
Campus and business ecosystem collaboration: A model entrepreneurship education in university

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Abstract

This research aimed to find the interaction of entrepreneurship education, family, and outside-the-family environment on the attitudes and entrepreneurial interests of 356 students who have passed the entrepreneurship course. This research is essential because there is a large gap between registered job seekers with undergraduate degrees and those with job placements. The sampling technique used was the quota sampling method. Data were collected through questionnaires and analyzed using the structural equation modeling method. The results showed that entrepreneurship education does not significantly affect attitudes but affects entrepreneurial interest. The family environment influences attitudes and interest in entrepreneurship, and the environment outside the family does not significantly affect interest only if moderated by entrepreneurial attitudes. Indirect influence is more dominant than other variable interactions. The learning model requires collaboration between the campus and the business ecosystem where students interact.

Keywords

Family environment, outside the family environment, student intention, university

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Introduction

Entrepreneurship plays a vital role in increasing the empowerment of people, maximizing the productivity of a country's private and government sectors, and reducing the number of educated unemployed, so encouraging student entrepreneurial interest is vital (Layoo, 2020). Entrepreneurial education in higher education institutions can significantly boost the nation's economic development (Eze & Odigbo, 2018). Entrepreneurship can help reduce unemployment in the context of developing countries (Syaifulah et al., 2021). The role of entrepreneurship education can increase entrepreneurship (Debarliev et al., 2020; Mahfud et al., 2020).

Students' entrepreneurial interests can be built through entrepreneurship education, training, and entrepreneurial skills driven by their educational background. However, fostering entrepreneurial interest cannot only be done through entrepreneurship education on campus because college graduates cannot create jobs independently; many are still job seekers (Mukesh et al., 2018). The number of registered job seekers with undergraduate degrees in Central Sulawesi is significantly disproportionate to those who are absorbed or get job placements. Higher education does not guarantee formal employment for graduates. Every year, the number of registered job seekers with bachelor's degrees increases, except in 2020; very few are absorbed, and some do not even get job opportunities. Graduates who do not get a job should be able to open jobs independently because students have been equipped with entrepreneurship education. Currently, more and more university study programs have the vision to produce entrepreneurial graduates. Entrepreneurship courses are included in the curriculum structure to realize the vision. Ironically, graduates are more likely to become employees than to manage their businesses. The number of graduates who have worked from 2020 to 2024 is more dominant in choosing to become laborers/employees rather than entrepreneurs. An in-depth understanding of what determines student entrepreneurial interest in addition to entrepreneurship education is needed so that integrated efforts can be made to encourage students to make entrepreneurship a career choice (Awah et al., 2023).

Since entrepreneurship education on campus has yet to maximize university graduates' entrepreneurial interest and capacity, developing entrepreneurial attitudes and interests and exploring some of the factors that influence them have been studied by several researchers in various countries. The research results in Nigeria show that entrepreneurship education cannot be proven effective in increasing students' entrepreneurial interest because there is no evidence that positive entrepreneurial interest changes because of exposure to entrepreneurship education (Ayotunde & Mohd; Sobri, 2018). There is no statistical impact of perceived and perceived desirability on entrepreneurial interest; there is no statistical impact of entrepreneurial knowledge on the entrepreneurial interest of university students (Elmobayed, 2022).

Entrepreneurship is a dynamic process that is always influenced by environmental factors. The environment in the form of "role models" also affects the interest in entrepreneurship. These *role models* usually see parents, siblings, other family, friends, spouses, or successful entrepreneurs who are idolized (Alma, 2013). Although it is not easy to develop an entrepreneurial spirit, it is not enough; it is just personal characteristics. In this case, the

involvement and participation of the family (parents) must be increased (Mangundjaya, 2012). The first factor influencing students' entrepreneurial interest is the family environment and the environment around students, either residence or association, that provides students with entrepreneurial practice opportunities; this is similar to the research results on students aged 18-40 years in sixteen countries in Europe and the Middle East, which concluded that family factors influence the entrepreneurial interest of undergraduate students as a source of business capital (Putra, 2012).

In contrast, master's level students are not influenced by family factors (Olszewska, 2015). Family background also significantly influences individuals to become entrepreneurs (Atef, 2015; Espiritu-Olmos & Sastre-Castillo, 2015; Ismail et al., 2015). In contrast, it was found that family environment does not determine students' interest in becoming entrepreneurs. Although more than half of students have one or both self-employed parents, it does not necessarily affect students' decision to become the founder or successor of their parents' business (Cano & Tabares, 2017).

This research examined the direct and indirect effects of entrepreneurship education, family environment, and outside the family factors on student attitudes and entrepreneurial interest. Very few studies have examined these three variables' indirect effects on students' interests. Attitudes. In addition, in the digital era, where students' interaction with social media is very high, the uniqueness of this research is to include social media indicators in the variable outside the family environment that affects business interest. This research also *develops* a model of environmental interaction with entrepreneurship education in influencing student interest. The research results can be a foothold in developing various entrepreneurship learning methods that consider the environmental aspects faced by students to encourage student interest in taking part in the business world.

Literature Review

Entrepreneurship education on entrepreneurial attitudes and interests

Entrepreneurship education has positively changed students' attitudes towards entrepreneurship education (Gargouri & Naatus, 2019). Entrepreneurship education has become an attraction and import in modern higher education; many researchers have highlighted the importance of evaluating entrepreneurship education and the role of entrepreneurship education in higher education (Blenker et al., 2014; Mukesh & Abhisek, 2018). Schoolteachers drive the courage to form entrepreneurship, and schools that provide practical and interesting entrepreneurship subjects can arouse interest in entrepreneurship, as happened to alums of MIT, Harvard University, and several other universities (Alma, 2013). Hattab (2014) found a positive relationship between entrepreneurship education and the entrepreneurial interest of students in Egypt. Likewise, Lestari and Wijaya (2012) found that entrepreneurship education significantly affects the entrepreneurial interest of students in Indonesia. Entrepreneurship education is intended as a learning process to change students' attitudes and mindsets towards entrepreneurial career choices. Thus, students who have taken entrepreneurship courses will have intrinsic values and entrepreneurial characteristics, increasing their interest in and love for the world of entrepreneurship. Empirical studies confirm a direct relationship between entrepreneurship education and intentions (Tommy et

al., 2016; Kadir et al., 2012). Entrepreneurship education can change students' entrepreneurial interests (Fayolle et al., 2014; Gerba, 2012). Studies have shown that Chinese students' entrepreneurial interests can be improved, and it has been found that entrepreneurship education affects not only students' entrepreneurial interests but also their attitudes towards them (Sun et al., 2017). Entrepreneurship education positively affects students' entrepreneurial interests, implying that variations in students' entrepreneurial education explain 75 percent of the variation in entrepreneurial interests. Entrepreneurship education has helped to create attention and stimulate students' interest and desire to enter the business world (Hillary, Josephine, & Martins-Emesom, 2019).

The three direct antecedents of entrepreneurial interest, namely attitudes towards entrepreneurship, subjective norms, and perceived behavioral control, directly influence entrepreneurial interest (Kassim et al., 2024; Lopes et al., 2023). Participation in entrepreneurship education positively influenced students' interest in becoming entrepreneurs by changing their attitudes from seeking paid employment to entrepreneurship and improving their entrepreneurial ability (Ebewo et al., 2017). This model of entrepreneurship education describes a process that allows students to face the pressures, competition, and risks inherent in entrepreneurship and provides them with a conscious view of the work required to start a business. The five-step teaching model was developed to create an entrepreneurship education pedagogy that fully embraces experiential learning lessons. The model was conceived while working at the Small Business Development Center and has been used to teach New Mexico State University students. The five-step model builds on the foundation of two of the most overlooked aspects of experiential learning: the whole-person approach and contact with the environment (Pittz, 2014).

Family environmental factors and interest in entrepreneurship

Someone married with several children will be more interested in starting a business. Alma (2013) and Lestari and Wijaya (2012) found that parents' jobs significantly affect students' interest in entrepreneurship. Various studies have stated that family background influences individuals to become entrepreneurs (Atef, 2015; Remeikiene et al., 2013). In addition, people sometimes start a business because of heritability. Sometimes, family business also influences an entrepreneur's decision to become an entrepreneur. It is said that heritability is more important even after realizing the influence of age, income, education, marital status, race, and immigrant status (Lindquist et al., 2015). The environment in the form of role models also influences interest in entrepreneurship. These role models usually look at parents, siblings, other family, and partners (Alma, 2013). The research results of students aged 18-40 years in sixteen countries in Europe and the Middle East concluded that family factors influenced the entrepreneurial interest of undergraduate students as a source of business capital. In contrast, master's level students were not influenced by family factors (Olszewska, 2015), and likewise stated that the first factor influencing students' entrepreneurial interest was the family environment factor that allowed students to practice entrepreneurship (Putra, 2012). The family business background greatly influences the tendency to become an entrepreneur (Soomro et al., 2016).

Outside family environment and entrepreneurial interest

Entrepreneurship is a dynamic process that is always influenced by environmental factors. The environment in the form of role models also influences entrepreneurial interest, and these role models usually see friends or successful entrepreneurs who are idolized (Alma, 2013). Likewise, Putra (2012) stated that the first factors influencing students' entrepreneurial interest are the family environment and the environment around students, both their residence and social circles, that provide students with opportunities to practice entrepreneurship.

Social factors have a simple but significant influence on students' entrepreneurial intentions. It can be concluded that social support, such as support from family, colleagues, friends, and the community, directly influences students' entrepreneurial career preferences (Ahmed & Amir, 2011). The micro-social environment significantly influences the formation of women's entrepreneurial interest (Borrero, 2018), that "becoming an entrepreneur involves many things and often overlaps", and for women, this is a personal and public task. Thus, female entrepreneurs tend to combine both issues, namely personal issues with public issues, in their entrepreneurial activities, and they pursue legitimacy from people around them in the scope of domestic and business life. This legitimacy manifests through support such as advice and contacts (Stead, 2017).

Entrepreneurial attitude

One of the most important factors to have is attitude. Entrepreneurs always have a unique attitude that helps them to get something more than others (Wahyudi, 2012). The theory of planned behavior (TPB) explains that this model has three conceptually independent determinants of entrepreneurial interest: entrepreneurial attitudes, subjective norms, and estimated behavioral control (Nguyen, 2017). Global measures of attitudes towards entrepreneurship and entrepreneurial behavior reflect individual beliefs about how entrepreneurship as a whole is desirable or undesirable. In fact, the more positive the attitude towards entrepreneurship is, the more profitable it is for business creation (Shook & Bratianu, 2010). Attitudes towards entrepreneurship are an important aspect in predicting future entrepreneurial potential. Attitude towards entrepreneurship is an important aspect that helps shape potential entrepreneurs in the future, and students with the right attitude toward entrepreneurship will be more likely to rely on themselves to run their businesses immediately after graduation (Budiati et al., 2012).

Nguyen (2017) confirmed that the attitude toward entrepreneurship positively relates to students' entrepreneurial interests. Other studies support the relationship between entrepreneurial interest and individual attitudes towards entrepreneurship. Individual abilities, opportunity recognition, networks, and socio-cultural perceptions significantly affect entrepreneurial interest (Sargani et al., 2018). Several literature reveal that interest can be predicted through attitudes and the assessment of the extent to which attitudes influence behavior, subjective norms and perceived behavioral control factors. These three factors are primarily presented in the TPB theory related to personal behavior and are found to play a decisive role in entrepreneurial interest (Ferreira et al., 2012). Based on attitudes towards behavioral factors, this research measures individuals' likes, dislikes, beliefs, and opinions

regarding certain behaviors in such a way as to entrepreneurial intentions. Attitudes towards behavior are the extent to which a person has a favorable or unfavorable evaluation or assessment of behavior. Many researchers have found that the greater a person's attitude towards entrepreneurial behavior, the stronger the individual's interest in becoming an entrepreneur (Kickul et al., 2008). Personality attitudes are important determinants of entrepreneurial careers among college students (Awang et al., 2014). Personality traits have been the main determinants of entrepreneurial intentions (Douglas & Fitzsimmons, 2008; Ebewo et al., 2017; Zain et al., 2010).

Methodology

Research design, site, and participants

This research was conducted in Central Sulawesi in 2022. This research used quantitative with a survey approach of 356 students as participants who had programmed entrepreneurship courses. This research used quota sampling techniques by giving rations to each study program that has entrepreneurship courses in its curriculum.

This research consists of five variables: entrepreneurship education, the family environment, the environment outside the family, entrepreneurial attitude, and interest in entrepreneurship. Entrepreneurship education (X1) is a set of entrepreneurship learning provided to students. There are four indicators of entrepreneurship education in this research, namely entrepreneurship course material (x1.1), course assignments (x1.2), entrepreneurship lecture activeness (x1.3), and entrepreneurship field practice (x1.4). The family environment (X2) is where students are born, grow, develop, and interact intensely, including parents, husband, wife, and siblings. Indicators used for the family environment are parents encouraging them to have their own business (x2.1), husband/wife/brother encouraging them to have their own business (x2.2), Parents facilitating or helping with entrepreneurship (x2.3), and husband/wife/brother facilitating or helping with entrepreneurship (x2.4). The environment outside the family (X3) is a secondary environment where students interact with the outside world, including social media, school, residence, and work environment. Indicators of the environment outside the family are entrepreneurial interest, which are influenced by watching on the internet/social media (x3.1). Entrepreneurial interest is influenced by idol figures (x3.2). Entrepreneurial interest is influenced by friends (play or school) (x3.3). Entrepreneurial interest is influenced by neighbors/neighborhood (x3.4). Entrepreneurial interest can be influenced by friends (work) (x3.5).

Entrepreneurial attitude (Y1) is an assumption or view accompanied by student beliefs about entrepreneurship. There are five indicators of attitude towards entrepreneurship, namely being sure of success if entrepreneurship (y1.1), opening a business is easy (y1.2), entrepreneurship provides an opportunity to apply expertise (y1.3), entrepreneurship makes me have financial freedom (y1.4), and having your own business is more honorable than working for someone else (y1.5). Interest in entrepreneurship (Y2). Entrepreneurship is the willingness of students to have their businesses. The indicators of entrepreneurial interest are: currently, I already have my own business even though it is small (y2.1); I am happy to be involved in entrepreneurial activities (y2.2); intending to start a business soon before finishing college (y2.3), intending to start a business later after finishing college (y2.4); and intending to start a business after not getting another job (y2.5).

The research data type was quantitative, using a Likert scale. The Entrepreneurial Intention Questionnaire (EIQ) is widely used by researchers studying student entrepreneurial interest to measure entrepreneurial interest. The questionnaire contains five items, presented in a Likert-type format with a scale ranging from 1 (strongly disagree) to 5 (fully agree). A composite score is calculated by summing across items, with higher scores indicating higher entrepreneurial intentions (Liñán & Chen, 2009).

Data collection and analysis

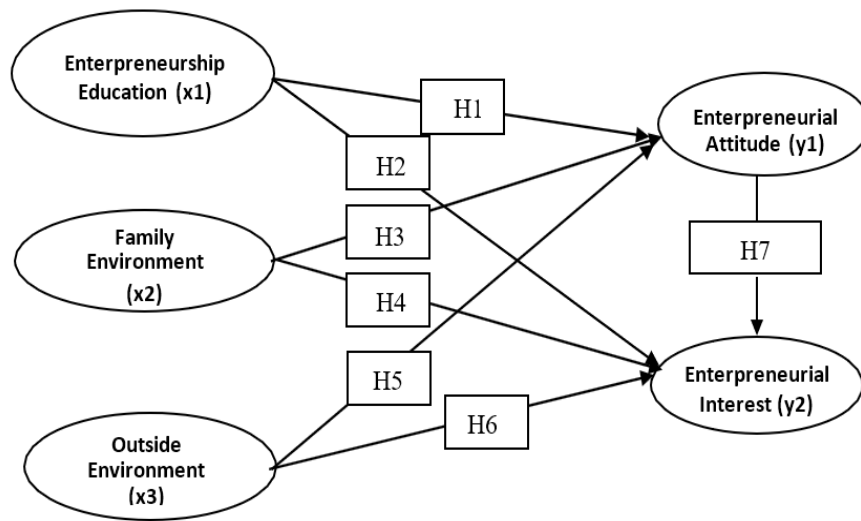
Data collection through questionnaires was distributed to all respondents; then, the collected data was processed and analyzed using statistical analysis. Statistical analysis methods are used to test hypotheses and draw conclusions, namely the Structural Equation Modeling (SEM) method with Linear Structural Relation (Lisrel) software. SEM is used in hypothesis testing because it can combine the measurement model with the structural model simultaneously and efficiently compared to other multivariate techniques (Kline, 2011). In addition, SEM is a set of statistical techniques that allow testing a series of relatively complex relationships simultaneously (Ferdinand, 2014). Data analysis shows the results of the validity and reliability tests of the variable research indicators. Table 1 shows that all indicators used meet reasonable and reliable standards so that data analysis can be continued. The following presents the results of the validity and reliability tests.

Table 1. Results of indicators validity and reliability tests

Estimator						Information	
Entrepreneurship Indicator		X1.1	X1.2	X1.3	X1.4	Valid Reliable	
Education(X1)	Loading factor (λ)	12,03	9,64	2,70	6,15		
	Reliability (1- δ)	5,97	8,19	13,27	12,77		
Family Environment(X2)	Indicator	X2.1	X2.2	X2.3	X2.4	Valid Reliable	
	Loading factor (λ)	3,08	2,96	10,99	12,80		
	Reliability (1- δ)	13,27	13,27	6,13	5,03		
Outside Family Environment(X3)	Indicator	X3.1	X3.2	X3.3	X3.4	X3.5	Valid Reliable
	Loading factor (λ)	4,67	2,98	3,02	10,49	11,94	
	Reliability (1- δ)	12,89	13,28	13,30	8,13	4,52	
Entrepreneurial Attitude(Y1)	Indicator	Y1.1	Y1.2	Y1.3	Y1.4	Y1.5	Valid Reliable
	Loading factor (λ)	7,10	5,19	6,75	7,16	6,84	
	Reliability (1- δ)	10,18	12,42	11,10	10,29	10,95	
Entrepreneurial Interests(Y2)	Indicator	Y2.1	Y2.2	Y2.3	Y2.4	Y2.5	Valid Reliable
	Loading factor (λ)	12,41	5,39	2,98	2,09	2,60	
	Reliability (1- δ)	5,32	10,92	12,99	13,17	13,08	

The structure of the analysis of research variables, namely the effect of entrepreneurship education, family environment, and the environment outside the family on attitudes and interest in student entrepreneurship, can be built using the model shown in Figure 1.

Figure 1. Structural research hypothesis model



Lisrel software can answer whether the model in Figure 1 appropriately describes the relationship between variables or has met the goodness of fit measures. The purpose of the measurement model points to the feasibility as a measurement instrument of the observed indicators representing latent variables (Kline, 2011). For good model fit, general guidelines suggest a chi-square norm cut-off value of less than 5, an RMSEA value of no more than 0.08, and a CFI value above 0.9 (Hair et al., 2010).

Table 2. Model fit criteria (goodness of fit measures)

GoF Size	'fit' Criteria	Estimate
Chi-Square (X^2)	<<<	901,61
P-Value	>0,05	0,070*
RMSEA	≤0,08	0,073*
sRMR	<0,05	0,01*
GFI	>0,90	0,92*
AGFI	>0,90	0,97*
NFI	>0,90	0,96*
PGFI	>0,90	0,95*
IFI	>0,90	0,93*
CFI	>0,90	0,91*
PNFI	>0,90	0,98*
CN	<N	119,24*

N = 356*Meets the criteria for a good model

Based on the criteria in Table 2, it turns out that all the estimated values obtained meet the criteria for model suitability, or "fit," so that the model built can be used and analyzed further.

Findings and Discussion

The characteristics of respondents are the characteristics of students who are respondents and are relevant to the indicators of the research variables being studied, including study program, semester, gender, and occupation of father and mother, as presented in Table 3.

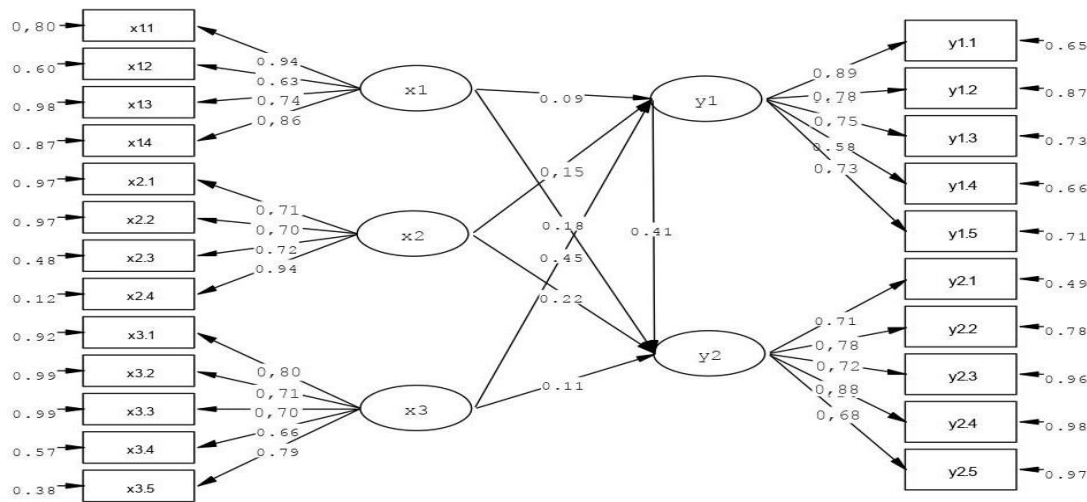
Table 3. *Respondent characteristics*

No	Characteristics	Total	Percentage (%)
1.	Study Program		
	- Civil Engineering	24	6,7
	- Government	49	13,8
	- Administrative	23	6,5
	- Law	47	13,2
	- Agribusiness	49	13,8
	- Management	114	32,0
	- Accounting	50	14,0
2.	Semester		
	3	42	11,8
	4	52	14,6
	5	105	29,5
	6	111	31,2
	7	46	12,9
3.	Gender		
	- Male	164	46,1
	- Female	192	53,9
4.	Father's occupation		
	- Civil Servant	79	22,2
	- Military	5	1,4
	- Entrepreneur	85	23,9
	- Farmer	127	35,7
	- Fisherman	8	2,2
	- Craftsman	5	1,4
	- Laborer	2	0,6
	- Other	45	12,7
5.	Mother's occupation		
	- Civil Servant	53	14,9
	- Entrepreneur	23	6,5
	- Farmer	53	14,9
	- Contract worker	1	3,0
	- Housewife	226	63,5

Measurement model

Based on the empirical model proposed in this research, hypothesis testing can be done by testing the path coefficient on the structural equation model.

Figure 2. Measurement model



Chi-Square=901.61, df=220, P-value= 0,07000 , RMSEA= 0,073

The following table summarizes the effect of each independent variable on the dependent variable directly (*direct*) and *indirectly* (*indirect*) by looking at the t-count value. The relationship between variables is significant if the t-count value exceeds the t-critical value (1.96).

Table 4. Summary results of hypothesis

No	Independent Variables	Dependent Variables	Estimate	t-count	Information
Direct influences					
1	Entrepreneurship Education (x1)	Entrepreneurial Attitude	0,09	1,28	Not Significant
2	Family Environment (x2)	Entrepreneurial Attitude	0,15	2,48	Significant
3	Outside Family Environment (x3)	Entrepreneurial Attitude	0,45	5,03	Significant
4	Entrepreneurship Education	Entrepreneurial Interest	0,18	2,52	Significant
5	Family Environment	Entrepreneurial Interest	0,22	3,00	Significant
6	Outside Family Environment	Entrepreneurial Interest	0,11	1,14	Not Significant
7	Entrepreneurial Attitude	Entrepreneurial Interest	0,41	3,92	Significant
Indirect influences through entrepreneurial attitude					
8	Entrepreneurship Education	Entrepreneurial Interest	0,04	5,02	Significant
9	Family Environment	Entrepreneurial Interest	0,06	9,72	Significant
10	Outside Family Environment	Entrepreneurial Interest	0,19	19,72	Significant

Entrepreneurship education on attitude

The results of this research indicate that the entrepreneurship education factor does not significantly affect students' attitudes toward entrepreneurship. This means that the entrepreneurship course materials and assignments that are followed are not able to convince students that they will be successful if they are entrepreneurs; opening a business is easy, entrepreneurship provides opportunities to apply their skills, entrepreneurship gives students financial freedom, and having their own business is more honorable than working for someone else.

In contrast to previous research, the impact of education on entrepreneurship has been recognized as one of the fundamental factors that help young people understand and foster entrepreneurial attitudes. There is a need to understand how to develop and nurture potential entrepreneurs, even when they are students. Participation in entrepreneurship education positively influenced students' intention to become entrepreneurs by changing their attitude toward entrepreneurship (Ebewo et al., 2017).

Entrepreneurship education includes entrepreneurship course materials, course assignments, and entrepreneurial field practice. Entrepreneurship education does not significantly affect attitudes, possibly due to ineffective learning methods that are still more theory than practice, which are still more in the classroom than in the business field. Therefore, students consider learning entrepreneurship useless because they need concrete evidence. Purnomo (2015) stated that students who view learning as helpful will have a positive attitude toward learning. The implication is that the university curriculum should be redesigned to stimulate an environment conducive to developing a positive attitude towards entrepreneurship by giving greater weight to field practice. Although entrepreneurship education does not significantly affect attitudes, entrepreneurship education and entrepreneurial attitudes positively and significantly affect student interest in entrepreneurship. This finding can be a benchmark for the formulation of entrepreneurship education policies. Future generations can have a better-planned education that helps improve their personality attitudes towards entrepreneurial career development.

Entrepreneurship education is an interest

The results of this research indicate a positive and significant effect of entrepreneurship education on student entrepreneurial interest; this means that entrepreneurship course materials, course assignments, lecture activeness, and entrepreneurial field practice can stimulate students' interest in having their own business, even though it is small, and be able to encourage students to enjoy being involved in entrepreneurial activities and interested in starting a business both before completing college and after completing the study period.

This research is the same as many previous studies that reveal entrepreneurship education has a positive effect on student entrepreneurial intentions (Odor et al., 2019; Patrick et al., 2017), but in contrast to Tommy et al. (2016), that entrepreneurship education in public universities is still not able to directly increase students' entrepreneurial interest. Entrepreneurship education lowers students' interest in entrepreneurship. However, after participating in entrepreneurship education, students can still benefit by increasing their self-

perception of entrepreneurial ability. Tommy et al. (2016) continued that entrepreneurial role models in the entrepreneurship education process increase students' entrepreneurial interest by mediating desired desirability and perceived feasibility. To be more effective, entrepreneurial role models must present role models with characters close to students. The closeness of the role model's character will facilitate students' identification and reflection. In addition, for the entrepreneurial role model to optimally increase students' interest, the role model is expected to increase the intensity of interaction with students to increase the transfer of knowledge and skills.

The family environment and entrepreneurial attitude

Students are born, grow, develop, and interact intensely in the family environment, including parents, husbands, wives, and siblings. Of the four indicators of the family environment used for the family environment, the fourth indicator gives the most outstanding contribution to forming family environment variables, namely, the father/mother facilitates or helps entrepreneurship. The research results indicate that family environment partially significantly affects entrepreneurial attitudes. In contrast, research in Pakistan revealed that no support was found to show the effect of family background on entrepreneurial intention among students. Because entrepreneurship and entrepreneurial attitudes are not fully brought from birth, education can perfect them (Soomro et al., 2016). The positive and significant influence of the family environment on the formation of entrepreneurial attitudes means that the family environment is an antecedent of entrepreneurial attitudes; this is related to the function of the family as the first and foremost education center in a person's life. This research aims to educate Indonesian families about the importance of fostering children's positive attitudes toward entrepreneurship; entrepreneurship can guarantee children's future. Many parents are pessimistic about entrepreneurship and hope their children attend college and become civil servants.

The family environment and entrepreneurial interest

Not only attitudes—it turns out that the family environment also significantly affects student entrepreneurial interest; this contradicts the research results that the family environment does not determine students' interest in becoming entrepreneurs and that self-employed parents do not necessarily influence students' decisions to become founders or successors of their parents' businesses (Cano & Tabares, 2017). Because the family is a primary group whose interaction between its members is intense and informal, the family is very effective in fostering interest in entrepreneurship; the family's active role in facilitating and helping their children, siblings, or spouses is needed—especially capital support, which is often an obstacle for students. Research in Pakistan shows that students are willing to start their businesses if given the opportunity or financial support (Awan & Ahmad, 2018). Family factors influence the entrepreneurial interest of undergraduate students as a source of business capital (Olszewska, 2015).

Family factors are also crucial as an axis for the formation of student entrepreneurial interest because the family functions as the first and foremost madrasa for children; the family

functions to instill values in each child from an early age, such as the values of independence, hard work, and responsibility, which can affect children's awareness to meet their own needs in the future. Puspitaningsih (2016) proved that if the family environment uses an entrepreneurial mindset, the child's mindset will be the same as his parent's.

In Indonesia, parents are role models for their children, so the behavior displayed by parents can foster children's desire to do the same. These findings reinforce previous findings (Putra, 2012) that the first factor influencing the entrepreneurial interest of students in Indonesia is the family environment factor. In addition, the environment in the form of "role models" affects the interest in entrepreneurship. *Role models* usually see parents and siblings (Alma, 2013).

The outside family environment's attitude

The results showed that the external family environment partially significantly affected students' entrepreneurial attitudes, the dominant influence variable. In this context, the environment outside the family is an antecedent of entrepreneurial attitudes; the higher the interaction of students with the environment outside the family, especially the work environment, idol figures who are active in the business world, and interaction with social media, the more it will foster their positive attitude towards entrepreneurship. Vice versa, the less interaction students have with the environment outside the family, the less positive their attitude towards their entrepreneurship will be.

In the digital era, where student interaction with social media is very high, what is watched on the media is very likely to influence attitudes; social media also provides convenience in doing business online, so students are influenced to take advantage of this convenience. The existence of social media has affected society's social life. Changes in social relations, or changes to the balance of social relations, affect the social system, including values, attitudes, and behavior patterns among groups in society. Positive social changes include the ease of obtaining and conveying information and gaining social and economic benefits (Cahyono, 2016).

The outside family environment of interest

The environment outside the family is a secondary environment where students interact with the outside world, including social media, idol figures, the school environment, the residential environment, and the work environment. Of the five indicators of the environment outside the family, the results showed that social media and the work environment contributed most to forming the variable environment outside the family. Based on the research results, the environment outside the family does not significantly affect interest. In contrast to Putra (2012), the first factors influencing student entrepreneurial interest are the environmental factors around students, residence, and association, which provide students with entrepreneurial practice opportunities.

The environment outside the family is only influential if moderated by the variable attitude toward entrepreneurship; the student's attitude significantly affects the interest in entrepreneurship. This indirect effect provides substantial significance. Therefore, it takes role

models such as successful entrepreneurs and students to idolize and foster interest. This research supports Alma's opinion that the environment in the form of "role models" also affects the interest in entrepreneurship. These role models usually see friends or successful entrepreneurs who are idolized (Alma, 2013).

Attitude toward entrepreneurial interest

Attitude is an assumption or view accompanied by student beliefs about entrepreneurship. There are five indicators of attitude towards entrepreneurship, namely, "confident that I will be successful if I become an entrepreneur, opening a business is easy, entrepreneurship provides an opportunity to apply my skills, Entrepreneurship gives me financial freedom, and having my own business is more honorable than working for someone else." The results showed that attitude has a significant positive effect on entrepreneurial intention. Researchers have developed a conceptual framework where the entrepreneurial intention is related to variables such as attitude, subjective norm, and perceived behavioral control. The attitude towards entrepreneurship depends on achievement, self-esteem, personal control, and innovation. In addition, developing attitudes through achievement, self-esteem, personal control, and innovativeness can support the development of individual intentions. Soomro and Shah (2015) found that individual attitudes positively and significantly influence entrepreneurial interest. This research shows a significant effect of attitude towards entrepreneurship and entrepreneurial intention (Fragoso et al., 2019; Jena, 2020; Muhammad et al., 2015; Phuc et al., 2020).

Attitude directly affects students' interest in entrepreneurship. Participation in entrepreneurship education positively influenced students' interest in becoming entrepreneurs by changing their attitudes toward entrepreneurship and improving their entrepreneurial skills (Ebewo et al., 2017). This research supports developing individual student attitudes toward entrepreneurship interest because the more positive students' attitudes towards entrepreneurship, the more they are interested in choosing entrepreneurship as a career choice. One indicator of attitude is the view that entrepreneurship can guarantee success in the future. Therefore, building confidence in the success of self (*self-efficacy*) is necessary to become an entrepreneur as students' primary motivation. Since learning and entrepreneurship development should be seen as a process that depends on and is influenced by social and environmental factors, attitude as a mediating variable also shows a significant effect; the research results support recent research, which reveals there is complete mediation between entrepreneurial attitudes and entrepreneurial interest during COVID-19 among university students (Muhammad et al., 2015).

The interaction of entrepreneurship education with the environment on student entrepreneurial interest

Based on the research results, a model of the influence of the environment outside the family, family, and entrepreneurship education on the attitudes and entrepreneurial interests of students can be developed, as shown below.

Figure 3. *The interaction model of entrepreneurship education with the environment on attitude and student entrepreneurial interest*

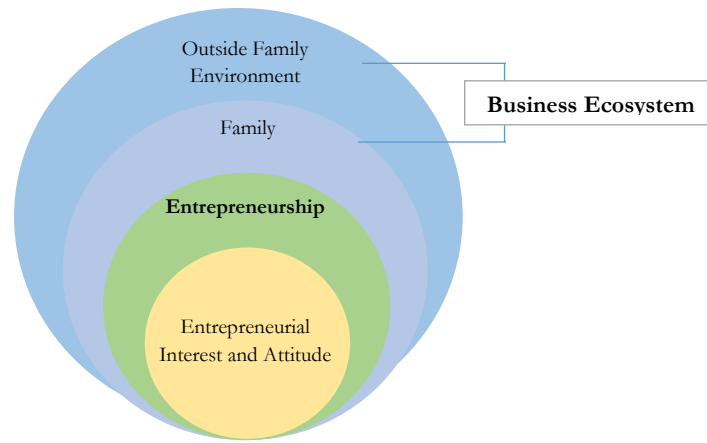


Figure 3 shows that students' entrepreneurial attitudes and interests are influenced by the interaction of several factors, namely the environment outside the family, which contributes the most, the family environment, and entrepreneurship education on campus, which contributes the least. These three factors synergize integrally in fostering entrepreneurial interest and ability among students. Because entrepreneurship education alone cannot partially encourage students' interest in entrepreneurship, there is a more significant influence, namely the environment outside the family and the student's family, where they interact intensely every time. Furthermore, these two factors need to be considered in entrepreneurship learning.

Conclusion and Recommendations

Based on the research results, entrepreneurship education does not significantly affect attitudes. It is only significant to the entrepreneurial interest of students. The family environment has a significant effect on both attitude and interest. While the environment outside the family is not significant to interest, it significantly affects the attitude. It is this attitude that directly and significantly affects interest. Furthermore, entrepreneurial interest is one of the main factors contributing to entrepreneurship's formation, growth, and development. This research implies that it is necessary to revise the entrepreneurship curriculum so that there are more entrepreneurial practices or internships than theory to increase student interaction with the work environment and encourage students to utilize social media to do business. Universities can create entrepreneurial interest accelerator programs by providing students with initial capital and entrepreneurial mentoring programs. Establish communication with students' families and alumni to foster a positive attitude towards entrepreneurship. This research limitation is that data collection only focuses on one province, Central Sulawesi.

Disclosure statement

This paper also describes our original work and is not under consideration by any other journal. All authors approved the manuscript and this submission. The three co-authors do not have any conflict of interest regarding this manuscript. This document was reported as the result of the research we conducted as one of the requirements at our responsibility as a researcher at our university.

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