RESEARCH ARTICLE

Factors affecting students' entrepreneurial intentions and their differences based on gender, tribe, and parents' occupation: a cross-sectional study [version 1; peer review: 2 not approved]

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Abstract

Background: This study examines the impact of entrepreneurial knowledge and self-efficacy in increasing students' entrepreneurial intentions and their self-efficacy. Differences were analyzed in entrepreneurial intentions based on gender, tribe, and parents' occupation.

Methods: The data used in this research was collected from a survey, done by distributing questionnaires electronically to students of the Economics Education Study Program, Faculty of Economics, State University of Medan in the semesters 3, 5, and 7, (n = 307), with a response from 260 individuals. The analytical test used was the PLS-SEM and nonparametric Mann-Whitney and Kruskal Wallis tests.

Results: Entrepreneurial knowledge and self-efficacy positively and significantly increased entrepreneurial intentions. Self-efficacy was not proven to act as a moderating variable, and there was no difference in entrepreneurial intentions between genders, tribes and parents' occupations.

Conclusions: There is a need to enhance the role of the family, so that women's entrepreneurial intentions will not fall lower than men's. It should be noted, however, the role of the family was not discussed in this study. This research implies that it is necessary to embrace innovative entrepreneurship education, so as to increase the entrepreneurial intentions of women and reduce gender inequality in entrepreneurial activities. Further research needs to be conducted on the role of culture-based families in preparing their sons and daughters to become entrepreneurs.

Keywords

Entrepreneurial intentions, Gender, Parents' job, Self-efficacy, Tribe

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Introduction

The prevailing patriarchal culture in Indonesia positions men as the bread winners of their families, while women are relegated to taking care of the household. This fact is very obvious from the Gender Empowerment Index in Indonesia in 2019, which is 75.24.¹ Thus, one can say that the Indonesian patriarchal culture places obstacles on the pathways of women that hinder them from entering into the business world. Over the last three decades, entrepreneurship has emerged as an economic power in the world,² and it has become an essential element for the economic growth and development of European countries.³ However, for developing countries, attention should be paid to factors that can influence an individual's intention to start a new business.⁴

Currently, the number of female students in Indonesia is 51.18%, which is higher than male students' at 48.82% (PDDikti.go.id). Therefore, this presents an excellent opportunity to increase the role of women in entrepreneurship through higher education. The readiness to enter the business world depends on the entrepreneurial intentions of those involved, and previous research has shown that there are differences in entrepreneurial intentions between men and women,^{4,5} showing that. Entrepreneurial intentions of men are higher than women's.⁷⁻⁹ In particular, fear of failure has been highlighted as a barrier for women who are non-entrepreneurs to release their entrepreneurial intentions.¹⁰

In recent years, there has been an increasing interest in the roles of cognitive approach and self-efficacy, since there is a direct relationship between educational background, knowledge through behavioral characteristics, and entrepreneurial intentions.¹¹ Entrepreneurship education is essential because it significantly increases entrepreneurial knowledge,¹² including forming, planning, running, or developing a business, which are skills that an entrepreneur needs. In addition, moderating the influence of gender on individual entrepreneurial orientation is required,¹³ and Sajjad & Dad¹⁴ have found a cultural connection to entrepreneurial intentions. Another factor that determines entrepreneurial intention is the level of self-efficacy. Self-efficacy is a belief that encourages individuals to do and achieve something.¹⁵ Self-efficacy can make someone have the desire to do something because they have the knowledge, skills, and ability to face various problems. Also, it is known that self-efficacy has a positive and significant effect on entrepreneurial intentions.^{16,17} Generally, parents expect their children to continue in the line of their professions, especially when they retire. Haq & Setiyani¹⁸ explained that entrepreneur parents influence their children's intention to become entrepreneurs, and a family of entrepreneurs has a significant impact on entrepreneurial intentions in college graduates. These families provide positive experiences that impact on their children's intention to become entrepreneurs.¹⁹

This study examined the predictor variables, which are related to students' interest in becoming entrepreneurs, in order to see if there are differences in entrepreneurial knowledge, self-efficacy, and entrepreneurial intentions between gender, parent's occupation, and tribe.

Methods

Study design

Research design in this study is correlational design. In correlational research design, researchers use the correlation statistical test to describe and measure the degree of association (or relationship) between two or more variables or sets of scores and not attempt to control or manipulate the variables.²⁰

This research included students at the Faculty of Economics, Medan State University, Indonesia. Data collection was carried out from September to November 2020 using an online survey platform.

Participants

The study population was all 307 students of the Economic Education Study Program, Faculty of Economics, State University of Medan. Only those willing to participate in the study (n = 260) were included. Notifications about this research were given during participants' classes in which the students were invited to participate in the study.

Data collection

Questionnaires were used to collect data on entrepreneurial knowledge, self-efficacy, and entrepreneurial intentions. The questionnaire measuring entrepreneurial knowledge and self-efficacy variables was adopted from Roxas,¹² while the questionnaire measuring entrepreneurial intentions was adopted from the questionnaire developed by Linan & Chen.²¹ The three questionnaires used a scale of 1-5. A value of 1 means very weak, while a value of 5 means very strong in measuring the questions on each variable, respectively.

The occupation of parents was divided into entrepreneur and non-entrepreneur (entrepreneur = 1, non-entrepreneur = 0), while gender is divided into male and female (male = 1, female = 0).

Data analysis

The research data was processed by using Smart-PLS 3.0 and SPSS (version 25). Before statistical analysis was performed, normality assumption was tested using Kolmogorov–Smirnov test, and the result was that the data were not normally distributed. Therefore, the most suitable statistical analysis for the data was a non-parametric approach. To compare participants by tribe, Kruskal Wallis was used; for all other variables, Mann-Whitney was used. Meanwhile SEM-PLS was used to examine subgroups and interactions between variables.

Ethical approval

Ethics approval was obtained from the Institute for Research and Community service of State University of Medan (approval number, IC220190/IC2RSE/LPPM/2020). Completion of the questionnaire also was taken as consent of the students to take part in the study.

Results

A total of 260 students returned the questionnaire; male participants numbered 52 individuals, while female participants numbered 208 individuals. In total, 129 participants came from the Batak Toba tribe, 34 individuals came from Batak Karo, 15 were from Batak Simalungun, 4 were from Batak Dairi/Pakpak, 35 were Javanese, 7 were Melayu, 6 were Nias, 2 were Chinese, 14 were Batak Mandailing, 7 were Minang, and 3 were Aceh. A total of 4 individuals belonged to other tribes not described above.

For gender, there was no significant difference in the level of entrepreneurial knowledge, entrepreneurial intention, and self-efficacy (Table 1). When examining the students' tribe, there was also no significant difference between entrepreneurial knowledge, entrepreneurial intentions, and self-efficacy (Table 2). The number of students was predominantly Toba Batak tribe at 49.62% followed by Javanese 13.46%, Batak Karo 13.08%. We observed that the average score of students' entrepreneurial intentions from Chinese tribe was the highest at 4.085, and the lowest was Karo tribe at 3.451 (scale 1-5).

Figure 1. Research model for SEM-PLS analysis.

Table 1. Levels of entrepreneurial knowledge, entrepreneurial intentions, and self-efficacy stratified by gender.

Variable	Gender	N	Mean	Asymp. Sig. (2-tailed)
Entrepreneurial knowledge	Male	52	3.198	0.94
	Female	208	3.164	
Entrepreneurial intentions	Male	52	3.650	0.945
	Female	208	3.688	
Self-efficacy	Male	52	3.796	0.423
	Female	208	3.664	

Table 2. Levels of entrepreneurial knowledge, entrepreneurial intentions, and self-efficacy stratified by tribe.

Tribe	N	Entrepreneurial knowledge	Asymp. Sig. (2-tailed)	Entrepreneurial intentions	Asymp. Sig. (2-tailed)	Self-efficacy	Asymp. Sig. (2-tailed)
Batak Toba	129	3.154	0.245	3.644	0.276	3.755	0.341
Batak Karo	34	2.892		3.451		3.384	
Batak Simalungun	15	3.322		3.911		3.710	
Batak Dairi/ Pakpak	4	3.125		3.708		3.285	
Jawa	35	3.200		3.805		3.645	
Melayu	7	3.739		3.930		3.879	
Nias	6	3.443		4.028		3.857	
Tionghoa	2	4.080		4.085		4.315	
Batak Mandailing	14	3.286		4.000		3.940	
Minang	7	3.284		3.929		3.520	
Aceh	3	2.750		2.835		3.255	
Others	4	3.043		3.208		3.628	

We observed that students' entrepreneurial intentions based on their parents' occupation have no significant difference. However, the average score of the entrepreneurial intentions, showed that for students whose parents have their own businesses scored 3.72, while students from white collar families scored 3.59. Familied who owned their own businesses consisted of entrepreneurs, farmers, and fishermen. Meanwhile, white collar families cooperated with other people or agencies such as state-owned enterprises employees, civil servants, soldier/police, and private employees.

Evaluation of model

Measurement models (outer)

Validity

The validity testing for reflective indicators was observed from the convergent validity and average variance extracted (AVE). The correlation coefficient between the items score and the construct score (Table 4) showed that the loading factor PK1 - to PK 6 has a value that was above the recommended value of 0.7, so that all indicators were valid and fit the convergent validity. Another method to observe is the discriminant validity, which looked at the square root of AVE. The recommended value was above 0.5. The data showed that all the constructs contained in the research model have values of above 0.5 (see Table 4).

Table 3. Levels of entrepreneurial knowledge, entrepreneurial intentions, and self-efficacy stratified by parents' occupation.

Variable	Parent's occupation	N	Percent	Mean score	Asymp. Sig. (2-tailed)
Entrepreneurial knowledge	Not entrepreneur	77	29.62	3.17	0.743
	Entrepreneur	183	70.38	3.17	
Entrepreneurial intentions	Not entrepreneur	77	29.62	3.59	0.427
	Entrepreneur	183	70.38	3.72	
Self-efficacy	Not entrepreneur	77	29.62	3.65	0.562
	Entrepreneur	183	70.38	3.71	

Table 4. Results summary for reflective measurement models.

Latent variable	Indicators	Convergent validity		Internal consistency reliability		Discriminant validity
		Loadings	AVE	Composite reliability	Cronbach's alpha	
		>0.70	>0.50	0.60-0.90	0.60-0.90	HTMT confidence interval does not include 1
Entrepreneurial knowledge	PK1	0.826	0.708	0.936	0.917	Yes
	PK2	0.809				
	PK3	0.890				
	PK4	0.803				
	PK5	0.815				
	PK6	0.900				
Self-efficacy	EF1	0.805	0.684	0.945	0.933	Yes
	EF2	0.850				
	EF3	0.883				
	EF4	0.885				
	EF5	0.862				
	EF6	0.693				
	EF7	0.807				
	EF8	0.816				
Entrepreneurial intentions	IK1	0.859	0.771	0.953	0.940	Yes
	IK2	0.829				
	IK3	0.888				
	IK4	0.897				
	IK5	0.915				
	IK6	0.878				

Reliability

The reliability test was done by looking at the composite reliability value of the indicators that measured the construct. The results of different tests and levels of entrepreneurial knowledge, entrepreneurial intentions, and self-efficacy based on gender, tribe and parents' occupation can be seen in [Table 5](#) (composite reliability EI, SE, and EK are all 0.9). Reliability test can also be strengthened with Cronbach's Alpha, and for all constructs it is > 0.6.

Table 5. Structural coefficient.

	Path coefficient	R Square	t Values	p Values	Significance (p < 0.05)
Entrepreneurial knowledge -> Entrepreneurial intentions	0.268	0.383	3.958	0.000	Yes
Self-efficacy -> Entrepreneurial intentions	0.438		5.371	0.000	Yes
Moderating Effect 1 (Self-efficacy) -> Entrepreneurial intentions	-0.015		0.163	0.871	No

Structural model (Inner)

The inner model explains whether the research model that is built is a good model. In Table 5, the R-Square value that is obtained is 0.383. This explains that entrepreneurial knowledge and self-efficacy can explain entrepreneurial intentions by 38.3% and the remaining 61.7% is explained outside the research model.

Hypothesis testing

This study examines whether entrepreneurial knowledge and self-efficacy play a role in increasing entrepreneurial intentions and it also examines whether self-efficacy act as moderating variables. The results obtained were: (1) Entrepreneurial Knowledge has a positive and significant effect on entrepreneurial intentions, and this can be seen from the P value, which is 0.000 (< 0.05); (2) The Path Coefficient value is positive, which is 0.268, and which indicates that the direction of the relationship between entrepreneurial knowledge and entrepreneurial intentions is positive; (3) Self-efficacy is proven to have a positive and significant effect on entrepreneurial intention, where p value is 0.000 (< 0.05).

Discussion

The desire to increase women's participation in Indonesia's political and economic sectors can be done through higher education. This desire gained momentum as women's participation in higher education continued to increase and women's achievements were on par with men. In fact, it has been observed that women's academic achievement is higher than men.²² In terms of self-efficacy, there is no difference between genders. Instead, women have a more adaptive approach when doing learning tasks.^{23,24} The problem lies in increasing women's intention to be active in the economic field and how to eliminate the fear of failure, which is a barrier to entering the business world. This study analyzed whether there are differences in the level of entrepreneurial knowledge, entrepreneurial intentions, and self-efficacy between genders. However, it was observed that there is no significant difference between the two. When viewed from the average score of entrepreneurial intentions, women have a slightly higher score, with a score of 3.69, as compared to men who have a score of 3.65. This is a valuable asset that should encourage women to become entrepreneurs, because the results of previous researches stated that the entrepreneurial intention of male students was higher than female students^{8,9,25} as well as women having lesser intentions to starting a business.²⁶ Therefore, this study has implications for how to design entrepreneurship education that can change the orientation of female students to become entrepreneurs.

In Indonesia, women are more interested in becoming teachers than entrepreneurs. In 2020, the number of female teachers was at a percentage of 69.84%, while that of male teachers was 30.16%. At the tertiary level, female students in education majors are also higher in number. This situation buttresses the fact that women's intentions to become entrepreneurs are still low. Davis & Shaver²⁷ explained that women are less likely than men to increase entrepreneur numbers. One solution that can be proffered is for the government and all stake holders to provide entrepreneurship education to women so as to increase their entrepreneurial intentions. This is important because as Oosterbeek *et al.*²⁸ and Westhead & Solesvik²⁹ opined, entrepreneurship education is designed to be better able to increase the entrepreneurial intention of the male students. Gender stereotypes may make women to consider themselves as less competent than men in entrepreneurship.³⁰ Not only that, barriers to women's entrepreneurship can be in the form of social, economic exclusion, and inequality.²⁵

In this study, the respondents were divided into 12 tribes. The Toba Batak tribe consisted of the majority of the study population (49.62%), which was almost half of the respondents. This study found no significant differences in terms of the level of entrepreneurial knowledge, entrepreneurial intentions, and efficacy when viewed from the category of tribe. However, when viewed from the average score for the three aspects, it would be observed that the Chinese tribe had a higher scores than other tribes. However, the accuracy is low due to the minimal number of samples for the Chinese tribe. This information aligns with business practices so far, at least in Indonesia, which is more dominated by Chinese ethnic groups.³¹ When analyzed further, the number of students' in the ethnic groups of the Batak tribe was far greater, consisting of the Toba Batak, Karo, Simalungun, Dairi/Pakpak, and Mandailing Batak. The number of Batak respondents was

196 (75.38%). The Batak tribe adheres to traditional culture. In the patrilineal system, the men's position is more dominant than the women's position, and boys will become family heirs.^{32,33} Therefore, this inequality gives rise to the following question: does this position harm women's entrepreneurial intentions? Our study did not analyse this question; however, it will be interesting to further study the situation, especially the role of families in preparing their offspring for the future. Are there differences in educating children from various tribes? Is there any tribe that focuses more on educating its children to become entrepreneurs? These are questions that need to be answered.

Table 1 shows no difference in entrepreneurial knowledge, entrepreneurial intentions, and self-efficacy between female and male students. It is hoped that women's entrepreneurial intentions will increase in order to encourage them to be better prepared to become entrepreneurs. This is because previous research show prove that men and women are both high achievers, but men are more likely to be accepted when applying for a job.²⁴ Furthermore, women and men are treated differently in the workplace. Sometimes, women are treated less favorably than men.³⁴ This situation should challenge women to focus more on entering into entrepreneurship rather than applying for jobs.

Entrepreneurial intentions can also be seen from the perspective of the correlation between parents' work and the level of their children's entrepreneurial intentions. This is considered essential because it helps us to know how families educate children and prepare them for the future. Family is an effective and efficient place to build entrepreneurs, and the family can be a model for entrepreneurs.³⁵ Parents who work as entrepreneurs are also known to be one of the factors that encourages children's intentions to become entrepreneurs.^{36,37} An entrepreneur family background encourages a higher entrepreneurial intensity score.³⁸ Family support is also known to be positively related to the success of women entrepreneurs.³⁹

Based on **Table 3**, there is no difference in the entrepreneurial intentions between students who have entrepreneur parents or non-entrepreneur parents. This indicates that the work of parents has no impact on the level of students' entrepreneurial intentions. If we look at the average score of entrepreneurial intentions, students who have entrepreneurial parents only have a score that is 3.62% higher. This research's findings provide an early indication that parents do not direct their children to follow their work. On the other hand, it seems that parents often give freedom to their children to determine their own future work. The results are quite impressive because there is no difference in the entrepreneurial intentions, while other researches generally state that women's entrepreneurial intentions are lower.^{29,40} However, further investigation needs to be done to determine whether there is a role for informal education that takes place within the family system.

From the results of the hypothesis testing, entrepreneurial knowledge has a positive and significant effect on entrepreneurial intentions. This explains that people in charge of running a business are better able to run the business. This condition encourages higher entrepreneurial intentions. The level of entrepreneurial learning achievement also contributes to students' entrepreneurial intentions,⁴¹ because entrepreneurship learning achievement is a description of the entrepreneurial knowledge that is owned.

Entrepreneurial knowledge can be increased through entrepreneurship education. The European Union provides entrepreneurship education to equip knowledge and encourage entrepreneurial careers' attractiveness to the younger generation.⁴² Entrepreneurship education can develop entrepreneurial intentions.^{30,43–48} This research strengthens the theoretical foundation that increasing students' entrepreneurial intentions can be done by implementing entrepreneurship education. Entrepreneurship education should not be limited to business education, but it can start from primary education to higher education with a design that is adjusted to the level of education and the clusters of knowledge being held.

Furthermore, self-efficacy is proven to have a positive and significant effect on entrepreneurial intentions. Thus, this study's results strengthen the research that stated that self-efficacy is positively and significantly related to entrepreneurial intentions.^{16,17} When students possess self-efficacy, it helps them to build a belief that enables them to do and achieve things. This belief is what drives the intention to become entrepreneurs. These findings explain that increasing entrepreneurial intentions can be done by increasing self-confidence. Self-efficacy can be built by increasing knowledge about business management through apprenticeships in the business world and successful entrepreneur models.

Moreover, when the self-efficacy variable was used as a moderating variable for the entrepreneurial knowledge variable on entrepreneurial intentions, it was found that self-efficacy did not play a role in increasing entrepreneurial intentions. According to Bandura's¹⁵ definition of self-efficacy, self-efficacy refers to the belief in a person's ability to carry out the necessary actions to produce something. The cause of self-efficacy is not a moderating variable. It can be presumed that the level of self-efficacy is influenced by the level of knowledge about managing the owned business.

Limitations

Since our research did not address the perspectives of families, we do not know their role in preparing their children for their future professions, therefore the data obtained was limited to only students' perspectives. However, this issue is increasingly important because we need to know the differences in family roles based on ethnicity.

Conclusions

This study examined the impact of entrepreneurial knowledge and self-efficacy on entrepreneurial intentions and whether self-efficacy acts as a moderating variable. It also analyzed the level of knowledge, self-efficacy, and entrepreneurial intentions based on gender, ethnicity, and parent's occupation. This study's findings are: (1) Entrepreneurial knowledge and self-efficacy positively and significantly affect entrepreneurial intentions; (2) Self-efficacy is not proven as a moderating variable; (3) The level of entrepreneurial knowledge, self-efficacy, and entrepreneurial intentions did not differ significantly when it was observed between gender, ethnicity, and parents' occupation. Thus, efforts to increase women's role in entrepreneurship won't be too difficult to achieve because the entrepreneurial intentions of women are not lower than the men' as in previous studies. Nevertheless, we need to know the impact of informal education that occurs within the family system. Also, it will be interesting to know the differences that abound in families educating their children based on culture (patrilineal) and parents' work. This study's results cannot be generalized because it only involved one field of science, namely economic education. However, this study provides information on the importance of entrepreneurship education, so as to increase the entrepreneurial knowledge and self-efficacy of women. For this reason, it is necessary to create entrepreneurial education designs that can increase entrepreneurial intentions, especially for women.

Data availability

Underlying data

Figshare: Students entrepreneurial intentions (sav).sav, <https://doi.org/10.6084/m9.figshare.14578092.v1>.⁴⁹

Data are available under the terms of the [Creative Commons Zero “No rights reserved” data waiver](#) (CC0 1.0 Public domain dedication).

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Boubker Omar

Ibn Zohr University, Agadir, Morocco

This study explores factors affecting students' entrepreneurial intentions and their differences based on gender, tribe, and parents' occupation. The topic of this study is very interesting. However, the following points are worthy of consideration to improve the manuscript's comprehensibility.

- It is unclear exactly the gap in knowledge that the authors intend to address. Accordingly, in the introduction section, the research gap and the motivation of the study need to be made clearer.
- The literature review section can benefit from more studies that are extensive. Need to include more references. Some example papers that may be helpful are given below:
 - Maslakçı A, Sürücü L, Şeşen H: Positive psychological capital and university students' entrepreneurial intentions: does gender make a difference?. *International Journal for Educational and Vocational Guidance*¹
 - Ramadani V, Rahman M, Salamzadeh A, Rahaman M, et al.: Entrepreneurship Education and Graduates' Entrepreneurial Intentions: Does Gender Matter? A Multi-Group Analysis using AMOS. *Technological Forecasting and Social Change*²
 - Boubker O, Arroud M, Ouajdouni A: Entrepreneurship education versus management students' entrepreneurial intentions. A PLS-SEM approach. *The International Journal of Management Education*³
- There is limited support from a specific theory within the hypotheses development. In my opinion, the inclusion of a theory describing the relation between entrepreneurial knowledge, self-efficacy, and entrepreneurial intention could provide a better guide to the study.
- The research method should be clearly described in detail. In addition, the authors are invited to provide more clarification about the sampling technique used in this study.
- The PLS-SEM approach was used to test the hypotheses, it is better to provide the reason

for using this approach. In other words, why did you choose PLS-SEM instead of CB-SEM?

- In the results section, the authors are invited to use the Fornell-Larcker criterion and the HTMT ratio of correlations in order to assess the discriminant validity of the measurement model.
- It is necessary to introduce other essential criteria for checking the structural model, including; the effect size, the predictive relevance, and the Goodness-of-fit of the model.
- The limitations and research directions are obviously not sufficient. The authors should include limitations that may be methodological or theoretical. In addition, what do you think a future study should take into account?
- Some minor English language editing is needed to correct the various grammatical errors present in the manuscript.

All the best.

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1. Maslakçı A, Sürücü L, Şeşen H: Positive psychological capital and university students' entrepreneurial intentions: does gender make a difference?. *International Journal for Educational and Vocational Guidance*. 2022. [Publisher Full Text](#)
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Is the work clearly and accurately presented and does it cite the current literature?

Partly

Is the study design appropriate and is the work technically sound?

Partly

Are sufficient details of methods and analysis provided to allow replication by others?

Partly

If applicable, is the statistical analysis and its interpretation appropriate?

Partly

Are all the source data underlying the results available to ensure full reproducibility?

Yes

Are the conclusions drawn adequately supported by the results?

Partly

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Management Sciences, Entrepreneurship

I confirm that I have read this submission and believe that I have an appropriate level of expertise to state that I do not consider it to be of an acceptable scientific standard, for reasons outlined above.

Reviewer Report 28 June 2021

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Emőke-Szidónia Feder

Marketing and International Economic Relations Department, Faculty of Economics and Business Administration, West University of Timișoara, Timișoara, Romania

This research paper addresses the potential roles of entrepreneurial knowledge and self-efficacy in fostering entrepreneurial intentions. Furthermore, the study considered to analyse if there are significant differences between groups based on gender, tribe, and parents' occupation.

Based on my opinion, the following observations should be considered and major improvements should be realised to the current form of the research paper:

- A more detailed background within the Abstract would be useful for readers.
- Originality-related aspects should be emphasized within the paper.
- Moderate editing of language and style is required.
- Authors state the following: "Gender Empowerment Index in Indonesia in 2019, which is 75.24.¹". The reference in the text is to the UNDP 2019 report, data in that report is for 2018 (report published in 2019). Also, there is a newer version/update on information for 2019 in the UNDP Report 2020 (<http://hdr.undp.org/en/2020-report>). Either year or reference should be corrected.
- The literature review should be extended. There are several studies in the business/management field and psychology analysing the influencing role of knowledge, competencies, education, and of self-efficacy on enhancing entrepreneurial intentions. Controversial results should be highlighted, and even previous results of researchers in the field from Indonesia should be presented.
- Authors state: "This study examined the predictor variables, which are related to students' interest in becoming entrepreneurs...". My observation would be that there are several

potential predictors, while the authors considered just two of them (knowledge and self-efficacy). The phrase should be reconsidered by including some predictors or specific predictors.

- Authors state: "The questionnaire measuring entrepreneurial knowledge and self-efficacy variables was adopted from Roxas,¹² while the questionnaire measuring entrepreneurial intentions was adopted from the questionnaire developed by Linan & Chen.²¹". In my opinion, the authors referred to measurement scales, not questionnaires. Generally, researchers apply one questionnaire with several measurement scales. If there are multiple questionnaires in this case, several critical aspects should be discussed, like how they match between the three questionnaires they mention for the same respondent, how they stock personal individual data for matching, privacy aspects (GDPR), and so on.
- Within the research model depicted in Figure 1, self-efficacy appears both as a predictor and moderator. In the case of a conducted research, self-efficacy can be a moderator for the causal relationship between knowledge and entrepreneurial intention; it cannot influence and moderate its own effect at the same time.
- Regarding Table 1 and 2, the authors should think about how relevant it is to compare a group of 52 and 208 respondents (regarding gender), respectively, and consider tribe, 129 and 4, 3, or 2 respondents.
- Regarding the results of hypothesis testing, there are 3 results mentioned, 1 and 2 regarding the same predictor. The authors should discuss either together or separately the sign and significance level of the causal relations in the case of the two predictors.
- Regarding the Discussion, if there are no differences between women and men regarding their entrepreneurial intentions, the authors should focus on why these entrepreneurial intentions do not turn into entrepreneurial activity or business creation in the case of women and how should this aspect be improved (e.g. opportunity creation, business context, dedicated programs, available budget/credits, etc.). Is really fear of failure the only blockage factor?
- The Discussion also regards the role of parents and family in fostering entrepreneurial intentions - the case of existence or non-existence of entrepreneurial role models within the family. There is a slight controversy compared to the phrase stated in the Abstract, where the authors claim the following: "...however, the role of the family was not discussed in this study".
- There are several limitations that should be mentioned and also some future research directions.

Is the work clearly and accurately presented and does it cite the current literature?

Partly

Is the study design appropriate and is the work technically sound?

Partly

Are sufficient details of methods and analysis provided to allow replication by others?

Yes

If applicable, is the statistical analysis and its interpretation appropriate?

Partly

Are all the source data underlying the results available to ensure full reproducibility?

Yes

Are the conclusions drawn adequately supported by the results?

Partly

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Entrepreneurial intentions, International entrepreneurship, Strategic orientations, International business

I confirm that I have read this submission and believe that I have an appropriate level of expertise to state that I do not consider it to be of an acceptable scientific standard, for reasons outlined above.

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