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iJEP International Journal of Engineering Pedagogy

iJEP | eISSN: 2192-4880 | Vol. 15 No. 1 (2025) | OPEN ACCESS

https://doi.org/10.3991/ijep.v15i1.48543

PAPER

Exploring the Factors Influencing Entrepreneurial Intentions of Engineering Students: A Comparative Study

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ABSTRACT

This study investigates the entrepreneurial intention of engineering and non-engineering students to understand the potential entrepreneurial gaps among future engineers. The study specifically examines the underlying factors, especially looking at the entrepreneurial scales of mindset and attitudes. The study is a quantitative research conducted by a survey with 112 participants. The results reveal that engineering students exhibit lower levels of entrepreneurial intention compared to the non-engineering group, showing that there is a gap between groups. The two groups exhibit similar levels of entrepreneurial attitudes, while the engineering group shows lower levels of entrepreneurial mindset. The effect of mindset on intention is significant among engineering students and insignificant among non-engineering students, whereas attitudes do not demonstrate a substantial discrepancy. The study found no notable variation in the promotion of entrepreneurial perception among students. The results show that developing an entrepreneurial mindset among engineering students is vital for promoting their entrepreneurial intentions. To achieve this, the research shows that institutions should provide the necessary skills and a supportive environment. Implications for institutions consist of establishing programs that advance entrepreneurial thinking and hands-on experience, leading to a new cohort of successful engineers turned entrepreneurs.

KEYWORDS

entrepreneurial intention, engineering, entrepreneurship education

1 INTRODUCTION

In recent decades, entrepreneurship has become a growing field of interest for students in engineering and technology-related disciplines [1], [2]. With their technical expertise, engineering students are equipped with the capability to introduce innovative solutions to the market. This skill is, for example, especially relevant for accelerating actions to deliver on the Sustainable Development Goals [3]. Additionally, entrepreneurship provides a platform for individuals to pursue their interests and transform their concepts into flourishing businesses [4]. Finally yet

Arias, M., Flad, M. (2025). Exploring the Factors Influencing Entrepreneurial Intentions of Engineering Students: A Comparative Study. *International Journal of Engineering Pedagogy (iJEP)*, 15(1), pp. 109–124. https://doi.org/10.3991/ijep.v15i1.48543

Article submitted 2024-02-13. Revision uploaded 2024-08-28. Final acceptance 2024-09-24.

importantly, entrepreneurial skills enhance students' employment ability and entrepreneurial willingness [5], [6].

In the theory of planned behavior, as outlined in [7], entrepreneurial intention is defined as an individual's drive or willingness to undertake entrepreneurial actions and it is identified as the most reliable indicator of future entrepreneurial behavior. Many studies have been conducted on the entrepreneurial intentions of both engineering and business students, with investigations such as [8] and [9] highlighting the desire of each group to pursue entrepreneurship. Though studies have been conducted within groups and not between groups to understand the underlying causes, there remains a lack of research on effective didactic approaches specifically for engineering students [10], which would provide a clearer understanding of their differences and their respective strengths and weaknesses.

In addition, higher education institutions have a crucial responsibility to engage students in entrepreneurial careers and develop their entrepreneurial skills. This is part of the so-called Third Mission, where universities go beyond teaching and research by contributing to the social, economic, and cultural development of the regions in which they operate [9]. For this reason, there has been a notable increase in entrepreneurship programs for engineering students over the past decade because they seem to find it challenging to engage in entrepreneurial activities [11]. However, little research has been conducted to explore the strategies employed by instructors and coaches participating in these programs. It has been shown that gaining insight into these approaches and beliefs will facilitate the creation of pedagogical and theoretical frameworks to enhance entrepreneurship education and consequently increase entrepreneurial intention [12].

To understand why engineers may struggle to become entrepreneurs, this study compares engineering students with a non-engineering group. The goal is to shed light on the underlying reasons for this difference and to explore the role of entrepreneurship education in these factors.

2 THEORETICAL BACKGROUND AND HYPOTHESES

There is mixed evidence in the literature regarding the comparison of the entrepreneurial intention between engineering and non-engineering students.

On the one hand, some studies suggest that business students tend to have higher entrepreneurial intentions than engineering students [13], [14]. [13] measured the entrepreneurial intention of undergraduate students in England using the Entrepreneurial Intention Survey [15], with a sample size of 8,456 participants comparing the entrepreneurial intention of students from six different academic disciplines. The study found that 50% of business students wanted to start their own business, while about 45% of engineering and technology students showed this intention. [14] compared the career choices of business and engineering students and found that business students (43.7%) were significantly more likely than engineering students (25.1%) to cite starting an organization as their career goal.

On the other hand, a study in Hong Kong [16] and a study in Vietnam [17] show that engineering students have a significantly higher entrepreneurial intention than business students. Furthermore, a study conducted in Romania showed similar conclusions for the male group. Their lack of business knowledge may lead to an overconfident state, which may explain why engineering students in these regions have higher entrepreneurial intentions [18].

Based on this mixed literature, our first research question (RQ) is as follows:

RQ 1: Is the entrepreneurial intention of engineering students different from that of non-engineering students?

In order to understand the underlying difference that affects intention, its antecedents need to be examined. Attitude has been strongly linked to intention [7], [19], [20] and refers to the degree to which an individual holds a favorable or unfavorable evaluation or assessment of the behavior, which is strongly associated with intention. For these reasons, attitude is considered a key subject variable in this study.

Furthermore, to provide additional insights beyond the theory of planned behavior, other authors noted that entrepreneurial intention is linked to mindset [21], [22]. An entrepreneurial mindset is defined as adaptive thinking and making decisions in complex, uncertain, and dynamic environments [23].

Little information can be found in the literature that compares the absolute values between the entrepreneurial antecedents of intention, such as attitude and mindset, for engineering and non-engineering students.

Within-group comparisons of engineering students have found that the perceptions of their entrepreneurial attitudes have no statistical differences between different types of engineering masters [24], [25]. In a study conducted in Finland, the authors analyzed the entrepreneurial intent and innovativeness of 277 undergraduate students from different majors at a university [25]. The study found differences in entrepreneurial intent between different majors but no significant differences in innovativeness, which is related to mindset [26].

These studies suggest that despite the variance in entrepreneurial intention, there is no discernible difference in their perception of attitude and mindset, which may seem counterintuitive. As a result, this presents an opportunity for the following research topics:

RQ 2a: Is the entrepreneurial attitude lower for the engineering group?
RQ 2b: Is the entrepreneurial mindset lower for the engineering group?

The European Society for Engineering Education emphasizes the importance of developing a mindset towards creativity, innovation, and entrepreneurship in universities [27]. In addition, [28] suggests that one of the most relevant measures to know whether an engineering student wants to start a business is their motivation to create and solve, which is typically associated with an entrepreneurial mindset.

[16] compares the relationship between entrepreneurship and engineering students. It is found that the attitudes of engineering students contribute more significantly to their entrepreneurial intention. On the other hand, in [29], attitude seems to influence the intentions of both engineering and non-engineering students equally.

Due to discrepancies in previous research and in relation to RQ 2, this study examines the mindsets and attitudes of engineering and non-engineering students to identify any differing parameters.

RQ 3a: What influence does attitude have in relation with Students' entrepreneurial intention for both groups?
RQ 3b: What influence does mindset have in relation with Students' entrepreneurial intention for both groups?

Researchers have frequently analyzed whether entrepreneurship education has an impact on intention. One study shows that entrepreneurship education has no impact on engineering students' intention [30], while the study [31] shows an increase in the overall entrepreneurial intention of engineering students. A similar contrast is also found for business students [32].

Mindsets are dynamic and influenced by individual experiences and knowledge acquisition [33]. Hence, the development of an entrepreneurial mindset in students relies on providing regular opportunities for them to engage in entrepreneurial thinking and action [34]. The students' entrepreneurial mindsets can be supported by curricular as well as extracurricular activities [23]. Building on this, studies such as [35] and [36] underscore the feasibility of augmenting the entrepreneurial mindset through real-world assignments and self-regulated learning reflection. To operationalize this, incorporating real-world assignments, such as internships at startups or established firms renowned for fostering intrapreneurial culture among students, as suggested by [37], becomes a viable strategy.

Therefore, it is of interest to know if entrepreneurship education has a different impact on students by comparing the level of increase in the entrepreneurial attitude, mindset, and intention. Furthermore, since the entrepreneurship courses include different years of schooling, it is relevant to know if this has an impact on the intention, as suggested by [38].

RQ 4: How do attitudes, mindsets, and intentions change for both groups after participation in an entrepreneurship course?

3 RESEARCH METHODOLOGY

3.1 Participants and data collection

The data for this study were collected through a questionnaire survey administered to 170 students at Esslingen University immediately upon completion of their entrepreneurship course. A total of 112 surveys were fully completed, including 55 engineering students and 57 non-engineering students from Germany. The survey participants are students from the faculties of Automotive Engineering, Mechanical Engineering, Computer Science, Mechatronic Engineering, Energy and Environment, and Industrial Engineering for the engineering group; and Business, Administration, and MBA for the non-engineering group. The study is based on data collected between March 2020 and June 2023. For most of the participants (96%), it is their first entrepreneurship course that they assist with, which helps them to study the first exchange with the entrepreneurial environment.

The entrepreneurship assessment used in this study was derived from the Assessment Tools and Indicators for Entrepreneurship Education (ASTEE) guidelines, which are used to assess and evaluate the impact of entrepreneurship education [4]. To assess students' perceptions of what they learned in the course, students were asked at the end of each program how their evaluation before and after taking the course was.

Binomial proportion tests of significance revealed an even distribution of the data. The demographics and comparisons are shown in Table 1, with their respective significance levels. The results indicate no significant differences in gender, age, role models, work experience, and years of study across sections at the 95% level.

However, due to the presence of international programs, we observed a significant difference in nationality, which we accounted for as a control variable.

Table 1. Comparison of students' participants from both streams

	Engineering	Non-Engineering	p-Value
	n (%)	n (%)	
Total Number of Respondents	55 (49.1)	57 (50.9)	0.942
Gender			
Male	41 (74.5)	35 (61.4)	0.137
Female	14 (25.5)	22 (38.6)	
Role model	36 (66.7)	43 (75.4)	0.308
Nationality (German)	51 (92.7)	37 (64.9)	<0.001*
Working experience	31 (57.4)	41 (71.9)	0.109
Studying years:			
1 year or less	11 (20.0)	8 (14.0)	0.676
2+ years	44 (80.0)	49 (86.0)	
Entrepreneurship education previous participation	4 (7.4)	6 (10.5)	0.566
Age (mean)	25.1	26.6	0.106

Notes: Some of the categories may not add up to 100 percent due to some students not selecting an option to a question on the survey and/or data were identified as an outlier and not included in the analysis. *Indicates a statistically significant difference in sample sizes ($p < .05$). p-value calculated by applying Pearson Chi-Square with continuity correction and difference in mean for age.

3.2 Measures

Though the questionnaire comprises qualitative elements about the general evaluation of the course, it primarily employs a 7-point Likert scale consisting of latent variables representing an average/singular "voice" of the views of all students (for a discussion on the conflict between quantitative assessments of students' experiences and that of individual students' voices [39]). Details on the specific questions are presented in Appendix (Table A1) and elaborated on in ASTEE [4].

Entrepreneurial intention. Entrepreneurial intention (EI) is the term used to describe the motivation for starting a business instead of working for a wage [32]. According to different research [40], [41], as well as the theory of planned behavior, future prediction of entrepreneurial behavior usually includes intentions.

Entrepreneurial attitudes. The student's attitude towards starting a business is measured using the entrepreneurship attitudes (EA) scale, which was developed by ASTEE [4].

Entrepreneurial mindset. Entrepreneurial mindset (EM) is defined as "the ability to sense, act, and mobilize under uncertain conditions" [42]. Meanwhile, according to [43], the EM is "a growth-oriented perspective through which individuals promote flexibility, creativity, continuous innovation, and renewal." Although different definitions exist, Naumann's comparison of eight EM definitions suggests that they were more or less similar to each other regarding

adaptable thinking and decision-making in complex, uncertain, and dynamic environments [23].

Based on the identified attitudes in the Directorate-General Enterprise and Industry framework, a tool was developed that measures the respondents' sense of initiative and attitude towards challenges [44]. A slight change was made in this scale after doing an exploratory factor analysis, shown in the Appendix (for a correlation matrix see Table A2, for the exploratory factor analysis see Table A3). The sense of perseverance is not included in this scale since it is considered a separate scale, but rather creativity is incorporated, which is typically related to measuring an entrepreneurial mindset [26].

3.3 Data analysis procedure

RQ 1 and 2 are examined by comparing the means between both groups of engineering and non-engineering students utilizing a t-test. Levene's test for equality of variances is implemented to evaluate whether to assume or not equal variances.

For RQ 3, a Structural Equation Model (SEM) is conducted using SPSS AMOS 29 to investigate the influence of entrepreneurial factors on intention. For that, the control variables *Gender* and *Nationality* are included, which have been proven to impact entrepreneurial intention [21], [45], [46].

3.4 Common method bias and multicollinearity

The identification of data sources carries the potential for common method bias, which occurs when the same method is used to measure both the independent and dependent variables in a study, leading to an artificial inflation of the relationships between them. To address common method bias, the Harman single-factor test should undergo further verification [47]. Harman's methodology dictates that all factors should be combined in factor analysis. If the first factor accounts for more than 50% of the total variance, common method bias may exist in the data. In this study, the results of the factor analysis reveal that the first factor accounts for only 28.24% of the total variance, which is below the 50% threshold.

Variance Inflation Factor (VIF) is used to detect multicollinearity among predictor variables in a regression analysis, which needs to be checked for the independent variables and control variables. The findings indicate a value of VIF in a range of 1.01 to 1.10, which is lower than the conventional threshold of 5 [48]. Additionally, to determine sample adequacy, the Kaiser-Meyer-Olkin (KMO) test is conducted and yields a value of 0.771, surpassing the 0.50 threshold [49]. Hence, there is no common method bias and collinearity to be concerned about, and the sample size is adequate.

3.5 Reliability and validity

Internal consistency is essential in ensuring accurate and reliable data. Cronbach's alpha is used to measure the internal consistency or reliability of a set of scale or test items, in which case Table 2 confirms that all Cronbach alpha factor

values exceed 0.7, demonstrating high internal consistency among the latent variables used.

Table 2. Confirmatory factor analysis

Scale	Cronbach's Alpha
EI	0.90
EA	0.81
EM	0.72

For improved consistency, we conducted factor analyses using principal component analysis and Promax rotation. An eigenvalue greater than one determined the number of factors. The results shown in the appendix yielded three factors, namely entrepreneurial attitude, mindset, and entrepreneurial intention, which were in line with our expectations (Table A3).

4 RESULTS

4.1 Entrepreneurship intention and antecedents

For RQ 1, Table 3 demonstrates a significant disparity in entrepreneurial intention between engineering and non-engineering students, with a p-value lower than 0.05. A significant value of 0.027 is found in Levene's test for equality of variances, indicating that the variance in intention between both groups cannot be assumed. This also indicates that both groups display distinct distribution patterns.

Table 3. Mean differences

Latent Variable	Engineering	Non-Engineering	t	p-Value
EI	4.27	4.92	2.05	**0.046***
EA	5.91	6.06	0.87	0.384
EM	5.33	5.77	2.69	**0.008***

Note: *Significant findings of $p < .05$.

For RQ 2, a significant difference is observed in mindset, indicating a lower value among engineering students. However, no difference in perception is registered for the latent variable attitudes.

4.2 Structural equation modeling results

SEM is a statistical technique that allows researchers to evaluate and test complex relationships between variables, combining aspects of factor analysis and multiple regression analysis. SEM is particularly useful for assessing theoretical models that involve multiple, interrelated dependent relationships simultaneously [50]. For that reason, and since the study deals with the subtraction of observable variables into latent variables, structural equation modeling is used, and Figure 1 presents the conceptual model.

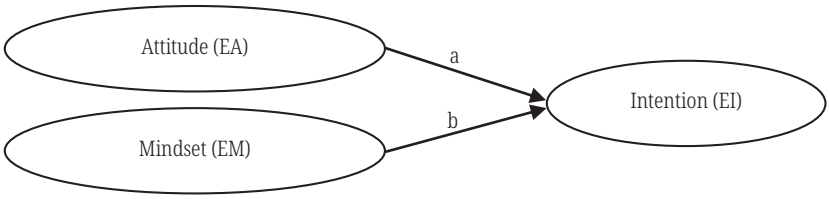

Fig. 1. Conceptual model

The model demonstrates satisfactory reproduction of the sample variance and covariance matrix, as shown by the fit assessment. All global measures of goodness-of-fit reach acceptable levels: The Root Mean Square Error of Approximation (RSMEA) of 0.068 (<0.080 for moderate) and the Comparative Fit Index (CFI) of 0.908 (>0.90). The model parameters were estimated via maximum likelihood and are presented in Table 4 for comparison.

The findings of RQ 3 reveal that EM and EA have a significant impact on the engineering group, whereas it appears that mindset does not play a significant role for the non-engineering group. To ensure the values are robust, we employed the Bayesian SEM approach with a constant prior. The results align with those presented in Table 4.

Table 4. SEM on the effect of EI per grouping category

Variable	Engineering		p-Value	Variable	Non-Engineering		p-Value
	Mean	SE			Mean	SE	
EA→EI	0.936	0.441	0.030*	EA→EI	1.060	0.394	<.001**
EM→EI	0.940	0.274	<.001**	EM→EI	0.123	0.324	0.704

Notes: *Significant findings of $p < .05$; **Significant findings of $p < .01$; SE = Standard Error.

4.3 Entrepreneurship education's impact

In regards to RQ 4, the effectiveness of entrepreneurship education is assessed by surveying students before and after the course. Table 5 displays the results, which consistently show a positive increase in perception. However, these values cannot be used to conclusively prove that entrepreneurship education has a positive impact due to the possibility of students demonstrating learning regardless of the context. However, this information can be used to compare the increase in perception between both groups. Based on our data, the observations did not indicate any significant difference between engineering and non-engineering students.

Table 5. Increase in latent variables after taking part in the entrepreneurship course

Latent Variable	Engineering		Non-Engineering		p-Value
	Mean	SE	Mean	SE	
Increase in EI	0.67	0.91	0.77	1.07	0.62
Increase in EA	0.60	1.07	0.52	0.85	0.68
Increase in EM	0.67	0.87	0.77	0.88	0.54

Note: SE = Standard Error.

Furthermore, higher levels of education have a positive impact on entrepreneurial intention, as indicated by an increase from 3.72 in the first year to 4.78 in the later semesters, with statistical significance at the 0.05 level. This trend is consistent for both engineering and non-engineering groups.

5 DISCUSSION

For RQ 1 and 2, the mean scale of entrepreneurial intentions is 4.27 among engineering students and 4.92 among non-engineering students, with a p-value of 0.046, indicating that the non-engineering group has a higher intention towards entrepreneurship compared to their engineering counterparts. However, there is no significant difference in attitude perception between the two groups. A difference is found for engineering students who exhibit noticeably lower mindset scores than non-engineering students.

The SEM analysis shows excellent goodness of fit indices. Interestingly, a statistically significant correlation between mindset and intention was found in the engineering group, while non-significant outcomes were observed in the non-engineering cohort. The identified discrepancies can be explained by the varying operationalization of the "mindset" construct used in this study, highlighting significant conceptual differences.

This can also be explained by the results of RQs 1 and 2, where the engineering group had a higher potential to increase in intention and mindset due to its lower value. These findings suggest that explicitly engineering students profit from entrepreneurship education changing their mindset. As entrepreneurship as a field encourages innovative and practical solutions similar to designing and shaping technology.

This is a similar outcome to the study [28], which emphasizes that successful entrepreneurial outcomes are linked to the core principles of engineering education, which involve inventing, designing, and innovating to create new products and solve problems. Highlighting the shared aspects of creation and problem-solving in both fields could improve the relevance of entrepreneurship for engineering students and instructors. The results also indicate that there are opportunities to integrate entrepreneurship elements into traditional engineering curricula.

However, European Commission findings [51] suggest that most engineering students take a product-oriented perspective towards business, with the students assuming that an innovative product or process would ensure success, without acknowledging that a sustainable business necessitates market demand. This emphasizes the necessity of entrepreneurship courses in inspiring students by promoting an innovative entrepreneurial mindset while equipping them with the essential skills and knowledge to thrive in a fiercely competitive market.

When studying the impact of education, specifically in relation to RQ 4, the findings suggest that there are no significant discrepancies between the two groups concerning the enhancement of entrepreneurial intentions, mindsets, and attitudes. These results imply that those with a lower baseline value in those scales experience some level of improvement, though not to its maximum potential. The influence of the entrepreneurship education could result in a more substantial impact. Therefore, the development of intention-promoting frameworks aimed at engineering students is crucial [52]. The findings demonstrate that introducing engineering projects, such

as capstone projects, in the curriculum [53] in a manner that stimulates innovation and problem-solving abilities can enhance students' entrepreneurial intentions.

6 PRACTICAL IMPLICATIONS AND FUTURE RESEARCH

Given the impact that improving the entrepreneurial mindset has on the entrepreneurial intention of the engineering group, strengthening the entrepreneurial mindset through entrepreneurship education is compelling.

As shown in the literature review, students' entrepreneurial mindsets can benefit from both curricular and extracurricular activities. It emphasizes the effectiveness of enhancing an entrepreneurial mindset through real-world assignments and self-regulated learning reflection. To implement this, integrating real-world assignments like internships at startups or established firms known for fostering an intrapreneurial culture is a practical approach. By structuring educational experiences to include hands-on engagement with entrepreneurial endeavors, educational institutions can actively contribute to the cultivation of a robust entrepreneurial mindset among engineering students.

In general, future research should continue to investigate effective methods for teaching entrepreneurship. In advancing our understanding of the cultivation of entrepreneurial intention and mindset in engineering education, several promising research directions emerge. Longitudinal studies could follow individuals over time to determine the lasting impact of entrepreneurship education. Examining the influence of mentorship and coaching, along with comparative analyses of different pedagogical approaches, can refine our understanding of effective methods. Assessing the impact of entrepreneurship programs on mindset development through quantitative analyses and examining discipline-specific manifestations in different engineering fields provide further insights. Together, these avenues contribute to a more comprehensive understanding of EI and mindset development and their implications for engineering education.

Future research should also consider the various dimensions of EM, rather than as a single factor whose definition has been widely debated. Looking at its different components can provide insights into its formation and better address it.

7 CONCLUSION

A limited number of studies have comparatively analyzed the factors influencing entrepreneurship between engineering and non-engineering students. Using a SEM analysis, the findings of this study suggest significant differences in terms of intention and mindset between groups. Specifically, engineering students exhibited lower intention and mindset values, while attitudinal differences were not found. Lower values in engineering students' mindsets and intentions can result in reduced entrepreneurial behavior, leading to fewer entrepreneurial activities by engineers overall. This suggests to enhancing entrepreneurial intention among engineering students by increasing their mindset.

To this end, we find that entrepreneurship education has a similar influence on intention, attitudes, and mindset for both engineering and non-engineering students. This indicates that entrepreneurial programs education, specifically using hands-on learning projects, could increase engineering students' mindsets and thus their intentions. Though our current education system may not fully address the

diverse needs and aspirations of individual students, potentially hindering its efficacy in fostering a strong entrepreneurial mindset, it is worth exploring whether this approach is the most efficient means of increasing intention.

8 LIMITATIONS

Although the study enhances our comprehension of entrepreneurial intention development, particularly among engineering students, it has certain limitations that must be acknowledged. First, the data relies heavily on self-assessment by the students, which may introduce bias by providing an over-optimistic evaluation of personal performance. Second, although the original survey includes qualitative elements such as open-ended questions (e.g., general evaluations of the course, lecturers, etc.), the study is, by definition, based on statistical analyses, thus neglecting individual students' voices. Including more qualitative questions and using a mixed-methods approach could give additional insights. Third, the study is confined to participants from Esslingen University of Applied Sciences in Baden-Württemberg, Germany, thus leading to decreased data variance and limitations in terms of generalizability. To obtain more widely applicable results, it is crucial to augment the number of participants. Finally, we were unable to account for external factors that may have had an impact on the development of entrepreneurial scales, such as cultural environment and institutional factors.

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10 APPENDIX

10.1 Items in the questionnaire

Table A1. Items for the creation of latent variables

1	Entrepreneurial Intention
ei1	*I often think about starting a business*
ei2	*I have business ideas I am going to implement*
ei3	*My goal is to become my own boss*
2	Entrepreneurial Attitude
ea1	*Starting a business is Worthless/Worthwhile*
ea2	*Starting a business is Disappointing/Rewarding*
ea3	*Starting a business is Negative/Positive*
3	Entrepreneurial Mindset
em1	*I am often the first to suggest a solution to a problem*
em2	*I see possibilities where others see problems*
em3	*I can come up with new ideas*

10.2 Correlation matrix

Table A2. Pearson correlations (r)

Variables	Entrepreneurial Intentions	Entrepreneurial Attitudes	Entrepreneurial Mindset	Gender	Nationality
Entrepreneurial Intentions	1.000	.466**	.386**	.292**	–.303**
Entrepreneurial Attitudes	.466**	1.000	.286**	–0.002	–0.125
Entrepreneurial Mindset	.386**	.286**	1.000	0.020	–0.115
Gender	.292**	–0.002	0.020	1.000	–0.080
Nationality	–.303**	–0.125	–0.115	–0.080	1.000

Note: **Correlation is significant at the 0.01 level (2-tailed).

10.3 Exploratory factor analysis

Table A3. Factor loadings and cross-loadings for the measurement model

	Intention	Attitude	Mindset
ei1	**0.92**	0.01	–0.01
ei2	**0.89**	–0.08	0.13
ei3	**0.91**	0.07	–0.09
ea1	0.14	**0.78**	–0.02
ea2	–0.17	**0.93**	0.09
ea3	0.08	**0.83**	–0.06
em1	–0.07	–0.05	**0.82**
em2	0.07	0.03	**0.79**
em3	0.04	0.05	**0.76**

Note: Extraction Method: Principal Component Analysis. Rotation Method: Promax with Kaiser Normalization.

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