

Today's MBA Student is Tomorrow's Entrepreneur

A View of How Gender Impacts Career Choices



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BACKGROUND

When individuals decide to return to school to pursue an MBA, they are frequently doing so for one of three reasons: a career switch, a pivot to a new industry, or to take on a new functional role. However, there is a subset of individuals that return to school with the idea of pursuing a career in entrepreneurship or venture capital. Why do they desire an MBA to advance their goals? What barriers do they anticipate? What personal attributes will be most important to their success? What motivates them? Are they choosing entrepreneurship primarily for the expected financial returns, the opportunity to see their ideas come to fruition, or perhaps because they want to be a part of an exciting, fast-paced environment tackling the world's problems? These are some of the questions we sought to answer in order to better understand and support the next generation of entrepreneurs, with a particular focus on how that may vary by gender.

Under the guidance of managing partner Cindy Padnos, highlighting unique gender-based differences in the opportunities and obstacles of entrepreneurs has been an area of focus and passion for the team at Illuminate Ventures for more than a decade. Our first [whitepaper](#) in 2010 documented the outperformance of women entrepreneurs in venture-backed technology companies (*High-Performance Entrepreneurs: Women in High Tech*). Having built a very diverse portfolio of investments over the next 8 years, we wondered why the rest of VC industry was still funding so few women founders (fewer than 12% of companies and less than 5% of dollars invested) and even fewer Black and LatinX entrepreneurs. In search of answers, rather than accepting the typical hypotheses that there were just too few of them, we conducted a broad survey of high-tech founders and early-stage VC investors in 2018. The results of that outreach yielded a new report (*Gender Differences in Entrepreneurship: Voices of Founders and Funders*) that brought some unexpected obstacles to light. Each of these prior efforts was conducted with support from MBA student interns at Carnegie Mellon's Tepper School of Business – and this time is no different.

Since the fund's inception, MBA interns have been critical to Illuminate's strategy and success. We've utilized their talents for diligence-related research, deal flow sourcing and for direct portfolio support, all while these students are exposed to our investment process from introduction to exit. They strongly encouraged this third paper, as they were especially interested in the broader attitudes of MBA students toward entrepreneurship, and whether or not female MBAs had the same concerns about this career path as their male peers. The opinions of these students matter a great deal; research has shown that many startups have MBAs as co-founders, and our paper shows strong interest in entrepreneurship at top programs nationally—even more so than we expected. As this group is likely to shape the startup landscape of the future, understanding their concerns is critical.

Research for this current project was conducted via an online survey of current MBA students and applicants to top MBA programs. It captured over 500 responses from students involved in more than 20 different US-based MBA programs. The use of near-identical survey questions administered in 2018 to active tech entrepreneurs and VC investors made it possible to identify similar and different perspectives between the two groups. The data in each survey was also collected in a manner that allowed us to identify the backgrounds of the respondents, including their gender and ethnicity, among other factors. The MBA student survey was launched in late 2019, with data collection continuing

through midway into 2020. With nearly half of the responses coming from that later period, we were able to identify and assess any COVID-related impacts on student viewpoints. You can find more about the survey methodology and the demographics of the respondents in the Appendix to this paper.

In this paper, we explore several topics from the perspective of MBA candidates:

- Overall student interest in entrepreneurial careers, including specific motivations for pursuing such a path
- Perceived successful attributes of entrepreneurs, and barriers to entry into the field
- Interest in a career path in venture capital
- The COVID effect: Interest in entrepreneurship in pre- versus post-COVID times

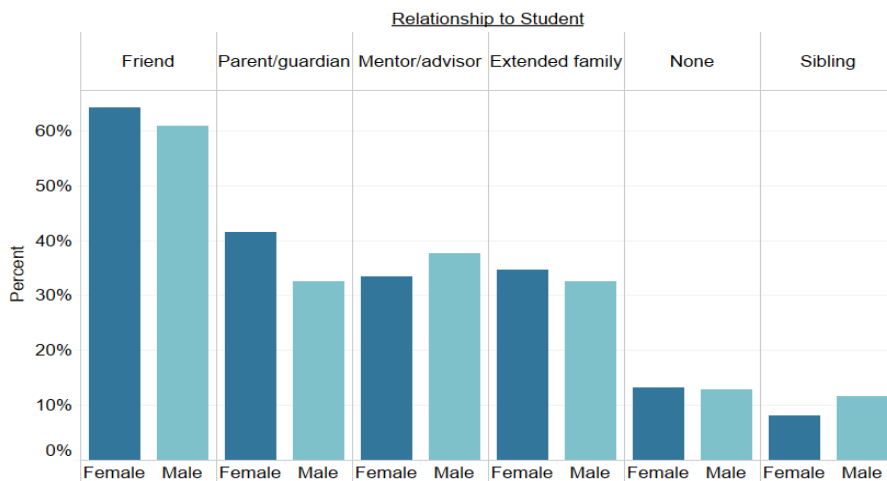
HOW DO MBA STUDENTS THINK ABOUT ENTREPRENEURSHIP?

Level of Interest in Entrepreneurship

The survey results show that entrepreneurship is a large and growing area of interest for MBA students and candidates. Over 85% of respondents indicated that it was something they were considering as a current or future career path. Men (88%) were slightly more likely than women (80%) to select this answer. Strong historical MBA student interest in entrepreneurship is supported by figures from investment database [PitchBook](#) showing that entrepreneurs from just the top twenty-five MBA programs founded 9,450 companies (14% led by women) between 2006 and 2020, including 72 unicorns. Many MBAs will still follow a corporate path, where according to *Forbes*, 40% of Fortune 500 CEOs have an MBA on their resume – but a higher percentage than ever have an interest in entrepreneurship.

The high level of interest in entrepreneurship is less surprising when we look at the backgrounds of the respondents. Over half of the students have either previously founded a business (23%) or worked in an early stage company (an additional 36%), although it is not clear if these were full-time roles. Similarly, nearly 60% of the students have a friend who is an entrepreneur and over two-thirds have either a parent or mentor that is an entrepreneurial role model. While there is likely some bias in terms of the pool of students who self-selected to participate in a survey focused on entrepreneurship and venture capital, the percentages who wish to follow this path are still remarkably high. The most common undergrad degree for women interested in pursuing entrepreneurship was a liberal arts/humanities degree, followed by a finance undergrad. For men, over 80% of those with an engineering undergraduate degree were interested in entrepreneurship.

Chart I: People Influencing Interest in Entrepreneurship

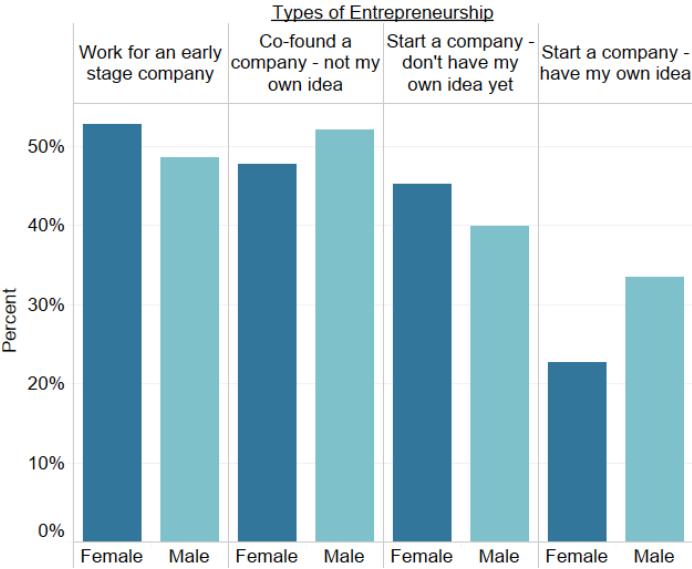


How Students Expect to Start Their Entrepreneurial Journey

Participants were next asked to identify their top areas of entrepreneurial interest, with the survey offering options that ranged from being a startup founder to investing in early-stage companies. The results were fairly evenly distributed across a number of possible entrepreneurial scenarios, several of

which didn't require the individual to have their own new product or service idea. Joining an existing startup was the student's first choice and the next most selected option was co-founding a company based on someone else's idea. The overall responses suggest a strong interest in becoming involved in entrepreneurial endeavors, regardless of whether or not students currently have their own product vision. Many students indicated that they are drawn to being a part of an entrepreneurial team as a first step to potentially launching a startup themselves.

Chart II: Student Interest in Entrepreneurship



Source: Illuminate Ventures, 2021

Of note, over a third more of the male respondents indicated that they already have an idea to start a company versus female respondents. Some recent [research](#) led by Sabrina Howell and Ramana Nanda with the National Bureau of Economic Research utilizing data from Harvard Business School's New Venture Competition may shed some light as to why male students seem to be a bit further along on their entrepreneurial journey than women. Their evaluation of the data showed that having the opportunity to be exposed to VCs substantially benefitted male participants in the competition, but was only marginally helpful for women. The data showed that male participants were nearly twice as likely as female participants to follow up with the VCs after the competition, limiting the positive network effects for the female participants. Their study suggests that structural solutions focused only on providing female students and entrepreneurs more exposure to VCs may not be sufficient to eliminate networking friction. As evidenced in a wide array of research reports, women do not lack ability or interest; however, the perceived lack of access to funding networks and lesser likelihood of grabbing opportunity when exposed to it may help to explain why fewer female respondents indicated that they preferred to start a company than their male peers.

Current Involvement with Entrepreneurship

To better understand how MBAs are already engaged in some form of entrepreneurship, respondents were asked to indicate if they were actively pursuing an entrepreneurial project. Nearly 40% more male students (48% versus 34%) said they were actively pursuing a project than their female peers. Given

how closely the desire to be an entrepreneur matched for men and women (only 10% more men than women), it would be a fertile area of exploration to better understand why male students seem more capable of realizing their entrepreneurial aspirations earlier in their lives than the women.

Chart III: MBAs Currently Active in Entrepreneurship

48% 

34% 

Source: Illuminate Ventures, 2021

COVID Impact

Given the timing of the survey data collection process, we had the unique opportunity to assess whether or not the COVID pandemic influenced students to think more or less entrepreneurially. As it turns out, a slightly higher percentage of students voiced interest in entrepreneurship after the inception of COVID in late March versus the responses gathered earlier in the year. The combination of the devastating effects of COVID on our communities with the likely adjacent impact on job prospects for young graduates is likely stimulating more students than ever to think outside of the traditional corporate job market. Unfortunately, COVID seems to be negatively impacting women's access to capital more so than men. A recent Pitchbook [article](#) shows that Q3 2020 investment in companies led by women is at the lowest level since 2017.

Students with entrepreneurial aspirations likely see the new problems caused by the pandemic as opportunities and are thinking about how to launch creative new solutions that can quickly gain market momentum. When combined with the fundamentally resilient nature of people who are entrepreneurs at heart, the prospects for innovation are exciting. Every crisis has an endpoint and this will be the cue for many to undertake something new. Hopefully, the result will be startups that provide much-needed solutions in areas such as testing, pathogen tracking, telehealth, virtual collaboration online education, and more that we cannot yet even imagine!

Reasons Students Don't Choose Entrepreneurship

For those students who were not interested in entrepreneurship (only 15% of all respondents), they were asked to stack rank a list of six reasons or add their own. The top overall concern was the *lack of financial security after graduation* (#1 for men and a close #2 for women). The rankings of remaining reasons to opt-out of an entrepreneurial path showed quite a bit of difference between male and female students. Concerns over *access to the right networks of resources* ranked very high on the list of barriers for men (their #2) but fell to #5 for women.

Conversely, the *availability of funding for a new venture* (#1 for women and #4 for men) certainly relates to concerns about financial security, but is much more specific to an individual's belief in their ability to raise capital. The stronger ranking of this obstacle by women may relate to another closely aligned barrier, *self-confidence*, with women ranking this in the #3 spot, but falling to #6 for men. This result suggests that the historical findings of a plethora of research papers showing that males tend to

overestimate their capabilities while women do the reverse may still hold true even amongst MBA students in the year 2020.

Recent [research](#) conducted by Christine Exley of Harvard alongside Judd Kessler of The Wharton School is consistent with the students' responses to our survey. In their study of 4,000 professionals, men and women were tested using a standardized tool and delivered nearly identical performance levels. When asked 'How well do you think you did?' uniformly, men thought they did better than they actually did, and women thought they did worse than they actually did. When the same group was asked to rate their capabilities on a scale of one to 100, men self-rated at an average score of 61, and women averaged 45. "It's a 15-point difference on this hundred-point scale for people who did basically the same. And, in fact, the women did slightly better," said professor Kessler. The confidence gap illustrated in our MBA survey is particularly disturbing, since it may impact opportunities sought by female MBA students well beyond their interest in entrepreneurship.

Both of the above results showing women having less self-confidence than men run contrary to research summarized by professor Laura Guillien of ESMT in [an article](#) published in *Harvard Business Review* in 2018. Her research, conducted in collaboration with Margarita Mayo of IE Business School and Natalia Karellaia of INSEAD, found that the confidence gap was more of a perception gap by others (meaning co-workers), not the perception women in the workplace had of themselves.

We share our data and these viewpoints to generate awareness and in the hope that learning about these differences will help young women realize that they have every reason to have confidence in their abilities. The confidence gap amongst women and other diverse founders in the entrepreneurial ecosystem is likely a somewhat self-perpetuated myth. The choice of an entrepreneurial career demonstrates a level of confidence and conviction that exceeds the norm. Given the well-known, but little discussed barriers to success that women and other diverse founders still face, their courage and confidence likely exceed that of a more typical white male founder.

WHAT MOTIVATES AN MBA TO CONSIDER ENTREPRENEURSHIP?

Entrepreneurship Drivers

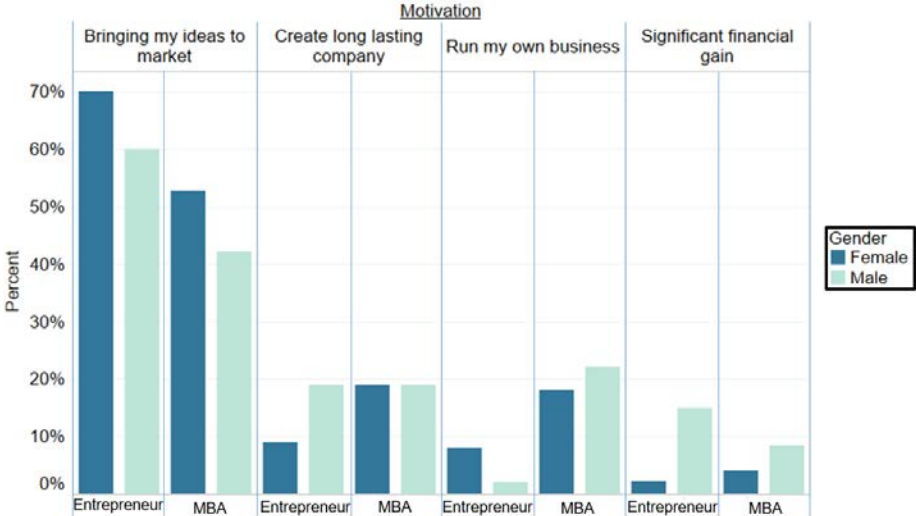
With so many MBA students expressing a strong interest in entrepreneurship as a career choice, the next obvious question is – why? Amongst the options offered in the survey, there was one choice that stood out far above all others: *The opportunity "to bring ideas for products/solutions I am passionate about to market."* This response was consistent across all levels of prior student work experience and educational background, as the top selected motivation for pursuing entrepreneurship.

The top three motivations to become an entrepreneur were selected in very similar ratios by both male and female students: *bringing my ideas to market* (53% of women, 42% of men), *creating a long-lasting company* (19% each of women and men) and *running my own business* (18% of women, 22% of men). Additionally, as compared to responses to the same question collected in our 2018 research with active entrepreneurs, the overall ranking of motivations was nearly identical, although there was an even higher level of commitment to the #1 choice that was voiced by over 70% of women and 60% of men.

This level of consistency between the responses provided by students and by active entrepreneurs as well as across reported genders, educational background, and several other factors displays a strong level of like-mindedness. It seems that the drive to be entrepreneurial is not changed by extraneous factors. An entrepreneur is – well – an entrepreneur at heart!

One unique difference between the male founders as compared to either female founders or MBA students was their higher ranking of being motivated by the potential for “significant financial gain”. Fifteen percent of male founders selected this as their top motivation versus less than 7% of student respondents and a similarly low percentage of female entrepreneurs.

Chart IV: Single Highest Motivation to Be an Entrepreneur



Source: Illuminate Ventures, 2021

Other Motivations

The survey also offered respondents the opportunity to describe their own motivation rather than choose from the pre-defined list that was included. While few chose to do this, nearly half of the “write-in” responses from students focused on making a positive impact on society. Several shared plans to do more with their startup ideas than just build a successful business, including being “most interested in running an ethical social enterprise” and “proving that profit and social good are not mutually exclusive.” These motivations are consistent with other research on the priorities of Gen Y and Millennials. Not only are more and more MBAs interested in careers in entrepreneurship, but many are looking beyond financial gain to measure their success.

WHICH ENTREPRENEURIAL SUCCESS ATTRIBUTES ARE MOST IMPORTANT?

Consistent View of The Top Attribute

The use of near-identical survey questions administered in 2018 to active tech entrepreneurs and VC investors made it possible to identify similar and different perspectives between these two groups and

the students. To accomplish this, we started by asking the students which personal attributes they feel are most important to entrepreneurial success. They were offered a list of ten possible responses that were identical to those used in our 2018 survey of entrepreneurs and VCs and asked to stack rank their top five.

There was nearly universal support for the top-selected attribute, not just between the male and female students and the founders, but across from the female venture investors as well-- "*resilience/perseverance*" was the hands-down winner. More than 50% in each of these groups put this attribute in the top spot. Consistently facing and overcoming adversity is one of the most important qualities for entrepreneurial success. It's likely helpful that the students seem to understand that being an entrepreneur is "not for the faint of heart." While male VCs did not rank this attribute as the most critical personal trait for an entrepreneur, it did rank as their #2 selection.

Chart V: Ranking of Entrepreneurial Success Attribute Importance

Attribute	Female MBA	Male MBA	Female Founder	Male Founder	Female VC	Male VC
Resilience/perseverance	1	1	1	1	1	2
Ability to Attract Team	5	2	2	2	2	3
Visionary with Passion	4	5	3	3	3	4
Networks for Access	2	3	4	6	6	6
Smart Risk Taker	3	4	5	5	5	5
Domain Knowledge	6	6	6	4	4	1

Source: Illuminate Ventures, 2021

Differences in Viewpoints

From the top spot onward, however, there were some interesting differences between the groups as to which attributes were most valued. The contrast between the investor perspective and all others is striking. VCs gave a relatively high ranking to "*domain expertise*" and assigned much lesser value to the "*smart risk-taker*" attribute than the students. Underestimating the importance of domain knowledge or over-indexing on being a smart risk-taker may harm how young entrepreneurs are viewed by potential investors.

In the student rankings, female students, for example, did not rank "*attracting a great team*" nearly as highly (their #5) as the male students or the other prior survey groups – all of whom selected that attribute as either the #2 or #3 contributor to success. For female students, this is a potential blind-spot that could impact their success. A focus on building great talent into a core startup team is viewed by others as critical to success.

Understandably, given their typically younger age and thus more limited opportunities to build strong business networks, the students (#2 for women and #3 for men) ranked the ability to have "*networks for access to advisors and investors*" more highly than either the male entrepreneurs or the investors (#6 for all of them). It's noteworthy, however, that women entrepreneurs did rank this attribute as similarly in

importance to the students (their #4) versus the others. This is another indicator of the somewhat more limited networks that women in general, feel they have open to them in the entrepreneurial ecosystem.

The somewhat lower ranking on the part of the students of the “*visionary with passion*” attribute as compared to founders and investors is also worth considering. Perhaps these students, as suggested by indicating they were more likely to join versus start a company as their likely first entrepreneurial step earlier in the survey, are just too early in their careers to have identified the specific startup opportunity they are passionate about pursuing.

Less Highly Ranked Attributes

Having a technical or STEM education, prior startup experience, and the desire for "world domination" were the three lowest-ranked attributes by students. These same attributes scored very low rankings from founder and VC participants in our prior research as well. While it may seem surprising that MBA students don't feel that an individual must have prior startup experience to be a successful entrepreneur, it's been proven time and again that having a unique vision and great team can trump experience when launching a company.

WHAT ARE THE HIGHEST BARRIERS TO ENTREPRENEURIAL SUCCESS?

Students: Financial Concerns Top the List

Pursuing entrepreneurial endeavors obviously has an element of risk that cannot be overlooked when weighing the decision to follow this career path. We asked students to assess the strength of a list of possible barriers to their entry into entrepreneurship, with scoring ranging from "not a perceived barrier" all the way to "insurmountable barrier". Male and female MBAs responded nearly identically in selecting the four biggest barriers they feel they face. Their top concern was “*financial security*”, with more than half of the students indicating that it was either a strong (42%) or insurmountable (16%) barrier. The next highest barrier was the “*ability to gain funding*” for their enterprise with a combined 37% of students indicating high levels of concern (strong = 28%, insurmountable = 9%). Having “*access to the right networks*” and “*gaining credibility/trust*” followed as the third and fourth highest-ranked barriers respectively for all MBA students.

Chart VI: Ranking of Barriers to Entrepreneurial Success

Barrier	Female MBA	Male MBA	Female Founder	Male Founder	Female VC	Male VC
Concerns re: financial security	1	1	2	1	5	8
Access to startup capital	2	2	1	2	2	3
Access to the right networks	3	3	7	13	13	6
Having a unique idea	low	low	3	6	1	2
Acquiring Credibility/trust	4	4	4	3	10	4

Source: Illuminate Ventures, 2021

Differences in Perspective

Comparing the student rankings to our previous research with entrepreneurs and VCs regarding these same potential barriers showed some important similarities and quite a few differences. Entrepreneurs, like the students, had selected the two financial barriers as their biggest obstacles, although male founders were slightly more concerned about security and women more about raising capital. On these two penultimate blockers, however, VC investors seem somewhat oblivious to the level of obstruction that both students and entrepreneurs feel regarding concerns over “*financial security*.” Investors ranked this barrier to entrepreneurship fairly low, falling to #5 for female VCs and #8 for males. The VCs did, however, give more credit to the level of barrier faced by those seeking capital for their company, ranking that potential obstacle in the top 3. Perhaps understandably, they seem to prioritize company risk over personal financial risk as a likely hurdle to entrepreneurial success.

Several other less critical obstacles showed significant variance between how they were ranked by students versus others. Not surprisingly, “access to the right networks” for things like advisors and mentors was a high (#3) barrier by students, but fell much further down the list for entrepreneurs and investors. Fresh out of graduate school, the depth of an individual's network is much more limited than for most founders. Recent research in [Harvard Business Review](#) that was conducted by a group of professors from MIT Sloan and Northwestern Kellogg shows that the average age of a startup founder is 45 – and add another year to age 46 if it's a high-growth startup. As a result, most founders are older than our student survey population (over 80% were under 35) and have had time to expand their networks before launching a company.

Heads up on Investor Perspectives

The two barriers identified as likely to be the biggest obstacles to entrepreneurial success by investors were viewed very differently by students as well as by entrepreneurs. The #1 ranked barrier by female VCs (#3 for male VCs) was “*having a unique startup idea*.” Female entrepreneurs ranked this issue within their top 3, but for male founders, it fell to #6. We do not show the exact ranking for students as the question was asked slightly differently than in the prior survey, but overall, their responses indicated that they give this a low rank as a barrier. Fundamentally, MBA students do not seem to consider having the actual startup idea themselves as an obstacle to entrepreneurship. More than two-thirds of students expressed more interest in joining a startup than implementing their own idea. Only 23% percent of women and 33% percent of male students envision being the product visionary.

The #1 ranked barrier that male VCs selected (#3 for female VCs) was “*networks that create great teams*”. It's somewhat surprising that this obstacle did not make it into the top five barriers for students or entrepreneurs, given the well-researched importance of having a great startup team. CB Insights has been analyzing the reasons for startup failure since 2014. Their [2019 update](#) shows that 23% of startups failed because they did not have the right team, with only the fundamental “lack of market need” and “running out of money” as more likely reasons to fail. Since 2011 the [Startup Genome](#) has looked at the factors most impacting startup success. Their initial analysis of over 650 high-growth tech startups yielded some interesting insights related to the impact of team structure:

- Solo founders take 3.6x longer to reach scale stage compared to a founding team of 2
- Business-heavy founding teams are 6.2x more likely to successfully scale with sales-driven startups than with product-centric startups

- Technology-heavy founding teams are 3.3x more likely to successfully scale with product-centric startups with no network effects than with product-centric startups that have network effects.
- Balanced teams with one technical founder and one business founder raise 30% more money, have 2.9x more user growth, and are 19% less likely to scale prematurely than technical or business-heavy founding teams

As a further demonstration of the longstanding awareness of team selection on startups, [Lindred Greer](#), now at Michigan Ross, began her research on this topic as a professor at Stanford Business School nearly a decade ago. Based on her learnings, Stanford has offered an entire class entitled "[The Psychology of Startup Teams](#)" since that time. A more in-depth [analysis of research](#) on the topic of Entrepreneurial Team Formation can be found in work conducted at INSEAD and published by the Academy of Management where they reviewed many prior research reports.

Student-specific Attributes

There was one attribute added to the potential barrier list for students that had not been included in our prior surveys – “*self-confidence*.” Perhaps not surprisingly for talented MBA students, this attribute was not seen by many students as a significant barrier – with more than 60% indicating that it was either not a barrier at all or a low one. As may have been expected based on the research shared earlier in this paper, women MBA students did rank the barrier level somewhat higher than the men.

WHICH INFORMATION SOURCES DO MBA STUDENTS USE/TRUST?

Most Valuable Sources

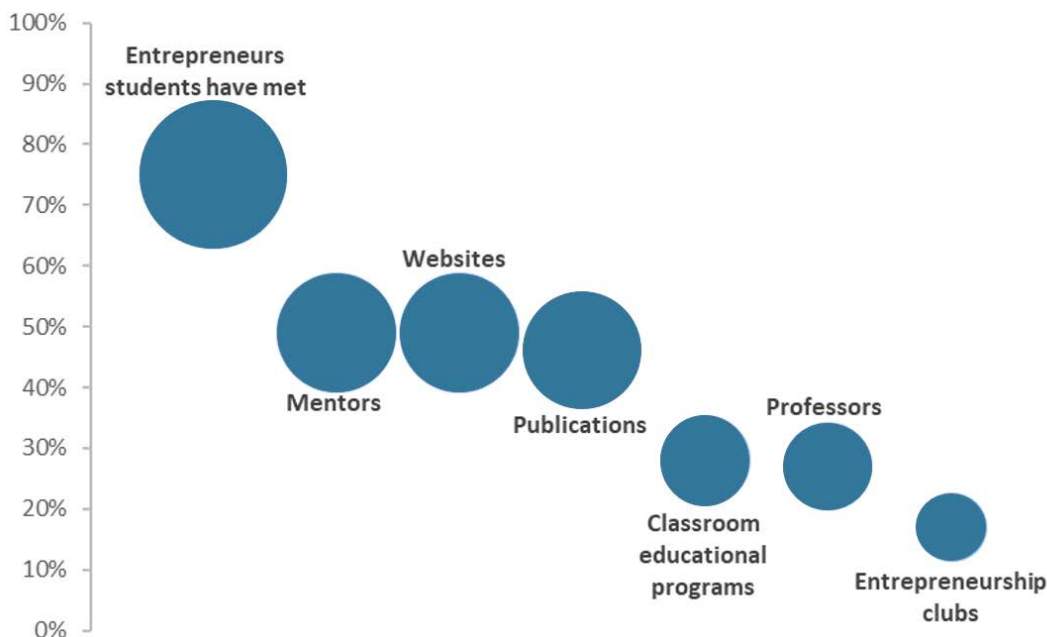
With so many MBA students having a strong interest in entrepreneurship, it begs the question of how they learn about it. We set out to understand which sources of information students consider to be the most useful and reliable. The survey offered eight options, asking respondents to select their top three in terms of frequency of use and trust and also enabled students to add their own ideas. Not surprisingly, the most often selected item (nearly 75% of students) was *entrepreneurs* that the students have met, often outside of their educational programs. Thereafter, three more options had nearly identical selection rates from the students, with each receiving top-three ranking from nearly half of all participants: “*mentor*,” “*entrepreneurship journals and website*,” and “*books and magazines*.” While few (only 8% of participants) chose to add knowledge sources beyond the eight originally offered, these suggestions included podcasts, friends and family members, Twitter/blogs, and prior work experience.

Lower Impact Surprises

Several options that were offered in the survey were ranked lower in terms of relative use/trust than we one might have expected. These include Entrepreneurship clubs (17%), classroom educational programs (28%), and professors (27%). Because this lack of credibility and value was somewhat perplexing, we probed this question directly post-survey with a group of current Illuminate Ventures MBA interns and gained some interesting perspective. In their view, while programming from a “club” standpoint does help students gain exposure to the entrepreneurial world, most on-campus events are for students who are already interested and passionate about entrepreneurship, meaning these are not events where MBAs are getting exposure to the topic for the first time. Additionally, student clubs and

classes offer fairly limited direct exposure to entrepreneurs. These students shared their view that other outside events and internships in the entrepreneurial community where they gain direct access to founders and investors offer the most valuable learning opportunities.

Chart VII: Data Sources Most Valued by MBA Students



Source: Illuminate Ventures, 2021

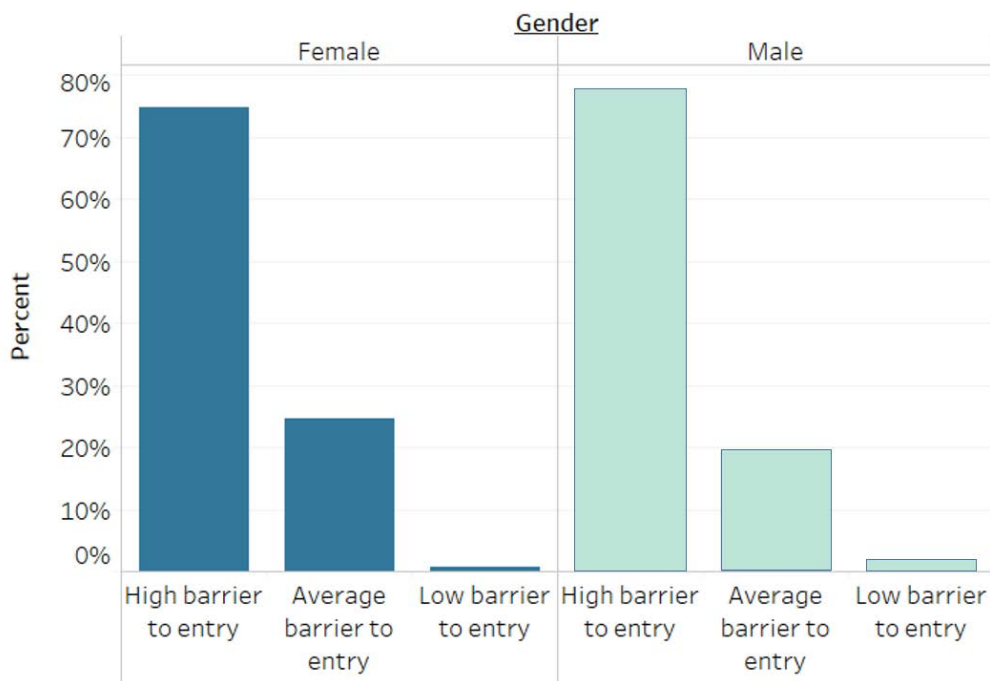
There are many interesting implications of the student rankings of the best learning resources that MBA programs may wish to consider regarding educations in entrepreneurship. Programs may benefit from focusing on helping students gain better access to mentors and active entrepreneurs versus traditional classroom activities.

IS VENTURE CAPITAL A VIABLE CAREER PATH?

Perceived Barriers

Founding a company or working in a startup are not the only ways to be involved in entrepreneurship. For some MBA students, their interests and skills take them in a different direction - including a desire to be involved in financing startups and building a portfolio versus investing all of their time/energy into one company. With that in mind, the survey set out to gather student perceptions of the Venture capital (VC) space from a career path perspective. In general, we learned that students have a relatively high degree of interest in a VC career (63% of men and 53% of women) and that they also perceive this path, unlike entrepreneurship, as having some very high barriers to entry. This viewpoint held true independent of the educational background of the participant.

**Chart VIII: Student Perception of Barriers to Entry
Venture Capital Career Path**



Source: Illuminate Ventures, 2021

The student perspective is likely quite accurate. According to the [NVCA](#), there are fewer than 1,500 active venture capital firms (many of which are very small 1-2 person teams) typically creating less than 100 new investing partner-level positions a year. Of course, MBA students don't generally enter a firm as a partner, but this number provides a good benchmark as junior position additions are similarly few in number. Many smaller firms hire no junior roles at all and focus entirely on partner-level positions

There is a significant gap between opportunity and interest in VC careers. Many more students voiced interest in this career path than the pool of potential opportunities. Getting an MBA is a plus, however, as shown in [research conducted by TechCrunch](#). Over half of all current VC partners earned an MBA. But all MBAs are not created equal, as only 5 schools in North America have even 100 VC partner graduates today. While it may be surprising that students at some of the schools with the most current VC investors already in place do not show the highest level of interest in a career in venture capital, [PitchBook](#) confirms that graduates from these same MBA programs also have some of the highest levels of activity in forming startups. Of note, the VC partner metric includes all graduates of a given University, not just the MBAs. The concentration of those following VC career paths is yet another demonstration of homophily, the tendency we all have to be more comfortable with people and ideas that are more similar to our own. It's only natural that the earliest VC investors had a natural affinity for graduates from their own alma maters, but it also creates a dogmatic cycle that is difficult to break.

Chart IX: VC Career Interest at Universities with the Most VCs

Business School	MBA Student Interest	Current # VC Partners
Harvard University (GSB)	55%	484
Stanford University (GSB)	58%	426
University of Pennsylvania (Wharton)	71%	225
Massachusetts Institute of Technology (Sloan)	83%	148
Columbia University	78%	100
Dartmouth College (Tuck)	100%	90
Yale University	72%	90
University of California-Berkeley (Haas)	80%	80
University of Chicago (Booth)	59%	79
Cornell University (Johnson)	80%	63

Source: Illuminate Ventures, 2021

The odds of gaining a seat at the table in a VC firm are worse for female students and other underrepresented communities. As of year-end 2019, [research by AllRaise](#) shows that 65% of VC firms do not have a single female partner, and women represent just 13% of all VC decision-makers. 2018 [NVCA research](#) shows Blacks and Latinos holding only 4% of partner-level VC roles. The numbers are growing, but [data](#) shared by Harvard’s Sophie Calder-Wang at the 2019 Equity Summit shows that at the historical pace of change, it will take 400 years to get to parity.

MBA survey respondents were given the opportunity to offer their own views on why they would or would not consider a career in venture capital. The top positive responses included being able to make a positive impact and to help catalyze great new business ideas (similar to why MBAs are interested in pursuing entrepreneurship), being drawn to the fast-paced lifestyle of the industry, and to have the ability to be a pioneer for women in a space typically dominated by men. The negative responses centered primarily around the high barriers to access.

Following are a few representative student quotes:

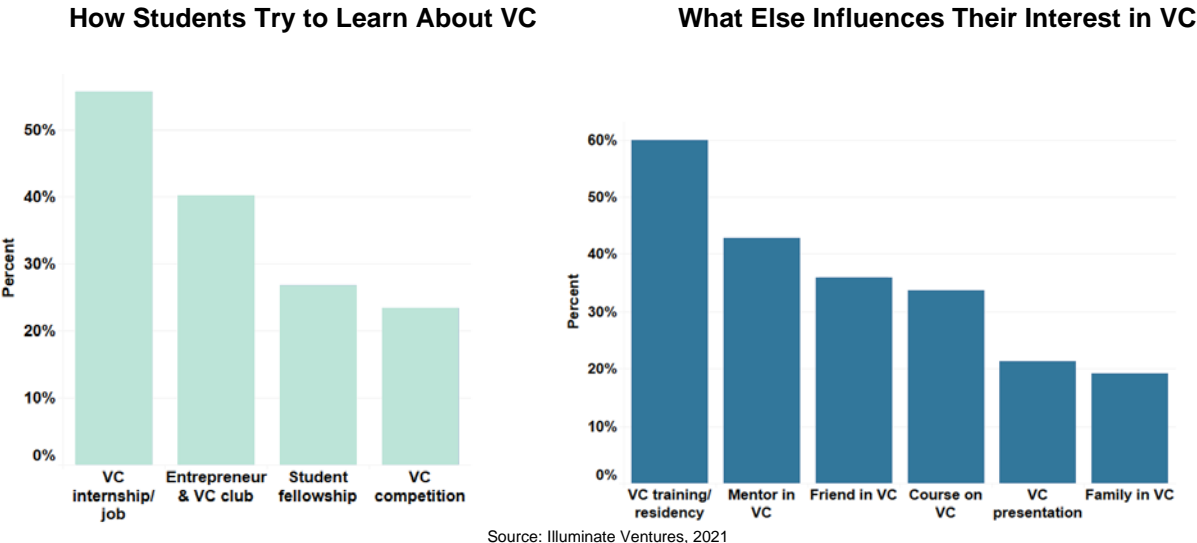
- “I spent the past year interning at a Venture Capital firm in Austin and loved the fast pace the firm operates at, the breadth of new technologies they review on a daily basis, and the meritocracy that exists both in a VC firm and at their portfolio companies.”
- “The lack of female VCs is something that impacted me when I was part of a female-owned startup team for a pitch competition. That interested me in being on the other side of the table for sure...”
- “I grew up around small businesses and saw the impact that it can have first-hand. The opportunity to invest capital, help grow a business, create jobs, and generate potentially attractive returns is very compelling.”

- “I've considered it a viable career path, however, my perception is that it is very challenging to land an opportunity unless you have an MBA and are connected with the right circles.”

MBA Student Exposure to Venture Capital

Despite the odds, many MBA students are actively seeking knowledge and experience in the VC community. For some, they may be taking this path to learn how VCs think so they can be better prepared as founders seeking capital, not to seek a VC position. The top source of current involvement for students is via internships with venture capital firms. Many VC firms run active summer internship programs. Illuminate Ventures is a bit unique in this regard in that since inception the firm has had an active class-year internship and Student in Residence (SiR) program. With more than 60 “graduates” from their program, more than 45% were women, and 78% overall came from diverse backgrounds. Many MBA students are also involved in entrepreneurship via Entrepreneurship and VC Club programming on their campus. Students are getting involved via student fellowships and Venture Capital Investment Competitions. Responses of men and women students to this set of questions were nearly identical.

Chart X: Student Exposure to Venture Capital



Students were also asked to share their views on what other types of exposure they felt might make it more likely that they would consider a career path that includes venture capital. The majority of students feel that some type of program that allows them to directly interact with a VC firm would have the most impact on their interest in career opportunities in the VC community.

SUMMARY OF FINDINGS

What motivates and supports MBA students' interest in entrepreneurship?

- By far, the most selected reason for considering entrepreneurship for both men and women was to bring ideas they are passionate about to the market. This mirrors the response from our prior research of current entrepreneurs.
- Roughly 60% of students interested in an entrepreneurial career path had an entrepreneur friend, and over two-thirds had a parent or mentor as a role model.
- The most prized data source for MBA students was current entrepreneurs.
- Mentors and information found through websites, journals, and books were also valued, but students assigned lesser usefulness to clubs and classroom experiences.

How do students think about entrepreneurial barriers and success attributes?

- Across current and prior survey respondents, all agreed that the most important attribute of a successful entrepreneur is a combination of resilience and perseverance.
- All but one of the groups surveyed also selected the ability to attract a great team as the second most important success attribute. This ranking is likely well-merited since data shows that 23% of startups fail because they lack the right team.
- When considering barriers to entrepreneurial success, male and female MBAs both selected financial security (58%) as a very significant barrier, followed by access to startup capital (37%). These top two barriers paralleled those of both male and female founders in our prior research.
- Female MBA students ranked “self-confidence” as a barrier to entrepreneurial success somewhat higher than the male students surveyed.

How far along are students on their entrepreneurial journey?

- Over a third more male respondents already had a startup idea versus female.
- Many students prefer joining an existing startup versus launching their own when starting out.
- A much higher proportion of male students reported that they were already active in an entrepreneurial project when compared to female students (48% versus 34% of respondents).

What level of interest exists and what barriers are perceived in a venture capital career?

- While MBAs were interested in careers in venture capital – 63% of men, and 53% of women – they believed it is very hard to break into the space. Roughly 75% of female students perceived a “high barrier to entry” and nearly 80% of male students.
- Historically, the odds of landing a VC role have been far worse for women and other diverse groups lacking the right networks.
- Students believed the best way to gain exposure to VC was through an internship in the space, but few have access to these types of opportunities.
- Research shows that even minimal exposure to VC networks substantially benefits men, but is less helpful for women.

We are pleased to be able to share the views of current MBA candidates, many of whom are likely to be tomorrow's entrepreneurs. We hope that the data may be useful to individuals considering entrepreneurship or venture capital investing as a career direction. We also encourage educators to leverage the student perspectives represented in the survey data as they design their entrepreneurship programs.

APPENDIX

Section I: DEMOGRAPHICS OF RESPONDENTS AND METHODOLOGY

Process

Starting in the Fall of 2019, two second-year MBA students at Carnegie Mellon University along with partners and Business Advisory Council members from Illuminate Ventures began a process of reaching out to the top MBA programs in the US to gain student support for the survey on a "grassroots" basis. A variety of direct and indirect approaches were leveraged including personal contacts, University events, guest lecturing opportunities, outreach to VC and entrepreneurship clubs, and via graduate business conferences. We were also fortunate to gain the support of the leadership team of [Poets and Quants](#) who shared our survey participation request via a message to their broad MBA student audience. We greatly appreciate this support for our data gathering efforts.

Much of the survey content had previously been developed and tested in our prior 2018 research amongst early-stage entrepreneurs and venture capitalists. We reused identical questions focused on entrepreneurial attributes and barriers, enabling direct comparisons between the 2018 data and current responses. Additional questions were first tested with a sample of Tepper MBA students before being embedded in the broader survey.

Demographics

We were pleased to have over 500 students representing 22 MBA programs complete the survey. Only four MBA programs had more than 30 respondents from their MBA programs including Carnegie Mellon Tepper, Yale, USC Marshall, and Chicago Booth. The vast majority of participants (81%) were attending full-time MBA programs with only 6% currently in online programs and 13% in part-time programs. This wasn't surprising as our best outreach was to students that were on campus originally. Without formal University sponsorship, the other students were a bit harder to connect with. Our goal was to gain a broad set of responses – avoiding over-concentration in a single MBA program, by geography, or gender and we believe we achieved that. We are pleased to have gained as broad a cross-section of ethnic backgrounds as well, with 68% selecting from an array of different backgrounds and only 32% classifying themselves as white/Caucasian.

Sex, Age, and Ethnicity

Our series of 6 demographic questions were optional, but had a very high rate of response (over 85%). The participants selected from gender preferences of "male", "female", "other", and "prefer not to say". Fewer than 12% opted for "prefer not to say" and not a single respondent selected "other". Roughly 30% of participants identified as female, and 58% percent as male contributors.

Nearly half of the student participants were in the 25-29 age range, with only 7 percent being younger than that. Given a typical undergrad degree gained at age 22, this group of students has 3-6 years of work experience before attending an MBA program. The next largest grouping was in the 30-35 range, representing 27% of the respondents. Nearly 10% were over age 35, likely having more than a dozen years of work experience before seeking their MBA.

Beyond the 1/3 white respondents, the second largest grouping was Asians (at nearly 35% including East Asians) followed by 10% Latino, and 5% Black. Another 13% either skipped this question or indicated that they would prefer not to respond.

Geography and Country of Origin

Students participating in this survey were somewhat concentrated in the northeast of the United States, which is consistent with the fact that so many of the top MBA programs are located there. Over 46% were from the northeast, 10% from the south and mid-Atlantic, 23% from the west coast, 11% from the Midwest. Additionally, a quarter of the survey respondents are not US citizens. In terms of the foreign-born students, the highest representation came from India, with 16% of all survey participants, followed by China. No other individual country had more than 3% representation in the survey.

Prior Education

The undergraduate backgrounds of the participants were more heavily concentrated in two domains - business and engineering, including computer science (totaling 53% overall). Students with liberal arts and economics were also well represented. Interest in entrepreneurship, in particular, saw some alignment with the undergraduate educational background of the participants, with students who had received any type of STEM showing the highest level of interest, followed closely by those with business degrees.

Undergraduate Degrees and Startup Interest of Respondents

Degree Area	Undergrad Percent	% Interested in Entrepreneurship
Business	26%	86%
Economics	12%	78%
Liberal Arts/Humanities	18%	79%
Engineering (including Computer Science)	28%	91%
Science	8%	90%
Other STEM Degree	2%	100%
Other/None Indicated	6%	81%

Source: Illuminate Ventures, 2021

APPENDIX

Section II. ABOUT THE AUTHORS

Cara Giannandrea:

Cara is an MBA candidate at the Tepper School of Business (class of 2021). After obtaining her bachelor's degree in psychology, she worked in the mental health field where her experience working with a mental health startup ignited her passion for entrepreneurship. To gain more experience in other business-related fields, she began working in technology/manufacturing sales, before deciding to return to school for her MBA. Her interests lie in social entrepreneurship and impact investing. Upon graduation, she plans to found/co-found a social enterprise.



Cindy Padnos:

Cindy Padnos is the founder and Managing Partner of Illuminate Ventures, a Seed stage venture capital firm focused exclusively on enterprise/B2B software investments. Illuminate is operating from its third fund with early investments in current market leaders like BrightEdge, Contentstack, Coupang, and Pex. The firm has also gained successful exits with companies like Xactly (IPO), Opsmatic (acquired by New Relic), and Sense Platform (acquired by Cloudera). Cindy is a prior serial entrepreneur in the tech sector with several successful IPO and M&A exits, including as founder/CEO of Vivant. Cindy currently sits on several private company boards and is a member of the Business Board of Advisors for the Tepper School of Business at Carnegie Mellon University. Her passion for encouraging diversity in the tech sector led her to research and author [three white papers](#) on this topic since 2010.



Natalie Gerber:

Born and raised in Pittsburgh, Natalie is a recent Tepper School of Business graduate (MBA '20). After pursuing a BS in Energy, Business and Finance, she worked for GE Energy Financial Services for four years before returning to Pittsburgh to gain her MBA at Tepper. While at Tepper, she was the class Vice President for the 2019 school year and involved with the Graduate Business Association, Tepper Women in Business, Energy & Clean Tech, and Volleyball clubs. As a senior associate at Oriden, she is applying her MBA skills to better understand how technology is affecting and improving the renewables industry while encouraging women to pursue careers in both finance and energy.



Illuminate Ventures

Led by investing partners who have been founders themselves, Illuminate Ventures provides seed capital and know-how to B2B software startups with initial market traction. By applying a different lens, we find the "hidden gems" – scrappy, more experienced, but sometimes uncommon founders who value our experience and our firm's broad platform of advisors, interns, and other resources to catalyze their growth. Learn more about the firm at www.illuminate.com.