



ENTREPRENEURSHIP EDUCATION IN HIGHER EDUCATION: PEDAGOGICAL APPROACHES, ENTREPRENEURIAL COMPETENCIES, AND STUDENT OUTCOMES

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ABSTRACT

Entrepreneurship education has become increasingly important in higher education for developing entrepreneurial competencies, mindset, and career readiness. This study examined entrepreneurship education, pedagogical engagement, entrepreneurial competencies, and student outcomes among university students. A quantitative cross-sectional secondary analysis was conducted using responses from 240 higher education students. Entrepreneurship Education, Classroom Engagement, Extracurricular Engagement, Entrepreneurial Mindset, and Personal Entrepreneurial Environment were assessed using multi-item measures. Descriptive statistics, Cronbach's alpha, Pearson and Spearman correlations, group comparisons, and multiple linear regression were applied. Statistical significance was set at $p < 0.05$. Entrepreneurship Education, Classroom Engagement, Entrepreneurial Mindset, and Personal Entrepreneurial Environment showed relatively favorable mean scores, while Extracurricular Engagement was lower. All constructs demonstrated acceptable internal consistency. Entrepreneurial Mindset was positively associated with Entrepreneurship Education, Classroom Engagement, and Extracurricular Engagement. The regression model explained 33.1% of the variance in Entrepreneurial Mindset. Extracurricular Engagement was the strongest significant predictor, followed by Classroom Engagement, whereas Entrepreneurship Education and Personal Entrepreneurial Environment were not independently significant. Active pedagogical engagement, particularly extracurricular and classroom participation, played a more prominent role in entrepreneurial mindset development than general educational exposure alone. Higher education institutions should strengthen experiential and participation-based entrepreneurship learning opportunities.

1. Introduction

The study of entrepreneurship has gained a new significance in higher education as universities are supposed to equip students with the skills to be innovative, to be self-employed, and to adapt to evolving labor-market needs. It aids the growth of initiative, flexibility, inventiveness and identification of opportunities, and programs on entrepreneurship have spread throughout universities to enhance entrepreneurial preparedness in students (Alakaleek et al., 2023). This growth has been reflected in various systems of higher education as well, with entrepreneurship education receiving more institutional focus (Amalia & Von Korflesch, 2021). Nonetheless, pedagogical design may be constrained by gaps that make learning too abstract or not relevant to the real-life entrepreneurial experience (Amjad et al., 2020). There is a growing trend towards experiential and student-centered learning in modern entrepreneurship education, as opposed to traditional lecture-based learning. The students can be engaged in practical activities, reflection, collaboration, and problem-solving to bridge the gap between entrepreneurial concepts and real situations (Bell & Bell, 2020). This could be further enhanced by exposure to successful entrepreneurial models that can give students realistic role models of entrepreneurial behavior and decision-making (Boldureanu et al., 2020). The trend in the development of entrepreneurship education has thusly been towards active and experiential pedagogies (Hägg and Gabrielsson, 2020). Various experiential strategies can yield various results, and pedagogical design is a significant factor to take into account (Lackéus, 2020). Education in responsible entrepreneurship also incorporates applied practice with more social and ethical thinking (Igwe et al., 2022), and the inclusion program can be designed to be accessible to learners with varied backgrounds (Baggen et al., 2022).

Entrepreneurial competencies are the knowledge, skills, attitudes and behaviors one needs to detect opportunities, solve problems, make decisions and act in the face of uncertainty. These competencies can be reinforced by higher education with the help of meaningful learning experiences and practice (Bauman and Lucy, 2021). The importance of organized educational experiences in the formation of entrepreneurial skills in university students is also evidenced (Ferrerias-Garcia et al., 2021). Curriculum effects can be supported with campus learning environments offering the opportunity to practice entrepreneurial knowledge and skills (Iqbal et al., 2022). Entrepreneurial mindset is a notable manifestation of these competencies since it is a measure of how the students react to opportunities, uncertainty, and entrepreneurial challenges. Education on entrepreneurship has been associated with enhanced entrepreneurial spirit when attributes of education stimulate motivation and interest (Cui et al., 2021). Entrepreneurial skill development can also be affected by family entrepreneurial exposure (Hahn et al., 2020) and curriculum quality and lecturer competence can affect entrepreneurial intention and student outcomes (Iwu et al., 2021). Examples of student outcomes of entrepreneurship education include entrepreneurial mindset, entrepreneurship competencies, entrepreneurship confidence, entrepreneurship intention, engagement, and entrepreneurship preparedness. Studies have shown that entrepreneurship education may have effects on cognitive, attitudinal, and behavioral consequences, but these effects vary based on the design and context of the program (Carpenter and Wilson, 2022). The competencies that can be developed through experiential entrepreneurship pedagogy can also be applicable in the post-university environment and lead to graduate employment outcomes (Kozlinska et al., 2023). Education on entrepreneurship is also consistent with other twenty-first-century skills like communication, creativity, critical thinking, and problem-solving (Ghafar, 2020).

Although there is increased research, limited studies have been done on entrepreneurship education, classroom activity, extracurricular activity, entrepreneurial skills, and student achievement in one platform. The current literature tends to concentrate on curriculum, intention or single pedagogical approaches. Thus, the analysis of these dimensions can shed light on the most closely correlated educational experiences related to entrepreneurial mindset and assist higher education institutions in reinforcing their student-centered entrepreneurship programs.

Objectives of the study

- 1.To assess entrepreneurship education, engagement, and entrepreneurial mindset among higher education students.
- 2.To examine how educational and engagement factors predict students' entrepreneurial

2. Methodology

2.1 Study Design

The quantitative cross-sectional secondary analysis was done to investigate entrepreneurship education, pedagogical methods, entrepreneurial competencies and student outcomes in higher education. The research assessed the relationship between entrepreneurship education, classroom engagement, extracurricular engagement, entrepreneurial mindset, and personal entrepreneurial environment. Descriptive and inferential statistics were used to analyze structured responses of university students. The design was viewed as suitable since the information available documented the educational experiences and entrepreneurship-related attributes of the students at one point in time and thus the correlation between the key constructs could be evaluated.

2.2 Data Source

Data were obtained from the publicly available Dataset_Entrepreneurship_Mindset_Education on Mendeley Data (Ayed, 2021). The source included data about entrepreneurial mindset and assessment of entrepreneurship education program among the Umm Al-Qura University students. It also encompassed extracurricular involvement perceptions, classroom teacher interaction, environment around students and demographics. There were 240 records of students and 29 variables in the analytical file which were in CSV format so that they can be prepared and analyzed statistically.

2.3 Study Variables and Measures

The variables of the study were divided into five major constructs. Entrepreneurship Education was measured using four items (EP1-EP4), Classroom Engagement using two items (CE1-CE2), and Extracurricular Engagement using five items (EC1-EC5). Entrepreneurial Mindset was measured using seven questions (EM1-EM7) and reflected the development of entrepreneurial competencies and the main student outcome. Three items (PE1-PE3) were used to measure Personal Entrepreneurial Environment. Each construct was given a mean composite score with a higher mean indicating higher levels of the respective characteristic.

2.4 Data Preparation and Reliability Assessment

Statistical analysis of the information was preceded with the screening of the data to complete information, the lack of answers, the lack of validity of the values, and the range of responses. Blank-space entries were handled as missing values and questionnaire responses were transformed into numerical values. Multi-item constructs were used to determine composite scores based on available valid responses. The Cronbach alpha was used to measure internal consistency of Entrepreneurship Education, Classroom Engagement, Extracurricular Engagement, Entrepreneurial Mindset, and Personal Entrepreneurial Environment. The acceptable value of Cronbach alpha coefficient was set at 0.70 or more, which could be used to justify the reliability of each construct.

2.5 Statistical Analysis

Statistical inferences and descriptive statistics were used. Categorical characteristics were summarized in frequencies and percentages, whereas scale measures were summarized in means, standard deviations, medians, minimums and maximums. Internal consistency was determined by Cronbach alpha. Pearson correlations were used to assess the links between the key constructs, whereas Spearman correlations were used to suggest complementary non-parametric estimates. Entrepreneurial Mindset was used as the dependent variable and multiple linear regression was used. Two-group differences were determined using independent-samples t-tests and Mann-Whitney U tests. The variance inflation factors and residual diagnostics were checked and $p < 0.05$ was taken as statistically significant.

3. Results

3.1 Demographic Characteristics

A total of 240 students were included in the analysis. The percentage of males was 52.08 whereas the percentage of females was 47.92. The major age group (82.08) was most students between the ages of 21-25. About 61.67% indicated no parental entrepreneurial history whereas 52.92% indicated no entrepreneurial exposure by friends. The majority of the participants had prior work experience

(67.92%), and 86.67% had not ventured into an entrepreneurial activity. The biggest educational groups were occupied by undergraduate students and students of non-business specializations according to Table 1.

Table 1. Demographic Characteristics of Participants

Characteristic	Category	n	%
Gender	Male	125	52.08
	Female	115	47.92
Age	≤20 years	30	12.50
	21–25 years	197	82.08
	26–30 years	12	5.00
	>30 years	1	0.42
Parental entrepreneurial background	Yes	89	37.08
	No	148	61.67
Entrepreneurial friends'/peer exposure	Yes	112	46.67
	No	127	52.92
Previous work experience	Yes	163	67.92
	No	77	32.08
Started entrepreneurial activity	No	208	86.67
	Yes	30	12.50
Education level	Postgraduate	88	36.67
	Undergraduate	152	63.33
Specialization	Business-related	61	25.42
	Non-business-related	179	74.58

Figure 1 shows the educational and entrepreneurial background features of the participants.

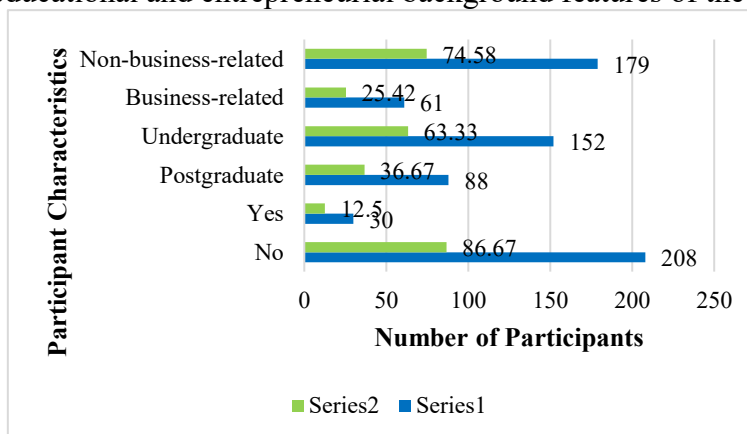


Figure 1. Participant Background Characteristics

As depicted in the figure, the respondents were mainly clustered in the non-business-related specializations and undergraduate studies. The majority had not yet begun entrepreneurial activity, suggesting that the sample was mostly unrepresentative of the students with little direct

entrepreneurial activity, despite having the exposure to entrepreneurship education.

3.2 Reliability and Internal Consistency of Study Constructs

Internal consistency was satisfactory in all the major constructs which are used as composite measures. Entrepreneurship Education had the greatest reliability with Cronbach's alpha of 0.856, then Entrepreneurial Mindset (0.835) and Personal Entrepreneurial Environment (0.834). The extracurricular Engagement showed acceptable reliability (alpha = 0.770), and the Classroom Engagement yielded an alpha of 0.734 even with just two items. These reliability coefficients demonstrate acceptable consistency among the measures of the constructs measured, as presented in Table 2.

Table 2. Reliability of the Main Study Constructs

Construct	Items	Cronbach's α
Entrepreneurship Education	4	0.856
Classroom Engagement	2	0.734
Extracurricular Engagement	5	0.770
Entrepreneurial Mindset	7	0.835
Personal Entrepreneurial Environment	3	0.834

3.3 Levels of Entrepreneurship Education, Engagement, and Entrepreneurial Mindset

The scores at the construct level revealed overall positive answers to most of the dimensions. Entrepreneurship Education had the highest mean score (3.780 ± 0.881), then Entrepreneurial Mindset (3.756 ± 0.705) and Classroom Engagement (3.721 ± 0.978). The mean of Personal Entrepreneurial Environment also was quite high 3.671 ± 1.037 . Conversely, Extracurricular Engagement scored the lowest with a mean score of 2.968 ± 0.878 indicating relatively poorer engagement in activities that were not related to the formal classroom. Table 3 shows descriptive findings.

Table 3. Descriptive Statistics of the Main Study Constructs

Construct	N	Mean	SD	Median
Entrepreneurship Education	240	3.780	0.881	4.000
Classroom Engagement	240	3.721	0.978	4.000
Extracurricular Engagement	240	2.968	0.878	3.000
Entrepreneurial Mindset	240	3.756	0.705	3.714
Personal Entrepreneurial Environment	240	3.671	1.037	3.833

The means of the key constructs of entrepreneurship education are compared in Figure 2.

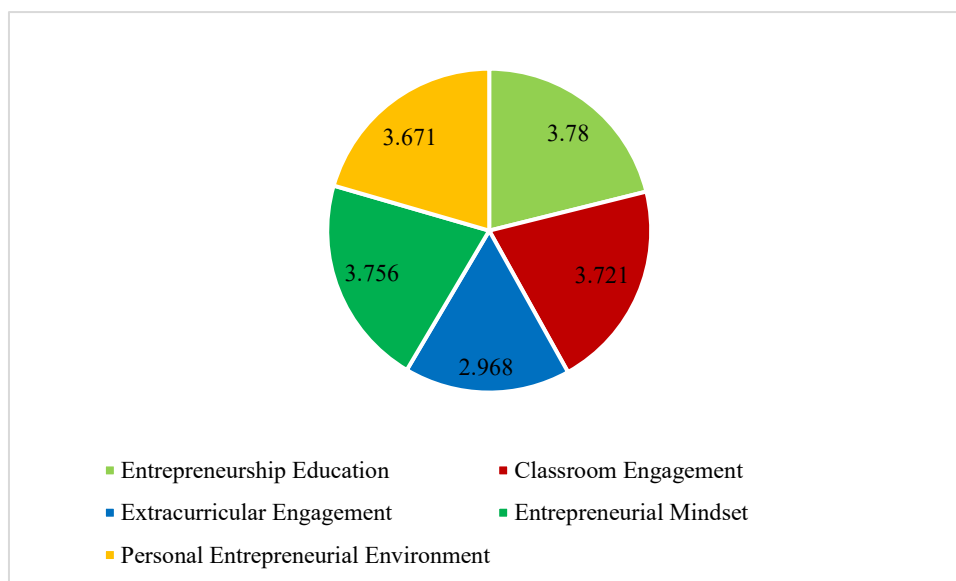


Figure 2. Mean Scores of Study Constructs

The figure shows a rather high degree of entrepreneurship education, classroom engagement, entrepreneurial mindset, and personal entrepreneurial environment. The level of extracurricular involvement was also relatively low, which implies that the students were more exposed to formal learning experiences than the entrepreneurship-related activities that were outside of the classroom.

3.4 Associations Between Pedagogical Approaches and Entrepreneurial Outcomes

There were important positive correlations between a number of educational and entrepreneurial constructs. Classroom Engagement ($r = 0.431$, $p < 0.001$) and Extracurricular Engagement ($r = 0.498$, $p < 0.001$) had moderate associations with Entrepreneurial Mindset. Entrepreneurship Education was found to have a less significant positive correlation with Entrepreneurial Mindset ($r = 0.196$, $p = 0.002$). Entrepreneurship Education was strongly related to Personal Entrepreneurial Environment ($r = 0.599$, $p < 0.001$). Table 4 depicts the entire correlation structure.

Table 4. Pearson Correlations Among the Main Study Constructs

Construct	EE	CE	EC	EM	PE
Entrepreneurship Education (EE)	1.000	0.069	0.216	0.196	0.599
Classroom Engagement (CE)	0.069	1.000	0.354	0.431	0.057
Extracurricular Engagement (EC)	0.216	0.354	1.000	0.498	0.206
Entrepreneurial Mindset (EM)	0.196	0.431	0.498	1.000	0.135
Personal Entrepreneurial Environment (PE)	0.599	0.057	0.206	0.135	1.000

Figure 3 illustrates the relationships between the main entrepreneurship education, engagement and entrepreneurial outcome constructs.

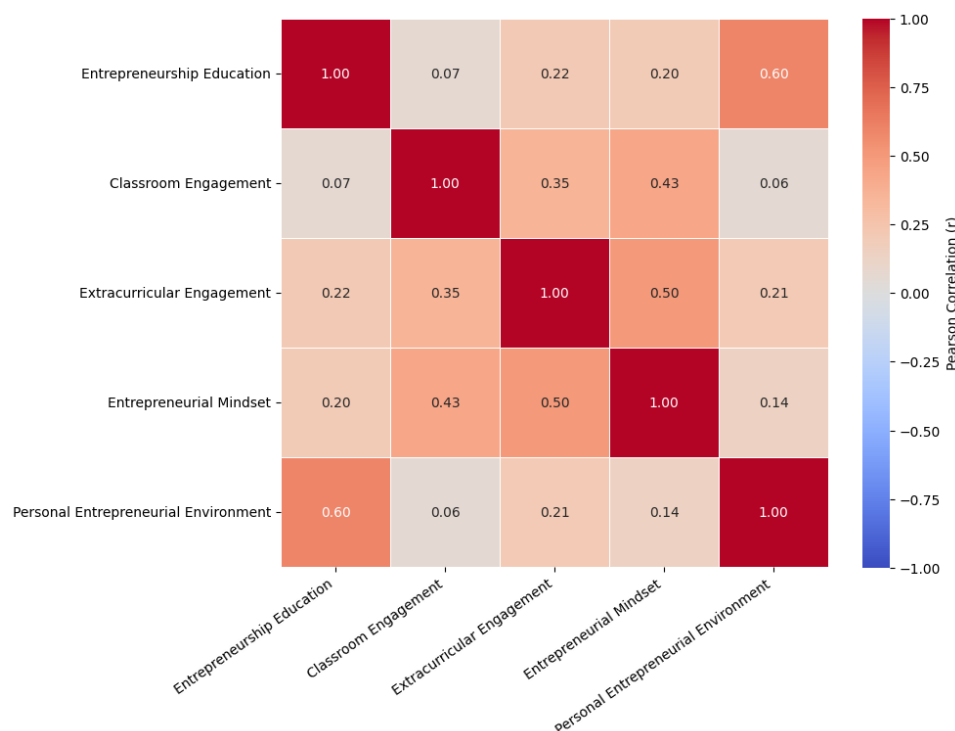


Figure 3. Correlations Among Study Constructs

The heatmap indicates that extracurricular engagement and classroom engagement were positively related to entrepreneurial mindset. The personal entrepreneurial environment had the strongest relationship with entrepreneurship education, with the rest of the relationships having weak to moderate strength.

3.5 Predictors of Entrepreneurial Mindset

The multiple regression analysis revealed that the model was significant to explain entrepreneurial mindset, with $R^2 = 0.331$ and adjusted $R^2 = 0.319$, $F(4,235) = 29.05$, $p < 0.001$. The most significant significantly predictive predictor was Extracurricular Engagement ($= 0.376$, $p < 0.001$) then Classroom Engagement ($= 0.292$, $p < 0.001$). Entrepreneurship Education did not have any independent significance ($= 0.109$, $p = 0.105$), and the effect of Personal Entrepreneurial Environment was not significant either, as shown in Table 5.

Table 5. Multiple Linear Regression Predicting Entrepreneurial Mindset

Predictor	B	SE	β	t	P
Entrepreneurship Education	0.087	0.054	0.109	1.629	0.105
Classroom Engagement	0.210	0.041	0.292	5.118	<0.001
Extracurricular Engagement	0.302	0.047	0.376	6.410	<0.001
Personal Entrepreneurial Environment	-0.016	0.046	-0.024	-0.361	0.718

3.6 Entrepreneurial Mindset Across Background Groups

Entrepreneurial Mindset varied greatly among various background categories. Parent category 2 showed a higher mean score than category 1 (3.844 vs. 3.597, $p = 0.013$). Friend category 2 also

reported a higher score than category 1 (3.933 vs. 3.558, $p < 0.001$). The highest difference was seen in the Worked For category where the mean of category 2 was 4.080 in comparison to 3.603 of category 1. Other background comparisons did not show any significant difference, as indicated in Table 6.

Table 6. Group Differences in Entrepreneurial Mindset

Variable	Group 1 Mean $\pm$ SD	Group 2 Mean $\pm$ SD	t	P
Gender	3.720 $\pm$ 0.707	3.795 $\pm$ 0.704	-0.828	0.408
Parent	3.597 $\pm$ 0.781	3.844 $\pm$ 0.641	-2.516	0.013
Friend	3.558 $\pm$ 0.755	3.933 $\pm$ 0.611	-4.192	<0.001
WorkedFor	3.603 $\pm$ 0.703	4.080 $\pm$ 0.595	-5.451	<0.001
Started	3.723 $\pm$ 0.712	3.971 $\pm$ 0.636	-1.964	0.057
Education	3.679 $\pm$ 0.684	3.801 $\pm$ 0.715	-1.315	0.190
Specialization	3.672 $\pm$ 0.643	3.785 $\pm$ 0.724	-1.143	0.255

4. Discussion

The current results revealed that the entrepreneurship education, classroom engagement, entrepreneurial mindset, and the personal entrepreneurial environment were rated more positively, and the extracurricular engagement was rated relatively lowly. This trend indicates that students were more exposed to formal and classroom-based learning on entrepreneurship than those activities that went beyond the classroom. The moderate high score on entrepreneurial mindset shows that the students had positive entrepreneurial orientations even when extracurricular activity was less. This could mean that formal educational experiences were having an impact on entrepreneurial development but this seemed to be dependent on the level of student engagement in the learning process.

The obtained correlation results presented more obvious signs of this trend. Entrepreneurial mindset positively correlated with entrepreneurship education; however, it was stronger in relation to classroom engagement and extracurricular engagement. This implies that active pedagogical experiences can be more effective than exposure to entrepreneurship education in general. The same research by Lv et al. (2021) also found that entrepreneurship education had an impact on entrepreneurial intention in the form of entrepreneurial competence, meaning that the impact of educational influences might rely on the attainment of practical abilities and not on exposure to curriculum alone. Miço and Cungu (2023) also highlighted that entrepreneurship education is a complex learning process where competence development is dependent on the organization and experience of learning. The strongest predictor of entrepreneurial mindset in the regression model was extracurricular engagement, then followed by classroom engagement. This observation supports the need of applied and active learning. Peschl et al. (2021) posited that entrepreneurial thinking is developed by pedagogies that prepare students to operate in circumstances of uncertainty, whereas Rodrigues (2023) emphasized the importance of experiential, active, and student-centered pedagogies in higher education entrepreneurship programs. These views are also in line with the current results as students who indicated higher involvement in classroom and extra-curriculum reported higher scores in entrepreneurial mindset.

The greater significance of extracurricular involvement can be indicative of the fact that such activities allow applying knowledge, communicating with peers, addressing real problems, and being exposed to entrepreneurial situations more directly. Sousa and Costa (2022) demonstrated that the discovery and growth of entrepreneurship competencies in higher education students can be facilitated through problem-based learning. Likewise, the existing findings indicate that entrepreneurial skills can be enhanced as students leave their passive learning background and engage in practical experiences. This is especially applicable to universities that are interested in enhancing student performance by

taking them through practical experiences and not teaching them just the course content. The implications of the findings to the modern entrepreneurship education are also evident. According to Sitaridis and Kitsios (2024), the significance of digital entrepreneurship and the necessity of entrepreneurship education to cope with the evolving technological environment are on the rise. Universities can thus leverage incorporating digital projects, simulations, competitions, incubator activities and problem-solving into entrepreneurship programs. These strategies may enhance classroom activity and extracurricular activities as well as relevance of entrepreneurial learning to the prevailing economic situations.

The research also affirmed the overall perspective that entrepreneurship education ought to be measured in a number of student outcomes. Wong and Chan (2022) discovered that diverse learning outcomes such as knowledge, skills, attitudes, and behavioral intentions could be impacted by entrepreneurship education. The entrepreneurial mindset was the primary outcome of the students in the current analysis and was significantly correlated with active engagement in education. This implies that the institutions must not just evaluate the completion of courses but also evaluate how well students are able to acquire entrepreneurial ways of thinking and acting. There are a number of constraints to be considered. The cross-sectional study design did not allow a causal interpretation and the self-reported responses could have brought about response bias. It was also restricted to the analysis of students in one institutional setting, which decreases generalizability. Moreover, the entrepreneurial competencies were manifested primarily in terms of entrepreneurial mindset instead of a more general cluster of performance or behavioral measures. Longitudinal and multi-institutional design, objective entrepreneurial outcomes, and specific competencies of opportunity recognition, creativity, leadership, risk management, and venture creation should be the focus of future research.

5. Conclusion

This study has explored the entrepreneurship education, pedagogical involvement, entrepreneurial competencies, and student outcomes of higher education students. The results demonstrated relatively positive scores on entrepreneurship education, classroom involvement, entrepreneurial attitude, and individual entrepreneurial climate, with extracurricular involvement being relatively lower. Entrepreneurial mindset positively related with entrepreneurship education, classroom engagement, and extracurricular engagement, which implied that the entrepreneur development of students was related not only to the exposition to formal education but also to the quality and the degree of their engagement in the learning process. The regression analysis also indicated that extracurricular engagement was the most prevalent predictor of entrepreneurial mindset, and secondly, classroom engagement. Conversely, general entrepreneurship education, as well as, personal entrepreneurial environment did not reveal any significant independent effects, when the other predictors were adjusted. These results emphasize the role of active, participatory and experience-based pedagogical strategies in enhancing entrepreneurial skills among university students. Colleges and universities should thus supplement the formal entrepreneurship programs with real world projects, personalized classroom exercises, competitions, workshops, mentoring, and other co-curricular events. These strategies can build more favorable environments to build entrepreneurial minds and actions. Future studies must further broaden these results by conducting longitudinal and multi-institutional studies and use more indicators like entrepreneurial intention, venture creation, innovation performance, and post-graduation employment outcomes.

References

1. Alakaleek, W., Harb, Y., & Harb, A. A. (2023). The impact of entrepreneurship education: A study of entrepreneurial outcomes. *The International Journal of Management Education*, 21(2), 100800.
2. Amalia, R. T., & Von Korflesch, H. F. (2021). Entrepreneurship education in Indonesian higher education: mapping literature from the Country's perspective. *Entrepreneurship Education*, 4(3), 291-333.
3. Amjad, T., Rani, S. H. B. A., & Sa'atar, S. B. (2020). Entrepreneurship development and pedagogical gaps in entrepreneurial marketing education. *The International Journal of*

- Management Education, 18(2), 100379.
4. Ayed, T. L. (2021). Dataset_Entrepreneurship_Mindset_Education (Version 1) [Data set]. Mendeley Data. DOI:10.17632/hf3hr58twy.1
5. Baggen, Y., Lans, T., & Gulikers, J. (2022). Making entrepreneurship education available to all: Design principles for educational programs stimulating an entrepreneurial mindset. *Entrepreneurship Education and Pedagogy*, 5(3), 347-374.
6. Bauman, A., & Lucy, C. (2021). Enhancing entrepreneurial education: Developing competencies for success. *The International Journal of Management Education*, 19(1), 100293.
7. Bell, R., & Bell, H. (2020). Applying educational theory to develop a framework to support the delivery of experiential entrepreneurship education. *Journal of Small Business and Enterprise Development*, 27(6), 987-1004.
8. Boldureanu, G., Ionescu, A. M., Bercu, A. M., Bedrule-Grigoruță, M. V., & Boldureanu, D. (2020). Entrepreneurship education through successful entrepreneurial models in higher education institutions. *Sustainability*, 12(3), 1267.
9. Carpenter, A., & Wilson, R. (2022). A systematic review looking at the effect of entrepreneurship education on higher education student. *The International Journal of Management Education*, 20(2), 100541.
10. Cui, J., Sun, J., & Bell, R. (2021). The impact of entrepreneurship education on the entrepreneurial mindset of college students in China: The mediating role of inspiration and the role of educational attributes. *The International Journal of Management Education*, 19(1), 100296.
11. Ferreras-Garcia, R., Sales-Zaguirre, J., & Serradell-López, E. (2021). Developing entrepreneurial competencies in higher education: a structural model approach. *Education+ Training*, 63(5), 720-743.
12. Ghafar, A. (2020). Convergence between 21st century skills and entrepreneurship education in higher education institutes. *International Journal of Higher Education*, 9(1), 218-229.
13. Hägg, G., & Gabrielsson, J. (2020). A systematic literature review of the evolution of pedagogy in entrepreneurial education research. *International Journal of Entrepreneurial Behavior & Research*, 26(5), 829-861.
14. Hahn, D., Minola, T., Bosio, G., & Cassia, L. (2020). The impact of entrepreneurship education on university students' entrepreneurial skills: a family embeddedness perspective. *Small Business Economics*, 55(1), 257-282.
15. Igwe, P. A., Madichie, N. O., Chukwuemeka, O., Rahman, M., Ochinanwata, N., & Uzuegbunam, I. (2022). Pedagogical approaches to responsible entrepreneurship education. *Sustainability*, 14(15), 9440.
16. Iqbal, J., Asghar, M. Z., Asghar, A., & Waqar, Y. (2022). Impact of entrepreneurial curriculum on entrepreneurial competencies among students: The mediating role of the campus learning environment in higher education. *Frontiers in psychology*, 13, 950440.
17. Iwu, C. G., Opute, P. A., Nchu, R., Eresia-Eke, C., Tengeh, R. K., Jaiyeoba, O., & Aliyu, O. A. (2021). Entrepreneurship education, curriculum and lecturer-competency as antecedents of student entrepreneurial intention. *The International Journal of Management Education*, 19(1), 100295.
18. Kozlinska, I., Rebmann, A., & Mets, T. (2023). Entrepreneurial competencies and employment status of business graduates: the role of experiential entrepreneurship pedagogy. *Journal of Small Business & Entrepreneurship*, 35(5), 724-761.
19. Lackéus, M. (2020). Comparing the impact of three different experiential approaches to entrepreneurship in education. *International Journal of Entrepreneurial Behavior & Research*, 26(5), 937-971.
20. Lv, Y., Chen, Y., Sha, Y., Wang, J., An, L., Chen, T., ... & Huang, L. (2021). How entrepreneurship education at universities influences entrepreneurial intention: Mediating effect based on entrepreneurial competence. *Frontiers in psychology*, 12, 655868.
21. Miço, H., & Cungu, J. (2023). Entrepreneurship education, a challenging learning process

- towards entrepreneurial competence in education. *Administrative Sciences*, 13(1), 22.
22. Peschl, H., Deng, C., & Larson, N. (2021). Entrepreneurial thinking: A signature pedagogy for an uncertain 21st century. *The International Journal of Management Education*, 19(1), 100427.
 23. Rodrigues, A. L. (2023). Entrepreneurship education pedagogical approaches in higher education. *Education Sciences*, 13(9), 940.
 24. Sitaridis, I., & Kitsios, F. (2024). Digital entrepreneurship and entrepreneurship education: a review of the literature. *International Journal of Entrepreneurial Behavior & Research*, 30(2-3), 277-304.
 25. Sousa, M. J., & Costa, J. M. (2022). Discovering entrepreneurship competencies through problem-based learning in higher education students. *Education Sciences*, 12(3), 185.
 26. Wong, H. Y., & Chan, C. K. (2022). A systematic review on the learning outcomes in entrepreneurship education within higher education settings. *Assessment & Evaluation in Higher Education*, 47(8), 1213-1230.