

# DEGREES OF ENTREPRENEURIAL INTENT AND ENTREPRENEURIAL ORIENTATION AT DIFFERENT STAGES OF ENTREPRENEURSHIP EDUCATION

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**Abstract:** Entrepreneurship has been popular among young population of every country. They want to be their own boss, independent from any control and self-made millionaires. Many universities offer entrepreneurship program either in the form of series of courses within an establish management programs or as a separate program/department. However, there was a lack of report on efficiency of such program on the graduates. At Bangkok University's School of Entrepreneurship and Management (BUSEM), there is a separate entrepreneurship program comprising courses targeting business idea generation, business plan creating, business pitching and launching, and business review. In this research we evaluated the efficacy of the program by employing Entrepreneurial Intent (EI) and Entrepreneurial Orientation (EO) that were the indices usually used to understand degrees of desire and ability to be an entrepreneur. This research followed BU's 1,500+ entrepreneurship students for 8 years (2016-2024) and found that years of study (Year) was the influential factor to both EI and EO among BUSEM students. However, among the EI scales, only reversed EI3 (wanting to work as employee in large organization) was significantly impacted by Year and FB separately. For EO, Year significantly influenced the scores of many EO scales; EO12 (ready to run the project by new method), EOP1 (readiness to confront with the problem), EOP2 (ready to run the project by new method) and EOR2 (love to make bold investment of time and money); meanwhile, only EO14 (solve the problem by new method) was significantly influenced by FB. Therefore, the BUSEM's Entrepreneurship curriculum led to a gradual increase in Entrepreneurial Orientation toward the final years of the program. The challenges for the educators were to maintain the EI scores for the students and enhance EO level for the young entrepreneurs.

**Keywords:** entrepreneur, entrepreneurial intent, entrepreneurial orientation, entrepreneurship education, entrepreneurship curriculum

## Introduction

Entrepreneurship plays a critical role in stimulating the global economy by fostering the development of new businesses and creating employment opportunities (Linan, Rodriguez-Cohard & Rueda-Cantuche, 2011). In response, many governments have introduced policies and programs aimed at promoting new ventures and start-ups (Canever, Barral, & Ribeiro, 2017). Entrepreneurship education (EE) is vital for enhancing entrepreneurial attitudes and skills among the population (Potter, 2015). Research shows that students who receive EE tend to have higher entrepreneurial intention (EI) and entrepreneurial orientation (EO) compared to students from other disciplines (Westhead & Solesvik, 2016). Effective entrepreneurship can be cultivated through a carefully structured curriculum (Mandel & Noyes, 2016; Noyes, 2018).

Since 2008, Bangkok University's School of Entrepreneurship and Management (BUSEM) has embraced this philosophy by developing a dedicated curriculum in Entrepreneurship. Students learn

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directly from lecturers and industry mentors. The four-year bachelor's program is structured into four progressive stages:

#### **Stage 1: Business Idea Generating**

In the first year, students are introduced to the foundations of Entrepreneurship, Business Management, and Creative Thinking and Innovation. They are encouraged to explore and develop creative business ideas, which they bring to life during a retail fair. This event offers hands-on experience with key aspects of business operations, including sourcing materials, planning, and selling to actual consumers.

#### **Stage 2: Business Model Planning**

Students transition their ideas into structured business plans and models, deepening their understanding of business dynamics (McKeever, Jack, & Anderson, 2015). Embedded entrepreneurship in the creative re-construction of place. *Journal of business venturing*, 30(1), 50-65.). Courses during this stage include Business Models, Business Plans, Production and Operations Management, Family Business, and Business Strategies. Students also develop their first product or service prototypes and receive guidance from experienced mentors (Cannavacciuolo, Capaldo, Esposito, Landoli, & Raffa, 2006).

#### **Stage 3: Business Launching or Pursuit**

At this point, students present their business plans and prototypes to real investors during Investor Pitches (Noyes, 2018). They manage the sourcing of raw materials, packaging, production processes, and quality control. BUSEM organizes a Business Fair in leading shopping malls where students sell their products and receive feedback from real consumers. The successes and setbacks from these experiences become invaluable lessons (Mandel & Noyes, 2016).

#### **Stage 4: Wrap-up and Professional Preparation**

The final stage focuses on refining students' entrepreneurial capabilities to prepare them for the competitive business world. Students learn to analyze their mistakes and improve their business plans (Gasse & Tremblay, 2006). Additionally, BUSEM facilitates business matching opportunities between students and investors to help scale their start-ups.

Throughout each stage, students encounter various business challenges that shape their entrepreneurial motivations, which may fluctuate over the course of the program. These changes are reflected in their entrepreneurial intention (EI) (Canever et al., 2017). Typically, students with strong EI prefer to become entrepreneurs rather than employees in established firms (Nabi & Linan, 2013). Moreover, successful entrepreneurs exhibit consistent entrepreneurial behaviors known as entrepreneurial orientation (EO) (Lumpkin & Dess, 1996), which the BUSEM curriculum fosters at each stage (Bolton & Lane, 2012).

### **Method**

The impact of the BUSEM curriculum on students' entrepreneurial potential was assessed through a survey utilizing Entrepreneurial Intent (EI) and Entrepreneurial Orientation (EO) instruments (Souitaris,

Zerbinati, & Al-Laham, 2007; Bolton & Lane, 2012). The EI was measured through three questions evaluating students' EI1) intention to own a business, EI2) desire for self-employment, and EI3) preference for working within an organization (Souitaris et al., 2007). The EO was evaluated using three key dimensions: EOR) risk-taking (with 3 sub scales: EOR1 - making quick business decision, EOR2 - love to make bold investment of time and money, EOR3 – ready to confront with the consequence of own investment); EOI) innovativeness (with 4 sub scales: EOI1 – keen to make experiment on new project, EOI2 – ready to run the project by new method, EOI3 – keen to learn new things, EOI4 – solve the problem by new method); and EOP3) proactiveness (with 3 sub scales: EOP1 – readiness to confront with the problem, EOP2 – always planning ahead, EOP3 – always being the first person who imply the new method) (Bolton & Lane, 2012).

The survey was conducted in from December 2017 - 2024, administered during classroom lectures, and completed by students through a self-administered questionnaire. Given that the primary aim of the research was to support the enhancement of the BUSEM curriculum, a convenience sampling method was employed by sending emails to 2000+ BUSEM students (between year 2016 to 2024). The questionnaire links was embedded in the email. One thousand four hundred and ninety (1,490) students completed the questionnaire (59% response rate).

The data set containing the EI, EO and corresponding sub-scale scores were analyzed by a 2-way Multivariate Analysis of Variance (MANOVA) model comprising year of study (Year), family business ownership (FB) and the interaction term between the two factors (Year x FB) followed by Tukey B multiple comparison procedure. All statistical analyses were conducted at 95% confidence level.

## **Findings**

Among the 1,490 participants, 54.6% were male and 45.4% were female, with the vast majority (99%) aged between 16 and 23 years. There were 639 (42%) 1<sup>st</sup> year, 502 (33%) 2<sup>nd</sup> year, 212 (14%) 3<sup>rd</sup> year and 137 (9%) 4<sup>th</sup> year students. One thousand two hundred and twenty-four (1,224) students were with family business and 255 students were without family business.

The MANOVA analysis revealed significant influence of Year (Wilks' Lambda  $F_{39,4353} = 1.895$ , p-value = 0.001) and (Wilks' Lambda  $F_{13,1470} = 1.895$ , p-value = 0.041); however, the two-way interaction effect was not significant (Wilks' Lambda  $F_{39,4353} = 0.642$ , p-value = 0.959) on Entrepreneurial Intent (EI) and Entrepreneurial Orientation (EO). Further investigation revealed that years of study (Year) emerged as the influential factor that significantly influenced both EI and EO among BUSEM students (Table 1). Table 1 shows that, among the EI scales, only reversed EI3 (wanting to work as employee in large organization) was significantly impacted by Year and FB separately. For EO, Year significantly influenced the scores of many EO scales (EOR2, EOI2, EOP1 and EOP2) and only EOI4 was influenced by FB (Table 1).

Table 1: Significant level of Year of study (Year), Family Business Ownership (FB) and the interaction between the two factors on EIs and EOs.

Variable	p-values		
	Year	FB	Year*FB
<b>EI</b>			
<b>EI1</b>	0.936	0.806	0.982
<b>EI2</b>	0.196	0.191	0.816
<b>EI3 (reversed)</b>	0.000	0.002	0.892
<b>EO</b>			
<b>EOR1</b>	0.390	0.591	0.835
<b>EOR2</b>	0.040	0.494	0.221
<b>EOR3</b>	0.282	0.747	0.476
<b>EOI1</b>	0.568	0.409	0.601
<b>EOI2</b>	0.028	0.165	0.769
<b>EOI3</b>	0.510	0.667	0.621
<b>EOI4</b>	0.371	0.027	0.503
<b>EOP1</b>	0.009	0.149	0.3000
<b>EOP2</b>	0.048	0.542	0.135
<b>EOP3</b>	0.885	0.671	0.487

Figure 1 shows the independent influences of Year and FB on reversed EI3 scores (wants to work in big organization). The scores reduced slightly and gradually (about 0.5 point) throughout the 4 years of studies. Meanwhile, the students with FB had higher EI3 scores than those without FB.

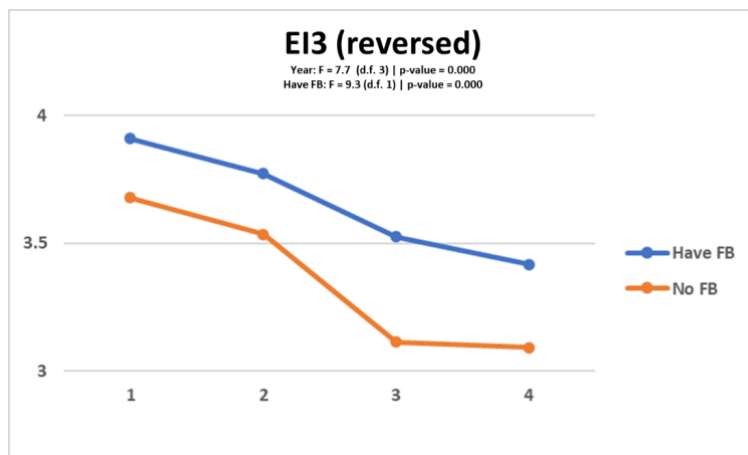


Figure 1: Changes of EI3 throughout BUSEM 4-year curriculum (reversed scores of the EI3 where the higher the score the lower intent to be an employee)

Figure 2-6 shows the influenced of Year on EOI2 (ready to run the project by new method), EOP1 (readiness to confront with the problem), EOP2 (ready to run the project by new method) and EOR2 (love to make bold investment of time and money); meanwhile, only EOI4 (solve the problem by new

method) was significantly influenced by owning an FB. The EO scores diminished slightly (about 0.1) in the first year and stabilized from the 2nd to the 4th year (Figure 2, 4, 5 & 6). Even though, students with FB in the 2nd and the 3rd year seemed to have higher EOI2, EOP1, EOP2 and EOR2 scores (about 0.1-0.15) than those without FB; however, the effect was not significant (Figure 2, 4, 5 & 6). Figure 3 shows the significant influence of owning an FB on EOI4 scores. The students with FB had significantly higher EOI4 scores (about 0.1 to 0.2) than those without FB (Figure 3).

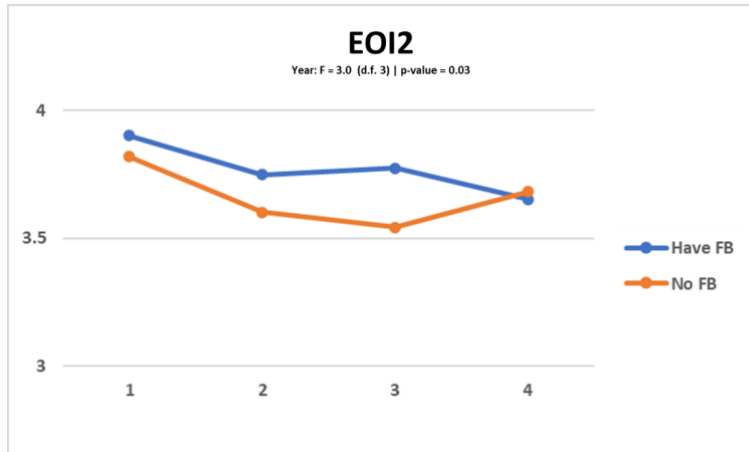


Figure 2: Changes of EOI2 throughout BUSEM 4-year curriculum (ready to run the project by new method)

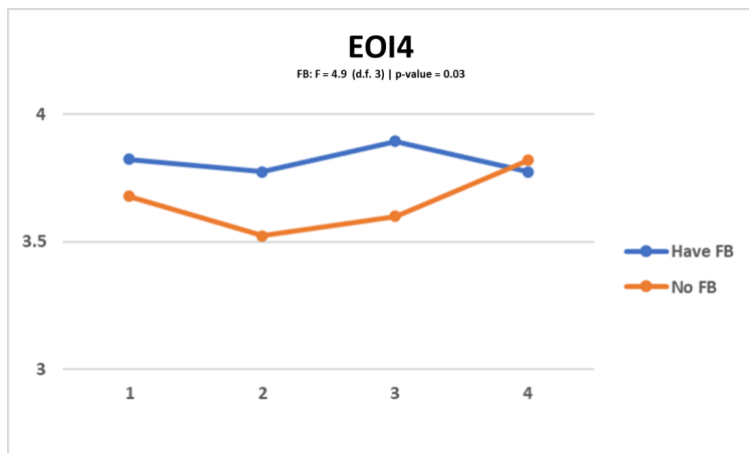


Figure 3: Changes of EOI4 throughout BUSEM 4-year curriculum (solve the problem by new method)

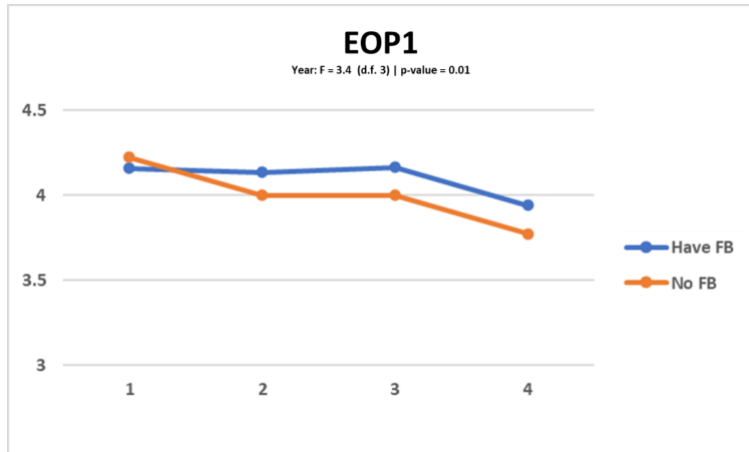


Figure 4: Changes of EOP1 throughout BUSEM 4-year curriculum (readiness to confront with the problem)

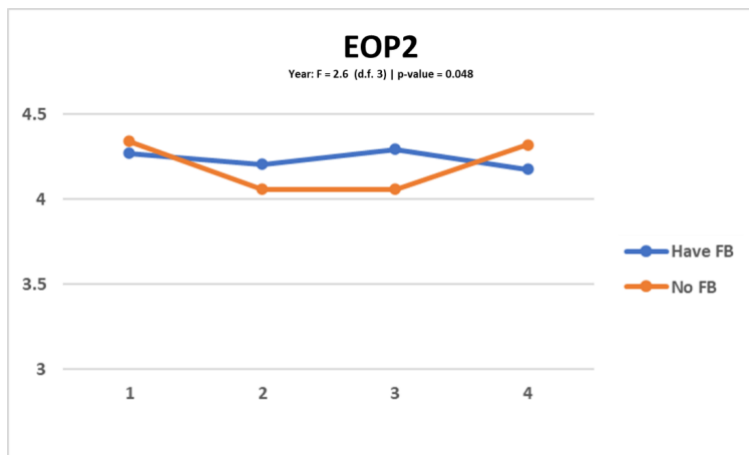


Figure 5: Changes of EOP2 throughout BUSEM 4-year curriculum (always planning ahead)

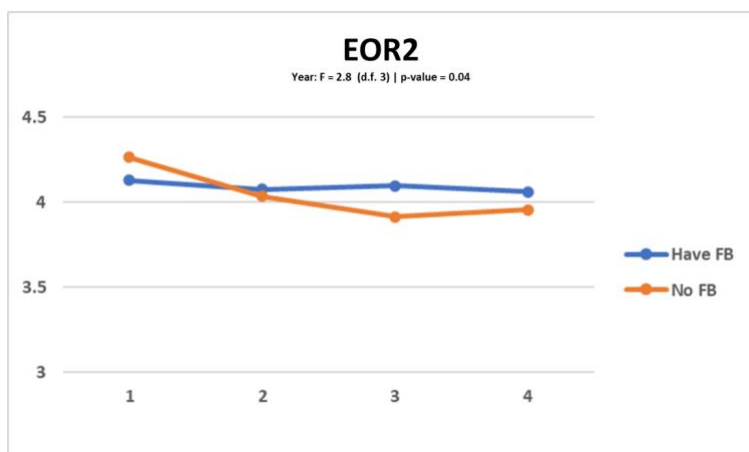


Figure 6: Changes of EOR2 throughout BUSEM 4-year curriculum (love to make bold investment of time and money)

## **Discussion**

The number of students enrolling in BUSEM has steadily increased, reflecting the growing positive perception of entrepreneurship education in Thailand. According to the GEM Global Report (2024/25), Thailand ranked 16<sup>th</sup> out of 51 countries in entrepreneurial intentions; and entrepreneurship had increasingly become a social norm. This trend was evident in the rise of BUSEM's first-year enrollments from 34 students in 2011 to 350 in 2024.

### Entrepreneurial Intent (EI)

Students maintained high scores for EIs especially EI1 (intention to own a business) and EI2 (desire for self-employment) (above 4.5/5). Only reversed EI3 (no intention to be an employee) showed slight drop to the range 3.0-3.9 depending on FB ownership, where students with FB tended to have higher reversed EI3 (Figure 3). This result agreed with Espiritu-Olmos & Sastre-Castillo (2015) which also found that the students with FB background had higher EI than their fellows who had no FB. However, in the final year, EI scores declined slightly across groups, likely due to students' realization of real-world entrepreneurial challenges (Nabi et al., 2018).

### Entrepreneurial Orientation (EO)

Freshmen exhibited the highest EO scores, driven by enthusiasm and active participation in idea generation and feasibility analysis (Mandel & Noyes, 2016). Students with FB had slightly higher EOI 2 (ready to run the project by new method) and EOI4 (solve the problem by new method) than students with non-FB. These results agreed with previous studies reporting that students with FB had higher degree of innovation by learning and see examples from their parents or other family members (De Massis, A., Frattini, F., Kotlar, J., Petruzzelli, A. M., & Wright, M., 2015). EOP1 (readiness to confront with the problem) and EOP2 (always planning ahead) scores showed that students with FB and No-FB background were having similar Proactiveness level, but the process of development may difference during the curriculum (Zellweger, T. M., Sieger, P., & Halter, F., 2011). The development of EOR2 (love to make bold investment of time and money) curved thought the years showed that the students with no FB started with higher EOR2 score than students with FB. However, at the end of the program the students with FB had higher EOR2 than their peers with no FB. The higher EOR2 of students with FB than those without FB may be due to family support. Cruz & Nordqvist (2012) reported that the students with FB had more confidence to take risk by investing their time and money in the new projects because of their family foundation and support.

Interestingly the EO scores between FB and non-FB students were very similar (with less than 0.5/5 point differences). In the final year, students without FB showed higher EO levels, suggesting that well-designed entrepreneurship education (EE) could maintain students' EO levels and, additionally, enriched and developed entrepreneurial skills even among those without prior business backgrounds as previously reported by Canever et al. (2017).

### Implications and Recommendations

To address differences between students with and without FB backgrounds, BUSEM should introduce tailored electives, such as family business spin-offs, innovative technology for family businesses, and excellence in start-ups. Establishing a Start-up Track for students, featuring topics like venture creation, funding, and scaling start-ups, is recommended. Inviting successful start-up founders and family business successors to share real-world experiences would also help sustain or enhance students' EI and EO throughout the program.

### Reference

- Bolton, D. L., & Lane, M. D. (2012). Individual entrepreneurial orientation: Development of a measurement instrument. *Education+ training*, 54(2/3), 219-233.
- Canever, M. D., Barral, M. R. M., & Ribeiro, F. G. (2017). How does the public and private university environment affect students' entrepreneurial intention? *Education+ Training*, 59(6), 550-564.
- Cannavacciuolo, L., Capaldo, G., Esposito, G., Iandoli, L., & Raffa, M. (2006). To support the emergence of academic entrepreneurs: the role of business plan competitions. *International Entrepreneurship Education*, 55.
- Cruz, C., & Nordqvist, M. (2012). Entrepreneurial orientation in family firms: A generational perspective. *Small Business Economics*, 38, 33-49.
- De Massis, A., Frattini, F., Kotlar, J., Petruzzelli, A. M., & Wright, M. (2016). Innovation through tradition: Lessons from innovative family businesses and directions for future research. *Academy of management Perspectives*, 30(1), 93-116.
- Espíritu-Olmos, R., & Sastre-Castillo, M. A. (2015). Personality traits versus work values: Comparing psychological theories on entrepreneurial intention. *Journal of Business Research*, 68(7), 1595-1598. Nabi et al., 2018
- Gasse, Y., & Tremblay, M. (2006). 13. Entrepreneurship education among students at a Canadian university: an extensive empirical study of students' entrepreneurial preferences and intentions. *International Entrepreneurship Education*, 241.



- GEM (Global Entrepreneurship Monitor) (2025). Global Entrepreneurship Monitor 2024/2025 Global Report: Entrepreneurship Reality Check.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of management Review*, 21(1), 135-172.
- Liñán, F., Rodríguez-Cohard, J. C., & Rueda-Cantuche, J. M. (2011). Factors affecting entrepreneurial intention levels: a role for education. *International entrepreneurship and management Journal*, 7, 195-218.
- McKeever, E., Jack, S., & Anderson, A. (2015). Embedded entrepreneurship in the creative reconstruction of place. *Journal of business venturing*, 30(1), 50-65.
- Mandel, R., & Noyes, E. (2016). Survey of experiential entrepreneurship education offerings among top undergraduate entrepreneurship programs. *Education+ training*, 58(2), 164-178.
- Nabi, G., & Liñán, F. (2013). Considering business start-up in recession time: The role of risk perception and economic context in shaping the entrepreneurial intent. *International journal of entrepreneurial behavior & research*, 19(6), 633-655.
- Noyes, E. (2018). Teaching entrepreneurial action through prototyping: The prototype-it challenge. *Entrepreneurship Education and Pedagogy*, 1(1), 118-134.
- Potter, J. (2015). Assessment and good practice. *Entrepreneurship and Knowledge Exchange*, 285.
- Souitaris, V., Zerbini, S., & Al-Laham, A. (2007). Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. *Journal of Business venturing*, 22(4), 566-591.
- Westhead, P., & Solesvik, M. Z. (2016). Entrepreneurship education and entrepreneurial intention: Do female students benefit? *International small business journal*, 34(8), 979-1003.
- Zellweger, T., Sieger, P., & Halter, F. (2011). Should I stay or should I go? Career choice intentions of students with family business background. *Journal of business venturing*, 26(5), 521-536.