Standing Apart: What makes students more likely to launch a venture or commercialize a product?

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Question for discussion:

What are the characteristics of students who are more successful in starting a venture or commercializing a product?

Our work-in-progress study is examining the characteristics of students who are advanced in entrepreneurship.

Characteristics of Person

Characteristics of Environment

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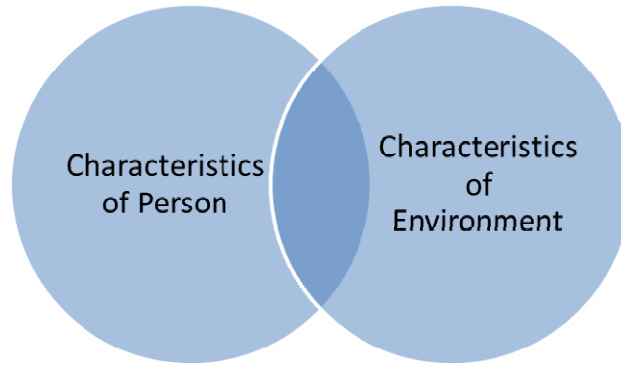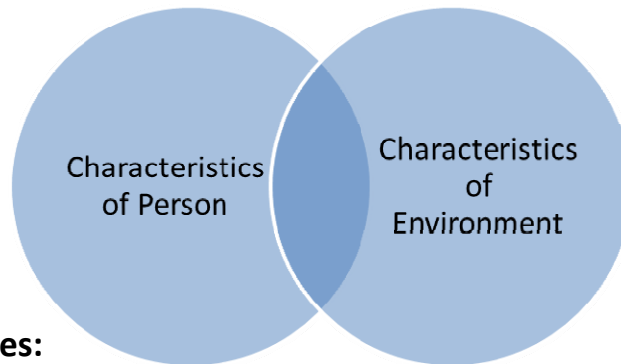
Examples:

Self-Efficacy

Drive

Risk-taking

Creativity

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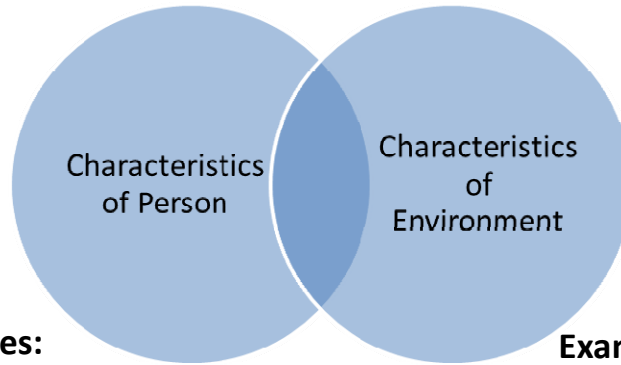
Examples:

Self-Efficacy

Drive

Risk-taking

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Examples:

Role models

Mentors

Peer influence

Resources

We conducted 19 interviews with advanced entrepreneurial students.

How do advanced students perceive themselves to be different from their peers?

What are the characteristics of the teams that the students work on?

How have they utilized support from university organizations such as Lion Launch Pad?

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As part of the interviews, students were asked how they would compare themselves to their peers.

Creative	"Go-getter"
Team-Oriented	Self-confident
Motivated	Observant
Self-conscious	Risk-taker

In addition, 22 advanced students completed an online survey consisting of various scales.

Creative self-efficacy (Tierney & Farmer, 2002)
Entrepreneurial self-efficacy (McGhee et al., 2009)
Locomotion and assessment (Kruglanski, et al., 2000)

Two different comparison groups were used for some of the subscales.

1. **Students who completed one course in the university-wide entrepreneurship minor (ENTI) (n=128)**
   Creative self efficacy
   Entrepreneurial self-efficacy

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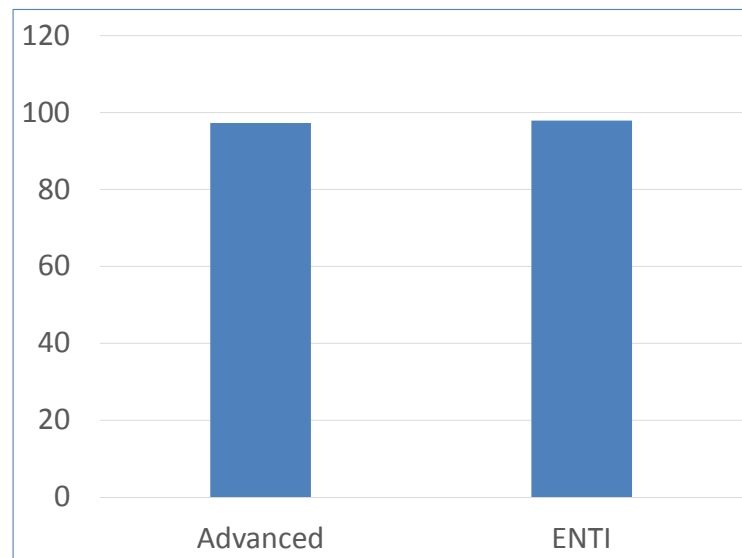2. **Senior engineering students (n=230)**
   Creative self-efficacy
   Locomotion
   Assessment

Advanced students did <u>not</u> have higher entrepreneurial self-efficacy as compared to ENTI students (*p*=0.875).

One of the major ways in which advanced students felt they were different from their peers is that they are already working on projects.

> *"Most of [the students in the e-ship courses] haven't acted on one of those ideas or actually started something and took that first initial risk…I've done it…I have money in it…There are two types of people I see in my e-ship classes: the ones that want to be and the ones that have already been."*

> *"I'm one of the few who's actually going out and starting a business."*

Many students commented on the difficulty of working on their project.

> *"[W]ith entrepreneurship, you need to be self-confident almost to the point of delusion…The odds are really stacked against you."*

For creative self-efficacy scores, advanced students were <u>not</u> different than ENTI students but were higher than senior engineering students ($p<0.000$)
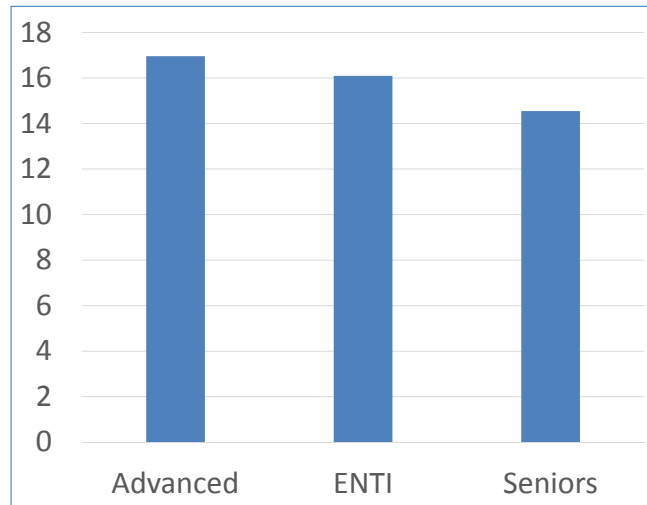
Some advanced students felt that they were more creative than their peers in terms of idea generation and problem solving.

"I would fall asleep thinking of new ideas. I would stay up at night until 6 in the morning…I had an entire booklet [of ideas] that I hid from everyone."

"I'm willing to think outside the box and think of new solutions to things. As you continue to get older, we're stuck thinking the same things over and over…I'm always willing to question that and really take a look outside the box."

Students have various definitions on what it means to be creative. A few make the distinction between creativity and art.

"A lot of people will say, 'oh, I'm not creative because I can't do this, this, and this,' and then they'll name a bunch of art practices. Creativity and art are definitely not the same thing."

"I feel like I have a lot more tools – creativity invoking tools – than the normal person. But naturally, I don't feel like I'm any more creative."

Advanced students were found to have higher <u>locomotion</u> scores as compared to senior engineering students (p=0.003)
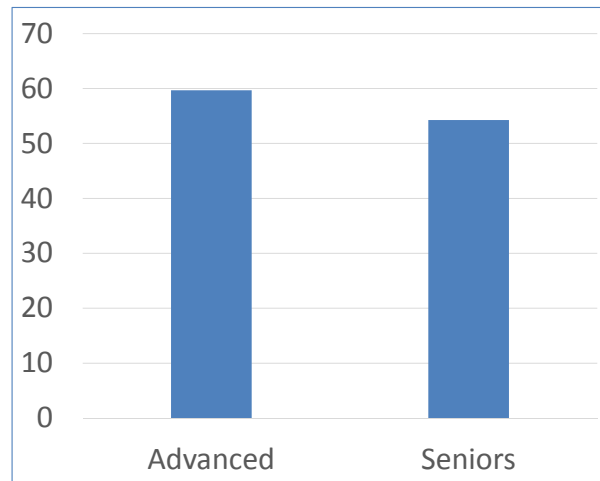
Advanced students often described themselves as having more "drive" than their peers.

"Everyone has an idea; many people don't pursue it…It's just having the ambition to take those steps to see if you can validate your idea and create a product or a company."

"I've always looked for opportunities to grow myself. I feel like I've done a pretty good job of identifying those opportunities when they arise and taking advantage of them. I see my friends and peers have the same opportunities…and they decide not to."

"Your biggest competitor is yourself. You're the only person who's moving things forward, and you're the only person who's holding things back.

Advanced students often stated that they often overcommitted themselves but didn't give up easily.

"I try to take on way too much."

"I think I see a lot less roadblocks than [other students] do."

"I don't give up too quickly. I pursue my ideas to the fullest and I'm always open to new opportunities. While I see other students become discouraged once they fail once, I accept failure as a learning lesson…"

Advanced students were found to have higher <u>assessment</u> scores as compared to senior engineering students (*p*=0.003)
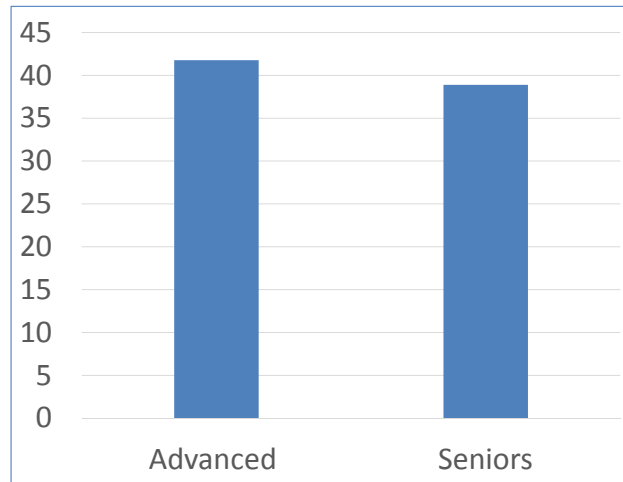
Regarding self-consciousness, students made the distinction between being self-conscious of themselves versus being self-conscious of their ideas.

"You're putting so much of yourself out there that I wish I wasn't self-conscious, but I am. Here are all my ideas that I'm working with… I feel like, in a sense, your project, after a while, is an extension of yourself. And it's an extension of me."

"The company's not about me or any of the individuals. It's about the idea."

"Because I'm so much more aware about kind of where I fail and how to use that, I think that makes me more self-conscious. I think I'm more likely to play scenarios over in my head than average. "

When asked whether they were observant, students often identified themselves as skilled at opportunity recognition.

"You observe different problems going on around you from small to large problems, and you think to yourself, 'Wow, there's a solution to that, and I could do that.'"

"I think about 'why' a lot. Like why things are if I look at them."

"I'm always keeping my eye out for everything. I like to understand the market and what's going on with the world."

"I think of the craziest ideas…Anything you see walking around, you notice a problem, you'd like to find a solution."

Advanced students often described themselves as informed risk-takers but felt that risks were minimal.

"Everything [our team has] done has been pretty conservative. We didn't rush into decisions. [We] make sure we're getting it right."

"I'm not much of a risk-taker…[We] are trying to get feedback from all sides such that when we step out into the limelight and start the business, things aren't going to come out of left field."

"It's not like I left a job with responsibilities and financial obligations and left a steady flow of income to do a start-up or something. I feel like while you're in college, the risks are pretty minimal."
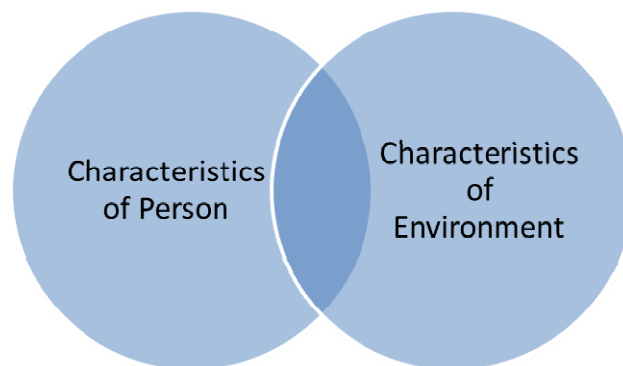
Our study has several limitations.

Small sample size for surveys

Appropriate comparison groups

Reliance on student perception data

Data collection and analysis is still in progress

Future work needs to consider an interactive model of entrepreneurial skill development.

Acknowledgements