



A short summary:

What we learned from studying entrepreneurship education for more than fifteen years

I and my colleagues have studied entrepreneurship education for more than fifteen years (see References). We surveyed thousands of college students and faculty across seven countries (the U.S., Turkey, China, India, Spain, Belgium, and Afghanistan). This note draws on a [research paper](#) written with [Harun Şeşen](#) (European U. of Lefke), [J. Rajendran Pandian](#) (Virginia State U.), and [Greg Winter](#) (Alcorn State U.) and presented at the [2019 BAMDE conference](#) in Bulgaria.

What did we learn?

1. Students' views of their future are largely shaped by confidence and fear.
2. Differences between men and women matter in education.
3. Professors underestimate the significance of students' psychology.

What do I conclude?

I think that business education should be more than skills and knowledge. It should understand, shape, and strengthen students' sense of self. This can foster independent learning, which will create more time to show students how—and *why*—to use their skills. It will encourage students to use their skills. And, it will address what we found really matters the most—internal, psychological factors.

Where am I looking now?

The end of this note talks about the military college West Point's deliberate emphasis on developing students' confidence and other psychological dimensions broadly termed as "character". I think this will be a useful start for thinking about entrepreneurship education in terms of student psychology.

1. Confidence and fear drive students

We need self-confidence to pursue things on our own.

Entrepreneurial "self-efficacy"—basically, self-confidence when doing new things—is the most important predictor of whether a student is developing/carrying out an entrepreneurial plan. Students often are relatively low in this entrepreneurial self-confidence.

Internal barriers and motives matter more than external ones.

Intrinsic (subjective) psychological motives matter more to students than external motives. Motives like a desire for independence and the opportunity to create something matter more than making money and gaining social status.

Intrinsic psychological barriers also outrank extrinsic barriers. Things like lack of confidence and fear of failure matter more to students than things like market conditions or lack of start-up capital.

Confidence affects how we use our education.

Our research shows that education encourages already-confident people to pursue new ventures and to change their direction in life. However, lower self-confidence can reduce the impact of education.

2. Women and men are different

Young men are more confident, perhaps over-confident.

Our research shows why, in general, male students express greater entrepreneurial intentions and higher confidence. Young men in our study tend to focus on what they want (motives) and pay less attention to obstacles, and young women focus more on possible barriers and adverse consequences.

A colleague suggests suggested that young women have greater risk-awareness than young men. We do know that young men are much more likely to risk physical injury than women, and that car insurance rates are higher for young men. Neuroscience shows us that women's brains mature earlier than men's, including the frontal lobe—the locus of reason, decision-making, and self-control.

“Higher” levels of self-confidence in men may have practical and cultural roots as well. In our research, women in relatively egalitarian societies like Belgium and the U.S. seem more attuned to barriers in general than men. Significantly, in highly unequal societies like Afghanistan, the practical barriers for women can be even higher—lack of capital, lack of legal protection, lack of respect.

We find significant differences between young men and women in attitudes, values, and beliefs. And, we also observe that female students *tend* to be more deliberative in decisions, while males *tend* to be more enthusiastic about rapid decisions. Does this mean we should see men making more attempts with a higher failure rate, and women making fewer attempts but with a higher success rate?

3. Professors underestimate the significance of students' psychology.

Professors dramatically underestimate student interest in entrepreneurship. Students feel more self-confident than their professors recognize. And, students often are more interested in entrepreneurship than their professors are aware.

Professors often think that schools support students' interests in entrepreneurship. Students are less likely to think so.

Students focus about aspirations and fears, but professors talk about external risks and rewards. Even though students are influenced more by internal psychological factors, professors think in terms of objective issues (demand, competition, financing, etc.). Self-confidence has the biggest influence on how entrepreneurial a student feels, but professors do not necessarily perceive this correlation.

My current question: What can we learn from military colleges about shaping character?

The real surprise is not that psychological factors are part of learning, or that men and women are different, but how little business education *actively* addresses this powerful influence.

Business education should address such differences. This does not mean trying to make the sexes the same, or treating one as less than the other. It means acknowledging the differences exist, and helping *all* students to have a fuller, better-grounded sense of self-confidence and risk-awareness.

For example, although a military college is not a business school, there may be much to learn from the military emphasis on psychology and, in particular, on what is called “character”.

Let’s look at the U.S. Army’s four-year military college commonly known as West Point, which defines four specific, detailed programs or “pillars”: character, academic, military, and physical. Only two of these are found in typical university entrepreneurship education.

	West Point	Entrepreneurship education
Course curriculum	Academic pillar	Yes
Applications/enrichments	Military pillar	Yes
Athletic activity	Physical pillar	No
Psychological development	Character pillar	No

Course curriculum—no real difference.

West Point’s “Academic” pillar looks like any typical college curriculum—general education courses, a major subject, and some free electives.

Applications and enrichments—very similar.

This is the area of specialized activities, events, and experiences. West Point’s “Military” pillar means field training and practical application of concepts and skills. Business schools do the same thing with supplements like company visits, workshops, speakers, internships, applied projects, and so on.

Athletic activity—different.

Armies emphasize physical fitness, but there are many ways to get fit. In West Point’s “Physical” pillar, students are *required* to be on sports *teams*. Mandatory participation isn’t just about physical fitness—it is to build confidence, teamwork, and persistence, things that also are relevant for entrepreneurship education. However, few universities have modest physical education requirements, and physical team activity clearly is not an integral part of business education.

Character development—very different.

“Character” is West Point’s primary pillar, and the most interesting one to relate to business education. As with the physical pillar, the psychological purposes of the character pillar are remarkably relevant to business education. The school considers character-building so important that it specifically enumerates five elements of leadership character to build or shape in students:

- Moral ...the knowledge, integrity, and awareness to assess the moral-ethical aspects of every situation and the personal courage to take appropriate action regardless of consequences.
- Civic...demonstrating empathy, loyalty, respect, and humility that enable an individual to treat others with dignity and to display selflessness.
- Social...behaving with proper decorum in all professional, social, and online environments.
- Performance...sense of duty, resilience, and grit...

— Leadership...establishes a safe, positive...climate where everyone thrives while achieving results.

Of course, business students are not military students, but...

How can young women and men benefit from incorporating character and physical pillars into entrepreneurship education, and how might we do it?

How can we do more to instill students with positive entrepreneurial attributes and character?

And, in a world of trade-offs, what might we give up if we re-orient entrepreneurship education from teaching students to shaping students?

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