Linking Mindset to Entrepreneurial and Intrapreneurial Intentions in Engineering and Business

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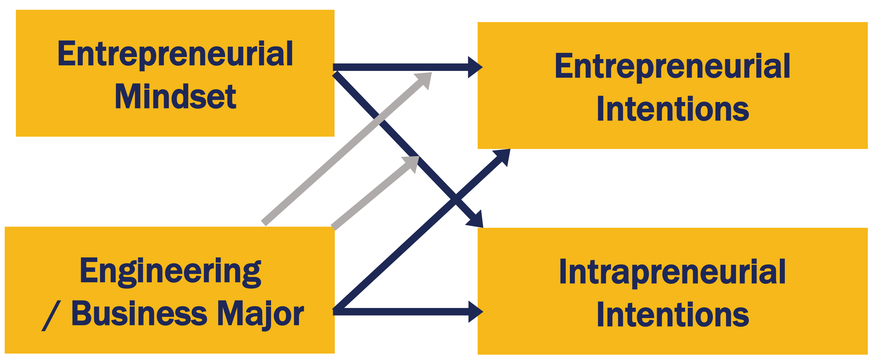
Vision and Motivation

Our study explores how an **entrepreneurial mindset (EM)** relates to **entrepreneurial/intrapreneurial intentions (E/II)** among **engineering and business students**, highlighting disciplinary differences. It aims to elevate **entrepreneurial education**, ensuring students develop the skills and mindset to innovatively and effectively navigate the global economy.

Research Questions

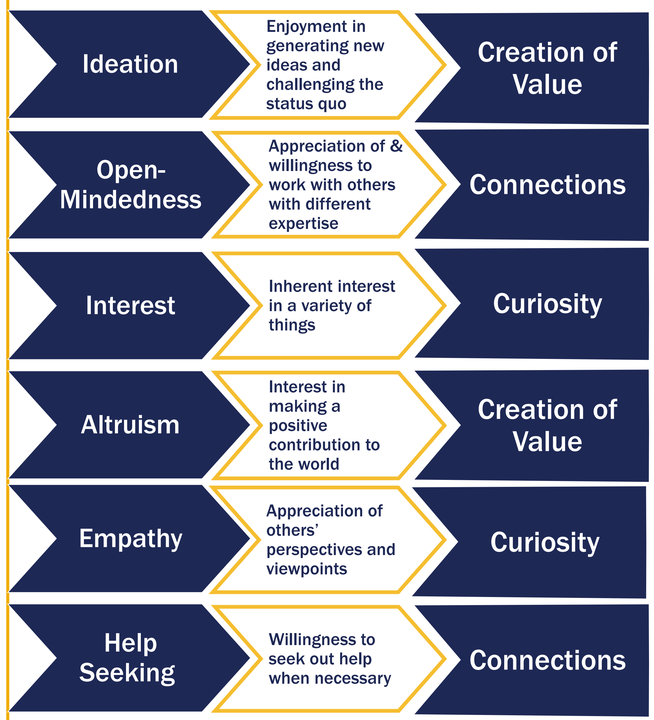
1. How do the elements of an **entrepreneurial mindset (EM)** relate to **entrepreneurial intentions (EI)** among engineering and business students?
2. How do the elements of **EM** relate to **intrapreneurial intentions (II)** among engineering and business students?
3. How does the **major (engineering versus business)** moderate the relationship between the elements of EM and E/II?

Theoretical Framework



Survey Instrument

ESEMA Instrument[1] and KEEN's 3Cs



Educational Implications

Develop Creative Problem-Solvers: Foster engineering and business curricula that emphasize creativity, social responsibility, and real-world application of knowledge.
Customize Curriculum by Discipline: Tailor educational strategies to the unique entrepreneurial drivers of engineering versus business students, enhancing their intrinsic motivation and capabilities.
Promote Cross-Disciplinary Learning: Encourage projects and experiences that merge engineering innovation with business strategy, preparing students for collaborative and interdisciplinary entrepreneurial endeavors.
Implement Continuous Engagement: Integrate internships, project-based learning, and mentorship to cultivate and reinforce an entrepreneurial mindset throughout the educational journey.

Results

- **Innovative Problem-Solving as a Keystone**: Strong correlation between ideation and both entrepreneurial and intrapreneurial intentions across disciplines, emphasizing the importance of innovative problem-solving.
- **Altruism as the Spark for Intrapreneurial Spirit**: Altruism is highly connected with intrapreneurial goals in both engineering and business students, with business students showing a stronger preference for entrepreneurship due to the curriculum's emphasis on social impact.
- **Curiosity and Compassion Fuel Engineering Innovation**: Engineering students' interest and empathy significantly relate to their entrepreneurial efforts, setting them apart from business students, and emphasizing the importance of a user-centric and collaborative approach in engineering education for entrepreneurial success.
- **Open-Mindedness and Intrapreneurship:** Open-mindedness is particularly connected to intrapreneurial intentions among engineering students, underscoring the value of diverse perspectives and interdisciplinary teamwork in fostering intrapreneurship.
- **Disciplinary Differences:** The study illustrates distinct paths toward entrepreneurial and intrapreneurial intentions between engineering and business students, suggesting the need for tailored educational strategies.

References

1. Brunhaver, Samantha R., et al. "Development of the Engineering Student Entrepreneurial Mindset Assessment (ESEMA)." Advances in Engineering Education 7.1 (2018): n1.

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