Internship Program as a Mediating Variable in Improving Student Achievement in Indonesia and Malaysia in Terms of Entrepreneurial Passion and Entrepreneurial Education

Raya Sulistyowati[1], Angga Martha Mahendra[1], Septyan Budy Cahya[1], Putri Hestiningrum[1], Nur Shahrulliza Muhammad[2], Amily Fikry[2], Marisa Intan Prawesti[1], Khoirotul Amaliyah[1]
[1] Universitas Negeri Surabaya, Indonesia
[2]Mara Technological University, Malaysia

rayasulistyowati@unesa.ac.id

Abstract. In 2023, the global economy faces the threat of recession, leading to sluggish economic growth and rising unemployment. One effective solution to address these economic challenges and reduce unemployment is entrepreneurship. Entrepreneurship plays a vital role in boosting national economies by generating employment, fostering innovation and creativity, encouraging positive social change, and driving economic growth. Moreover, entrepreneurship contributes to wealth creation, making it essential for economic recovery and sustainability. This study explores the role of internship programs as a mediating variable in enhancing student achievement in Indonesia and Malaysia, particularly in relation to entrepreneurial passion and entrepreneurial education. The urgency of this research stems from the need to better understand how internships can bridge the gap between education and entrepreneurial outcomes, equipping students to respond to global economic and industrial challenges. The study adopts an explanatory research design using a quantitative approach. The research population includes students from Indonesia and Malaysia, specifically those enrolled in economics faculties. The sample consists of students from the Faculty of Economics and Business, Universitas Negeri Surabaya (Indonesia), and the Faculty of Management and Business, Universiti Teknologi MARA (Malaysia). Data were collected using a structured questionnaire. For data analysis, Structural Equation Modeling (SEM) with the Partial Least Squares (PLS) method was employed, using SmartPLS 3.0 software. The findings of this research are expected to offer valuable insights into the development of effective educational strategies that incorporate internships, enhance entrepreneurial capabilities, and ultimately contribute to reducing unemployment and improving economic resilience in Southeast Asia.

Keywords: Entrepreneurial Passion, Entrepreneurial Education, Internship Program, Student Achievement.

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1 Introduction

In 2023 the world has the potential to experience a global economic recession, this condition creates slow world economic growth [1]. As a result of the economic recession, there will be a reduction in employment, increasing the number of unemployed [2]. The solution to dealing with economic problems and minimizing unemployment is entrepreneurship [3][4]. Entrepreneurship contributes to the country's economy by creating high employment, innovation, creativity, positive social development and economic growth [5][6]. Entrepreneurship is one of the important factors in improving a country's economy because of its ability to create wealth for entrepreneurs [7][8][9]. The ability to create jobs, reduce unemployment, and stimulate economic improvement is one of the main reasons why many countries recognize the importance and promote entrepreneurship education for their citizens. A possible approach to the problem is through current technological developments that can be integrated in students to add an entrepreneurial passion and entrepreneurial education, so as to improve student achievement. In this study, the internship program is considered as a mediating variable, which means that the internship program is expected to mediate the influence between entrepreneurial passion and entrepreneurial education on student achievement. That is, the internship program can be a link between entrepreneurial passion and entrepreneurial education with student academic achievement. Through this research, it is hoped that empirical evidence can be found to support the importance of internship programs as a factor in improving student achievement in Indonesia and Malaysia, as well as an effort to promote entrepreneurship among students.

Based on the description above, there is a research gap in this study that will open the door to further understanding of the internship program as a mediating variable in improving student achievement in Indonesia and Malaysia in terms of entrepreneurial passion and entrepreneurial education. The urgency lies in the role of internship programs as a mediating variable in improving student achievement in Indonesia and Malaysia, with a focus on the influence of entrepreneurial passion and entrepreneurial education, being very important in facing the challenges of the global economy and industrial transformation. Thus, this research is not only a scientific contribution, but also has a significant practical impact in improving student achievement, developing entrepreneurial spirit, and stimulating economic growth in both countries. Internship programs are not just a transitional stage from education to work, but are key to shaping a generation of students who are ready to face change and create a positive impact in society and the world of work. The urgency of this research lies in the need to develop entrepreneurial capabilities among university students in response to global economic and industrial changes. In addition, this research aims to make significant scientific contributions and practical impacts in improving student achievement, developing entrepreneurial spirit, and stimulating economic growth in both countries. Internship programs are considered key in preparing students to face changes and create a positive impact in society and the world of work.

2 Methodology

Based on the research design regarding the influence of Entrepreneurial Passion and Entrepreneurial Education on student achievement with the Internship Program as a mediating variable, this study uses a quantitative approach, with a type of descriptive and explanatory research that seeks to explain the relationship between research variables, namely the influence of (X1) Entrepreneurial Passion, (X2) Entrepreneurial Education, (Z) Internship Program and (Y) Student Achievement. The following is the research design.

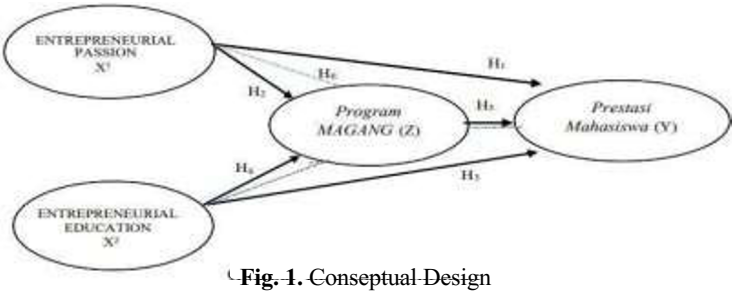

Fig. 1. Conseptual Design

Source: processed by researchers

This research will be conducted from January 2024 to December 2024. Data collection was carried out by means of researchers distributing questionnaires online via google form. This questionnaire uses a Likert scale with 1-5 rating points. The population of this study were students in Indonesia and Malaysia. The sample in this study were students of the Faculty of Economics and Business, Surabaya State University, Fakulti Pengurusan dan Peniagaan University Teknologi Mara totaling 425 students. This study uses purposive sampling data collection techniques using certain criteria including: (1) UiTM and UNESA students who have taken entrepreneurship courses. (2) UiTM and UNESA students who have run an internship program. This research is carried out by analyzing the data and then grouped according to the variables that have been determined. Furthermore, the data from each variable studied will be presented so that calculations can be made to test the hypothesis. Therefore, the data analysis technique that will be used in this study uses the help of statistical software SmartPLS 3.3.3, Structural Equation Model (SEM) with the Variance Based SEM approach or better known as Partial Least Square (PLS). The sampling technique in this study was non-probability sampling.

3 Results and Discussion

Evaluation of the Measurement Model

The measurement model, also known as the outer model, serves to evaluate the validity and reliability of the research model.

Table 1. Outer Model Estimation

Construct	Item	λ	α	CR	AVE
Entrepreneurial Passion (X1)	X1.1	0,965	0,970	0,975	0,784
	X1.2	0,966			
	X1.3	0,656			
	X1.4	0,972			
	X1.5	0,676			
	X1.6	0,773			
	X1.7	0,739			
	X1.8	0,979			
	X1.9	0,970			
	X1.10	0,976			
	X1.11	0,968			
Entrepreneurial Education (X2)	X2.1	0,888	0,911	0,927	0,589
	X2.2	0,877			
	X2.3	0,700			
	X2.4	0,696			
	X2.5	0,677			
	X2.6	0,706			
	X2.7	0,720			
	X2.8	0,889			
	X2.9	0,708			
Intership Program (Z)	Z1	0,900	0,958	0,964	0,660
	Z2	0,923			
	Z3	0,725			
	Z4	0,666			
	Z5	0,953			
	Z6	0,700			
	Z7	0,699			
	Z8	0,636			
	Z9	0,694			
	Z10	0,786			
	Z11	0,740			
	Z12	0,930			
	Z13	0,948			
	Z14	0,949			
Student Achivement (Y)	Y1	0,742	0,946	0,952	0,571
	Y2	0,739			
	Y3	0,706			
	Y4	0,748			
	Y5	0,735			
	Y6	0,711			
	Y7	0,702			
	Y8	0,706			
	Y9	0,845			

Y10	0,680
Y11	0,857
Y12	0,698
Y13	0,744
Y14	0,853
Y15	0,836

Source: processed by researchers

Table 1 presents the results of the measurement analysis of the outer model used to test the validity and reliability of the constructs in the study. The tested constructs include Entrepreneurial Passion (X1), Entrepreneurial Education (X2), Internship Program (Z), and Student Achievement (Y). The Entrepreneurial Passion (X1) construct has 11 indicators with loading factor (λ) values mostly above 0.6 indicating good convergent validity. The Entrepreneurial Education (X2) construct consists of 9 indicators, with varying loading factor values but mostly adequate. Internship Program (Z) has 14 indicators with generally high loading factor values, while Student Achievement (Y) has 15 indicators with loading factor values mostly close to or above 0.6. In terms of reliability, Cronbach's Alpha (α) values for all constructs are above 0.9, indicating high reliability. The Composite Reliability (CR) value also shows good internal consistency, with all constructs having values above 0.7. Meanwhile, the Average Variance Extracted (AVE) value, which is used to test convergent validity, shows that all constructs have a value above 0.5. This indicates that more than 50% of the variance of the indicators can be explained by the latent variable.

Overall, the results in this table show that all constructs used in the study meet the necessary validity and reliability criteria. The indicators used are valid and reliable to measure their respective constructs, so they can support further analysis and interpretation in this study.

Structural Model Evaluation

Table 2. R Square Test (R)

	R Square
Intership Program	0.965
Student Achievements	0,966

The results of the R Square analysis show that the Internship Program construct has an R Square value of 0.965, while the Student Achievements construct has an R Square value of 0.966. Specifically, the R Square value of 0.965 in the Internship Program construct indicates that 96.5% of the variance in the construct can be explained by the relevant independent variables, while the remaining 3.5% is explained by other factors outside the model. Similarly, the R Square value of 0.966 in the Student Achievements construct indicates that 96.6% of the variance in the construct can be explained by the independent variables in the research model.

Hypothesis Test

The results of the relationship analysis between variables in this study show that all hypotheses proposed are accepted (confirmed). The first hypothesis (H1) shows that Entrepreneurial Education has a positive and significant effect on Internship Program with a path coefficient of 0.167, a t-statistic value of 5.798, and a p-value of 0.000. The

second hypothesis (H2) states that Entrepreneurial Education has a very strong effect on Student Achievements, with a path coefficient of 1.004, a t-statistic value of 27.219, and a p-value of 0.000. The third hypothesis (H3) shows that Entrepreneurial Passion has a positive and significant influence on Internship Program, with a path coefficient of 0.828, t-statistic value of 29.326, and p-value of 0.000. However, the fourth hypothesis (H4) shows that Entrepreneurial Passion has a negative but significant influence on Student Achievements, with a path coefficient of -0.335, t-statistic value of 3.843, and p-value of 0.000. Furthermore, the fifth hypothesis (H5) shows that Internship Program has a positive and significant effect on Student Achievements, with a path coefficient of 0.305, t-statistic value of 3.309, and p-value of 0.001. For the mediation hypothesis, H6 shows that Internship Program mediates the effect of Entrepreneurial Education on Student Achievements, with a mediation effect of 0.051, t-statistic value of 3.838, and p-value of 0.000. H7 shows that Internship Program also mediates the relationship between Entrepreneurial Passion and Student Achievements, with a mediation effect of 0.253, t-statistic value of 3.096, and p-value of 0.002. Overall, these results indicate that both direct and mediating variables in the research model have a significant influence on Internship Program and Student Achievements, supporting the hypotheses proposed in the study.

Table 3. Direct and Indirect Effects

	Relationship	β	T-value	P-value	Decision
H1	Entrepreneurial Education -> Internship Program	0,167	5,798	0,000	Confirmed
H2	Entrepreneurial Education -> Student Achievements	1,004	27,219	0,000	Confirmed
H3	Entrepreneurial Passion -> Internship Program	0,828	29,326	0,000	Confirmed
H4	Entrepreneurial Passion -> Student Achievements	-0,335	3,843	0,000	Confirmed
H5	Internship Program -> Student Achievements	0,305	3,309	0,000	Confirmed
H6	Entrepreneurial Education -> Internship Program -> Student Achievements	0,051	3,838	0,000	Mediator
H7	Entrepreneurial Passion -> Internship Program -> Student Achievements	0,253	3,096	0,002	Mediator

Source: processed by researchers

Entrepreneurship education plays a significant role in preparing students for the internship program.

Entrepreneurship education plays a significant role in preparing students for intership programs, which provide a bridge between classroom theory and workplace practice. Recent research has shown that the integration of entrepreneurship education with internship programs can improve students' practical skills, work readiness and attainment. Fayolle et al. (2018) highlighted that experiential education, such as project-based learning, builds students' practical competencies to face industry challenges. At UNESA, this approach is applied through a digital-based business plan project that is

relevant to the needs of the internship company. Meanwhile, Nabi et al. (2017) asserted that entrepreneurship education increases students' self-efficacy, which makes them more confident when facing complex tasks during internships. This is seen at UiTM, where entrepreneurial bootcamps prepare students to pitch business ideas and develop innovative solutions during internships at startups.

Entrepreneurship education plays an important role in improving students' academic achievement and entrepreneurial skills.

Entrepreneurship education plays an important role in improving students' academic achievement and entrepreneurial skills. Recent research has shown that it builds self-confidence, creative thinking and innovation skills. Wardana et al. (2020) revealed that entrepreneurship education strengthens students' self-efficacy, increasing confidence in their ability to face challenges and take measured risks. In addition, Jiatong et al. (2021) highlighted that entrepreneurship curriculum helps students develop a critical and flexible mindset in identifying and evaluating business opportunities. At Surabaya State University (UNESA), the integration approach between theory and practice is an advantage. Students not only learn through theory, but are also involved in various entrepreneurial competitions, expanding their experience and achievements. In contrast, at Universiti Teknologi MARA (UiTM), students implement an entrepreneurship curriculum to produce innovative products that win awards at national and international levels. The implementation of such a curriculum creates a generation of creative and innovative technopreneurs, answering the needs of the industry in the future.

Entrepreneurial passion plays an important role in determining the level of student engagement in the internship program

Entrepreneurial passion plays an important role in determining students' level of engagement in internship programs, as it encourages them to be more proactive in seeking opportunities relevant to their business aspirations. According to Cardon et al. (2009), individuals with entrepreneurial passion show strong motivation to explore practical experiences that can strengthen their skills and knowledge. This is reflected in UNESA students, where those with a high passion for entrepreneurship often choose internship sites that are in line with their business areas of interest, such as digital-based MSMEs or creative startups. This approach is in line with Baron's (2008) research, which found that entrepreneurial passion correlates with better adaptability and innovation during real work situations. On the other hand, UiTM students with entrepreneurial passion often take advantage of internship programs to expand their professional networks, including at the international level. Findings from Ho and Pollack (2014) suggest that students with entrepreneurial passion are more likely to seek challenging work environments, such as multinational companies or global collaboration-based programs, as they see it as an opportunity to strengthen their competitiveness in the global market.

Entrepreneurial passion has an effect on student achievement.

These results suggest that excessive entrepreneurial passion can be a double-edged sword, especially if not balanced with good time management and prioritization. Bauman et al. (2012) found that individuals who focus too much on personal achievement in entrepreneurship tend to neglect other responsibilities, including academic obligations. This phenomenon was seen at UNESA, where some students who were very enthusiastic about developing business projects faced challenges in completing college

assignments, such as academic reports or group projects. This is in line with the findings of Shepherd and Patzelt (2011), who emphasized that excessive passion can trigger overcommitment, so that individuals lose balance between professional and academic aspects. A similar situation also occurs at UiTM, where students with high commitment to business activities, such as management of start-ups or participation in entrepreneurship competitions, often find it difficult to manage time for their studies. Research by Ho and Pollack (2014) supports these findings, suggesting that poorly managed entrepreneurial passion can lead to stress and burnout, ultimately reducing productivity and achievement in both the business and academic worlds.

The internship program plays an important role in enhancing students' academic and professional achievements.

Internship programs play an important role in enhancing students' academic and professional achievements by providing an environment to put theory into practice. Kessler and Frank (2009) explain that practical work experience during internships allows students to understand the context of the real world of work, thus helping them to connect academic concepts with industry needs. At UNESA, the industrial internship program is not only designed to provide exposure to the world of work, but also to strengthen students' understanding of business challenges, such as operations management and product innovation. Meanwhile, UiTM adds value by leveraging its network of partnerships with large and multinational companies to provide a more challenging internship experience. Through a project-based approach, UiTM students get the chance to tackle real-world problems such as operational efficiency or digital- based marketing strategies.

The internship program has a strategic role as a mediator between entrepreneurship education and student achievement.

The internship program has a strategic role as a mediator between entrepreneurship education and student achievement, because it is able to bridge theory with real practice in the world of work. Nabi et al. (2017) emphasized that internships provide students with the opportunity to apply entrepreneurial knowledge in a professional environment, which contributes to the development of technical skills, entrepreneurial mindset, and innovation ability. At Surabaya State University (UNESA), students who undergo internships after completing entrepreneurship courses show better ability to create innovations, both in the form of new products and more efficient business processes. This phenomenon is in line with the findings of Wardana et al. (2020) who indicated that internships contribute to improving students' entrepreneurial competencies, including in terms of risk management and business idea execution. Meanwhile, at Universiti Teknologi MARA (UiTM), internships serve as a platform to hone specific skills relevant to industry needs, such as digital marketing and technology-based innovation.

The entrepreneurial spirit is a key factor driving student engagement in the internship program, which significantly improves their achievements both academically and professionally

Entrepreneurial spirit is a key factor driving student engagement in internship programs, which significantly improves their achievements both academically and professionally. Research by Obschonka et al. (2011) highlighted that students with entrepreneurial passion tend to be more proactive and committed in undergoing internships,

thus gaining greater benefits than those who lack such drive. At Surabaya State University (UNESA), students with entrepreneurial passion often complete internship projects with results that exceed expectations. They not only fulfill their tasks, but also develop innovations that add value to the companies where they intern. This case example reflects the importance of integrating the entrepreneurial spirit in the educational curriculum. Meanwhile, at Universiti Teknologi MARA (UiTM), students use internships to build a strong business portfolio, such as designing innovative business plans or developing technology-based products. This portfolio becomes a key asset for their future achievements, including winning national and international entrepreneurship competitions

4 Conclusion

Entrepreneurship education, if well integrated through internship programs, can improve students' practical skills, confidence and readiness to face the world of work. By supporting the development of entrepreneurial passion and building an experiential learning ecosystem, institutions like UNESA and UiTM are able to create innovative and competitive graduates. Support in the form of mentoring and time management training is also essential to manage challenges and ensure students' academic and professional success.

Strengthening the link between entrepreneurship education and internship curricula is essential to ensure that students can integrate the theory they learn with practical experience in the world of work. Although some institutions have implemented internship programs well, there is still a gap between the theoretical skills students have and the practical skills needed in the field. Therefore, more case studies and experiences from other institutions that have successfully integrated these two aspects can provide deeper insights. In addition, it is important to pay attention to the challenges that students face in applying entrepreneurial knowledge in practice, such as the lack of support in internships or the mismatch between educational objectives and company needs. Emphasis on developing soft skills, such as communication and leadership, should also be prioritized, as these interpersonal skills greatly affect students' success in undergoing internships and adapting to the world of work. To support students with high entrepreneurial passion, universities can introduce mentoring programs and time management training to enable them to balance entrepreneurship and academic achievement. In addition, expanding collaboration with different types of industries, including MSMEs and digital-based companies, will provide a more diverse and relevant experience to market needs. Integrating internship programs with a network of alumni who have succeeded in the business world can also be a source of inspiration and expand students' professional networks, preparing them for future career challenges.

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