

Students' entrepreneurial attitudes: does the integrated Learning model based on tri dharma in entrepreneurship education work?

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Abstract

The role of entrepreneurship education is urgently needed due to the lack of entrepreneurial activities, the curriculum not being standardized, the lack of skills of the lecturers in entrepreneurship, and less collaboration among the practitioners, education institutions, and students. Therefore Entrepreneurship education has not been planned and integrated well into higher education's functions to develop student entrepreneurial attitudes. This research aims to analyze the effectiveness of the integrated entrepreneurship education model of tri dharma education in developing student entrepreneurial attitudes in higher educations. Indicators of student entrepreneurial attitudes were measured by aspects of student leadership, student personality, and student personal assessment and the research analysis through paired sample t-test The result indicates that the integrated entrepreneurship education model of tri dharma education was effective and can be used as an alternative learning model to improve student entrepreneurial attitudes. It can be helpful in the students to increase their entrepreneurship attitudes after school in the community. The researcher recommends further research to compare the tri dharma of entrepreneurship education model with the other model. It also recommends cooperatively formulating and implementing a fit integrative entrepreneurship education program to develop better students' entrepreneurship attitudes in Indonesia.

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1. Introduction

In the last few decades, the role of entrepreneurship in higher educations has become very important and highly considered in facilitating students' future carrier. It cannot be denied that conditions like this during the Covid 19 pandemic require education to teach the importance of independence, innovation, and creativity. The emergence of a critical view of higher education in Indonesia regarding the low quality of college graduates and insensitivity to the dynamics that arise in society regarding the newness of technology and industry are driving factors to improve education management, especially in the field of entrepreneurship (Maryani et al., 2018).

A global world of competition accompanied by government policies in education is very important for developing higher education with an entrepreneurial orientation and the profile of graduates with an entrepreneurial spirit. The idea of including entrepreneurship in education triggers extraordinary enthusiasm and impacts economic growth, job creation, community resilience, fostering individual attitudes, increasing the involvement of educational institutions, and equality (Elmuti et al., 2012). Furthermore, in aims to include entrepreneurship in education (Rusok et al., 2017) stated that entrepreneurship education must prioritize the development of entrepreneurial attitudes, skills, and behaviours through a quality education system. In entrepreneurship education programs, the suitable entrepreneurial model can stimulate student confidence to start new businesses and improve student attitudes towards entrepreneurship (Boldureanu et al., 2020). However, even if the students reach the goals of entrepreneurship before, it does not guarantee they can survive shortly. The ability to recognize and take advantage of opportunities, innovation, reason, creativity, become a visioner, independently think, work hard, be optimistic, dare to take risks, and be able to become leaders have characteristics that can survive changes and contribute to the nation's economy. These graduates can answer challenges and compete in the free market.

The emergence of higher education has significantly impacted the increasing number of graduates/undergraduates competing to enter the world of work and must ensure that students understand and develop their skills to compete (Chunoo & Osteen, 2016). Ghorbani et al., (2012) show that entrepreneurship and business education are growing and developing in various countries. Higher education wants to cultivate entrepreneurship and establish an entrepreneurial mindset through education and learning. Entrepreneurship education significantly contributes to creating business opportunities, especially in developing countries and applies a curriculum that accommodates instability, technological change, and international competition (Sánchez García et al., 2017).

To achieve the desired results, entrepreneurship education in Indonesia requires a long-term integrative program between action-based entrepreneurship learning models, experimental learning, and entrepreneurial involvement in learning (Ghina, 2013). (Amadi-Echendu et al., 2016) states that the construction of entrepreneurship education in higher education must be developed through entrepreneurship education, research and development, innovation, commerciality and incubation, and policymakers to stimulate and develop student entrepreneurial skills. However, the previous study did not mention and explain who is responsible for taking the responsibility to take initiative to include entrepreneurship education in the curriculum. From this statement, universities must take the

initiative to include entrepreneurship education in the curriculum; set up an incubation centre so that business ideas and products can be published; building forums between universities, industry and government (Amadi-Echendu et al., 2016).

Another statement was made by (Ghina, 2013), which revealed the ineffectiveness of entrepreneurship education. Entrepreneurship education is still ineffective due to: 1) low entrepreneurial intentions because entrepreneurship guarantees as a career guarantee option are not clear; 2) lack of entrepreneurial activities in universities; 3) The entrepreneurship curriculum has not been standardized in tertiary institutions; 4) the lack of skills of the lecturers in conveying the paradigm of the importance of entrepreneurship; not yet effective operation of entrepreneurship learning centres in universities; 5) Cooperation between universities and entrepreneurs is still lacking; and 6) limited cooperation between universities and financial and non-financial institutions (Ghina, 2013). It directly pointed out an urgent issue that must be solved. It is limited entrepreneurship education model that integrates important internal and external factors that support the effectiveness of entrepreneurship education in tertiary institutions.

Based on these empirical data and the urgent issue before, this research examines the entrepreneurial education model that integrates the three pillars of higher education or tri dharma (teaching, research, and community service) as the solution. Tri Dharma in higher education are signs that must be carried out entirely and comprehensively by every lecturer. Thus if entrepreneurship education is contained and implemented in tri dharma in higher education, the goals set to shape students who have entrepreneurial attitudes can be achieved. The orientation of higher education to the formation of entrepreneurial attitudes is also the commitment of most private universities in Central Java, Indonesia. Selected private tertiary institutions have similarities as providers of Economic Education study programs which are considered relevant to accommodate the process of forming entrepreneurial attitudes and are reflected in the vision of the private colleges study program.

The problem of education as a forum for shaping entrepreneurial attitudes is also reflected in the research presented by (Florea & Florea, 2013), which in idealism states that education has an essential role in stimulating entrepreneurship and creativity in building new businesses in European and developing countries. The results showed that about 50% of the respondents agreed that education can help grow entrepreneurial initiatives and attitudes. 47% of respondents also agree that education plays a role in improving understanding of the role of entrepreneurship in society, and 41% agree that education provides skills and understanding how to help them enter the world of business. The research also shows that only 28% agree that education encourages them to become entrepreneurs (Florea & Florea, 2013). The process of entrepreneurship education is not only able to master knowledge and technology, but the application of competencies followed by good soft skills is a must-have (Dardiri, 2016). The status quo of the previous research to increase the student entrepreneurial attitudes did not provide clearly the learning model to develop it.

Moreover, to provide the solution to develop student entrepreneurial attitudes, This research, through the comprehensive exploration of the research question on integrated the learning model regarding tri dharma in Higher Education, will be unravelled, emphasized, and scrutinized to increase the entrepreneurial attitudes. The higher education entrepreneurship model developed integrates teaching, research and community service, which closely relates to student entrepreneurial attitudes.

2. Literature Review

Entrepreneurship is widely defined and has many different meanings. Some argue that there is no general agreement on a clear definition of entrepreneurship. In addition (Rudhumbu et al., 2016) states that "entrepreneurship education fosters a positive attitude to become entrepreneurs after graduating from education and must be supported by funding, technical and startup support, as well as support opportunities for students. Entrepreneurship education is not limited to business and produces entrepreneurs or only meets the interests of the government, industry, or community. However, developing an entrepreneurial education system must generate creative attitudes from students that will enable young people to overcome uncertainty in the labour market" (Ehtiyar & Baser, 2019). This means that entrepreneurship education is the knowledge needed for forming student entrepreneurial attitudes to respond to any socioeconomic challenges that exist in society.

Entrepreneurship education must be broadly translated, which includes the skills taught, encourages a positive attitude towards the growth of innovation, and fosters an entrepreneurial spirit which will encourage the birth of entrepreneurial attitudes and skills (Kumar Singh, 2015). (Chibuzor & Friday, 2013) writes about "Adopting Strategic Management in Planning and Implementation of Entrepreneurship Education in Tertiary Institutions in Nigeria, states that entrepreneurship education is not only about theoretical knowledge but about developing an entrepreneurial mindset in each graduate through the process of forming attitudes, behaviors and entrepreneurial skills. In addition, the capability approach in entrepreneurship education can also strengthen individuals, especially in understanding the existing social and economic context (Dejaeghere, 2014). This means that entrepreneurship education must play a role in raising awareness, developing skills, and practicing theory in learning for students about entrepreneurship (Bae et al., 2014); (Fayolle & Gailly, 2015).

Entrepreneurship education has many models as a reference for its implementation. Research conducted by (Almahdi & Researcher, 2013); outlines several models of entrepreneurship education, namely traditional business models, integrated entrepreneurial performance models, deliberate models, and social entrepreneurship models.

Traditional business models are defined as entrepreneurial education models that focus on entrepreneurship for business management, such as how to plan a business or submit proposals to investors. Things that are more core and must be developed are about fostering entrepreneurial attitudes and thoughts, such as high self-efficacy, emotional intelligence, and good interpersonal skills (Byun et al., 2018).

The integrated entrepreneurship model is a model that integrates planning behaviour theory with the motivation-opportunity-ability theory (Hui-Chen et al., 2014). This means that this model states that entrepreneurial motivation can grow in the presence of personal attitudes, subjective norms, and perceived behavioral control. The intentional model is the result of perceptions of "desirability" and "feasibility" (Subhan et al., 2020). Desirability is based profile of an entrepreneurial individual that inspires many people to choose a career as an entrepreneur. Meanwhile, her feasibility is based on her profile to show the best attitude, so if you encounter a condition that is not feasible, it will not attract her attention.

The social entrepreneurship model is a model that involves social entrepreneurs who can contribute to providing innovative solutions to social problems and take advantage of income-generated strategies so that they can have a greater sustainable impact. This entrepreneurial model pays close attention to the strengths and weaknesses that arise in society, thus a variety of

entrepreneurial groups can meet the need for a business or business world. Therefore, the more complex the needs the business world must fulfil, entrepreneurship education is increasingly essential in the higher education curriculum.

Pal'Ová et al., (2020) revealed similar research. They revealed the strategy to increase entrepreneurial attitudes through Project-based learning, which focused on the courses in ICT used in their field and the main objective of both described courses is to provide practical insight into the company's life cycle to the students. The result showed that the model enhanced entrepreneurial attitudes through time. However, the researcher focuses less on the essence of entrepreneurial attitudes. It is the leadership as the entrepreneur. The research only focused on how online tools develop entrepreneurial attitudes. Similarly, Wahidmurni et al., (2022) proved that the modules impact entrepreneurial attitudes. Through their research, it has been found that the modules can significantly improve students' entrepreneurial attitudes but it cannot significantly increase their entrepreneurial intentions.

In contrast with the research of Pal'Ová et al., (2020; and Wahidmurni et al., (2022), Bustos et al., (2022) provided a predictive model that close to entrepreneurial attitudes in learning process in school they are creativity, transference and context control. This research focuses on finding the predictive model that was not applied directly to the learning process. At the same time, Pal'Ová et al., (2020) proved that project-based learning is one of the models that impact entrepreneurial attitudes. Meanwhile, Bustos et al., (2022) recommended further research which closes with their predictive model.

The entrepreneurship education model that has been closed and developed is to integrate three aspects of tri dharma in higher education: learning, research, and community service with entrepreneurial content. This model is developed with the assumption that the study program has a commitment to cultivating entrepreneurship as outlined in the vision of the study program and prepares graduates with an entrepreneurial mentality and other competencies.

As for procedurally, the entrepreneurship education model in terms of the learning aspect must include: 1) content containing an understanding of entrepreneurship courses, the scope of entrepreneurship courses; 2) entrepreneurial learning outcomes; 3) evaluation of entrepreneurship learning. This means that the integration of entrepreneurship education in entrepreneurship learning must run dynamically by involving interactive learning (Boon et al., 2013) and using dynamic learning methods that are not static (Chawinga, 2017).

Integrating research in entrepreneurship education produces innovative learning methods and critical thinking skills and involves communicating with students about the benefits of entrepreneurship education (Ratten & Usmanij, 2020). Students in groups with the guidance of lecturers and people in charge of entrepreneurship courses, carry out the research aspect in entrepreneurship education. The research method is taken from cases relevant to entrepreneurship, observed and presented in the classroom with the guidance of the lecturer. The input results were refined and a paper was compiled as a requirement for the midterm exam.

Community service aspects in the entrepreneurial education model are significant for building communication skills, teamwork, and problem-solving skills, exploring student experiences in service learning in the community, increasing self-confidence, and reporting based on self-constructed

experiences. This aspect is carried out by students in groups guided by lecturers and those in charge of entrepreneurship courses. The method used is a focus group discussion related to entrepreneurial cases and is observed and also presented in the classroom. Input from other students and supervisors is formulated and written as a paper as a requirement to take the midterm exam.

Entrepreneurship is essentially an activity that can create added value through a combination of new and different or creative and innovative resources so that it can compete in the market. The Consortium for Entrepreneurship Education, Columbus, Ohio (Consortium for Entrepreneurship Education, 2004) contains explanatory indicators about aspects that must be observed in forming entrepreneurial attitudes. The first is leadership, with aspects that must be observed, namely honesty and integrity, responsibility, initiative, ethical work, spirit of achieving goals, positive leadership, teamwork, jointly realizing the organizational vision, sharing authority, and respecting diversity. Second is personal assessment, which includes the existence of the desired entrepreneurial profile, certainty of stereotypes, determining interests and self-evaluation, and assessing oneself to explore their entrepreneurial potential. The third is personal management which consists of being positive, having interest and enthusiasm, making decisions, being change-oriented, problem-solving, and assessing existing risks.

Becoming an entrepreneur requires several skills: (1) creative thinking skills. Creative thinking is supported by two things: the mobilization of the power of the imagination and the scientific thought process. (2) Skills in decision-making. Making decisions does not start with facts but makes decisions based on opinions. (3) Skills in leadership. A person can have the skills to lead himself if he is active in learning to have a solid entrepreneurial personality. (4) Managerial skills. He must be able to manage all resources, both material and personal sources to achieve a successful life. (5) Skills in socializing between humans (human relations). We should get used to associating with other people in everyday life so that we get to know each other by facing various types of other human characters.

Based on the problem background and literature review, this study aims to develop an integrated entrepreneurship education model and analyze the effectiveness of the integrated entrepreneurial education model in higher education for developing the students' entrepreneurial attitudes.

3. Methods

3.1. Research model

Each variable's average and frequency distribution are explained using descriptive statistical analysis. The data analysis outcomes are displayed as the average rating of the entrepreneurial attitudes and intents of the students. This research used a t-test method to assess the integrated learning model based on tri dharma to enhance entrepreneurial attitudes among students in higher education. Two population means' deviations were tested using the formula.

3.2. Participants

This research took place in the Economic Education Study Program, where universities have the same vision, namely developing entrepreneurship education. The research subjects were structural faculty officials, study program structural officers, lecturers, and 29 students as subjects in the trial.

3.3. Data Collection Process

Data collection was carried out through a questionnaire sourced from the Consortium for Entrepreneurship Education, Columbus, Ohio (Consortium for Entrepreneurship Education, 2004). The researcher use the Consortium for Entrepreneurship Education, Columbus, Ohio (Consortium for

Entrepreneurship Education, 2004) which has indicators of the process of forming student entrepreneurial attitudes. The following describes the categories of information, data, and data collection techniques:

Table 1.
Categories of Information, Data, and Data Collection Techniques

Information Category	Data	Data collection technique
The effectiveness of the integrated entrepreneurship education model for the formation of student entrepreneurial attitudes	Aspect 1 Entrepreneurial Attitude: student leadership before and after the application of the model	Questionnaire
	Aspect 2 Entrepreneurial Attitude: student personality before and after the application of the model	
	Aspect 3 Entrepreneurial Attitude: personal assessment of students before and after applying the model	

The questionnaire used by the author is a closed questionnaire and is positively structured in order to obtain a constant objectivity of the respondents. The answers to the questionnaire were made based on the Likert Scale with the following weights: a) Very good: 5, b) good: 4, c) Fairly good: 3, d) poor: 2, and e) bad: 1.

The integrated entrepreneurship education model is validated by experts and stakeholders in entrepreneurship education, lecturers of entrepreneurship courses, and students participating in entrepreneurship courses through focus group discussions. The focus group discussion method is applied because this method uses interaction data from the results of discussions conducted by all participants, provides in-depth and informative data. In addition, at the model validation stage and the effectiveness of the entrepreneurial education model for the formation of student entrepreneurial attitudes, 29 student respondents were treated as limited trial subjects. The results of the validation of the integrated entrepreneurship education model are:

First and foremost, entrepreneurship education must have a plan that includes content on the fundamental ideas of entrepreneurship, the need for achievement and creation, business opportunities, business management, togetherness and business ethics, entrepreneurship development, business plans, and objectives. Understanding entrepreneurial spirit and mentality is crucial. Capturing different business opportunities and various crucial factors related to it as a basis for evaluating its viability is also important. Searching for new ideas, identifying businesses with a solid business plan, mastering and applying it in the workplace, driven to create jobs, and facilitating businesses with development potential are other important skills. In addition to planning, the implementation must be arranged by applying a project-based learning model. At the end of the lesson an evaluation must be carried out with the assessment criteria: mastery of the material, creativity and student discipline (Bikse et al., 2014).

Second, entrepreneurial research and service must also contain three elements: planning, implementation, and evaluation. Entrepreneurial research and service planning must contain content about business startups, entrepreneurial encouragement, small business: in this case, small businesses; use of venture capital for investment purposes in high growth potential businesses; research and development of new products or processes; and also a clear objective, namely to provide research experience, advocate and disseminate research results through community service activities. The implementation of entrepreneurial research and service is carried out by students in groups, guided by the lecturer in charge of entrepreneurship courses, observation, advocacy and FGD on cases related to entrepreneurship. Evaluation of entrepreneurial research and service with the criteria of presentation assessment, material mastery, and student final reports (Ratten & Usmanij, 2020).

The aspect of entrepreneurial attitudes is an important element of the integrated entrepreneurship education model, where the learning outcomes expected by relevant stakeholders require college graduates to be able to make creative and innovative efforts by developing ideas, and looking for opportunities and life improvement. The change in entrepreneurial attitudes is measured by student leadership, student personality, and student personal assessments carried out before and after the application of the model.

The author applies the paired-sample t test, the author will look at the initial conditions before the application of the model by providing a questionnaire related to student entrepreneurial attitudes. After obtaining data on the initial entrepreneurial attitudes possessed by students before applying the entrepreneurial model, the authors gave treatment to the research sample by applying the integrated entrepreneurship education model. In the process of implementing the integrated entrepreneurship education model is complete, the author will give a questionnaire again to find out the changes in student entrepreneurial attitudes which consist of three indicators, namely leadership, personality, and student personal assessment. The number of samples both before and after the implementation of the entrepreneurship education model must be the same because the data must be in pairs. The next stage was tested using paired-sample t test.

1) Preparation stage: The sample was selected from a predetermined university because there are similar characteristics related to commitment in cultivating entrepreneurship. In other words, the specified sample is homogeneous and in the same conditions and comes from a normally distributed population (Sugiyono, 2015).

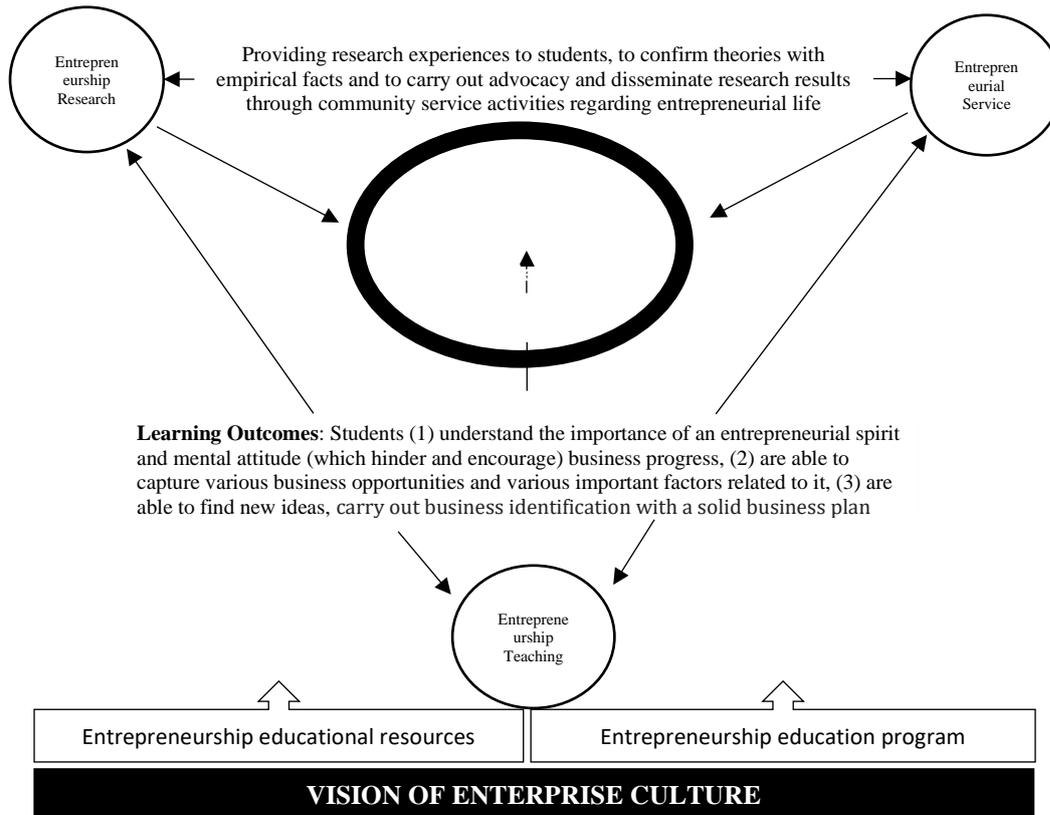
2) Implementation stage: Conducting pre-test to find the initial entrepreneurial attitudes, Implemented the model (treatment process) and finally giving the post test.

3) Data Analysis

4) Draw a conclusion

Figure 1.

Integrated Entrepreneurship Education Model for Establishing Student Entrepreneurial Attitudes



3.5. Data Analysis

Analysis of the effectiveness of the integrated entrepreneurial education model in the perspective of improving student entrepreneurial attitudes using paired-sample t test, where this test is to compare the average of two variables in a single sample group or in other words, the paired sample t test. The author uses the same sample but the test is carried out twice, namely before and after the model's application. (Creswell, 2016)

4. Results

The feasibility of the conceptual model was tested on students taking entrepreneurship courses. The testing process is carried out between the author and lecturer who teaches entrepreneurship courses based on validated manuals. The lecture lasts for one semester consisting of entrepreneurship theory lectures, entrepreneurship case presentations and discussions, and presentation and discussion of the results of entrepreneurship assistance. From these lectures, the raw scores were obtained as follows:

Table 2.

Raw Score for Integrated Entrepreneurship Class

Raw Score	Lecture Theory	Results Case study	Presentation of Results Accompaniment
7.0		6.90%	
7.5	17.24%	3.45%	6.90%
7.75			13.79%
8.0	65.51%	68.97%	44.83%
8.25			13.79%
8.5	10.34%	3.45%	17.24%
8.75			3.45%
9.0	3.45%	17.24%	
9.5	3.45%		
Mean	8.0517	8.1034	8.0776
Std. Dev.	0.42980	0.50673	0.30694
Minimum	7.50	7.00	7.50
Maximum	9.50	9.00	8.75

Based on the table above, which shows the raw score in the entrepreneurship lecture process that was tested on students taking entrepreneurship courses, it resulted in a good category. The score is then processed into final grades and quality letters according to academic standards and results in student graduation outcomes in entrepreneurship courses..

The value determined as student graduation is not used as the basis for a change in student entrepreneurial attitudes but continues the process by comparing student attitudes before and after graduating from entrepreneurship lectures. Guardian lecturers fill the measuring tool for change in entrepreneurial attitudes as parties who continuously interact and communicate with students and find out the attitudes of the students they guide through a questionnaire / instrument for assessing student attitudes.

Based on the assessment data on the aspects of leadership, personality, and student personal assessments shown in table 3.

Table 3.

Student Entrepreneurial Attitude Scores (Leadership Aspects, Personality, Student Personal Assessment)

Leadership Score	Before Model	After Model	Personality Score	Before Model	After Model	Personal Assessment Score	Before Model	After Model
4.0	6		4.0	6		4.	3	
	.89%			.89%		0	.45%	
4.5	1		4.5	2		4.	3	
	3.79%			0.69%		25	.45%	

5.0	3	4.8	1	4.	1						
1.03%		0.35%	5	0.35%							
5.5	4	5.0	3	4.	6						
4.83%		4.48	9	.90%							
6.0	3	5.5	2	5.	3						
.45%	.45%	0.69%	0	7.93%							
6.5	3	6.0	6	3	3						
	.45%	.89%	.45%	15	.45%						
7.0	6	6.5	2	5.	1						
	5.52%		0.69%	25	0.35%						
7.2	1	7.0	6	5.	1						
	7.24		5.52%	5	7.24%						
7.5	1	7.5	1	5.	6						
	0.34%		0.35%	75	.90%						
				6.	3						
				25	.45%						
				6.	3						
				5	.45%						
				6.	1						
				75	7.24%						
				7.	4						
				0	4.83%						
				7.	1						
				1	7.24%						
				7.	1						
				25	0.35%						
				7.	3						
				5	.45%						
an	Me	5	7	an	Me	4	6	ean	M	5	6
	.1207	.0345			.9793	.9138			.0500	.9741	
	Std	0	0		Std	0	0		St	0	0
	. Dev.	.49380	.27810		. Dev.	.50383	.32920		. d. Dev.	.50	.23853
	Mi	4	6		Mi	4	6		Mi	4	6
nimum	Ma	.00	.00	nimum	Ma	.00	.00	nimum	M	.9	.25
	6	7			6	7			5	7	
ximum	.00	.50	ximum	.00	.50	aximum	.15	.50			

The results of calculations and test/ t test related to scores before and after the implementation of the integrated the three pillars entrepreneurial education model obtained the following outcomes:

Table 4.
Output Analysis of Different Test Scores for Students' Entrepreneurial Attitudes

Entrepreneurial Attitudes		Paired Samples Test									
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper	t	df	Sig. (2-tailed)		
Leadership	Leadership	1.91379	.42403	.07874	2.07509	1.75250	24.305	8	.000		
	Personal	1.93448	.49445	.09182	2.12256	1.74640	21.069	8	.000		
Personal	Personal	1.92414	.4020	.07246	2.07256	1.77571	26.555	8	.000		

The results various test analyses table 4 demonstrate a difference in the mean student leadership score of 1.91 (difference between scores before 5.12 and scores after 7.03); a standard deviation of 4.24 with a probability of 0.00 where 5 percent. The three pillars integrated entrepreneurship education model is effective in shaping student entrepreneurial attitudes towards student leadership aspects. The outcome of the different test analysis shows a difference in the mean score of student personality before and after the application of the integrated entrepreneurship education model is 1.93 (the difference between the score before 4.979 and the score after 6.913). The standard deviation of 4.94 with a probability of 0.00 where <5%. The three pillars integrated entrepreneurship education model is effective in shaping the entrepreneurial attitude of students in the aspects of student personality. The output of the different test analysis above shows that there is a difference in the mean score of student personal assessments both before and after the application of the integrated entrepreneurship education model of 1.92 (the difference between the scores before 5.05 and the score after 6.97); standard deviation of 3.90 with a probability of 0.00 where <5%. The three pillars integrated entrepreneurial education model is effective in shaping students' entrepreneurial attitudes towards student personal assessment aspects.

The integrated entrepreneurship education model based on the results of statistical testing shows its effectiveness for changing students' entrepreneurial attitudes. The entrepreneurial attitude outlined in this study consists of three aspects: aspects of student leadership, student personality, and student personal assessment. The results of these statistical tests are in line with the criteria of entrepreneurial resilience and excellence, namely thinking and acting strategically, adapting to all changes that occur and being ready to take risks, trying to satisfy customers with superior service, always trying to control organizational strengths and weaknesses with internal control, increasing competence and motivate and foster capital.

Several indicators indicate the entrepreneurial attitude in terms of leadership. These indicators are honesty and integrity, responsibility, initiative, work ethically, enthusiasm for achieving goals, looking for alternatives, positive leadership, encouraging and motivating the team, working together in achieving the vision, sharing authority, and assessing oneself so that self-potential is explored. Several predefined indicators indicate entrepreneurial attitudes in terms of student personality aspects. These indicators are always positive, have high interest and enthusiasm, are able to make decisions, are change-oriented, skilled at solving problems, dare to take risks, are responsible for every decision, time management, tolerance for ambiguity, develop feedback for self-improvement, creative, and able to set goals to be achieved. Predetermined indicators indicate the entrepreneurial attitude viewed from the aspect of personal assessment. The indicators consist of the ability to explain predetermined entrepreneurial personality characteristics, ensure personal bias, be able to determine every interest, self-evaluation, and self-assess to explore potential.

5. Discussion

The results of the study prove that the integrated entrepreneurial education model of the Tri Dharma College can shape a student entrepreneurial attitudes. The test results are in line with those conveyed by The Consortium for Entrepreneurship Education, Columbus, Ohio (Consortium for Entrepreneurship Education, 2004).

1. *Leadership aspect in Tri Dharma Integration to Increase entrepreneurial attitudes.*

Leadership demonstrates honesty and integrity; responsible behaviour; initiative; ethical work habits; passion for the achievement of goals; recognizing other efforts; leading others using positive statements; development of team spirit; involvement in others in working towards a shared vision; sharing authority if needed; appreciate the value of diversity. This research found the leadership aspect increased well through the effectiveness of the learning model in entrepreneur education regarding tri dharma in higher education. According to it, there should be a positive association between an entrepreneurial leader's identity and their want to build their businesses. However, previous research could not locate any solid proof of a connection between their entrepreneurial passion and their desire to grow their businesses (Dhakal et al., 2022). Therefore the role of leadership in entrepreneurial attitudes urgently needs to enhance. The previous report also revealed that servant leadership's a significant positive impact on Indonesia's Successful Women Entrepreneur (Setyaningrum & Muafi, 2023).

These reports strengthen the important role of leadership could be define as the aspect of entrepreneurial attitudes in higher education. The more the leadership of entrepreneurial could be developed, the more greater of entrepreneurial attitudes. Therefore the learning model that integrated tri dharma in higher education can be a solution to enhance the leadership aspect in entrepreneurial attitudes.

2. *Personality aspect in Tri Dharma Integration to Increase entrepreneurial attitudes.*

In contrast with the leadership, personality describes desired entrepreneurial personality traits; ascertaining personal biases and stereotypes; determining interests; evaluate personal abilities; conduct self-assessments to determine entrepreneurial potential. This research found the personality aspect was increased by tri dharma integration in learning model. However, the five big personalities such as extroversion, emotional stability, agreeableness, conscientiousness, and openness. A previous study reported that only two of big five personalities impact entrepreneurship attitudes. They are extroversion and agreeableness (Volery & Mattes, 2022) . In contrast with it the research of Patel & Thatcher, (2014) found that Greater Openness to Experience had a beneficial impact on the survival of self-employment, but people who scored lower on Emotional Stability were less likely to continue working for themselves. Greater Openness to Experience benefited the survival of self-employment, but people who scored lower on Emotional Stability were less likely to continue working for themselves. Similar to both results, the research found the increasing score in personality aspect of entrepreneurial attitudes. Meanwhile this research took a place in education field of student in higher education.

Therefore the learning model integrated with tri dharma in higher education directly supports the increasing aspect of personality in entrepreneurial attitudes. In short, these result due to research, learning, and community service activities. They attract development of personality in student especially in community service. It has the bigger part to interact with the other person who was need the student's favor. Interpersonal communication took a part the increasing of the personality aspect in entrepreneurial attitudes (Nafiati et al., 2022). It is directly nexus with the community service that has a role to communicated each other.

3. *Personal assessment aspect in Tri Dharma Integration to Increase entrepreneurial attitudes.*

Similar with personality, Personal assessment, as the coinage of personality, is maintaining a positive attitude; show interest and enthusiasm; make decision; develop an orientation for change; demonstrate problem solving skills; assessing risk, assuming personal responsibility for decisions; use time management principles; develop a tolerance for ambiguity; use feedback for personal growth; show creativity; set personal goals. It focuses on how the person to decided and considered their entrepreneurial business.

The implication of this research is to cultivate entrepreneurship, entrepreneurship education in universities must include aspects of learning, research, and community service. It means that the existence of a curriculum that contains entrepreneurship courses in higher education is the responsibility of universities in responding to any changes and developments. Entrepreneurship in research is a form of scientific communication with the community regarding real-world issues and problems. Community service is a means of application, communication, and socialization of learning and research results.

6. **Conclusion(s)**

The integrated learning model regarding tri dharma in higher education entrepreneurship education model is effective in increasing student entrepreneurial attitudes as measured by three aspects, namely aspects of leadership, aspects of student personality, and aspects of student personal assessment. It answered this research question to analyze the effectiveness of the integrated entrepreneurship education model tri dharma education in developing student entrepreneurial attitudes in higher education. This research might contribute to further the learning model to consider tri dharma as the learning model to increase entrepreneurial attitudes. Based on the results of the analysis of different tests for these three aspects, the aspect that experienced a higher increase and was ranked first was the aspect of personal assessment, then the second rank was the aspect of leadership and in the third rank was the aspect of student personality. Limited trials on students are also effective in improving these three aspects (aspects of leadership, student personality, and student personal assessment) as parameters of student entrepreneurial attitudes.

7. **Recommendations/Future directions**

The integrated entrepreneurship education model not only requires a commitment set out in the vision and mission of the institution but requires support for the provision of adequate resources so that the implementation of entrepreneurship education in universities can run smoothly. The three pillars integrated entrepreneurship education model must also be in line with various schemes of entrepreneurial programs and activities organized by the Ministry of Education and Culture. The researcher recommends further research comparing the entrepreneurship education model of three pillars with the other model. It aims to enrich the knowledge of how to increase student entrepreneurial attitudes.

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