographic locations.

CONCLUSION

As the comments from Carl Schramm point out, the economic value of entrepreneurship education in terms of venture creation has not yet been demonstrated. This examination of undergraduate entrepreneurship students' career goals shows that few intend to pursue entrepreneurship immediately after graduation and some intend to utilize entrepreneurial skills to accelerate their paths to leadership in existing organizations, and establish the financial stability they prefer to have before becoming an entrepreneur. This leads to interesting questions such as: Given the average age of entrepreneurs, is it just a matter of time before the returns are realized? How well will students' career goals map with their actual career paths? Is the growth of entrepreneurship education to wider audiences enhancing or diluting its effects as a driver of venture creation? And, are we teaching entrepreneurship in a manner that it drives venture creation and resonates with diverse populations? These are all questions that warrant further investigation.

The variety of potential outcomes associated with entrepreneurship education make its value difficult to measure. This further challenges a field which has struggled to define its body of knowledge, its role as

an academic discipline, which at its core is about venture creation. It is clear that the discourse involved in promoting the value of entrepreneurship education to wider populations of students can be both a blessing in terms of attracting more interest and people to the field, but also a curse in that it risks diluting its core premise. This suggests that the confounding outcomes of being an entrepreneur (venture creation) and being entrepreneurial (the "art" of entrepreneurship) should be addressed distinctly in research and pedagogy.

REFERENCES

Cabrera, E. F. (2007). Opting out and opting in: understanding the complexities of women's career transitions. *Career Development International, 12*(3), 218-237.

Charney, A. H., & Libecap, G. D. (2003). The contribution of entrepreneurship education: An analysis of the Berger program. *International Journal of Entrepreneurship Education, 1*(3), 385-418.

Creswell, J. (2003). Research Design: Qualitative, quantitative and mixed methods approaches.[Cited 10 May 2005].

Creswell, J., & Clark, V. (2007). Designing and conducting mixed methods research.

Duval, C., N, Shartrand, A., & Reed-Rhoads, T. (in press). The role of entrepreneurship program models and experiential activities on engineering student outcomes. *Advances in Engineering Education*.

Duval-Couetil, N. (2013). Assessing the impact of entrepreneurship education programs: Challenges and approaches. *Journal of Small Business Management, 51*, 14.

Falkang, J., & Alberti, F. (2000). The assessment of entrepreneurship education. *Industry & Higher Education*, 101-108.

Fayolle, A., Gailly, B., & Lassas-Clerc, N. (2006). Assessing the impact of entrepreneurship education programmes: A new methodology. *Journal of European Industrial Training, 30*(9), 701-720.

Gatewood, E., Brush, C., Carter, N., Greene, P., & Hart, M. (2004). Women Entrepreneurs, Growth, and Implications for the Classroom. Coleman Foundation White Paper Series for the United States Association for Small Busienss and Entrepreneurship.

Gupta, V. K., Turban, D. B., Wasti, S. A., & Sikdar, A. (2009). The role of gender stereotypes in perceptions of entrepreneurs and intentions to become an entrepreneur. *Entrepreneurship theory and practice, 33*(2), 397-417.

Haynie, J. M., Shepherd, D., Mosakowski, E., & Earley, P. C. (2010). A situated metacognitive model of the entrepreneurial mindset. *Journal of Business Venturing, 25*(2), 217-229. doi: http://dx.doi.org/10.1016/j.jbusvent.2008.10.001

Katz, J. A. (2003). The chronology and intellectual trajectory of American entrepreneurship education 1876-1999. *Journal of Business Venturing, 18*, 283-300. doi: 10.1016/S0883-9026(02)00098-8

Kuratko, D. (2005). The emergence of entrepreneurship education: Development, trends, and challenges. *&Entrepreneurship Theory & Practice, 29*(5), 20.

Lange, J. E., Marram, E., Jawahar, A. S., Yong, W., & Bygrave, W. (2011). Does an entrepreneurship education have lasting value? A study of careers of 4,000 alumni. *Frontiers of Entrepreneurship Research, 31*(6), 2.

Neck, H., & Greene, P. (2011). Entrepreneurship education: Known worlds and new frontiers. *Journal of Small Business Management, 49*(1), 55-70.

Patterson, N., & Mavin, S. (2009). Women Entrepreneurs Jumping the Corporate Ship and Gaining New Wings. *International Small Business Journal, 27*(2), 173-192.

Pittaway, L., Hannon, P., Gibb, A., & Thompson, J. (2009). Assessment practice in enterprise education. *International Journal of Entrepreneurial Behaviour & Research, 15*(1), 71-93.

Rideout, E. (2012). *Bounded Rationality and the Supply Side of Entrepreneurship: Evaluating Technology Entrepreneurship Education for Economic Impact*

 (Ph.D.), North Carolina State University, North Carolina. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2027023

Scherer, R. F., Adams, J. S., Carley, S. S., & Wiebe, F. A. (1989). Role Model Performance Effects on Development of Entrepreneurial Career Preference. *Entrepreneurship: Theory & Practice, 13*(3), 53-71.

Schjoedt, L., & Shaver, K. G. (2007). Deciding on an entrepreneurial career: A test of the pull and push hypotheses using the panel study of entrepreneurial dynamics data1. *Entrepreneurship Theory and Practice, 31*(5), 733-752.

Schramm, C. (2014, May 6, 2014). Teaching Entrepreneurship Gets and Incomplete. *The Wall Street Journal*. Retrieved from http://online.wsj.com/news/articles/SB10001424052702304279904579515953479728072#livefyre-comment

Shartrand, A., Weilerstein, P., Besterfield-Sacre, M., & Golding, K. (2010). *Technology entrepreneurship programs in U.S. engineering schools: An analysis of programs at the undergraduate level*. Paper presented at the American Society for Engineering Education, Louisville, KY.

Shinnar, R. S., Giacomin, O., & Janssen, F. (2012). Entrepreneurial perceptions and intentions: the role of gender and culture. *Entrepreneurship Theory and Practice, 36*(3), 465-493.

Thébaud, S. (2010). Gender and Entrepreneurship as a Career Choice Do Self-assessments of Ability Matter? *Social Psychology Quarterly, 73*(3), 288-304.

Torrance, W. E. F. (2013). Entrepreneurial Campuses: Action, Impact, and Lessons Learned from the Kauffman Campuses Initiative. *Ewing Marion Kauffman Foundation Research Paper*.

Vanevenhoven, J., & Liguori, E. (2013). The Impact of Entrepreneurship Education: Introducing the Entrepreneurship Education Project. *Journal of Small Business Management, 51*(3), 315-328. doi: 10.1111/jsbm.12026

Vesper, K. H., & Gartner, W. B. (1997). Measuring progress in entrepreneurship education. *Journal of Business Venturing, 12*(5), 403-421. doi: 10.1016/s0883-9026(97)00009-8

Wadhwa, V., Aggarwal, R., Holly, K., & Salkever, A. (2009). The Anatomy of an Entrepreneur: Family Background and Motivation (pp. 20). Kansas City, MO.

Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. *Entrepreneurship Theory and Practice, 31*(3), 387-406.

Wyckham, R. (1989). Measuring the effects of entrepreneurial education programs: Canada and Latin America. In R. Whyckham & C. Wedley (Eds.), *Educating the Entrepreneur* (pp. 1-16). Colombie-Brittanique: Universite Simon Fraser.