



## Does the Support System Mediate the Relationship between University Roles and Entrepreneurial Intentions among University Students?

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### Abstract

This study aims to investigate the effectiveness of university roles in entrepreneurial intentions among university students. This study is also measuring the functions of the system supports as the control variables towards entrepreneurial intentions. Universities seem to compete in the industry to provide and develop the entrepreneurial skills set to their students. Perhaps they may add more benefit in preparing and equipping their students as entrepreneurs once they completed their studies. The study was conducted in local universities. Three hundred respondents were approached in getting the data compiled. Based on that, only 250 complete and usable data received in returns. An 83% response rate is achieved because the sample was from a list of

young entrepreneurs' schemes currently being assessed by the government agencies. Questionnaires used to validate the items from university roles (6 items), entrepreneurial intentions (5 items), and finally support systems (6 items). Likert scales were used to measure all the items. Besides that, there are also seven questions for respondents' profiles. The results indicate that all tested hypothesized were positively significant. Universities should consider finding ways to develop and motivating their students towards entrepreneurial intentions. Further study may continue the model with different sets of control variables for concrete solutions in managing the student's entrepreneurial intentions.

**Keywords:** Entrepreneurial intentions; System support; University roles; TVET.

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## Introduction

Recent statistics on youth unemployment recorded steady figures of 13.2% since 2014. The numbers are estimated to increase in the year 2021 as the post-COVID 19 impacts. Graduated students have been reported not immediately finding their job after completion of studies. Many countries with support from governments and universities are trying to develop entrepreneurial intentions among their students as part of the unemployment solutions. Universities change their directions by focusing more on survival skills and motivating their students in multiskilling instead of concentrating on academics.

The changes involve some modification of their university teaching method and curriculum activities. The university roles as one of the main factors in instilling the students' entrepreneurial intentions are essential. However, research still has been conducted to establish a concrete model and the right framework before it can be implemented worldwide or become the proven syllabus towards entrepreneurial intentions.

## Literature Review

### Entrepreneurial intentions

Intentions, in general, is related to aims, objective, purpose goal of someone to achieve based on individual motives towards the action. Entrepreneurial intentions mean that individuals aim to start involved in Entrepreneur activities based on opportunities available to penetrate the market or offer products or services. According to (Santos & Liguori, 2019), entrepreneurial intentions are part of the motor drives that influence individuals to venture and seek entrepreneurial outcomes. Past research (Schwarz et al., 2009) claimed that the entrepreneurial Intentions would

get strong if the action is perceived to be feasible and the possibility achieved as per target. Intrinsic intentions are strongly related to individuals' chances of success or not based on the actions taken by starting the entrepreneurial activity (B. Kadir & Shamsudin, 2019).

Past studies indicated that entrepreneurial intentions could be developed and instil through education. Proper education, especially at the university level, may inspire students to choose entrepreneurship as their career. Students need to be exposed to a strong entrepreneurial background to provide them with clear information on the business environment (Pruett et al., 2009). Most students admire successful business figures but not being informed well about the challenges that each successful entrepreneur faced at the beginning to sustain and survive in business. Entrepreneurial education also helps provide students with communication skills, which is essential in business environments. (Soomro & Shah, 2015) suggested that universities should also expose students to problem-solving skills that may lead them to be more alert and creative in producing new products or services. It was also suggested by (Ahmed et al., 2020) that entrepreneurial education may inspire students to have entrepreneurial intentions by exposing them to the business opportunity and chances to succeed based on proper education and business exposure. According to (Sims & Chinta, 2019), most entrepreneurs start their business at the age of 20 – 25, which is suitable for university students as they fall under the age categories.

It was also highlighted by (Tomy & Pardede, 2020) that entrepreneurial intentions might come from individuals' past working experiences. Entrepreneurs venture into business because they cannot stand to work in office environments or experience frustrations in their job environments (Baharudin Kadir et al., 2020). It was suggested by (Monllor & Soto-Simeone, 2019) that basic technical knowledge and some industry working experiences may inspire and influence individuals to have entrepreneurial intentions. Past research (Al-Shammari & Waleed, 2018) claimed that a combination of technical skills and working experiences might provide enjoyable experiences for an individual to succeed in entrepreneurial activities. It was also mentioned that besides technical and experiences, managerial skills are also critical in making decisions and problem-solving (S. Hassan et al., 2019).

Entrepreneurial intentions are closely related to individuals' ability to generate fresh ideas and solve the current problem. It was mentioned by (Tomy & Pardede, 2020) that a good and robust business should be the one that can solve the current customer problem. A strong entrepreneurial intention may lead individuals' thinking and mindset towards that as they see opportunity in getting success. It was highlighted that entrepreneurial intentions originate from individuals' strong mental and ability to experience success and failure that could not stop them from continuing the trial and error before finally managing to succeed in the market (Shamsudin et al., 2018). It was well mentioned that the current customer is getting complicated. Therefore, success is not a matter of overnight exercises (S. Hassan et al., 2019). Entrepreneurial intentions may have exposed individuals to the possibility to fail and the opportunity to succeed.

Past studies highlighted that those entrepreneurial intentions could be developed and inspired by an entrepreneur's attractive lifestyle and living conditions. It must be exposed to the advantages and disadvantages of young entrepreneurs preparing for their long journey towards success. Besides that, entrepreneurial intentions must be supported with a strong support group derived from a closed group member such as family up government agency involvement in prospering the interest of entrepreneurial intentions. It was mentioned by (Monllor & Soto-Simeone, 2019) that support groups are essential towards the development of entrepreneurial intentions among the young generations. Past studies indicate a positive relationship between the support groups towards entrepreneurial intentions (Salem et al., 2016). However, the entrepreneur's primary education is critical to avoid students having a wrong perception of starting their career as entrepreneurs (Ahmed et al., 2020). Another research also highlighted that government agencies and government policy's strong involvement might increase the motivation and inspiration of the young generations to venture into entrepreneurial activities (S. Hassan et al., 2019).

It must be made clear that entrepreneurial intentions cannot be made mandatory at the universities level based on research. Only a small portion of students' percentage is inspired to be entrepreneurs based on education from formal educations (Kumar et al., 2020). According to (Fietze & Boyd, 2017), students should be exposed to all the entrepreneur elements and practical exposure to spark entrepreneurial intentions based on strong motivations rather than keeping the entrepreneur as their last chance to survive (Martins & Perez, 2020). Past research highlighted that despite all universities introducing entrepreneurial syllabus, the success level is still below expectations (Sallaudin Hassan & Shamsudin, 2019). Most researchers suggested that the system support, such as governments and family members, be part of the system to encourage students to develop their entrepreneurial intentions. It was claimed by (Ahmed et al., 2020) that students decline towards the entrepreneurial intentions and development because they did not gain and experienced the benefits of being an entrepreneur as well as lack of support from family members, for example, in motivating and encouraging their family members to venture into the entrepreneur areas.

### **University roles**

The current universities' current trends are not limited to Malaysia but throughout the world to promote entrepreneurial education as part of students' additional knowledge to venture into business (Sims & Chinta, 2019). Universities play essential roles in providing information and exposing the students to the benefits of being entrepreneurs. The functions are to strengthen the students' entrepreneurial motivation and intentions through a systematic curriculum and teaching method (Kebaili et al., 2017). According to (Shah & Soomro, 2017), universities with a standard education on entrepreneurial activities may generate entrepreneurs among their students. Students at universities may not have a clear view related the entrepreneurial activities. Their aims are mostly to graduate and attached to a corporation. Overall, less effort and encouragement

are made by families, especially to persuade their children towards entrepreneurship (Politis et al., 2016). According to (Van Gelderen et al., 2008), students' knowledge of characters, especially the necessity of entrepreneurial activities, was poor among university students (Pruett et al., 2009).

Today, universities implemented many education programs towards entrepreneurship to expose students to new fields that they may not have a chance to explore before (Agolla et al., 2019). It was suggested that universities focus on the development of entrepreneurial behaviours among their students. (Kebaili et al., 2017) highlighted that universities should focus on the acquisitive opportunity towards entrepreneurship through problem-solving activities and networking building. In the same vein, (Politis et al., 2016) urged universities to expose students to entrepreneurial attributes such as strong determination, hardworking, self-confidence, and self-esteem. According to (Van Gelderen et al., 2008), those attributes can be part of the students' success factors in having more interest in entrepreneurial activities. It was also mentioned by (Oliveira & Rua, 2018) that universities should review their teaching methodology and curriculum towards improvising students' skill towards entrepreneurship. Those are among the suggestions based on past research and seems very important to look into by universities to create entrepreneurial intentions.

### **Teaching methodology**

The teaching method can be translated into how knowledge is transmitted to potential or target students (Hägg & Gabrielsson, 2019). It was also related to transferring the contents through the learning activities for enhancement (Daneshjooash & Hosseini, 2018). Overall, teaching methodology is the combined activities and technique of teaching to achieve goals (Jabarullah & Iqbal Hussain, 2019). In this study, the teaching methodology of entrepreneurial knowledge is to cultivate entrepreneurs' motivation among university students. Based on past research, teaching methodology related to entrepreneurial intentions focuses on enhancing the students' abilities and entrepreneurs' potential (Thomassen et al., 2019). Universities must ensure that their teaching technique provides enough information and experiences to get familiar with entrepreneurial activities. It was mentioned that entrepreneurial activities in universities could be done in many ways. However, most of them did not zoom into creating an entrepreneur (Floris & Pillitu, 2019). Simultaneously, students learned the subjects for grading purposes and thus failed to produce significant numbers (Thomassen et al., 2019). At the same time, students learned the issues for grading purposes. They, therefore, were unable to produce substantial numbers of entrepreneurial from the universities level (Keinänen & Kairisto-Mertanen, 2019).

The teaching methodology can be done through direct instructions as per other core subjects. Still, past research indicates that it may not generate positive results toward entrepreneurial intentions (Otache, 2019). It is also highlighted that universities focus on interactive teaching. Students will be given assignments or group projects with exceptional guidance or supervisors

from the universities (Keinänen & Kairisto-Mertanen, 2019). It was mentioned that group activities or project-based might encourage students to explore more entrepreneurial activities in group-based activities (Daneshjoovash & Hosseini, 2018). Recent research suggested that universities conduct a demonstration based study that can allow students to experience real entrepreneurial activities and learn from successful entrepreneurs. Students may not be able to view or feel the spirit of entrepreneurship unless they have been given a chance to conduct any events related to entrepreneurial activities (Thomassen et al., 2019).

Floris & Pillitu (2019) suggested that universities focus on problem-solving elements as they are essential elements in understanding customer preferences, trends, needs, and wants. Problem-solving skills may provide the students with the capability to overcome challenges and find a solution within a reasonable option (Ho & Tran, 2018). Problem-solving skills will be built on the student's strong characteristics as an entrepreneur (Hägg & Gabrielsson, 2019). It was suggested that universities blend their teaching methodology with simulation exercises towards entrepreneurial activities. The simulation exercises will provide students with real entrepreneurial challenges and activities (Bell & Liu, 2019).

Past research claimed that most universities focused on project-based activities transmitting the knowledge of entrepreneurship (Dominik & Banerji, 2019). Project-based could be the best option based on the currently available resources at universities. It involves a minimal budget for implementation (Quach et al., 2019). Students may be split into groups and assigned to conduct any entrepreneurial activities related to creating new products, selling, or conferences that may add more value to entrepreneurial knowledge. Apart from that, some universities implement team teaching to provide students with a more significant transfer of knowledge from various experts. According to Bell & Liu (2019), team teaching allowed students to understand multiple experts in different skills such as leadership, marketing, management, innovation, or accounting under a single syllabus. All efforts and options have by universities can be concluded towards achieving the same goals, increasing the number of entrepreneurial intentions among the young generations, especially among university students.

## **Curriculum**

Universities that intent to promote entrepreneurial intentions among students must ensure that they have a robust curriculum that will eventually achieve their targets (Daneshjoovash & Hosseini, 2018). An entrepreneurial or entrepreneurship curriculum is essential as it will transfer the knowledge and change the students' mindsets towards the entrepreneurial. (Bell & Liu, 2019) suggested that universities focus on developing crucial critical skills such as problem-solving and critical thinking in their curricula. A high level of exposure to the skills mentioned will indirectly lead to a robust entrepreneurial mindset among the students. Besides that, (Sá & Holt, 2019) also suggested that universities develop students' confidence and blend with the creative elements to be entrepreneurs (Floris & Pillitu, 2019). The characteristics and traits must be developed

through a robust curriculum to achieve the goals successfully.

Bell and Liu (2019) urged that universities' curriculum be embedded with good communications skill. Marketers scholars such as (Srivastava et al., 2019) claimed that communication is the first part of being an entrepreneur. Customers will not buy or intend to buy should there not have enough information about the products or services. Entrepreneurs need to be guided on promoting their services through advertisements, posters, awareness campaigns, and promotions (Floris & Pillitu, 2019). It is also essential that the curriculum is included with the entrepreneurial abilities in recognizing opportunities (De Carolis & Litzky, 2019). In business, opportunities are something that must be grasped quickly and to be done with knowledge. Students who know may easily calculate the risk and balance the opportunity with the outcomes (Dinning, 2019). Most students keep the distance from entrepreneurial activities because there are too many failure stories portray despite the successful ones. Universities' curriculum should have exposed students to the success stories and how success comes materialized. Indirectly it will have inspired students to become entrepreneurs.

The entrepreneurial curriculum should also provide a path towards students' dreams to become entrepreneurs (Memon et al., 2019). They should be exposed to the syllabus that highlighted successful entrepreneurs' real stories and conduct activities that may increase their intentions and motivation to be entrepreneurs. Recent studies on entrepreneurial curriculum highlighted that students who have been exposed to challenging tasks might eventually have a positive attitude towards entrepreneurship (Che Embi et al., 2019). It means that students need proper guidance and supervision to keep them on the right track towards the objective set (Keinänen & Kairisto-Mertanen, 2019).

Daneshjoovash and Hosseini (2018) suggested that universities expose students to the real market situation by bringing the experts to campus or getting students to the field to experience real entrepreneurial activities (Dinning, 2019). Universities may select and appoint prominent partners willing to contribute and share their knowledge with students (Memon et al., 2019). There are also projects or competition-based programs sponsored by the market players to get new ideas from the students for innovative products (Otache, 2019). Such a thing may be strengthening the curriculum towards developing the entrepreneurial intentions among the students.

### **Support system**

Many past research types, such as (Kumar et al., 2020), highlighted the support system's role in contributing to entrepreneurial intentions. The most popular dimensions used as a support system are family support (Padovez-Cualheta et al., 2019), government support (Bazan et al., 2020) and financial aid either by the entrepreneur agencies or financial institutions (Lindvert et al., 2015); past research indicates that most entrepreneurs, especially the young generations, are not interested in pursuing their entrepreneurial intentions due to the support systems. According to

(Zhou et al., 2019), the support system may be the motivation factors to success and development of the spirit of entrepreneurial intentions. It can also be the reason young entrepreneurs do not continue their interest in entrepreneurial activities.

Strong family support is required to motivate and encourage the spirit of entrepreneurs in the making. Family plays considerable roles in developing the character of entrepreneurship (Otache, 2019). On the other hand, it was reported by (Padovez-Cualheta et al., 2019) that low support from family resulted in common interest in entrepreneurial intentions. Low support from family mostly because there is no entrepreneurial history record in the family and parents' negative perception and attitude towards entrepreneurial activities (Padovez-Cualheta et al., 2019). Entrepreneurs from the family business background may be well developed in the business-minded and entrepreneurial skills from childhood. Therefore, entrepreneurs from business families are mostly well prepared with entrepreneurial skills, experiences, and knowledge.

As mentioned by (Kirkwood, 2007), the government supports vital support systems for young and existing entrepreneurs. Support from governments comes in terms of training, grants, coaching, and business opportunities. Governments support helps young entrepreneur's early start-up by providing the incubators, initial grants from machines, or any other requirements such as packaging, certifications, and networking. The absence of government supports may kill entrepreneurial intentions because of the tough journey in the penetrating market.

Financial institutions play roles in support of providing loans to young entrepreneurs. Some businesses may require high start-up capital, and failing to get funding may demotivate entrepreneurial intentions (Farid, 2007). Financial institutions also provide business coaching to ensure that their customers will strive for success, contributing to long-term relationships in a win-win situation (Nguyen et al., 2019).

Overall, the existence of a support system is essential to measure the success of entrepreneurial intentions. A support system could play decisive roles or vice versa, depending on the situation. Therefore, support systems consider this study as a mediator between university roles and entrepreneurial intentions.

## **Methodology**

Structured questionnaires were used in this study for data collection. Three hundred respondents were approached in getting the data compiled. Based on that, only 250 complete and usable data received in returns. An 83% response rate is achieved because the sample was from a list of young entrepreneurs' schemes currently being assessed by the government agencies. Questionnaires used to validate the items from university roles (6 items), entrepreneurial intentions (5 items), and finally support systems (6 items). Likert scales were used to measure all the items. Besides that, there are also seven questions for respondents' profiles.

At least three experts verified questions used in entrepreneurship. Two were from the academic sectors, while the other is currently active in a government agency's entrepreneurial activities. Some changes made in the sentences and grammar for a clear understanding upon comments by the experts. Data will be analyzed using SPSS and Amos version 25.

## Results

The standardized loadings indicate that all values are above acceptable more than 0.5, while the t-values are more than 14.4. Results show a significant fit with average AVE of entrepreneurial intentions at 0.91, and CR is 0.96. AVE for university roles is 0.92, and the CR is 0.97. System supports at the same time show an AVE of 0.90 and CR of 0.93. Table 1 also indicates that all composite values are more than 0.6 for three variables tested in this study.

Table 1. reliability and factors loading of the variables

Items	Factors loading	t-value	AVE	CR
Entrepreneurial intentions			0.91	0.96
EI 1	0.97	22.40		
EI 2	0.99	23.14		
EI 3	0.92	20.39		
EI 4	0.95	22.60		
EI 5	0.99	23.34		
University roles			0.92	0.97
URL 1	0.94	21.80		
URL 2	0.95	22.31		
URL 3	0.91	22.10		
URL 4	0.96	21.90		
URL 5	0.97	21.30		
URL 6	0.93	22.34		
Support systems			0.90	0.93
SSS 1	0.92	21.70		
SSS 2	0.91	22.11		
SSS 3	0.94	22.60		
SSS 4	0.95	21.80		
SSS 5	0.96	21.40		
SSS 6	0.94	22.74		

Table 2. Standard deviations, means, and correlations

	Mean	SD	URL	SSS	EI
University Roles (URL)	4.18	0.78	(0.94)		
Support Systems (SSS)	4.22	0.73	0.85	(0.94)	
Entrepreneurial intentions (EI)	4.03	0.79	0.63	0.84	(0.85)

Table 2 demonstrated the mean and standard deviations for university roles, support systems, and entrepreneurial intentions. It shows that discriminant validity was confirmed. Table 3 demonstrated the relationship between the independent variable (university roles), control variable (system support), and dependent variable (entrepreneurial intentions). University roles influence entrepreneurial intentions positively ( $\beta = 0.26$   $p < 0.001$ ). Therefore H1b is supported. It also indicates that university roles positively influence system support ( $\beta = 0.22$   $p < 0.001$ ). Therefore, H1a is also supported. System support as independent variable positively influence to entrepreneurial intentions ( $\beta = 0.52$   $p < 0.001$ ). All hypotheses tested were positively significant.

Table 3. Path estimates of the structural model

Hypothesized path		Standardized path coefficients	t-values	Result
H 1a	University roles $\rightarrow$ support systems	0.22	5.88	Supported
H 1b	University roles $\rightarrow$ entrepreneurial intentions	0.26	5.57	Supported
H 2	System support $\rightarrow$ entrepreneurial intentions	0.52	6.62	Supported

Table 4. Path estimates of the structural model

	Standardized path coefficients value			
	Full mediation model		Partial mediation model	
	$\beta$	t-value	$\beta$	t-value
University roles $\rightarrow$ entrepreneurial intentions			0.26	5.57
University roles $\rightarrow$ support systems	0.24	6.40	0.22	5.88
Support systems $\rightarrow$ entrepreneurial intentions	0.84	20.22	0.52	6.62

Based on the above table, university roles predicted support systems ( $\beta = 0.22$   $p < 0.01$ ) and support systems predicted entrepreneurial intentions ( $\beta = 0.52$   $p < 0.01$ ). The results indicated that the indirect effect of university roles on entrepreneurial intentions through mediation was 0.15 ( $\beta = 0.22 \times 0.52 = 0.15$   $p < 0.001$ ). The direct effect of university roles was 0.26 ( $p < 0.001$ ). The direct effect is much stronger than the indirect effect. It can be concluded as a partially supported.

## Conclusion

The results of this study disclosed that the university roles are essential to the development of entrepreneurial intentions. Thus, previous results supported the past that indicated the same positive results (Ahmed et al., 2020). There is no doubt that universities play essential roles in

developing and cultivating university students' entrepreneurial intentions. Universities have more advantages in providing the skills set and motivations within their closed control areas. It is easier for the university management to control, keep track, and identify those who have potential or whatnot. Universities' role is, therefore, the best in educating and exposing students towards entrepreneurial intentions.

Interestingly, the role of system support as a control variable is not significant compared to the direct relationship between university roles and entrepreneurial intentions. One important thing is that system support supports entrepreneurial intentions, but its role as mediator is not reliable. Future studies may test the system support as independent variables instead of control variables towards entrepreneurial intentions.

### Conflict of interest

The authors declare no potential conflict of interest regarding the publication of this work. In addition, the ethical issues including plagiarism, informed consent, misconduct, data fabrication and, or falsification, double publication and, or submission, and redundancy have been completely witnessed by the authors.

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