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Intrapreneurship: As the outcome of entrepreneurship education among business students

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Abstract: Nowadays, entrepreneurship is a subject that attracts attention for all majors in higher education. However, the determination of learning outcomes in entrepreneurship education is still debatable, especially in non-entrepreneurship majors. This study aims to 1) examine the role of attitude toward entrepreneurship, which is proxied by the entrepreneurial mindset, towards intrapreneurship belief among business students and 2) measure how motivation affecting the attitude toward entrepreneurship among business students. Researchers collecting the data using surveys among business students at the State University of Medan. The survey was conducted using an electronic questionnaire designed with a 7-Likert scale. The distribution of the questionnaires was carried out using the snowball technique in student study groups. With the simple random sampling technique, the researcher collected 205 data, which further analyzed using variance-based SEM. The results indicate that the cognitive component was a key instrument in forming intrapreneurship belief among students. Meanwhile, motivation is a determining factor that shapes attitude toward entrepreneurship. This study recommends a meaningful learning process that shapes entrepreneurial cognition. This is because learners are now instilling entrepreneurship in themselves, no longer through their beliefs of experience and family background, but through the skills, they have learned and explained rationally.

Subjects: Entrepreneurship; Teaching & Learning; Continuing Professional Development

Keywords: Entrepreneurship; Cognition; Innovation Management; Intrapreneurship

1. Introduction

Studies related to learning outcomes in Entrepreneurship Education still produce long discussions (Karlsen et al., 2011). Some researchers demand students to establish new businesses as a learning outcome, while other studies limit this to the formation of an entrepreneurial mindset in students. Støren (2014) categorizes the learning outcome variations into four, namely: 1) producing transformative experiences in creating an entrepreneurial mindset in students; 2) have students who can develop new businesses/start-ups or impart skills for this purpose; 3) Produce the ability and knowledge of students in any field to commercialize their intellectual assets; 4) Generate additional insights provided to business school students. Of the four variations, Støren (2014) tends to prefer the third option to be applied to entrepreneurship education, which is carried out in undergraduate programs in art, science, engineering, and business, of course outside of the entrepreneurial undergraduate program. Likewise, commercializing

intellectual assets still boils down to two things: producing new products that are sold through new start-ups or creating new knowledge implemented in existing businesses. The majority of entrepreneurship researchers are of the view that ownership of intellectual assets should ideally result in innovation to initiate new business ventures or new start-ups (Farrukh et al., 2019; Honig & Samuelsson, 2020; L. Li & Wu, 2019; Liguori et al., 2020a; Rodríguez Gutiérrez et al., 2019; Sang & Lin, 2019; Santos & Liguori, 2019; Wang et al., 2019). This is because the presence of a new business or start-up will immediately generate new career opportunities, increase competitiveness, trigger product diversification and differentiation, control unemployment, and of course, spur economic growth (Frederiks et al., 2019; Honig & Samuelsson, 2020; Jena, 2020; Liguori et al., 2020a; Rodríguez Gutiérrez et al., 2019; Wang et al., 2019). In Indonesia itself, Small-Medium Enterprises (SMEs) carried out entrepreneurial practices (SMEs) have been able to contribute to GDP by 59.08% in 2012 and 60.34% in 2013 (Kemenkop, 2013). This figure is undoubtedly significant and shows the strategic importance of the entrepreneurial sector in economic growth.

However, it cannot be denied that business schools have a profile of graduates who are not intended to become new entrepreneurs (Jena, 2020). Some business schools that have determined the outcome of entrepreneurship education to produce new entrepreneurs have not been able to guide most of their alumni to establish new businesses, meaning that most of their alumni are still looking for jobs in existing companies or corporate (Brindley & Ritchie, 2000; Hytti et al., 2010; Moy & Lee, 2002; Roffe, 1996). This is only natural because entrepreneurship education in the non-entrepreneurship department is only taught with limited credit and courses. There is not enough time allocation available to assist students in producing new businesses according to their fields of expertise. Although, various developed and developing countries in the world believe that entrepreneurship education in higher education can instill a sense of innovation that stimulates the growth of new entrepreneurs (Catherine Forje, 2019; Farrukh et al., 2019; Hytti et al., 2010; Jena, 2020; Kuratko et al., 2020; Sekaran & Bougie, 2016; Støren, 2014; Wang et al., 2019).

This study aims to examines the role of attitude toward entrepreneurship, which is proxied by the entrepreneurial mindset towards intrapreneurship belief in business students. An entrepreneurial mindset is a knowledgeable content that is implanted in business students during lectures on entrepreneurship courses. This study uses intrapreneurship as an outcome of entrepreneurship education because establishing a new business is not a graduate profile for most undergraduate programs in business, management, accounting, and economics in Indonesia. Although the presence of entrepreneurship courses is intended to open up opportunities for the presence of new entrepreneurs. However, most studies also still define entrepreneurial intention as an outcome of entrepreneurship education (Fernández-Pérez et al., 2019; Jena, 2020; Kim & Park, 2019; L. Li & Wu, 2019; Liguori et al., 2020a, 2020a; Sang & Lin, 2019; Santos & Liguori, 2019; Støren, 2014). Although The Theory of Planned Behavior (TPB; Ajzen, 1991), (Social Cognitive (SCT; Bandura, 2001), and Social Cognitive Career Theory (SCCT; Lent & Brown, 2002), generally justify that behavioral intention is the determinant of behavioral action, but still entrepreneurial intention has not reached the actual action to do business.

On the other hand, intrapreneurship is believed to be an individual value capable of driving the birth of innovation, which is a crucial antecedent of entrepreneurial success (Ağca et al., 2012; Farrukh et al., 2019; Honig & Samuelsson, 2020; Z. Li, 2016). Intrapreneurship in individuals is shown by the ownership of creative thinking, critical thinking, collaborative thinking, initiative skills, decision-making skills, and leadership skills (Farrukh et al., 2019). Ownership of intrapreneurship in individuals has been empirically proven to be able to innovate existing businesses (Ağca et al., 2012; Farrukh et al., 2019; Honig & Samuelsson, 2020) and also is a crucial requirement of the birth of an entrepreneurial attitude (Honig & Samuelsson, 2020). Therefore, researchers believe that intrapreneurship is a more critical skill to aim for as an outcome of entrepreneurship education in business students. Intrapreneurship prepares students to be competitive in working in existing corporations, developing existing MSMEs, or building new start-ups. Instead of making

entrepreneurial intentions, this study chooses intrapreneurship as a personal value that alumni can use for various career directions they choose.

Furthermore, this study uses motivation as an antecedent of attitude toward entrepreneurship. Given the breadth of faculty' expectations of the implementation of entrepreneurship education and orientation and initial knowledge of students, the motivation variable becomes important (Hytti et al., 2010). Because entrepreneurship material can be beyond the profile of graduates as previously explained. Meanwhile, students have a career orientation that forms their motivational background (Down, 1999; Hytti et al., 2010). Even though it is concentrated on intrapreneurship, the cultivation of intrapreneurship in students holds big expectations in student career orientation going forward (Honig & Samuelsson, 2020). In comparison, motivation can direct students' actions in specific ways and has implications for goal orientation; in this case, their career (Hytti et al., 2010; Sprinthall & Sprinthall, 1981). Students need to have strong motivation, which is directed by entrepreneurship courses on attitude toward entrepreneurship, which will form intrapreneurship beliefs. This study is essential for policymakers and educators at universities in providing an exceptional understanding of the uniqueness of students and specific alternatives to deal with this uniqueness so that entrepreneurship education that is implemented can achieve its goals (Jena, 2020). Besides, the goal-setting of entrepreneurship education must be in a specific and standardized framework referring to the achievement of the profile of graduates of a study program so that its usefulness can be measured in the main areas of expertise taught in specific study programs, such as in this study the fields of economics and business.

2. Theoretical framework

2.1. Intrapreneurship and higher education

Intrapreneurship can be described as entrepreneurial involvement in developing the company's mentality and innovation. The underlying theory related to intrapreneurship has been discussed by Pinchot III (1985), revealing that intrapreneurship is the result of imagination that takes responsibility for creating future innovations. Intrapreneurs are an important part of the tendency to become independent entrepreneurs, which will make someone can manage a team to produce ideas and methods to develop profitable business (Kirby, 2006). In this case, university students need the intrapreneur spirit to develop their intentions, attitudes, goals, aspirations, and expected responses toward opening new businesses (Ferreira et al., 2017). Additionally, intrapreneurship also depends on the existence of an innovative environment owned by the individual (Morris and Kuratko, 2002). Therefore, intrapreneurship is a valuable spirit demanded among aspiring entrepreneurs or professionals and needs to be trained gradually. Then the university develops that spirit among students through the formal course.

Interestingly, entrepreneurship education is trained in all of the study programs at the universities in Indonesia. The goal is for the university to induce entrepreneurial thinking in their student. An entrepreneur will be able to look at things in a new way, calculate and take risks, and accept failure in making the decision (Rambakus et al., 2020). Universities have to facilitate their student to learn those skills by accelerating intrapreneurs of their student (Rambakus et al., 2020). Therefore, the learning objectives of entrepreneurship education are not to obligate the student to become an entrepreneur but to introduce the way of entrepreneur thinking as that way of thinking is increasing in demand in this millennial and digital era which is becoming more uncertain and disrupted by technology. Wei et al. (2019) argue that entrepreneurship education has been recognized as one of the essential determinants in influencing every student's career decision at the University. So, the university has to teach entrepreneurial thinking, which contains intrapreneurship spirits for its students (Delić et al., 2016). It will help the student's readiness to enter the entrepreneur or professional environment in the current era, no matter their domain of study program.

2.2. Motivation on entrepreneurship education

Entrepreneurship is a new phenomenon for its development in academies, including universities. The phenomenon considered an essential part of changing business management is important, especially in creating entrepreneurial thinking patterns among students through proper entrepreneurial education according to current needs. Entrepreneurship education has been recognized as one of the essential determinants in influencing every student's career decisions at the University (Wei et al., 2019). Introducing modern concepts and approaches to entrepreneurship in higher education can influence students' perceptions of how to do entrepreneurship and have the awareness to make choices in the future (Pettersen et al., 2020). Entrepreneurship education at universities is the most effective way to create jobs, increase competitiveness, and improve higher education quality towards excellence (Kassean et al., 2015). Several kinds of literature have explained that entrepreneurship education shows several potential learning outcomes that create university entrepreneurship programs (Hytti et al., 2010). One of the important aspects of entrepreneurship education at universities is students' motivation to participate in a series of activities (Kuratko et al., 2020).

Motivation is the encouragement of individuals with a motive for action, which implies that behavior is goal-oriented (Peltonen & Ruohotie, 1992). Motivation emphasizes both intrinsic and extrinsic factors as the primary source of inspiration, including behavior that encourages the influence of outside and environmental factors in stimulating motivation. Individuals are motivated to perform tasks that they are rewarded for doing. Appreciating and learning experiences can change the direction of student motivation—intrinsic and extrinsic necessary to maintain motivation (Good & Brophy, 1990). Motivation emphasizes the stability of a person's behavior, which is influenced by specific situations and intrinsic and extrinsic factors. These two factors explain individual motives for having particular motivations; specific students motivated to take entrepreneurship education form components of entrepreneurial behavior (Luis Arquero et al., 2015).

Fenech et al. (2019) have identified four dimensions of entrepreneurial attitudes: the need for achievement, personal control over behavior, innovation, and self-esteem. Personal control over entrepreneurial behavior is the individual's perceived power and influence on business creation. This aspect measures every aspect of entrepreneurial attitudes in three dimensions, including affection (feelings and emotions), cognition (thoughts and beliefs), and conation (actions and behavior). The combination of all these dimensions builds the individual's general attitude towards entrepreneurial behavior. Therefore, the components of significant attitudes towards entrepreneurship education are cognitive, affective, and behavioral. The behavior component is an individual's desire for student behavior intentions such as attitudes, goals, aspirations, and expected responses to attitudes taken, namely entrepreneurship courses (Jena, 2020). The results of the research (Ferreira et al., 2017) explain that motivation as an encouragement to start a new business carried out by university students has a positive effect on the behavior of young entrepreneurs who dare to think about opening a business. The study (Lima et al., 2011) explains that student motivation in starting a company does not directly impact the behavioral component. Thus, the hypothesis is accepted:

H1: Motivation has a positive effect on the behavioral component

Sivarajah and Achchuthan's (2013) research has developed entrepreneurial activities using McClelland's model. The McClelland model predicts other types of motivation, such as the need for affiliation and power. Various empirical studies explain that the need for achievement is the dominant factor among other models. The need for achievement is a motivational pattern expressing self-confidence, initiative, and clearly defined goals to support increased business results. On the other hand, Schumpeter (2002) argues that motivation to start a business is related to economic factors. This occurs due to competitive market conditions, lack of community income

and challenging employment opportunities after college encourage graduate students to become young entrepreneurs. Students want to achieve challenging goals and overcome obstacles, enabling them to succeed due to their actions. However, the successful use of skills is required during entrepreneurial education to increase personal capacity, including knowledge, attitudes, and behaviors that strengthen self-confidence (Frese et al., 2014; Olufunso, 2010).

Furthermore, although motivating students, financial returns have not been linked to their primary motivation (Campos Lima et al., 2011). Business is dynamic and uncertain. Students usually feel uncomfortable when they fail to apply their theoretical knowledge as employees or when opening a new business. According to that circumstances, Omorede (2013) explains that achievement is also considered an essential motivation among scholars. Therefore, this situation leads students to include several motives in doing business, including financial, achievement, social, environmental, etc. (Bornstein, 2004; Frese et al., 2014; Olufunso, 2010; Omorede, 2013). However, whatever the motives, students still need the knowledge and experience to identify and explore more business opportunities and run them well (Baron & Ensley, 2006). It indicates that every motive of entrepreneurship will lead the students to learn some knowledge to practice. The motives will drive students to realize that they need attitudes, leadership, innovation, perceived control, self-confidence, and experience to do every motive of entrepreneurship (Hooks, 2010). If students have that comprehensive knowledge, they will be satisfied with their project, accept the bad situation and see their failures as opportunities for growth (Hooks, 2010).

Walter and Heinrichs (2015) has found that the cognitive component becomes essential as a variable owned by students who take entrepreneurship learning. The cognitive part consists of beliefs, thoughts, and knowledge about an object of attitude (Entrepreneurship Education). Opinions may be right or wrong, true or not true; all it takes is for that belief to exist. Likewise, ideas are detailed thoughts that a person has about something. Motivation and the cognitive component are very close to creating future students to become young entrepreneurs. Martinsen and Furnham (2019) study explained that a person's motivation affects a person's thinking and beliefs, which come from cognitive-based. Cognitive is the knowledge that their motivation will influence. Thus, we developed the following hypothesis:

H2: Motivation has a positive effect on the cognitive component

Individual motivation as young entrepreneurs is very complex and has produced much literature (Hessels et al., 2008; Krueger et al., 2000; Segal et al., 2005). In this literature, it is common to find these motivations categorized as a push or pull factors or a mix of both. Push factors can include unpleasant work or unemployment, while pull factors can include the need for achievement, autonomy, and financial success. Individuals driven into entrepreneurship are often labeled as motivated by hunger, and those who are drawn into entrepreneurship as motivated by opportunity. According to (Stephan et al., 2015), need-opportunity differentiation, also called push-pull, is the longest-standing conceptualization of entrepreneurial motivation to determine young entrepreneurs' behaviors.

Attitudes and actions were taken by motivated young entrepreneurs based on their experiences, including in higher education (Amorós et al., 2020). Higher education provides knowledge and lessons on becoming young entrepreneurs to help students develop ideas through entrepreneurship learning. This is students' emotional reaction and feelings toward the object of attitude (Entrepreneurship Education). According to (Cavazos-Arroyo et al., 2017), the desire felt from entrepreneurship and education can be formed through intuitive thinking. That means the perceived value of entrepreneurship is built through practical attitude assessments. The phrase "I Love Entrepreneurship Education Courses" or "I hate Entrepreneurship Education courses" is an expression of the emotional evaluation of entrepreneurship education (Pulka, Rikwentishe, &

Ibrahim, 2014). People also evaluated the same feelings and emotions differently due to unique motivations, personalities, past experiences, reference groups, and physical conditions (Cavazos-Arroyo et al., 2017). Some individuals/students may have positive feelings towards entrepreneurship education, while others may respond with adverse reactions. When students attend lectures, do they motivate to produce an affective component to become young entrepreneurs? The study (Hytti et al., 2010) explains that a person's motivation will affect their attitude. The higher your motivation, the higher your perspective to make decisions. Thus, the hypothesis is formulated as follows:

H3: Motivation has a positive effect on the affective component

2.3. Attitude toward entrepreneur

Attitude is a habit of reacting to the situation at hand. The term "attitude" is generally used for an opinion representing a person's overall tendency toward an object, idea, or institution. The form of attitude is may positive, negative, or neutral, as well as inactive & more general. However, entrepreneurship philosophy defines it as the extent to which a person perceives entrepreneurial behavior and its consequences as valuable, practical, and beneficial (see: Ajzen, 2002). Duell & Schommer-Aikins (2001) reflect the individual's knowledge by assessing the object's attitude. As individuals grow up in a community, an individual forms opinions is associated with a reference group. Therefore, each individual learns and formulates beliefs according to their social interactions. In this case, entrepreneurial education is the society of entrepreneurship designed by the university to encourage students to the beneficial belief of their intrapreneurship.

A student's belief in Entrepreneurship Education courses can help him develop beneficial components of this attitude over time. Emotional reactions of students towards the object of attitude (Entrepreneurship Education). The perceived value of entrepreneurship is built through practical attitude assessments. People evaluate the same feelings and emotions differently due to unique motivations, personalities, past experiences, reference groups, and physical conditions (Cavazos-Arroyo et al., 2017). Some individuals/students may find individuals/students towards entrepreneurship education, while others may respond with adverse reactions. The behavioral component reflects the desire of students' behavioral intentions in the form of goals, objectives, and aspirations, as well as expected responses to the object of attitude (Entrepreneurship Education), for example, a student who intends to become an entrepreneur before or after graduation can develop behaviors towards young entrepreneurs and have a strong interest. Big on entrepreneurship and education.

Entrepreneurship education has been high on the agenda for the last ten years. Many countries, including Indonesia, have conducted entrepreneurship education courses at universities. The plan aims to cultivate innovative and entrepreneurial skills and encourage more young people to set up their student businesses. A good education for entrepreneurship will positively impact students' intrapreneur spirit when participating in a series of entrepreneurship courses. Entrepreneurship education includes a variety of information and various learning processes (David et al., 2010). Entrepreneurship and intrapreneurship are based on entrepreneurial behavior and activities, namely, discovery or creation. Kirby & Ibrahim (2011) views intrapreneurship as a restoration in the field of entrepreneurship that shapes imagination and quickly generates new ideas because of its curious nature. Pinchot III (1985) characterizes intrapreneurs as goal-oriented and self-motivated. Unlike entrepreneurs, this occurs due to motivation by appreciation and organizational recognition. The author believes intrapreneurs must choose for themselves and pursue students' ideas. From this viewpoint, observations show that students tolerate risk, failure, and mistakes when independently determining ideas. To motivate such practice, students in the same environment can be encouraged to come together, tell stories, and practice a new business to manage. Students can identify and pursue opportunities in the known entrepreneurship education learning process.

The problem is that many parents think this is too practical and do not have the time and patience to try their children's creativity. Intrapreneurship describes entrepreneurial behavior within organizational boundaries (Farrukh et al., 2016). In particular, a person's innovative, risk-taking, and proactive behavior in determining business opportunities. In the literature, the terms used for entrepreneurship in existing organizations include entrepreneurial orientation or corporate entrepreneurship, which causes some misperceptions when studying it (Mustafa et al., 2015; Valsania et al., 2016); therefore, it is essential to clarify that corporate entrepreneurship and entrepreneurial orientation occurs at the organizational level and is monitored and planned in a "top-down" process (Edú Valsania et al., 2016). Contrary to this, intrapreneurship is understood at the individual level as a "bottom-up" process of a person's spontaneous behavior (Valsania et al., 2016). Intrapreneurship is a process in which students pursue business opportunities regardless of their resources for business renewal, profitability, and growth (Alpkan et al., 2010; Stevenson & Jarillo, 2007). Intrapreneurship includes three main dimensions: innovation, risk-taking, and proactivity. Design is an individual tendency to create new ideas; Risk-taking is defined as the tendency of individuals to take risks to benefit the business organization, and proactive is the anticipation and action taken on future needs, challenges, and changes that lead to new opportunities (Letonja et al., 2016; Valsania et al., 2016).

Farrukh et al., (2019) explains that Intrapreneurship is conceptualized as an entrepreneurial spirit owned by a person. When someone starts a business, their intrapreneurship spirit must provide ideas and ideas related to the company that is about to begin. The relationship between Intrapreneurship and attitude toward a new model in entrepreneurship can be positive for development (Kuratko et al., 2020). Attitude toward measures every aspect of entrepreneurial attitudes in three dimensions, including affection (feelings and emotions), goals (thoughts and beliefs), and conation (actions and behavior). Combining these dimensions builds individual general attitudes toward entrepreneurial behavior, including Intrapreneurship (Honig & Samuelsson, 2020). The components of significant attitudes towards entrepreneurship education are cognitive, affective, and behavioral. The various dimensions of the attitude will influence students' Intrapreneurship in starting a new business (Jena, 2020).

The behavior component is an individual's desire for student behavior intentions such as attitudes, goals, aspirations, and expected responses to the attitudes taken, namely the intrapreneur spirit of students in opening new businesses (Ferreira et al., 2017). Baron and Ensley (2006) found that students have the experience to identify and explore more business opportunities. Hooks' (2010) research compared the attitudes, leadership, innovation, perceived control, and the self-confidence of new and experienced entrepreneurs and how it relates to life satisfaction. The cognitive component becomes essential as a variable owned by students who take entrepreneurship learning. Furthermore, the mental part consists of beliefs, thoughts, and knowledge about an object toward intrapreneur attitudes (Martinsen & Furnham, 2019). Therefore, the affective component touched through intrapreneurs built through practical attitude assessment. The affective component is an expression of the emotional evaluation of entrepreneurship education received at the University (Ibrahim et al., 2019). The result of the same feelings and emotions differ from unique motivations, personalities, past experiences, reference groups, and physical conditions (Cavazos-Arroyo et al., 2017). Thus, the hypothesis is formulated as follows:

H4: Behavioral Component has a positive effect on Intrapreneurship

H5: Cognitive Component has a positive effect on Intrapreneurship

H6: Affective Component has a positive effect on Intrapreneurship

3. Method

3.1. Research instrument

The research instrument was adapted from several previous studies, namely Hytti et al. (2010), Jena (2020), and Støren (2014). The instrument adapted from Hytti et al. (2010) is an instrument that measures motivation, while the instrument adapted from Jena (2020) is an attitude toward entrepreneurial instrument consisting of the constructs Behavioral Component (BC), Cognitive Component (CC), and Affective Component (AC), and instruments used in The adaptation of Støren (2014) is an instrument used to measure Intrapreneurship Belief. The instrument was adopted and adapted to the conditions of the respondents and the objectives of this study. Before being used to collect data, the researcher invited five entrepreneurship lecturers at the Faculty of Economics, Unimed, to perform face validity on the adapted instrument (Cooper et al., 2006). Furthermore, the instrument was designed to be a questionnaire containing five parts, namely 1) the demographics of the respondents; 2) entrepreneurship background; 3) motivation measurement instrument; 4) measuring instrument of attitude toward entrepreneurship, and 5) intrapreneurship measurement instrument. The measuring instrument is designed with a 7-point Likert scale with a scale order of strongly disagree (SD), disagree (DA), somewhat disagree (SDA), neutral (N), partially agree (SA), Agree (A), strongly agree (SA). The questionnaire is then uploaded to the network via google form to be easily accessed electronically by respondents (Cooper et al., 2006). In the google form set, it is set that only students with a student of unimed email can access the questionnaire. This is done to control the input responses from students of the Faculty of Economics, Unimed.

3.2. Subject and data collection method

This study was conducted to standardize the instructional design and learning outcomes of entrepreneurship education in business schools represented by the Faculty of Economics, Unimed. Therefore, the subject of this research is students of the Faculty of Economics, University of Medan. This research was conducted with a survey method to capture students' perceptions of entrepreneurial education they have experienced and its learning outcomes. The survey method was chosen to meet the external validity because the intended learning outcomes are general in every department in business school (Cooper et al., 2006; Sekaran & Bougie, 2016). Therefore, this study uses simple random sampling on students who have taken entrepreneurship courses. Electronic questionnaires were distributed to all WhatsApp groups for classes who have entered their third, fourth year, and fifth-year students who have not graduated. Respondents were asked to fill out the questionnaire voluntarily to maintain the independence of the response. Two hundred twenty-seven responses were collected from three existing departments. However, after screening, only 205 responses were complete and could be used for data analysis.

Based on the data in Table 1, of the 205 respondents 170 (82.9%) are female respondents and 35 (11.1%) are male respondents. This condition seems unbalanced, but this condition cannot be avoided because students' composition at the Faculty of Economics, Unimed, is dominated by women. Furthermore, data regarding the origin of the respondent's majors shows that the data collection represents each department. The entrepreneurship course at the Faculty of Economics, Unimed, is held in the third semester. At the time of data collection in 2020, students who have experience studying entrepreneurship are students with the entry year 2018, 2017, 2016. Based on the sample demographics, this research is representative of students in the four years of entry.

This study identifies data on the respondent's family background regarding entrepreneurs or not. This is done to find out whether students have early experiences as entrepreneurs that might influence their responses. The response bias test is then carried out in the sensitivity test section after the structural model analysis (Hair et al., 2009). The data shows that 116 (56.6%) respondents do not have an entrepreneurial family background, and as many as 89 (43.3%) respondents have an entrepreneurial family background. Furthermore, as many as 106 (51.7%) respondents

Table 1. Respondent demographics

No	Category	f	%
Gender			
1.	Male	170	82,90%
2.	Female	35	11,10%
	Total	205	100%
Major			
1.	Economics	68	33,20%
2.	Accounting	68	33,20%
3.	Management	69	33,60%
	Total	205	100%
Year of Entry			
1.	2016	58	28,60%
2.	2017	104	50,70%
3.	2018	43	20,90%
	Total	205	100%
Family Enterpreneurship Background			
1.	My Parent is an entrepreneur	95	43,40%
2.	My Parent is not an entrepreneur	110	56,60%
	Total	205	100%
Business experience before enterpreneurship course			
1.	I have business experience	106	51,70%
2.	I have no business experience	99	48,30%
	Total	205	100%
Business owning after enterpreneurship course			
1.	Yes	65	31,70%
2.	No	140	58,20%
	Total	205	100%

had owned a business before taking the entrepreneurship course, and 99 (48.3%) respondents did not have a business before taking the entrepreneurship course.

Interestingly, after taking the entrepreneurship course, 65 (31.7%) respondents had a business left, while 140 (58.7%) respondents admitted that they did not own a business after taking entrepreneurship courses. The data shows a decrease in entrepreneurial action among respondents after participating in the Entrepreneurship Court. This data certainly shows the unique findings of this study.

3.3. Data analysis

This study uses variance-based Structural Equation Modeling (SEM) in testing hypotheses. Variance-based SEM was chosen because of the limited number of data in this study (Hair et al., 2009). The data analysis was performed using SEM-PLS with the help of Smart-PLS 3.0 software. Both measure measurement models and structural models (Bollen, 1989; Thatcher & Perrewe, 2002). PLS modeling is considered convenient and powerful for analyzing complex structural models, even with a small sample size (Goodhue et al., 2006). The data analysis contains two stages, including 1) construct validity or outer model testing and 2) hypothesis testing or inner

model testing. Construct validity is done by testing convergent validity, discriminant validity, and reliability. After the construct is valid, the structural model is analyzed to gain the result of hypothesis testing (Hair et al., 2009).

4. Result

4.1. Construct validity

Before analyzing the structural model, it is necessary to examine the measurement model. The measurement model consists of observed items used to reflect the latent variables to be tested in the structural model. Measurement model analysis is carried out to validate whether the observed item has internal reliability, internal consistency, and articles in certain constructs are different from other constructs (Hair et al., 2009). Internal reliability is measured by Cronbach's Alpha (α) and composite reliability with a reliability value above> 0.7 (Hair et al., 2009; Nunnally, 1994). Meanwhile, the internal consistency was tested with convergent validity. Convergent validity is done by observing the loading factor with a critical value above> 0.7, and average variance extracted (AVE) deals with a critical importance above> 0.5 (Fornell & Larcker, 1981).

To examine whether each construct is different from other constructs, this study conducted discriminant validity. The discriminant validity was conducted by cross loading factor and observing AVE roots, which induced diagonally on the correlation matrix (Fornell & Larcker, 1981; Hair et al., 2009). Observations on the cross-loading factor are carried out to ascertain whether the measurement item does not have the same high loading value on other constructs. Meanwhile, the AVE value is used to determine whether there is a more significant correlation coefficient than the AVE root value entered into the correlation matrix. If there is a discrepancy, the observed items that do not match the construct validity criteria should be excluded from the structural model analysis. The results of the AVE test, reliability, and discriminant validity are presented in Table 2. Furthermore, the confirmatory factor analysis (CFA) test results in cross-loading, which are shown in Table 3 . We use abbreviations to present efficiently in the table; Mtv is abbrev for motivation, BC is abbrev for Behavioral Component, CC is abbrev for Cognitive Component, AC is abbrev for Affective Component, and Int is abbrev for Intrapreneurship.

Referring to the value of Cronbach's Alpha and Composite Reliability, each construct has shown a Cronbach Alpha number> 0.8 and Composite Reliability> 0.7. This figure indicates that each construct has met the construct reliability. Furthermore, each construct also has an AVE value> 0.5. The AVE value is further confirmed by each measurement item's loading factor value, as presented in Table 3. All measurement items appear to have a loading factor> 0.7. This figure shows that each measurement item has an internal consistency or convergent validity. Furthermore, when testing the Cross-Loading Factor, it turned out that several items had high loading rates on two different constructs. This condition affects the discriminant validity according to the Fornell-Larcker criteria. Therefore, some items that do not fit these criteria are excluded from the measurement model. Those items are AC4 items in the Affective Component construct; items BC1, BC6, BC7 in the construct Behavioral Component; items CC2, CC6, CC8 in the Cognitive Component construct; and items Mtv1, Mtv3, Mtv6 on the Motivational construct. After these items were removed from the measurement model, all research constructs had met the discriminant validity referring to the cross-loading criteria and the Fornell-Larcker criteria.

4.2. Structural model analysis

The structural model analysis and hypothesis testing in this study used variance-based SEM, which was operationalized by the Smart-PLS 3.0 software. The results of structural model testing can be observed in Figure 1 and Table 4 below. Structural model analysis and hypothesis testing were carried out by following the path coefficient and p-value with the criteria α = 5% (p-value <0.05) or t-stat> 1.96 (Hair et al., 2009). The analysis results show that Motivation has a significant positive effect on the Behavioral Component with a path coefficient of ρ = 0.738 and t-stat = 17.551 (> 1.96), so H1 is supported. Furthermore, motivation was also found to positively and significantly

Table 2. AVE, reliability, and discriminant validity

No.	Constructs	*AVE*	Reliability		Fornell-Larcker Criterion				
			CA	*CR*	Mtv	BC	CC	AC	Int
1.	Motivation	0,777	0,861	0,913	0,881				
2.	Behavioral Component	0,630	0,855	0,895	0,653	0,794			
3.	Cognitive Component	0,745	0,914	0,936	0,532	0,777	0,863		
4.	Affective Component	0,832	0,967	0,972	0,063	0,078	0,151	0,912	
5.	Intrapreneurship	0,633	0,854	0,896	0,464	0,738	0,774	0,087	0,795

Source: ***Output of Smart-PLS 3.0, 2020***

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Table 3. Cross-loading factor

Items	Affective Component	Behavioral Component	Cognitive Component	Intra-preneurship	Motivation
AC1	**0,847**	0,543	0,392	−0,003	0,269
AC2	**0,909**	0,591	0,518	0,046	0,425
AC3	**0,887**	0,587	0,474	0,097	0,476
Int1	0,068	0,132	0,188	**0,899**	0,151
Int2	0,025	0,063	0,132	**0,923**	0,070
Int3	0,000	−0,004	0,066	**0,897**	0,002
Int4	0,021	0,038	0,127	**0,935**	0,048
Int5	0,019	0,021	0,084	**0,928**	0,024
Int6	0,112	0,103	0,160	**0,896**	0,100
Int7	0,113	0,088	0,150	**0,905**	0,096
BC2	0,479	**0,851**	0,695	0,090	0,651
BC3	0,521	**0,754**	0,513	0,086	0,552
BC4	0,401	**0,829**	0,766	0,102	0,709
BC5	0,659	**0,752**	0,514	0,007	0,469
BC8	0,624	**0,780**	0,531	−0,006	0,488
CC1	0,448	0,654	**0,858**	0,090	0,680
CC3	0,516	0,684	**0,888**	0,120	0,690
CC4	0,509	0,700	**0,860**	0,088	0,610
CC5	0,470	0,686	**0,890**	0,150	0,654
CC7	0,360	0,633	**0,818**	0,195	0,695
Mtv2	0,452	0,567	0,577	0,085	**0,733**
Mtv4	0,291	0,544	0,588	0,061	**0,773**
Mtv5	0,340	0,598	0,659	0,054	**0,837**
Mtv7	0,367	0,653	0,670	0,114	**0,845**
Mtv8	0,390	0,564	0,577	0,027	**0,784**

Source: *Output of Smart-PLS 3.0, 2020*

Figure 1. Structural Model

Source: *Output of Smart-PLS 3.0, 2020*

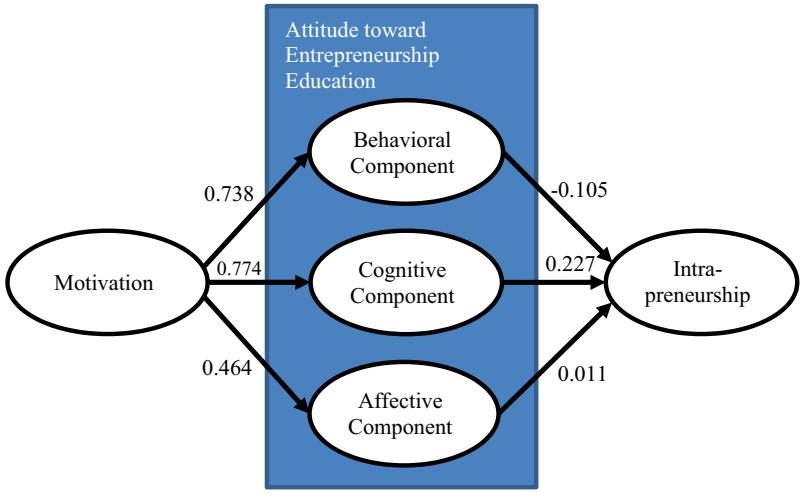

Table 4. Hypothesis testing

No.	Hypothesis		Coef.	t-stat	p-values	Result
1.	H1	Mtv → BC	0.738	17.551	0.000	Supported
2.	H2	Mtv → CC	0.774	24.881	0.000	Supported
3.	H3	Mtv → AC	0.464	7.661	0.000	Supported
4.	H4	BC → Int	−0.105	0.778	0.437	Not Supported
5.	H5	CC → Int	0.227	2.193	0.029	Supported
6.	H6	AC → Int	0.011	0.106	0.918	Not Supported

Source: *Output of Smart-PLS 3.0, 2020*

affect cognitive components with a path coefficient ρ = 0.774 and t-stat = 24.881 (> 1.96); thus, H2 is supported. Although with a relatively small path coefficient, ρ = 0.464, Motivation also shows a significant positive effect on the Affective Component with t-stat = 7.661 (> 1.96), this finding supports H3.

Interestingly, in explaining intrapreneurship to business students, the Behavioral Component, Cognitive Component, and Affective Component show different figures. Behavioral Component and Affective Component were found to have no significant effect on intrapreneurship beliefs in business students with a path coefficient of ρ = −0,105 and ρ = 0.011 and t-stat values equal to 0.778 (<1.96) and 0.106 (<1, 96). Meanwhile, the Cognitive Component showed a significant positive effect on intrapreneurship belief in business students with a path coefficient of ρ = 0.227 and t-stat = 2.193 (> 1.96). Then, H4 and H6 are not supported while H5 is supported. These findings are certainly an interesting discussion and add insight into the uniqueness of entrepreneurship education practices in higher education.

4.3. Sensitivity test

The sensitivity test in this study was conducted to ensure that the respondents' background, both those from entrepreneurial families and those from non-entrepreneurs families, did not interfere with the research results' consistency in the measurement model. This is necessary to avoid response bias due to the respondents' background in explaining their intrapreneur attitudes. The sensitivity test was carried out by multi-group analysis on the same structural model by dividing the data groups into data with samples from entrepreneurial families and samples from non-entrepreneur families. The figure observed from the data analysis results is the consistency of hypothesis support by reviewing the path coefficient, t-statistic, and p-value.

The results of the sensitivity test that occur in Table 5 below show that the results of structural model testing in both the entrepreneur family sample group and the non-entrepreneurs family sample group show consistency in the structural model analysis results. Both models show the support of the hypothesis on H1, H2, H3, and H5 and the unsupported hypothesis on H4 and H6. This finding is also consistent with the results of the structural model analysis with the full sample above. Thus, it should be assumed that the results of the structural model analysis in this study have met the sensitivity test.

5. Discussion

The motivation was found to influence the behavioral component, the cognitive component, and the affective component used to measure entrepreneurship attitude. These findings enrich the findings (Hytti et al., 2010), which have previously examined the impact of motivation to attend entrepreneurship courses on the achievement of learning outcomes in entrepreneurship education. This study suspects that before achieving the entrepreneurial outcome, students must tend attitudes measured by three important domains in learning, namely cognitive, psychomotor, and

Table 5. Result of sensitivity test

No.	Path	Entrepreneur Family			Non-Entrepreneur Family			Decision
		Coef.	t-stat	p-values	Coef.	t-stat	p-values	
1.	Mtf → BC	0,804	18,434	0,000	0,722	12,982	0,000	Supported
2.	Mtf → CC	0,705	12,606	0,000	0,682	12,745	0,000	Supported
3.	Mtf → AC	0,439	5,238	0,000	0,514	6,161	0,000	Supported
4.	BC → Int	−0,034	0,230	0,818	−0,121	0,621	0,535	Not Supported
5.	CC → Int	0,329	2,128	0,034	0,299	2,625	0,009	Supported
6.	AC → Int	0,035	0,288	0,774	−0,007	0,046	0,963	Not Supported

Source: *Output of Smart-PLS 3.0, 2020*

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affective (Haghshenas, 2015; Hansen, 2008; Hoque, 2016), which in this study is reflected in the Cognitive Component, Behavioral Component, and Affective Component. These components also represent the entrepreneurial mindset as proposed by (Kuratko et al., 2020). The researcher views that the use of these three components cannot be separated from the essence of achieving learning competencies and the criteria for the entrepreneurial mindset that students must have. Meanwhile, the motivation proposed as an antecedent of these three components can restore the essence of learning. In entrepreneurship education, studies are rarely used to predict learning attitudes and learning outcomes (Hytti et al., 2010). In comparison, motivation controls one's orientation in acting in specific ways, which have implications for the achievement of individual goals (Sprinthall & Sprinthall, 1981). Therefore, it becomes essential to understand how motivation affects learning attitudes in entrepreneurship education.

The motivation in students to study entrepreneurship led to enthusiasm and interest in entrepreneurship courses. High motivation will make students enthusiastic and actively participate in every meeting in entrepreneurship courses. Furthermore, the urge to take entrepreneurship courses will also build students' enthusiasm in mastering knowledge, forming logical thinking, and cognitive confidence in mastery of entrepreneurial expertise. Students with high motivation will have a strong desire to master the teaching material, including entrepreneurial knowledge and thoughts in their heads, which will then be ready to be implemented. On the affective side, the same thing happens; self-drive students will direct themselves to test a cooperative and responsive attitude to be involved in entrepreneurship education and form an attitude orientation for a career as an entrepreneur. This discussion confirms the findings of (Hytti et al., 2010; Jena, 2020; Kim & Park, 2019; Krapp, 1992). by placing motivation as an essential variable to create a cooperative attitude to engage in entrepreneurial education, which leads to intrapreneur belief in himself. This finding stands on the basic theory of motivation, which holds that motivation must be fed. It is useful to encourage behavior in the presence of new energy in students (Sprinthall & Sprinthall, 1981).

On the other hand, when involved in entrepreneurship courses, students' motivation can be influenced by their family background, whether the family is entrepreneurial or not. Of course, it is feared that it would form specific motivation conditions that affect the power to encourage or encourage their motivational function (Hytti et al., 2010; Jena, 2020; Kim & Park, 2019; Krapp, 1992). Therefore, this study conducted a sensitivity test in model testing to control bias in motivation. The sensitivity test shows that there is no difference in the structural model between students who come from entrepreneurial families or not. Then, it should be assumed that this study's motivation did not experience a response bias that, in general, could represent the condition of business students. Furthermore, the Behavioral Component, Cognitive Component, and Affective Component were found not all of them had a significant effect on intrapreneurship. Only Cognitive Components were found to have a significant positive impact on intrapreneurship. This finding does not support the hypothesis but becomes interesting in this study. Behavioral Component and Affective Component in Entrepreneurship education owned by business students at the State University of Medan do not affect intrapreneur beliefs in themselves. Research by Fernández-Pérez et al. (2019), found similar things when examining the effect of attitudes and actions proxied by emotional responses to entrepreneurial intention.

Meanwhile, when mediated by cognitive aspects, a significant relationship was found. Several entrepreneurship studies suggest that mental skills are seen as the main differentiator between successful entrepreneurs and those from non-entrepreneurial backgrounds (Chen et al., 2020; Duening, 2010; Frederiks et al., 2019; Hafer & Jones, 2015; Mitchell et al., 2007). If referring to Bandura (1993), the mastery of knowledge concluded with the cognitive capacity of the individual will form self-efficacy in him. Self-efficacy can be viewed with belief in one's ability related to the mastery of specific skills that make individuals master actions in themselves Bandura (1993), Therefore, in the findings of this study, business students view that both entrepreneurial attitudes and enthusiasm are not sufficient to form intrapreneurship beliefs in themselves. However, it takes mastery of knowledge related to entrepreneurial values , which form trust in him to instill

intrapreneurship. Intrapreneurship who will then create an entrepreneurial attitude in him wherever he has a career. Other studies have also revealed a lot about the role of cognitive capability in implementing intrapreneur attitudes in existing businesses and entrepreneurs in new industries, mostly related to risk-taking, decision making, business negotiations, and an attitude of innovation in running their business (Catherine Forje, 2019; Chen et al., 2020; Frederiks et al., 2019; Honig & Samuelsson, 2020; Jena, 2020; Kuratko et al., 2020; Mitchell et al., 2007). Thus the findings of this study have added to the variety of conclusions on entrepreneurship education in higher education. Of course, these findings stand in the view of the uniqueness of the characteristics of the subject, which further determines the direction of educational policy in producing alumni of business students who have intrapreneurship beliefs. The generalization of this study's results requires further validation of the model by referring to the characteristics of the population and samples that may differ from other universities or other areas.

6. Conclusion

This study examines the attitude toward entrepreneurship, which is proxied by the entrepreneurial mindset towards intrapreneurship belief in business students. Then, this study also examined motivation as a critical antecedent of attitude toward entrepreneurship. This study conducted a sensitivity test with multi-group comparisons between sample groups with entrepreneurial and non-entrepreneurial family backgrounds to control for response bias on motivation variables. The results showed that motivation significantly contributes to the formation of attitude toward entrepreneurship and avoids response bias. It's represented by the support of H1, H2, and H3 and the similarity of the sensitivity test results. Meanwhile, attitude toward entrepreneurship did not considerably influence intrapreneurship belief because the H4 and H6 are not supported. Only the cognitive component significantly affects intrapreneurship belief. These findings certainly have several implications and recommendations. Learning in entrepreneurship education must build student motivation from the beginning of lectures. The limited-time allocation available in entrepreneurship classes certainly requires high enthusiasm and enthusiasm among students to be involved in lessons. Lecturers must provide a big picture and convince students regarding promising career opportunities in any field with mastery of intrapreneurship. Furthermore, entrepreneurship learning can be focused on mastering cognitive skills to form an intrapreneurship attitude. In connection with this, it is necessary to conduct experiments or instructional research to find the best entrepreneurship learning method. The outcomes obtained are measurable, and the techniques developed can be a benchmark for entrepreneurship programs in other universities.

In addressing these implications, faculty managers need to take strategic policies to facilitate entrepreneurship lecturers to revise curriculum construction and instructional designs that have been implemented so far. Policymakers also need to enable academic research in terms of finding best practices in entrepreneurship education. More importantly, the reorientation of the outcome of entrepreneurship education that leads to the formation of intrapreneurship will undoubtedly influence curriculum changes and future research that will be carried out. Furthermore, the intrapreneurship specifications to be implanted have become an advanced issue that needs to be standardized.

This study has limitations on the variation of data and sample size. The data was taken from one university in one country. So, the generalization issue is limited to be interpretable by other universities. The Indonesian universities with similar characteristics or universities in other countries which have similar characteristics to Indonesia can generally interpret the result for their business student or their entrepreneurship program. Besides that, this research also does not avoid the weakness of internal validation due to the nature of survey research. Therefore, future researchers can expand the variety of respondents and sample sizes to enhance the generalizability of research results.

Furthermore, future research can also review and further revise the pattern of relationships between variables of the models offered in this study. Based on Fernández-Pérez et al. (2019), analysis, it should be assumed that the affective and behavioral components may not have a direct effect on intrapreneurship and are mediated by cognitive components or other variables.

Exploration of a more complex model or even parsimony will enrich the insights on entrepreneurship education research. Finally, as previously explained, research on the development of learning models, experiments, and action research is also urgent to be carried out concerning the implementation of the best learning in entrepreneurship education to ensure the achievement of outcomes. The entrepreneurship course is not carried out only as a complement and an addition to insight, as was feared by Støren (2014).

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