A model of entrepreneurial intention of graduates in the Mekong river delta

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Abstract:

This article aims to investigate the determinants of the inclination of Mekong river delta (MRD) graduates towards entrepreneurship, with the purpose of providing viable solutions to authorities to enhance the efficacy of entrepreneurial endeavours. The analysis relied on primary data derived from a survey conducted in 2021, which involved 341 graduates from six provinces within the MRD. Various statistical techniques were employed to analyse the data, including the Cronbach's Alpha test, exploratory factor analysis (EFA), and linear regression analysis. The findings reveal that the entrepreneurial intention of these graduates is positively influenced by a multitude of factors, such as behaviour control, subjective norms, attitude towards entrepreneurship, and perceived desirability, while being negatively impacted by the propensity to act. The study's primary contribution is the provision of an updated and cohesive framework that enhances understanding of the entrepreneurial intention among graduates in the MRD. The author offers actionable recommendations for various stakeholders: policymakers, universities, entrepreneurs, and researchers.

Keywords: **attitude toward entrepreneurship, behaviour control, entrepreneurial intention, perceived desirability, propensity to act, subjective norms.**

Classification number: **2.2**

1. Problem statement

Entrepreneurship has emerged as a prominent avenue to address a wide range of societal, environmental, and economic challenges. Consequently, comprehending the intricacies of entrepreneurship and entrepreneurial intention holds significant value for scholars and policymakers in evaluating and fostering entrepreneurial activities within specific regions. The Vietnamese government's approval of 2016 as the year of entrepreneurship has led to notable changes in economic and social development in the MRD. The development of several business incubators, such as Can Tho University's Business Incubators (2012), Soc Trang Business Incubators (2014), Vietnam-Korea Business Incubator (2015), and Tra Vinh Business Incubators (2018), signifies a rapidly growing entrepreneurial ecosystem in the region. Nevertheless, entrepreneurship rates of the MRD have been observed to be comparatively lower than in other parts of the country. Moreover, the MRD faces a dearth of country-specific studies that concentrate on entrepreneurs and their associated dynamics. Furthermore, the year 2020 witnessed an exceptionally challenging period for the MRD region. Adverse impacts from drought and saline intrusion have had detrimental effects on the region's economy, daily livelihoods, agricultural production (particularly fisheries and fruit cultivation), and the quality of agricultural soil. Alarming reports indicate that saline intrusion in the MRD has reached severe levels, resulting in damage to approximately 39,000 hectares of rice production areas. Compounding these challenges, the COVID-19 pandemic has had a profound and unprecedented impact. In response to these circumstances, economists have proposed self-employment as one of the most effective alternatives. Self-employment, or entrepreneurship, has the potential to generate substantial economic output, and the MRD region is no exception. Recognizing

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the vital role of entrepreneurship in the social and economic development of the MRD, this analysis explores a model of entrepreneurial intention among MRD graduates. The findings can provide pertinent solutions for authorities to enhance the effectiveness of entrepreneurship within the MRD region.

2. Literature review and theory development

2.1. Entrepreneurial intention

Over the past few decades, the concept of entrepreneurial intention (EI) has garnered considerable attention from scholars and educators. Previous researchers have proposed various definitions of EI with the aim of comprehending its underlying nature. For instance, employing primarily cognitive theory, B. Bird (1988) [1] characterised intentionality as a mental state that directs attention, experience, and action towards a specific target in order to achieve a particular objective. This construct serves as a crucial determinant in comprehending the entrepreneurial process. Entrepreneurial intention represents the initial step in the identification, creation, and exploitation of opportunities [2]. The intention to become an entrepreneur is directly linked to effective performance in this realm. Intention serves as a precursor in explaining behaviour and signifies an individual's dedication to engaging in entrepreneurial activities [3]. In the investigation of the entrepreneurial process, J. Ao, et al. (2014) [4] recognised entrepreneurial intention as a crucial element that aids in comprehending the initiation of a new business. This process encompasses a series of activities undertaken by individuals, including opportunity exploration, business plan creation, resource and relationship utilisation, as well as consideration of the conducive environment for commencing a business venture.

2.2. The factors influencing on individual's entrepreneurial intentions

Researchers have used various approaches to measure factors that impact an individual's entrepreneurial intentions. Notably, two prominent models commonly applied in Vietnam and globally include the Entrepreneurial Event Model proposed by A. Shapero, et al. (1982) [5], and the Theory of Planned Behaviour developed by I. Ajzen (1991) [6]. These models have gained recognition for their effectiveness in capturing the multidimensional aspects of entrepreneurial intentions. In addition to these established models, other scholars have proposed alternative frameworks to further enhance our understanding of entrepreneurial intentions. For instance, P. Davidsson (1995) [7], N.F. Krueger, et al. (1994) [8] have introduced new conceptual models that offer unique perspectives on the factors influencing entrepreneurial intentions. These additional models contribute to the growing body of research in this field and provide valuable insights into the complex dynamics involved in entrepreneurial decision-making processes.

2.2.1. Perceived behavioural control

Perceived behavioural control is related to an individual's perception of the ease or difficulty of performing a particular behaviour. In the context of entrepreneurship, perceived behavioural control relates to an individual's perception of their ability to start and manage a business successfully. Perceived behavioural control describes the individual's awareness of how difficult it is to become an entrepreneur [9]. It refers to an individual's belief in their capability to perform a specific task or behaviour successfully. If a person perceives that he can control over critical aspects of starting and managing a business, such as developing a business plan, securing funding, and managing resources effectively, he is more likely to feel confident to start a business and pursue entrepreneurship as a career. This, in turn, increases the strength of his intention to become an entrepreneur. Therefore, successfully perceived behavioural control plays a crucial role in shaping an individual's intention to start and manage a business. A high level of perceived behavioural control may increase the strength of an individual's intention. Therefore, the first hypothesis is proposed:

Hypothesis H_1: Perceived behaviour control is positively related to entrepreneurial intention.

2.2.2. Subjective norms

Subjective norms encompass the social obligations and influences that students encounter when expressing their intentions to establish entrepreneurial ventures. This pertains to the extent of agreement or disagreement exhibited by parents, relatives, mentors, and friends regarding the student's decision to embark on an entrepreneurial path. Subjective norms are rooted in an individual's perception of the social pressure to engage or refrain from a specific behaviour, which is shaped by the attitudes and beliefs of their significant others. While subjective norms have demonstrated inconsistent predictive power in

prior studies concerning entrepreneurial intention [10], it is imperative to investigate their relevance within the Vietnamese context. In Vietnam, social norms and cultural values wield considerable influence over individual behaviours. For instance, if parents, relatives, mentors, and friends possess positive attitudes and beliefs regarding entrepreneurship, it can heighten the perceived social pressure to initiate a business venture and bolster the individual's intention to become an entrepreneur. Conversely, if these significant harbour negative attitudes and beliefs about entrepreneurship, it can engender a perceived social barrier, diminish the individual's intention to commence a business, and even lead to the abandonment of entrepreneurial aspirations. Consequently, social norms are expected to exert an impact on entrepreneurial intention, as posited by the following hypothesis:

Hypothesis H_2: Subjective norms are positively related to entrepreneurial intention.

2.2.3. Attitude towards the behaviour

Attitude towards the behaviour is related to the perception of a behaviour's outcome and how an individual evaluates it positively or negatively about being an entrepreneur. Attitude towards the behaviour was defined as how favourable or unfavourable an individual evaluates or appraises the behaviour in question [11]. Accordingly, if an individual holds a higher rate of attitude towards the behaviour, he will be more likely to attempt to become an entrepreneur. Conversely, if someone has a negative attitude towards entrepreneurship, he may see it as risky, difficult, or unattractive, and be less likely to consider it as a career option. This aspect is in line with L. Kolvereid (1996) [12], who assumed that students who have a higher attitude towards the behaviour, subjective norm, and perceived behavioural control are more likely to form entrepreneurial intentions. This means that if they perceive entrepreneurship as an attractive and feasible career option and feel that their social environment supports and encourages it, they are more likely to intend to become entrepreneurs. Therefore, educational and other educational institutions can play a crucial role in promoting entrepreneurship by fostering a positive attitude towards it, creating a supportive social environment, and providing resources and training to enhance students' perceived behavioural control. With a higher level of attitude towards the behaviours, an individual will be more likely to form entrepreneurial intentions. Therefore, the first hypothesis is developed as follows:

Hypothesis H_3: Attitude towards the behaviour is positively related to entrepreneurial intention.

2.2.4. Self-efficacy

According to S. Cromie (2000) [13], self-efficacy refers to an individual's trust in their capability. That is, whether or not his or her goals can be obtained. F. Pajares (2002) [14] also agrees that if people have little belief that what they do will get desirable outcomes, they will have insufficient motivation to face adversities. Additionally, G. Segal, et al. (2005) [15] argued that higher entrepreneurial self-efficacy leads to a higher intention to involve in entrepreneurial actions. Although perceived behavioural control is intimately concerned with self-efficacy concepts [11], N.G. Boyd, et al. (1994) [16] believed that self-efficacy is a successful framework to explain the evaluation and choice process related to entrepreneurial intention and behaviour development. This analysis proposes the following hypothesis:

Hypothesis H_4: Self-efficacy is positively related to entrepreneurial intention.

2.2.5. Perceived desirability

E.J. Gatewood, et al. (1995) [17] pointed out that entrepreneurial intention encompasses not only attitudes but also *perceived desirability* and feasibility. Perceived desirability pertains to an individual's personal inclination and interest in initiating a business venture. Consequently, it serves as a motivational factor that facilitates the translation of positive attitudes into entrepreneurial intention. Specifically, possessing a positive attitude towards entrepreneurship stimulates an individual's aspiration to establish a business and engenders behaviours aligned with the intention of becoming an entrepreneur [5]. Based on these premises, the following hypothesis is formulated:

Hypothesis H_5: Perceived desirability is positively related to entrepreneurial intention.

2.2.6. Perceived feasibility

Perceived feasibility refers to an individual's subjective assessment of their capability to enact their intended behaviour, specifically in the context of entrepreneurial pursuits. It is closely intertwined with the presence of influential individuals within the immediate environment who play a crucial role in bolstering the individual's sense of feasibility in establishing their own business. Notably, the perception of feasibility has demonstrated its capacity to predict behaviour, particularly are situations where control over the

outcomes are inherently ambiguous [18]. F. Liñán (2004) [3] discovered that a substantial portion of the variation in intention can be attributed to the interplay between attitude towards entrepreneurship and perceived feasibility. Moreover, perceived feasibility and desirability are intricately linked to decision-making processes surrounding careers and entrepreneurial endeavours. Hence, the subsequent hypothesis is formulated as follows:

Hypothesis H_6: Perceived feasibility is positively related to entrepreneurial intention.

2.2.7. A propensity to act

The propensity to act represents a persistent inclination or disposition towards taking action, which can be actualised based on perceptions of control. It signifies a desire to attain control through active engagement. Despite the inherent stability of the propensity to act construct, there exists a belief that individuals can be trained to exhibit greater autonomy by acquiring self-management skills or skills aligned with overcoming adversity. In relation to the propensity to act, A. Shapero, et al. (1982) [5] equated it with an internal locus of control, implying that the measurement of locus of control can serve as a means to predict the influence of propensity to act on entrepreneurial intention. Thus, the fifth hypothesis in this study pertains to the relationship between these factors:

Hypothesis H_7: Propensity to act is positively related to entrepreneurial intention.
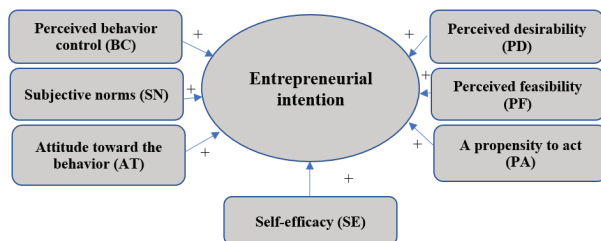
2.3. Research model (Fig. 1)

Fig. 1. Flow chart of the research model.

3. Research methodology

The data collection methodology employed in this study involved non-random purposive sampling. The survey targeted graduates residing in six provinces within the MRD: An Giang, Can Tho, Soc Trang, Tra Vinh, Dong Thap, and Ben Tre. The researchers identified potential respondents primarily through two channels: (1) personal connections and relationships, and (2) participation in start-up groups on social networks. The construction of the questionnaire drew upon a comprehensive review of relevant literature and insights gathered from four exploratory interviews conducted with an entrepreneurship lecturer, a manager of an entrepreneurship centre, and two graduates. Additionally, the questionnaire underwent a pre-testing phase involving nine students from An Giang University, and minor revisions were made to ensure its clarity and comprehensibility. The Likert-5 scale of measurement was employed within the questionnaires to capture participants' responses. The hypothesis was tested using the SPSS version 20.0, as guided by H. Trong, et al. (2008) [19].

4. Research results

4.1. Sample description

A total of 347 questionnaires were initially collected by the author. Following the data cleaning process, 341 questionnaires were deemed satisfactory and suitable for analysis. Therefore, the official sample size for the subsequent analysis included 341 observations. Details pertaining to the survey sample are presented in Table 1.

Table 1. Sample statistics by province/city.

Province	Frequency	Percentage
An Giang	133	39
Can Tho	130	38.1
Ben Tre	7	2.1
Soc Trang	66	19.4
Dong Thap	4	1.2
Tra Vinh	1	0.3
Total	341	100.0

Source: Authors' surveys (2020).

Gender: Table 2 shows that of the 341 respondents, there were 160 females, equivalent to 46.9%. The remaining 181 respondents were male, equal to 53.1%. There is not much difference in gender in the sample.

Table 2. Sample statistics by gender.

Gender	Frequency	Percentage
Male	181	53.1
Female	160	46.9
Total	341	100.0

Source: Authors' surveys (2020).

Entrepreneurial intention: The proportion of people with the intention to start up after being employed is highest (39%) (Table 3). Next, 38% of the

respondents have the intention to open their own business after graduation. Few graduates have the intention at a young age (1.2%).

Table 3. Sample statistics by entrepreneurial intention.

Period of time	Frequency	Percentage
After being employed	133	39
After graduation	130	38.1
At university	67	19.6
At high school	7	2.1
At young age	4	1.2
Total	341	100.0

Source: Authors' surveys (2020).

Business industry: Table 4 points out that most of the graduates start-up in the field of service (31%). Next, manufacturing accounts for a large proportion (30.8%). Retailing is also chosen by 19.9% of respondents. Distribution and medical are not really attractive (3.4 and 3.8%).

Table 4. Sample statistics of business industries.

Industry	Frequency	Percentage
Service	106	31
IT	38	11.3
Manufacturing	105	30.8
Retailing	68	19.9
Distribution	11	3.4
Medical	13	3.8
Total	341	100.0

Source: Authors' surveys (2020).

Entrepreneurial courses: In general, graduates used to take entrepreneurial courses in which Accounting and International Business are the two most popular courses. Only 99 respondents took the business strategy course (Fig. 2).
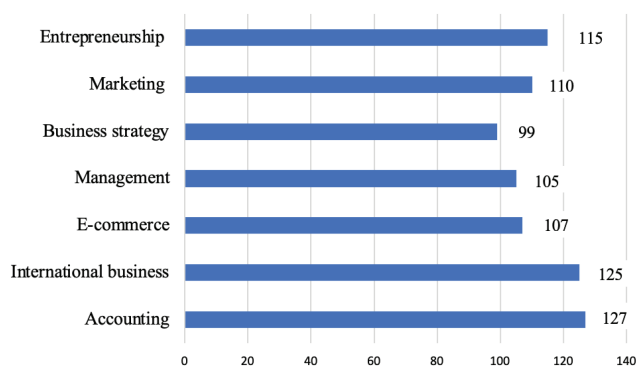

Fig. 2. Entrepreneurial courses taken by graduates. Source: Authors' surveys (2020).

4.2. Scale evaluation with Cronbach's alpha confidence coefficients

Cronbach's alpha coefficient assesses scale reliability. Cronbach's alpha test results for independent factors (Table 5, 6) show that the scale components of behavioural control, subjective norms, attitude, self-efficacy, desirability, feasibility, and propensity to act have Cronbach's alpha coefficients all meet the requirements of greater than 0.6; total variable correlation coefficients of the observed variables are more significant than 0.3; if each observed variable is deleted, the Cronbach's alpha value of the scale will be smaller. Only the component Feasibility gets a higher

Table 5. Cronbach's alpha of the independent variable.

Items	Scale means if item deleted	Scale variance if item deleted	Corrected item-total correlation	Cronbach's alpha if item deleted
Behavior Control; Cronbach's alpha =0.726				
BC1	12.34	3.137	0.595	0.616
BC2	12.35	3.288	0.522	0.661
BC3	12.38	3.389	0.511	0.668
BC4	12.47	3.556	0.436	0.710
Subjective norms; Cronbach's alpha =0.771				
SN1	12.33	3.358	0.514	0.747
SN2	12.31	3.245	0.620	0.694
SN3	12.33	3.109	0.613	0.695
SN4	12.28	3.256	0.550	0.729
Attitude; Cronbach's alpha =0.872				
AT1	16.37	5.881	0.746	0.834
AT2	16.32	5.683	0.762	0.829
AT3	16.20	6.238	0.613	0.865
AT4	16.35	5.918	0.667	0.853
AT5	16.32	5.760	0.710	0.842
Self-efficacy; Cronbach's alpha =0.807				
SE1	7.81	2.149	0.659	0.734
SE2	7.99	2.047	0.650	0.743
SE3	8.03	2.049	0.659	0.733
Perceived desirability; Cronbach's alpha =0.863				
PD1	7.67	2.963	0.709	0.839
PD2	7.82	2.345	0.775	0.782
PD3	7.59	2.772	0.753	0.798
Perceived feasibility; Cronbach's alpha =0.880				
PF1	7.56	2.123	0.873	0.738
PF2	7.62	2.100	0.711	0.893
PF3	7.49	2.421	0.740	0.857
Propensity to act; Cronbach's alpha =0.876				
PA1	4.19	2.596	0.767	0.820
PA2	4.09	2.456	0.714	0.873
PA3	4.21	2.542	0.810	0.783

Source: Analysis results from SPSS.

Cronbach's alpha value if the variable is deleted, but the author still maintains the ingredients to include in factor analysis, avoiding deleting suitable variables.

Table 6. Cronbach's alpha of the dependent variable.

Items	Scale mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Cronbach's alpha if item deleted
Entrepreneurial intention; Cronbach's alpha =0.777				
EI1	20.74	7.612	0.551	0.736
EI2	20.82	7.728	0.541	0.739
EI3	20.83	7.500	0.558	0.734
EI4	20.74	7.574	0.583	0.728
EI5	20.69	8.098	0.458	0.759
EI6	20.70	8.135	0.446	0.762

Source: Analysis results from SPSS.

Cronbach's alpha testing results for the scale Entrepreneurial intention show that Cronbach's alpha coefficients are all satisfactory, greater than 0.6, the total variable correlation coefficients of the observed variables are greater than 0.3, and the value of Cronbach's alpha if an item is deleted is smaller than Cronbach's alpha's value of the scale. Therefore, the scales of the above factors meet the requirements to include EFA in the factor analysis.

4.3. Exploratory factor analysis (EFA)

The scale of factors, including 7 independent variables and 1 dependent variable with 31 observed variables, met the requirements of Cronbach's alpha test and were included in the EFA.

The process of analysing the exploratory must meet the following conditions: (1) the factor loading is greater than 0.5, proving that these observed variables have reliability; (2) KMO coefficient satisfies factor analysis if $0.5 \leq KMO \leq 1$ [20]; (3) Sig coefficient =0.000 of Bartlett's Test shows that there are statistically significant correlated observed variables in the population, so these observations are suitable for factor analysis; (4) Cumulative variance greater than 50% [21] is suitable for factor analysis.

4.3.1. Exploratory factor analysis of independent variables

Table 7 shows that the EFA testing results of the independent variables receive KMO and Bartlett's test results that KMO value =0.795>0.05 and the coefficient Sig.=0.000<0.05. Therefore, it is concluded that the observed variables in the analysis have correlation, and EFA is appropriate in this study. Factor analysis results also show that the

total variance explained is 70.229%>50%, and the stop when extracted at factor 7 is 1.431>1; all meet the conditions. Seven factors are drawn from the analysis.

Table 7. Results of rotation matrix of factor components.

	Components						
	1	2	3	4	5	6	7
AT2	0.848						
AT1	0.820						
AT4	0.794						
AT5	0.792						
AT3	0.734						
PA3		0.880					
PA1		0.848					
PA2		0.838					
SN3			0.807				
SN2			0.791				
SN4			0.710				
SN1			0.679				
PD2				0.883			
PD3				0.878			
PD1				0.846			
PF1					0.885		
PF3					0.838		
PF2					0.818		
BC1						0.779	
BC2						0.736	
BC3						0.686	
BC4						0.666	
SE1							0.834
SE3							0.822
SE2							0.809
KMO		0.795					
Sig. Barlett		0.000					
Eigenvalue		1.431					
Total Variance explained		70.229					

Source: Analysis results from SPSS.

Results of the rotation matrix of the EFA analysis show that 7 new groups of factors with observed variables have factor loading coefficients all greater than 0.5.

4.3.2. Exploratory factor analysis of dependent variables

The results of the exploratory factor analysis of the dependent variables receive KMO and Bartlett's test results that show KMO value = 0.791>0.5 and the coefficient Sig. = 0.000<0.05, then it is concluded that the observed variables included in the analysis have a correlation with each other and the EFA is appropriate to use in this study. Factor analysis results also show that the total variance explained is 47.405%>40%, and the stop when extracted at factor 1 is 2.844>1, all meet the conditions meet (Tables 8, 9). There are no factors drawn from the analysis, and they are still named entrepreneurial intention (EI). There is no change in the factors of the proposed model.

Table 8. Summary of coefficient statistics results in EFA analysis for the dependent variable.

TT	Criteria	Values	Conditions	Results
1	KMO	0.791	≥0.5	Satisfied
2	Sig Bartlett's Test	0.000	≤0.05	Satisfied
3	Eigenvalues	2.844	>1	Satisfied
4	Total variance explained	47.405%	≥40%	Satisfied

Source: Analysis results from SPSS.

Table 9. Results of rotation matrix of factor components.

Items	Components
EI4	0.744
EI3	0.728
EI2	0.713
EI1	0.713
EI5	0.616
EI6	0.605

Source: Analysis results from SPSS.

4.4. Regression analysis

Multiple linear regression was performed with the Enter method to estimate the theoretical model. Multiple linear regression results show that the model has a coefficient R^2 of 0.266 and an adjusted R^2 of 0.251. That means that 25.1% of the variation in the dependent variable is explained by the independent variables in the model, and the rest is explained by the independent variables outside. The result of the F-value test with Sig value.=0.000<0.05 from the ANOVA analysis table (Table 10) shows that the built multiple linear regression model is suitable for the data set, and it is appropriate to use.

Table 10. ANOVA results for regression.

Model	Sum of squares	df	Mean square	F-value	Sig. coefficient
Regression	26.920	7	3.846	17.236	.000[b]
Residual	74.297	333	0.223		
Total	101.217	340			
Independent variables: BC,PF,SE,PD,AT,SN,PA					
Dependent variables: EI					

Source: Analysis results from SPSS.

The results of the multiple regression coefficient show the value of Sig. coefficients of all variables are available. <0.05, so hypotheses H1, H2, H3, H5, H7 are accepted (Table 11).

Table 11. Regression results.

Model B	Unstandardized coefficient		Standardized coefficient		t	Sig. Tolerance	Collinearity statistics	
		Std. Error	Beta				VIF	
(Constant)	1.651	0.359			4.598	0.000		
BC	0.163	0.049	0.174		3.325	0.001	0.806	1.240
SN	0.214	0.049	0.226		4.361	0.000	0.818	1.223
AT	0.145	0.047	0.159		3.111	0.002	0.847	1.180
SE	-0.044	0.041	-0.056		-1.089	0.277	0.838	1.194
PD	0.132	0.034	0.193		3.852	0.000	0.882	1.133
PF	0.053	0.041	0.070		1.285	0.200	0.735	1.360
PA	-0.083	0.037	-0.118		-2.237	0.026	0.792	1.262

Source: Analysis results from SPSS.

Based on the empirical research findings, it is evident that out of the seven research hypotheses examined, hypotheses H4 and H6 failed to attain the requisite level of significance. Conversely, hypotheses H1, H2, H3, H5, and H7 demonstrated a statistically significant relationship. Notably, the PA factor exhibited a negative influence on EI. In summary, the entrepreneurial intention of graduates in the MRD is influenced by several factors, including behaviour control, subjective norms, attitude toward entrepreneurship, perceived desirability, and propensity to act. It is worth noting that the propensity to act has a negative impact on entrepreneurial intention in this context.

5. Discussion, implications, and conclusions

5.1. Discussion

This research aimed to validate the integrated model of entrepreneurial intention, which combines A. Shapero, et al (1982) [5] theory with I. Ajzen's (1991) [6] theory of planned behaviour. By administering

a survey to a sample of 341 graduates in the MRD at the end of 2020, the model's validation was conducted using a combination of factor analysis and regression techniques. The findings indicate that a majority of the respondents (39%) expressed their intention to engage in entrepreneurship. Notably, all graduates in the MRD had prior exposure to entrepreneurial courses, with accounting and international business emerging as the most popular subjects among them. This study also confirmed that the entrepreneurial intention of graduates in the MRD is influenced by several factors, including behaviour control, subjective norms, attitude toward entrepreneurship, perceived desirability, and propensity to act. These results are consistent with many previous studies such as [22-25].

Even more surprisingly, the regression results show that self-efficacy and perceived feasibility do not affect entrepreneurial intention. This is opposite to the previous results. This can be explained that educational background does not adequately prepare graduates in the MRD for entrepreneurship. If the curriculum and training they received did not include entrepreneurship education or practical skills needed for business startups, they may lack confidence in their abilities. Moreover, graduates may perceive that the market conditions in the MRD after the period of COVID-19 become unsafe, or their specific field of interest is unfavourable for entrepreneurship.

Similarly, several entrepreneurship researchers and scholars have proposed and tested the positive relation between the propensity to act and entrepreneurial intention. However, this study's regression result points out a negative relation. This means that graduates who are more inclined to take action or are more proactive in pursuing entrepreneurial opportunities are less likely to express an intention to become entrepreneurs. In other words, a higher propensity to act is associated with a lower likelihood of wanting to start a business. This finding is somewhat counterintuitive, as one might expect that a higher propensity to act would be positively correlated with entrepreneurial intention. However, there could be several reasons why this negative impact is observed. The first reason is fear of failure. Graduates in the MRD who have a high propensity to act may also be more aware of the risks and challenges associated with entrepreneurship. They might fear failure and be less inclined to express an intention to become an entrepreneur due to

concerns about potential setbacks. The second reason comes from external factors. External factors in the MRD region, such as economic conditions, lack of support infrastructure, or limited access to resources, could be discouraging individuals with a propensity to act from pursuing entrepreneurship. Understanding the reasons behind this negative impact of "Propensity to act" on entrepreneurial intention would require further research and analysis specific to the MRD region. It is also important for policymakers, educators, and business development organizations to consider these findings when designing programs and interventions to encourage entrepreneurship in the region. Efforts to support and empower graduates with a high propensity to act should focus on addressing their specific concerns and challenges to promote a more favourable environment for entrepreneurship.

In summary, it can be deduced that entrepreneurial intention is subject to multifaceted influences, wherein factors such as behaviour control, subjective norms, attitude toward entrepreneurship, and perceived desirability exert a positive impact, while the propensity to act demonstrates a negative effect.

5.2. Implications for enhancing entrepreneurial intention of graduates in the MRD

This assessment aims to shed light on the factors that shape the entrepreneurial intention of graduates in the MRD, with the overarching goal of enhancing the entrepreneurial ecosystem within the region and promoting the well-being of individuals aspiring to establish their own ventures. Based on the findings, the authors put forth the following actionable recommendations for various stakeholders: (1) policymakers, (2) universities, (3) entrepreneurs, and (4) researchers.

To the first point, the effectiveness of entrepreneurial policies hinges upon their capacity to shape attitudes and intentions. For these policies to be advantageous, it is imperative for government officials and politicians to enhance business policies and effectively disseminate information to the public using mass media as a platform. Moreover, it is necessary for the government to modify the SME Support Law, which covers a wide range of policy domains, including taxation, financial access, innovation, and value chain enhancement. This recommendation arises from the observation that certain aspects, like SME digitalisation, have not

received adequate focus, while in other areas, such as the formalisation of household businesses, the desired outcomes have not been achieved thus far.

Secondly, universities can cultivate a sense of assurance in the realm of new venture establishment through the establishment of dedicated entrepreneurship centres and a heightened emphasis on entrepreneurial coursework. Specifically, universities should leverage the influence of positive role models during instruction, intensify experiential learning opportunities that simulate real-world challenges inherent to the start-up process, and establish supportive networks comprising sponsors and mentors. It is noteworthy that the research findings underscore the limited popularity of business strategy education within universities. Given the significance of this discipline, the author advocates for an expansion of business strategy courses to equip graduates with the necessary skills to thrive in competitive markets.

Thirdly, entrepreneurs themselves would benefit from gaining a deeper understanding of the various factors that influence entrepreneurial intention. This comprehension enables them to adequately prepare for the personal requisites necessary for more effective new venture creation. Additionally, entrepreneurs should strive to grasp their motivations, as the lens of intentions allows them to discern the underlying reasons behind their resolute choices in shaping their vision for the new venture.

Finally, researchers should prioritize the undertaking of extensive empirical investigations while concurrently enhancing the theoretical foundations underpinning entrepreneurial intention. This dual approach aims to yield a comprehensive research model that encompasses the most influential factors contributing to entrepreneurial intention.

5.3. Conclusions and suggestions for future research

Drawing upon previous studies and existing models, this research endeavour has proposed a cohesive research model elucidating the entrepreneurial intention of graduates in the MRD. Through the utilization of EFA and regression techniques, the study's findings indicate that five factors-namely, (1) attitude toward the behaviour, (2) subjective norm, (3) perceived behavioural control, (4) perceived desirability, and (5) propensity to act-significantly influence the entrepreneurial intentions of graduates. Notably, it is observed that only the propensity to act exhibits a negative influence. These factors pertain to individual and psychological aspects, implying their susceptibility to regulation through education and policy instruments. Consequently, it becomes imperative to provide support to graduates in establishing their own businesses and nurturing their entrepreneurial competencies. Furthermore, universities should implement measures such as entrepreneurial education, entrepreneurial skill training, fostering appropriate risk propensity, cultivating an encouraging and supportive atmosphere, establishing entrepreneurial funds, and facilitating the incubation of graduates' entrepreneurial ventures. By adopting this strategic approach, the entrepreneurial environment within the MRD is anticipated to undergo transformation, thereby fostering the entrepreneurial intentions of graduates and effectively promoting employment through entrepreneurship.

The primary contribution of this study lies in its provision of an updated and cohesive framework that enhances comprehension of the entrepreneurial intention among graduates in the MRD. Nonetheless, certain limitations should be acknowledged. _Firstly_, the analysis primarily focuses on graduates within the MRD region, making it challenging to extrapolate the findings to different provinces or regions. To address this, future study is advised to encompass various provinces in Vietnam to account for the disparities in local governmental support, potentially yielding divergent results. _Secondly_, despite the rigorous review process applied to empirical studies on entrepreneurial intention within the MRD and globally, it is possible that some pivotal studies may have been overlooked, which could have contributed to the subject matter. Hence, future studies on graduates' intentions should incorporate new empirical research and explore additional factors specific to the MRD context that may influence entrepreneurial intention.

CRediT author statement

Tran Thi My Phuong: Literature Review, Data Collection, Methodology, and Writing manuscript; Phan Anh Tu: Literature Review and Data Analysis.

COMPETING INTERESTS

The authors declare that there is no conflict of interest regarding the publication of this article.

REFERENCES

[1] B. Bird (1988), "Implementing entrepreneurial ideas: The case for intention", *Academy of Management Review*, **13(3)**, pp.442-453, DOI: 10.2307/258091.

[2] W.B. Gartner, K.G. Shaver, E. Gatewood, et al. (1994), "Finding the entrepreneur in entrepreneurship", *Entrepreneurship Theory and Practice*, **18(3)**, pp.5-9, DOI: 10.1177/104225879401800301.

[3] F. Linan (2004), "Intention-based models of entrepreneurship education", *Piccolla Impresa/Small Business*, **3(1)**, pp.11-35.

[4] J. Ao, Z. Liu (2014), "What impact entrepreneurial intention? Cultural, environmental, and educational factors", *Journal of Management Analytics*, **1(3)**, pp.224-239, DOI: 10.1080/23270012.2014.994232

[5] A. Shapero, L. Sokol (1982), *The Social Dimensions of Entrepreneurship*, University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship.

[6] I. Ajzen (1991), "The theory of planned behavior", *Organizational Behavior and Human Decision Processes*, **50**, pp.179-211, DOI: 10.1016/0749-5978(91)90020-T.

[7] P. Davidsson (1995), *Determinants of Entrepreneurial Intentions*, RENT XI Workshop.

[8] N.F. Krueger Jr, D.V. Brazeal (1994), "Entrepreneurial potential and potential entrepreneurs", *Entrepreneurship Theory and Practice*, **18(3)**, pp.91-104, DOI: 10.14211/regepe.v7i2.1071.

[9] A. Bandura, W.H. Freeman, R. Lightsey, et al. (1999), "Self-efficacy: The exercise of control", *Journal of Cognitive Psychotherapy*, **13(2)**, DOI: 10.1891/0889-8391.13.2.158.

[10] C.J. Armitage, M. Conner (2001), "Efficacy of the theory of planned behaviour: A meta-analytic review", *British Journal of Social Psychology*, **40(4)**, pp.471-499, DOI: 10.1348/014466601164939.

[11] I. Ajzen (2002), "Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior", *Journal of Applied Social Psychology*, **32(4)**, pp.665-683, DOI: 10.1111/j.15591816.2002.tb00-236.x.

[12] L. Kolvereid (1996), "Prediction of employment status choice intention", *Entrepreneurship Theory and Practice*, **21(1)**, pp.47-57, DOI: 10.1177/104225879602100104.

[13] S. Cromie (2000), "Assessing entrepreneurial inclinations: Some approaches and empirical evidence", *Eur. J. Work Organ. Psychol.*, **9**, pp.7-30, DOI: 10.1080/135943200398030.

[14] F. Pajares (2002), "Gender and perceived self-efficacy in self-regulated learning", *Theory into Practice*, **41(2)**, pp.116-125, DOI: 10.1207/s15430421tip4102_8.

[15] G. Segal, D. Borgia, J. Schoenfeld (2005), "The motivation to become an entrepreneur", *International Journal of Entrepreneurial Behavior & Research*, **11(1)**, pp.42-57, DOI: 10.1108/13552550510580834.

[16] N.G. Boyd, G.S. Vozikis (1994), "The influence of self-efficacy on the development of entrepreneurial intentions and actions", *Entrepreneur-Ship Theory and Practice*, **18(4)**, pp.63-77, DOI: 10.1177/ 10422587940-1800404.

[17] E.J. Gatewood, K.G. Shaver, W.B. Gartner (1995), "A longitudinal study of cognitive factors influencing start-up behaviors and success at venture creation", *Journal of Business Venturing*, **10(5)**, pp.371-391, DOI: 10.1016/0883-9026(95)00035-7.

[18] T.J. Madden, P.S. Ellen, I. Ajzen (1992), "A comparison of the theory of planned behavior and the theory of reasoned action", *Personality and Social Psychology Bulletin*, **18(1)**, pp.3-9, DOI: 10.1177/01461672-921-81001.

[19] H. Trong, C.N.M. Ngoc (2008), *Analyzing Research Data with SPSS*, Hong Duc Publishing House, 430pp (in Vietnamese).

[20] J.F. Hair, W.C. Black, B.J. Babin, et. al. (2010), *Multivariate Data Analysis*, 7th Edition, Pearson, New York, 761pp.

[21] J.C. Anderson, D.W. Gerbing (1988), "Structural equation modeling in practice: A review and recommended two-step approach", *Psychological Bulletin*, **103(3)**, DOI: 10.1037/0033-2909.103.3.411.

[22] N.T.M. Linh, T.T.H. Le, L.P.N. Hien, et al. (2023), "Factors influencing entrepreneurial intentions of students of Kien Giang University", *Ho Chi Minh City Open University Science Magazine - Economics and Business Administration*, **18(1)**, pp.35-49, DOI: 10.46223/HCMCOUJS.econ.vi.18.1.2091.2022 (in Vietnamese).

[23] C.T.N. Thuy, H.L.T. Truc (2020), "Factors affecting entrepreneurship intentions of students of An Giang University", *Industry and Trade Magazine,* https://tapchicongthuong.com.vn/bai-viet/cac-yeu-to-anh-huong-den-y-dinh-khoi-nghiep-cua-sinh-vien-truong-dai-hoc-an-giang-70579.htm, accesed 15 June 2023 (in Vietnamese).

[24] N.Q. Nghi, L.T.D. Hien, M.V.N. Than (2016), "Factors affecting the entrepreneurial intention of students in business administration at universities/colleges in Can Tho City", *Journal of Science Can Tho University*, **10**, pp.55-64 (in Vietnamese).

[25] P.A. Tu, G.T.C. Tien (2015), "Research on factors affecting the entrepreneurial intention: the case of students of the Faculty of Economics and Business Administration, Can Tho University", *Science Journal of Can Tho University*, **38**, pp.59-66 (in Vietnamese).