

**THE DETERMINANTS OF ENTREPRENEURIAL INTENTION:  
TEAM LEARNING, TEAM PERFORMANCE,  
PSYCHOLOGICAL SAFETY AND SELF-REGULATED  
LEARNING AS MODERATING EFFECT, AND PERCEIVED  
BEHAVIORAL CONTROL AS MEDIATING EFFECT**

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**ABSTRACT**

Entrepreneurship education is increasingly showing its role in forming entrepreneurs. The current study proposed and tested an integrative multi-perspective framework to identify the entrepreneurial intention amongst undergraduate students of 5 different universities who attending a project-based course of entrepreneurship in Surabaya. The main purpose of this study was to identify the interrelations among psychological safety toward entrepreneurship education process through team learning and team performance perceived behavioral control, self-regulated learning, and entrepreneurial intention using structural equations modeling in which the dimensions of these constructs were disentangled and treated as latent variables that were indirectly inferred from multiple indicators. The sample of the study consisted of 500 undergraduate students attending 5 universities in Surabaya, Indonesia. The results suggest that the entrepreneurship intention components do affect PBC respectively, the antecedent variables are also interrelated with each other. The empirical analysis supports all the hypotheses that the entrepreneurial intention of students is determined and this finding implies that psychological safety and self-regulating learning are moderators of the entrepreneurial intention-action translation. We outline implications for entrepreneurship literature and educators. We encourage educators to nurture the personality traits of students to develop their personality to be more proactive, so they can achieve more progress also emphasize nurturing the entrepreneurial intention of students in a systematic way. For students who felt not good in the project, we considered this as a positive outcome of entrepreneurship education, so they can decide to enter a managerial professional career.

**Keywords:** Entrepreneurship Education (EE), Team Learning, Team Performance, Psychological Safety, Perceived Behavioral Control (PBC), Self – regulated Learning (SRL), Entrepreneurial intention (EI)

## **Introduction**

Recently the graduates and students must realize they cannot expect that large companies and stable jobs will provide wealth, homes, and health care (Kirby 2004). Therefore, graduates need to be equipped with a broader range of marketable skills in an environment where entrepreneurial ventures are considered as determinants to create innovation and economic growth. General perspective presumes by having well-designed entrepreneurship curricula and experiences, students increase their knowledge and abilities. Rasmussen and Sørheim (2006) stated that universities contribute through the education of aspiring entrepreneurs, directly through the commercialization of research, as well as by becoming a nursery for new ventures. Kolvereid and Moen (1997) found that graduates with a major in entrepreneurship were more likely to start new businesses and had stronger entrepreneurial intentions than other graduates. Research in the field of entrepreneurship has shown that the presence of role models is essential for entrepreneurial aspirations and achievements (Green & Pryde, 1990). University-based enterprise creation is increasingly recognized as an activity that has the potential to be facilitated through special entrepreneurship education.

Being an entrepreneur can mean many things to many people. The general conception according to Gartner (1990) is that entrepreneurship is about individual entrepreneurs who create innovative organizations that foster and create value, both to seek profit or not. Although there is still some question as to whether entrepreneurs are born or made and other uncertainties such as whether entrepreneurship is a set of principles, terms, a set of attributes, or a mindset that make one opportunistic, competitive, proactive, risk-tolerant, autonomous, and innovative (Henry, et al. 2005b; Kirby 2004). Teaching entrepreneurship to students from different fields of study and with different levels of education may be more challenging than teaching students from the same field of study and with the same level of education. Moreover, the impact of entrepreneurship education on a student's entrepreneurial skills and EI might vary considerably, depending on the student's characteristics, including their field of study and educational level (Fayolle and Gailly 2015; Maresch et al.2016).

The objective of this paper is to unfold a new conceptual perspective that emphasizes learning-method through teamwork and involves the psychological side of each individual amongst students and the prospecting of students' aptitude for entrepreneurship career. In this view, entrepreneurship education through team learning and team performance approach in the project-based course of entrepreneurship education somehow enhances students' willingness to become entrepreneurs, then allows students to assess thoroughly whether they should pursue an entrepreneurial career.

Secondly, we examined the contribution of moderation factors from which individual learning or team learning influences the achievement of team performance's outcomes in the project-based

entrepreneurship course to inspire students to run their venture in the future. Then we investigate how one's belief shapes their attitudes and behaviors to improve our understanding of entrepreneurial intention formed, thus determining which dimensions of the antecedent variables should be addressed and enhanced toward fostering the intention to launch a business venture. In addition to assisting educators to develop effective learning strategies and curricula, and lecturers and coaches design effective approaches for their students.

Lastly, we also propose that a deceiving viewpoint to solely focus on start-up propensity. To come to a comprehensive assessment of how entrepreneurship education impacts on entrepreneurial intention of students, the gains from improved matching between students and career paths need to be considered. Giving clear advice and suggestion to non-entrepreneurial individuals that they are not well-suited for start-up activities could be a valuable insight as confirming and strengthening entrepreneurial tendencies in other students who are enthusiasts to set up their venture. We think that this approach is not only appropriate conceptually, it is also ethically the right route to take.

## **Literature Review and Hypotheses**

### **Psychological Safety**

According to Kahn (1990), PS is an individual's ability to express themselves without any concern of the negative impact of personal image, status, or career. He identified extensively four factors to psychological safety: interpersonal relationships, group dynamics, leadership, and organizational norms. Anshori et al. (2019) defined it as a condition where a person's positive emotions that help a person to build psychological, social, and physical resources. Inspired from Edmonson's study in 1999, it is a shared belief that the team is safe for interpersonal risk-taking. In this regard, the authors are interested in exploring the PS impact in project-based courses in entrepreneurship education.

From what we observed in the entrepreneurship education process, the personality trait of students is a strong determinant such as self-expression, risk-taking, and their learning as individuals. How some of them have the great initiative to get involved in the group, in the classroom, and practice sessions. Where they are eager to solve the project in entrepreneurship. We also predict, this proactive trait leads to other personality constructs like emotional stability and being open to new things and experiences. Chan (2006) posited that those with more proactive personalities are less likely to perceive a situation as being psychologically unsafe—even if contextual factors suggest otherwise. In entrepreneurship class, lecturers frequently give students special assignments, such as developing business ideas and making this idea be a student's project in a group context. Weekly they need to report their progress to lecturers as their mentors and sometimes invite external mentors or practitioners.

In the group of entrepreneurship subjects, some students indicated certain traits like they are more open to new ideas and accepting different perspectives of doing their assignment inclined to feel safe in taking risks and exposing their vulnerabilities in a team environment and the classroom. This is in line with Edmondson and Mogelof's findings in 2005, in the work environment context. Campos et al. (2017) explained that a psychology-based personal entrepreneurship teaching model (which teaches a proactive mindset and focuses on entrepreneurial behavior) has been more successful than a traditional entrepreneurship teaching model. He found a statistically significant and positive impact of psychology-based personal entrepreneurship teaching models on the profit of start-ups, compared to traditional entrepreneurship teaching.

Many universities in Surabaya implement project-based entrepreneurship courses, where students have to work in a team begin with idea generation exercises, working on real case studies, the creation of start-ups, feasibility studies, consulting projects with their mentor or lecturers, entrepreneur interviews, guest speakers, pitches, and simulations (Kassean et al. 2015), and targeting their project take-off at the end of the course. From Pittaway et al. (2011), students can deepen their entrepreneurial skills through learning-by-doing and experiential learning, as suggested in several works (e.g.,). Hill et al. (2014) show that the learning process as a team can be more effective than learning by each individual as there are chances to merge a diversity of knowledge, experiences, and perspectives amongst team members. When students make a mistake in their learning orientation in a group, they can take this crucial experience as part of their self-development. A team with good performance in the project-based entrepreneurship course relatively has a big portion of team learning as well as their psychological safety. According to the finding from previous research on groups-based experiential learning in Entrepreneurship class, the authors revealed the relationship between team learning and team performance is higher when psychological safety is high, respectively lower when psychological safety is low. We predict psychological safety able to strengthen the relationship of team learning with team performance. We put forth the following hypothesis:

**H1.** Psychological safety has positive moderation on the relationship between team learning and team performance

### **Team Learning and Team Performance on Entrepreneurial Intention**

Learning orientation is a stable dispositional construct that has a character on increasing one's competence and new skills development (Dweck, 1986). Kayes et al. (2005) argue that teams that explicitly and systematically address teamwork challenges through TL can improve team performance. The evaluation process in the project-based learning entrepreneurship course is by asking the teams to present and prove the results of their targeting progress. In the learning process within the team, several social processes may keep a team from being effective, such as overdependence on a leader, groupthink, diffusion of responsibility, loafing, and others, that need

to be addressed if a team wants to perform well. Using Fiore's (2019) survey on entrepreneurship courses in Italy. For team learning, we evaluate students' extent to integrate themselves into their team, expressing and sharing their idea with their peers, how they manage the differences of their peer's thoughts, and how well their working with different fields of study could affect their determination and desire to become an entrepreneur. From what they experience in team learning they can figure themselves in the future about their tendency to choose entrepreneur as their career option. When the team learning runs well and they are capable of dealing with those obstacles, students are enthusiastic to pursue a career as an entrepreneur or create a start-up business.

This implies that students are active participants. Students with high initiative would enact change, identify and detect problems, subsequently do problem-solving (Crant, 2000; Seibert, Crant, & Kraimer, 1999). As such, the psychologically unsafe situations would unlikely be gotten through by students with more proactive personalities—even if contextual factors suggest otherwise (Chan, 2006). Several personality traits related to learning, risk-taking, and self-expression have been posited to impact psychological safety.

To what extent are the students able to work with multidisciplinary background peers in their teamwork and collaboration, we predict there is a high possibility for them to run their venture in the future. How far can they exchange ideas, thoughts, opinions in their team and are ready to deal and manage differences and contrasts in problem-solving and teamwork of their project and assignment? Then the step of integrating themselves within the team, how well they immerse themselves as a team member could leverage them to start their own business.

We can define team performance from a concept that a team in entrepreneurial is 'two or more individuals, interacting and interdependent, who have come together to achieve particular objectives regarding commitment to a venture's future and success; whose work is interdependent in the pursuit of common goals and venture success; who are accountable to the entrepreneurial team and for the venture'' (Robbins and Judge, 2008).

On the other hand team performance assessment, we surveyed the participants regarding their performance in running their project and assignment in their entrepreneurship course as a team. This includes how skillful students in creating new products or services would motivate them to create their firm, manage innovation within a team project, the ability to execute integrative marketing plans, build up a professional network, identify new business opportunities and achievements and succeed in their business project-based learning entrepreneurship course to trigger their goals and plan to seriously start their venture. How well they innovate and manage it in their project could lead them to open their own business. The ability to interact with other prospective business partners, external mentors, potential suppliers, and how well they manage these relationships efficiently, would enhance their plan to seriously start a venture.

In the context of an experiential classroom, teams that execute Team Learning processes well should come up with solutions that are both valued highly by teachers and external clients. Second, TL can focus on team processes. This is an inside perspective on TL. Team learning can focus on team processes. This is an inside perspective on TL. When team learning is associated with entrepreneurial intention, we can see that person's future behavior is preceded by intention: the stronger a person's intention to engage in a specific behavior, the more likely it is that the actual behavior will be performed. Furthermore, the intention to perform a given behavior is the result of three cognitive antecedents: (i) attitude toward behavior; (ii) subjective norms; and (iii) perceived behavioral control. we propose the following hypothesis:

**H2a.** Team Learning has a positive effect on entrepreneurial intention

**H2b.** Team performance has a positive effect on entrepreneurial intention

### **The Mediating Effect of PBC on the relationship between TL and entrepreneurial intention and between TP and entrepreneurial intention**

Perceived behavioral control is defined by Sun et al. (2017) as beliefs about the control over an entrepreneurial behavior in terms of entrepreneurial skills, knowledge, resources, or opportunity. This factor relates to the perceived capability (i.e., self-efficacy) of an individual to perform the entrepreneurial behaviors. The construct of self-efficacy is an individual's perception of his or her capability to execute a set of actions required to perform the behavior that exists (Bandura, 1986; Swan et al., 2007) with potential situations (Bandura, 1982).

From Ajzen (2002), PBC has two factors: self-efficacy and perceived controllability. Self-efficacy covers the factors of internal control such as knowledge and skills and reflects one's perception about the ease or difficulty of performing certain behavior, as well as one's confidence in his or her ability to commit the behavior. In contrast, perceived controllability involves external control factors, such as opportunities, potential barriers resources, and represents one's perception that the behavior implementation is completely determined by him or her. In this situation, we investigate how perceived behavioral control could intervene in the set of actions of students in executing their team learning activities. We predict that team learning can strengthen one's intention to pursue an entrepreneurship career. Then we also inspect the courses of action in team performance such as creating new products and services, their innovation management, networking, identifying new opportunities in business on their intention to start their venture. The team learning and team performance that encompasses social cognitive approach, skills, and abilities can improve students' perceived behavioral control. According to Bandura (1986), these are fundamental sources of self-efficacy development (self-capability). Across a variety of settings, perceived self-efficacy and affective attitude turned out to have a stronger relationship with intention as compared to perceived controllability (Ajzen, 2002; Armitage & Conner, 2001; Huang & Chen, 2015; Kraft et al., 2005).

From team performance assessment results, we observed that the students need required competencies, abilities, skills, self-efficacy, and resources to overcome the uncertainties and control their entrepreneurial actions to succeed. The higher the perception of one's undertaking behavior in executing the team performance assessment, the higher level that the control is perceived, the more positive evaluation of the entrepreneurial intention will result. Kautonen et al. (2015) then Lüthje and Franke, (2003) had proved that PBC is positively affecting the entrepreneurial intention of students. This brings us to propose H3a and H3b also H5 as follow:

**H3a.** PBC mediates the effect of team performance on entrepreneurial intention

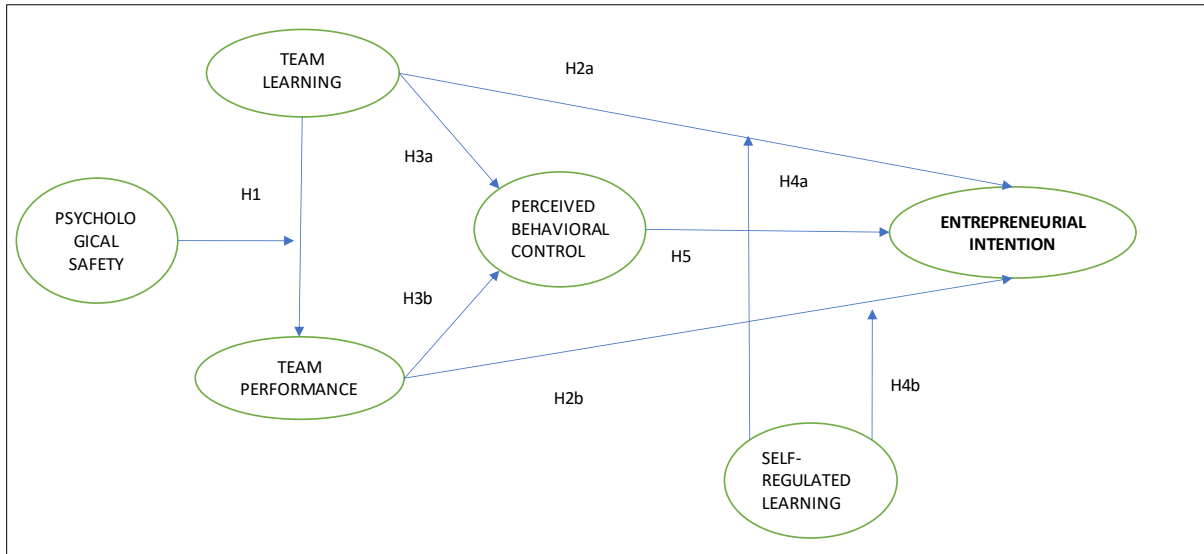
**H3b.** PBC mediates the effect of team learning on entrepreneurial intention

**H5.** PBC has a positive effect on Entrepreneurial Intention

### **The Moderation Effect of Self-Regulated Learning on the relationship between TL and entrepreneurial intention and between TP and entrepreneurial intention**

Self-regulated learning (SRL) is one of the courses from self-regulation and is in tune closely with educational aims (Burman et al. 2015). Broadly speaking, it refers to learning that is guided by *metacognition* (thinking about one's thinking), *strategic action* (planning, monitoring, and evaluating personal progress against a standard), and *motivation to learn* (Perry et al. (2006), Winne et al. (2000), Butler et al. (1995).

According to Zimmerman (1989, p. 329) the definition of self-regulated learning is “students initiat[ing] and direct[ing] their efforts personally to obtain knowledge and skills, instead of relying on . . . agents of instruction”. In carrying out ‘complex assignment’ self-regulated learning enables students to select methods independently (Zimmerman, 2002, p. 69), to prepare them to engage in “long-term creative projects” (p. 66). Educators seeking to inculcate self-regulated learning processes may encourage students to set goals, manage their time effectively, evaluate their learning, seek appropriate assistance, and alter their self-perception toward a sense of self-efficacy (Zimmerman, 2002, p. 64). About the establishing of entrepreneurial intentions amongst students, a lot of studies still have not explored more deeply related to the moderation effect of SRL in the learning process within a team and its performance in completing the project, especially in the project-based learning entrepreneurship course.



**Figure 1: Research Model**

Cheng (2011) states that SRL is effective in increasing academic performance. He states “if learners do not have [SRL] abilities, they learn by depending on the guidance and monitoring of others and fail to achieve a high level of learning”. Project-based learning entrepreneurship course intended to help students develop their skills and competencies to seize entrepreneurial opportunities. In the process of strategic action in SRL, Laguna (2013), Harm (2014), Brandstätter (2011) identified that self-efficacy in each individual contributes to the team performance as well the success and entrepreneurial creation. There are sequences in the process of learning, initially, learners assess their strengths and weaknesses concerning a specific learning task. Second, learners execute strategic planning and goal setting about mostly self-chosen learning goals. Third, learners implement their learning strategy and continuously monitor its effectiveness. Finally, learners compare the actual final learning outcome with the intended learning outcome. In the context of team performance assessment as follow creating new products and services, their innovation management, networking, identifying new opportunities in business, we assume that SRL has positive moderation on the effect of team learning on entrepreneurial intention of students, as well as in team performance’s impact on entrepreneurial intention. So, we propose the following hypotheses:

**H4a.** Self-regulated learning has positive moderation on the relationship between team performance and students EI (Entrepreneurial Intention)

**H4b.** Self-regulated learning has positive moderation on the relationship between team learning and students EI (Entrepreneurial Intention)



## Method

### Sample and data collection

The hypotheses of this cross-sectional study were tested using a convenience sample of 500 undergraduate students attending 5 different universities in Surabaya, Indonesia. Data were collected from the 3<sup>rd</sup> year and 2<sup>nd</sup> year students who participated and in the 4<sup>th</sup> year students who have completed their project-based course of entrepreneurship. The range of age was 17 – 24 years old. Before the analyses were performed, data were checked and cleaned for missing data and out-of-range values or non-permitted values in the instrument. The investigation was utilized with quantitative methods and saturated techniques. Both dependent and independent variables were collected by different methods and at different times, there is little concern for common method bias in this study. This study focuses on strategies that help to avoid CMB (common method bias) in the first place. To reduce testing doubtfulness, we assured that the respondent's answer would be anonymous (Podsakoff et al. 2003)

### Measures

The survey questionnaire was prepared based on validated and reliable measurement scales found in the literature. The items of the questionnaire along with their sources and their theoretically designated factors are presented in the Appendix. All items were measured on a 5-point Likert scale ranging from “1 = total disagreement” to “5 = total agreement.” A high score on an item indicated a high degree of agreement with the statement; a high score on a factor indicated more of the construct.

### Statistical analyses

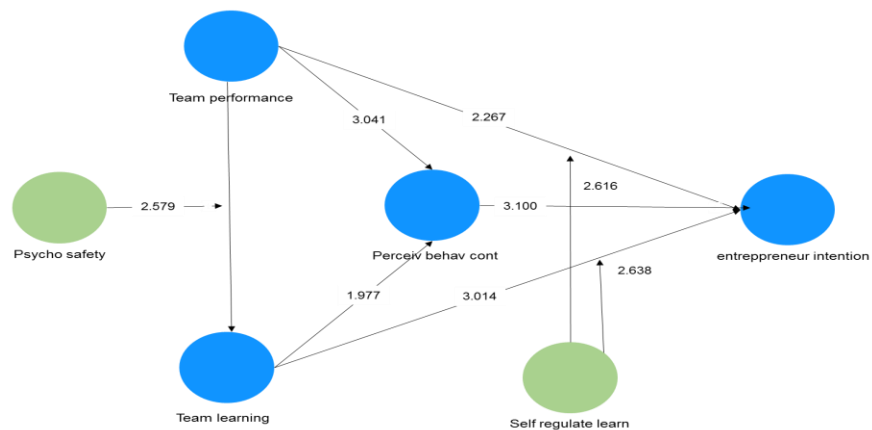


Figure 2: Inner Model

**Table 1: Respondent Characteristics**

<b>Demographics</b>	<b>Frequency</b>	<b>Percentage</b>
<b>University</b>		
UNAIR	100	100%
ITS	100	100%
UNESA	100	100%
UPN	100	100%
UC	100	100%
<b>Total</b>	<b>500</b>	<b>100%</b>
<b>Gender</b>		
Male	212	42,4%
Female	288	57,6%
<b>Total</b>	<b>500</b>	<b>100%</b>
<b>Age</b>		
17 Years	6	1,2%
18 Years	56	11,2%
19 Years	76	15,2%
20 Years	94	18,8%
21 Years	126	25,2%
22 Years	74	14,8%
23 Years	35	7%
24 Years	33	6,6%
<b>Total</b>	<b>500</b>	<b>100%</b>

The hypotheses of our study were tested employing the partial least squares (PLS) structural equation modeling (SEM) technique with SmartPLS-version. A two-step approach of SEM was adopted for the study. PLS-SEM is a two-step process involving assessment of the measurement and structural model (Anderson and Gerbing, 1988). First, the measurement model should be assessed by examining the internal consistency reliability, convergent validity (CV), and discriminant validity (DV) (Chin, 1998).

**Validity and Reliability Test**

Ghozali (2016) used convergent validity to measure the validity of an indicator, According to Chin (1998) that in convergent validity: the outer model has fulfilled the convergence validity requirement for reflective construct when loading factor > 0.6 can be said to be valid. The results of this study explain that all constructs on the validity and reliability tests show valid results.

**Table 2: Construct Validity Outer Loading Results**

	<b>Item</b>	<b>Outer Loading</b>	<b>Data Description</b>
<b>Moderating Effect</b>	Moderating Physio	1.000	Valid
	Moderation self-regulated learning 1	1.000	Valid
	Moderating self-regulated learning 2	1.000	Valid
<b>Psychological Safety</b>	PS1	0.940	Valid
	PS2	0.800	Valid
	PS3	0.886	Valid
	PS4	0.612	Valid
	PS5	0.878	Valid
<b>Team Learning</b>	TL1	0.797	Valid
	TL2	0.626	Valid
	TL3	0.894	Valid
	TL4	0.921	Valid

<b>Team Performance</b>	TP1	0.786	Valid
	TP2	0.879	Valid
	TP3	0.874	Valid
	TP4	0.854	Valid
	TP5	0.830	Valid
	TP6	0.869	Valid
<b>Perceived Behavioral Control</b>	PBC1	0.857	Valid
	PBC2	0.799	Valid
	PBC3	0.906	Valid
	PBC4	0.830	Valid
	PBC5	0.840	Valid
	PBC6	0.832	Valid
	PBC7	0.890	Valid
	PBC8	0.703	Valid
	PBC9	0.798	Valid
<b>Self Regulated Learning</b>	SRL1	0.746	Valid
	SRL2	0.881	Valid
	SRL3	0.799	Valid
	SRL4	0.860	Valid
	SRL5	0.871	Valid
	SRL6	0.807	Valid
<b>Entrepreneurial Intention</b>	EI1	0.911	Valid
	EI2	0.827	Valid
	EI3	0.712	Valid
	EI4	0.921	Valid

The next step is to test discriminant validity. Discriminant validity is a test used to determine whether a variable has an adequate discriminant, namely by comparing the loading value on the intended variable, it must be greater than the loading value of other variables.

**Table 3: Discriminant Validity**

	Psycho Safety	Team Learning	Team Performance	Perceived Behavioral Control	Self Regulated Learning	Entrepreneur Intention	Moderating Physco	Moderatin self regulated learning 1	Moderating self regulated learning 2
Psycho Safety	0.894								
Team Learning	0.770	0.813							
Team Performance	0.461	0.622	0.833						
Perceived Behavioral Control	0.650	0.656	0.829	0.812					
Self Regulated Learning	0.559	0.542	0.765	0.582	0.876				
Entrepreneur Intention	0.701	0.632	0.673	0.672	0.735	0.868			
Moderating Physco	0.698	0.579	0.525	0.620	0.672	0.689	1.000		
Moderatin self regulated learning 1	0.742	0.768	0.647	0.752	0.741	0.790	0.862	1.000	
Moderating self regulated learning 2	0.661	0.682	0.611	0.593	0.623	0.601	0.761	0.801	1.000

The next step is the measurement of the AVE value can be used to compare each construct with the correlation between other constructs in the model. The AVE value must have a value > 0.5 (Latan and Ghozali, 2014).

**Table 4: Construct Validity AVE Results**

Variable	AVE	Criteria
Moderating Psycho Safety	1.000	Valid
Moderation self-regulated learning 1	1.000	Valid
Moderating self-regulated learning 2	1.000	Valid
Psycho Safety	0.691	Valid
Team Learning	0.669	Valid
Team Performance	0.721	Valid
Perceived Behavioral Control	0.690	Valid
Entrepreneur Intention	0.717	Valid

The third test, the composite reliability: a construct has reliable data when it meets the reliability criteria of composite reliability. data that has a composite reliability value > 0.7 has high reliability, while Cronbach's alpha value is expected to have a value > 0.6 (Hair, et. al 2014).

**Table 5: Reliability Test Results**

Variable	Cronbach alpha	Composite reliability
Moderating Psycho Safety	1.000	1.000
Moderation self-regulated learning 1	1.000	1.000
Moderating self-regulated learning 2	1.000	1.000
Physical Safety	0.881	0.916
Team Learning	0.827	0.888
Team Performance	0.922	0.939
Perceived Behavioral Control	0.943	0.952
Entrepreneur Intention	0.865	0.909

The following measurement is the inner model, by testing the relationship between independent variables to dependent variables using  $R^2$ . The values 0.19, 0.33, 0.67 of  $R^2$  indicate that the model is weak, moderate, and strong, respectively (Ghozali 2016). The results of the R-Square in this study explain that the team performance variable has a value of 0.220 with weak criteria. this means that all independent variables simultaneously have a 22% influence on team performance while the remaining 78% influence variables outside of this study. Meanwhile, the behavioral control variable has a value of 0.853 with strong criteria, this explains that all variables simultaneously have an influence of 85.3% on perceived behavioral control, while the remaining 14.7% influence outside this study. While the r-square value of the entrepreneurial intention variable has a value of 0.601 with moderate criteria. this means that all variables simultaneously have an effect of 60.1% on the entrepreneurial intention variable, while the remaining 39.9% influence the variables outside this study.

**Table 6: R-square Results**

Variable	R Square	Criteria
Team Performance	0.220	Weak
Perceived Behavioral Control	0.853	Strong
Entrepreneur Intention	0.601	Moderate

**Results**

**Discussion and Analysis**

In this study, the authors use SmartPLS version 3.0 software. In this analysis, we test whether there is an effect between independent variables on the dependent variable, also to test the relationship of mediating effect to the dependent variable, to test the moderating effect between independent variables on dependent variables. The research hypothesis was accepted when the P-Values value was <0.05 or the T-Statistic value is more than 1,968.

**Table 7: Hypotheses Test Result**

		Original Sample	T statistic	P-Value
H1	Psychological Safety managed to moderate the effect of team learning on team performance	0.090	2.579	0.010
H2a	Team learning has a positive effect on entrepreneurial intention	0.021	2.267	0.000
H2b	Team performance has a positive effect on entrepreneurial intention	0.053	3.014	0.003
H3a	Perceived behavior control is partially mediating the relationship between team performance and entrepreneurial intention	0.405	3.041	0.002
H3b	Perceived behavior control is partially mediating the relationship between team learning and entrepreneurial intention	0.077	1.977	0.001
H4a	Self-regulated learning managed to moderate the relationship between team performance and entrepreneurial intention	0.050	2.616	0.025
H4b	Self-regulated learning managed to moderate the relationship between team learning and entrepreneurial intention	0.048	2.638	0.000
H5	Perceived Behavior Control – has a positive effect on Entrepreneurial Intention	0.368	3.100	0.002

Table 7 are the results of the hypothesis testing obtained in the study through the inner model. The results of the hypothesis test explain that the variable that has a strong construct, namely Perceived behavior control is partially mediating the relationship between team performance and entrepreneurial intention with a value of 0.405. while the variable that has a weak construct is Team learning has a positive effect on the entrepreneurial intention with a value of 0.021. this is of course supported in the research of Sarstedt, et al., (2017) which explains that the value of path

coefficients is closer to +1, the stronger the relationship between the two constructs. While the relationship that has a value of -1 indicates that the relationship is negative.

For **H1** psychological condition of an individual is based on the characteristics of deep-level such as attitudes personality, values, and is sustainable. These traits could shape the tendency of individuals to be more open in learning and willing to experience new challenges. When students in a project-based course of entrepreneurship - are more open to new ideas and more accepting of different perspectives in completing their assignments, they are inclined to feel safe in taking risks and exposing their vulnerabilities in a team environment and the classroom. Our findings support the study from Edmondson and Mogelof's findings in 2005, Kasean et al. (2015), and Campos et al. (2017). The higher these attitudes the stronger the learning orientation of students to perform in entrepreneurship subjects like micro-business projects or running start-ups.

In **H3a and H3b**, we find PBC is succeeded to intervene in the set of actions of students in executing their team learning activities. That team learning can strengthen students' intention to pursue an entrepreneurship career. PBC in this regard is the viewpoint and perception of students who are taking or already taking entrepreneurship classes to execute some venture project in the entrepreneurship class, whether it would be difficult or easy. PBC not only determines the formation of intentions but also, serving as a proxy for the process and activity in team learning where students can express their notions, exchange ideas, collaborate with their peers, co-op some internal conflict in their entrepreneurship team, solve their disputes over some issues in running their project or start-up business, eventually supports the prediction of actual behavior specifically pursuing entrepreneur career or setting up start-up business. When students have high perceived self-efficacy and affective attitude, they are likely to have stronger intention to become entrepreneurs, this finding supports the previous studies from Ajzen, (2002), Armitage & Conner (2001), and Huang & Chen (2015).

In addition, PBC is mediating the compelling efforts of students in identifying business potential, then start creating new products or services that have the potential to be commercialized in the market. Those endeavors are partially mediated by PBC on the intention of establishing, owning, running a new business as the choice for a career. In line with the literature that suggests that entrepreneurship courses need to be practical-oriented (e.g., Honig 2004; Rasmussen and Sørheim 2006; Pittaway and Cope 2007).

**H2a** is supported, the majority of respondents would like to get more encouragement to establish their own business than running it as their career choice, they would rather have more time spent on teamwork, presentations, and feedback received during mentorship in their teamwork activities particularly from experts like professors as well professionals in entrepreneurship. Our finding is compatible with a study from Fiore et al. (2019) that the perception of overall students' about their abilities to work in a multidisciplinary team, their entrepreneurial skills, and entrepreneurial intentions increased slightly. If students have high encouragement integrating themselves within the team, how well they immerse as a team member, this could leverage them to start their venture. Similar to team learning, our results show when the students are given by a set of assignments to evaluate their team performance, such as creating new products or services, managing innovation

within a team project, the ability to execute the integrative marketing plan, building up a professional network. Those who managed these entrepreneurship challenges and evaluations well, they likely to have more confidence and satisfaction in their skills and performance to attempt to establish their business and sacrifice some of their risks to make them stay in business as their career. This finding is consistent with Fiore et al (2019), our result supports the **H2b** team performance has a positive effect on entrepreneurial intention.

According to respondents, the process in their team learning in entrepreneurship class is strengthened by planning, self-monitoring, the student's strategic action, and motivation managed in helping students to be motivated in setting up their business and run their business in the future. We find that when students follow the sequences in the process of learning until the evaluation step properly, they can witness that their effort in completing the assignment, learning process, and conquer their challenges to achieve good performance, they feel more attracted to start and open their venture. In this regard, self-regulated learning has moderated positively the relationship between team learning and their entrepreneurial intention. Similar to team learning, performance in entrepreneurship class teams is also positively moderated by self-regulated learning, group learning, and their interaction in the team. Self-regulated learning is effective means as a learning strategy holds for both individual performance and team performance, the finding shows students perceived this as a driving force in increasing their intention to become entrepreneurs. Our finding is consistent with the studies from Laguna (2013), Harm (2014), Brandstätter (2011). Both **H4a** and **H4b** are supported.

When the students possess positive beliefs and high self-efficacy, they are likely to have greater feelings to be able to achieve their desired outcome to be an entrepreneur (Khalil, 2011). This finding posits theory from Bandura (1977) that people are usually inclined to activities where they feel confident and competent. We can see from our result shows that perceived behavioral control has a positive effect on entrepreneurial intention. As well as their behavior is affected along with intention (Ajzen, 2006). Thus, **H5** is supported.

## **Implications and Recommendations**

This study contributes to the literature on behavioral approaches to the entrepreneurial process in the context of group learning methods among students. Providing in-depth insight into the relations of how specific the components of entrepreneurship process within students give impact on the entrepreneurial intention through the mediating role of perceived behavioral control, and the moderating role of their psychological safety in undertaking their assignment and project in several ways.

As it is the general norm in the entrepreneurship class, lecturers and professors frequently give students special assignments, such as developing a business idea and making this idea to be a student's project in a group context. This study also encourages educators to nurture personality traits of students to develop their personality to be more proactive, so they can achieve more progress in the project to enhance their risk-taking, eventually, they feel psychologically safe and engaged in starting a business.

Perceived behavioral control is partially mediating both the relationship between team learning and the intention of students in setting up their business and the relationship of students' performance in a group context with their entrepreneurial intention. This indicates that this research also helps students how they perceive themselves internally and how they sense and scan their external factors to direct them to see their future career options in entrepreneurship. Through a set of the learning process such as interacting, integrating themselves in their group, collaboration, could encourage them to pursue their business establishment plan in the future. Furthermore, we propose a different perspective by pondering a student who has learned and completed the course that he or she may not be a good entrepreneur or will not enjoy being an entrepreneur. Conducting real-world experiments that could be costly to start a venture and fail at assignments, these students can now decide to enter a managerial professional career instead. This should be considered a positive outcome of entrepreneurship education, whereas major literature (and many policymakers) would state it as a fiasco problem.

An elaborative and systematic approach to entrepreneurship teaching is also recommended. This study suggests that emphasizes nurturing the entrepreneurial intention of students in a systematic way.

## **Conclusion**

Although entrepreneurship education has been introduced and promoted in many countries and at many institutions in higher education, there is little known at this point about the impact of these courses, especially project-based learning. In particular, our finding dismantled the largely unknown how the courses impact students' willingness to engage in entrepreneurial activity and what kind of components and processes are responsible for them to get through. Instead, generally, the literature has focused on a simplified "up and down" analysis which studies outcomes, but rarely reflects and reviews the causes or the path of entrepreneurship learning.

In our overall assessment, the results can be read as confirmation for educational policies that view entrepreneurship training as a way of informing students about career options, and of creating learning opportunities for calibrating and refining their assessments of which career is most suitable. We have no means to assess how costly the mistakes of choosing the "wrong" career would be to the students and society at large. Hence, we cannot quantify the true economic and societal impact of entrepreneurship training. But it seems worthwhile to consider that a simple increase in entrepreneurial activity may neither be a good objective, nor the most likely outcome for including entrepreneurship in the curriculum

## **Study limitations**

Even though our study gives some enlightenment in an entrepreneurship course, we realize that our methodology used also presents another limitation. As we sent a questionnaire to students, and some of them answered it voluntarily, we cannot rule out the possibility of a self-selection (or nonresponse) bias. That is, it is conceivable that only students with a high interest in entrepreneurship have answered the questionnaire. Thus, our results may reflect with a moderate



accuracy the way the investigated phenomena were interrelated in the overall target population.

In addition, this study also presented some limitations that should be addressed in future research. In the future we would like to explore more about the attitude towards entrepreneurship, subjective norm also education components, which include 4 different learning variables: know-why, know-who, know-how, and know-what. In addition, we also want to investigate the role of institutional support in this regard university support. And to test and compare the result between male students and female students with the same object regarding gender differences in the levels of attitude, perceived behavioral control, and their intention for an entrepreneurship career option. A forward study could present a better understanding of how EI is established into real action. Second, we made a selection of individual, organizational, and institutional variables that were found to be most influential in predicting EI through our extensive literature review.

## **Appendix**

### **Questionnaires**

#### **Psychological safety**

1. Proactive personality (how well students engage (to enact change, detect problems, and subsequently problem- solving) and get involved in teamwork (Crant, 2000; Seibert, Crant, & Kraimer, 1999) could strengthen the effect of team learning on team performance
2. Emotional stability (student's propensity to be calm, relaxed (Costa & McCrae, 1992; Judge, Bono, & Locke, 2000) will strengthen the effect of team learning on team performance in a project-based learning entrepreneurship course
3. Openness to experience (being open to new ideas and different ways of doing things may increase the likelihood that individuals would feel safe taking risks and exposing their vulnerabilities (Edmondson and Mogelof (2005) could intensify the weight of team learning on team performance
4. Learning orientation (when students focus on increasing their competence and new skills development, and self-development (group levels (Wilkins & London, 2006) would strengthen the relationship between team learning and team performance
5. Supportive peer (by having supportive and caring team members (Schepers, de Jong, Wetzels, & de Ruyter, 2008) and (Bstieler & Hemmert, 2010) would escalate the effect of team learning on team performance

#### **Team learning**

1. How well I could integrate myself into a new team, entices me to choose entrepreneurship as a career option
2. Share your thoughts with your peers (is there any difficulty to expressing ideas and thought in the group especially in discussion and problem-solving in a project-based learning entrepreneurship course that could leverage me to start my own business)
3. Manage different opinions within a team (how good myself in dealing with various and different thoughts from their peers, impact them to become an entrepreneur)

4. Work with students from different fields of study (to what extent I able go to work with multidisciplinary background members in teamwork and collaboration, affects them to run their venture)

### **Team Performance**

1. Creating new products and services (how skillful students in creating new products or services would motivate me to create their firm)
2. Managing Innovation within a team project (how well their innovation and how to manage it in project-based learning entrepreneurship course, to drive me to open their own business in the future)
3. Commercializing a new idea or development (the ability to execute an integrative marketing plan, to shape my dream, and plan to seriously start a venture)
4. Building up a professional network (how skillful their networking and self – branding to get a professional network, encourages them to set up my firm)
5. Identifying new business opportunities (the potentiality in identifying and detecting the opportunities of business, motivates me to achieve entrepreneurship profession)
6. Successfully managing a business (success in their business project-based learning entrepreneurship course achievement, boosts me to start and run their own business)

### **Perceived behavioral control**

#### *Perceived difficulty*

- 1a. Starting a firm and keeping it viable would be easy for me (Guerrero et al., 2009) would intervene in the relationship of team learning and entrepreneurial intention
- 1b. Starting a firm and keeping it viable would be easy for me (Guerrero et al. 2009) would intervene in the relationship of team performance and entrepreneurial intention
- 2a. If I wanted to, I could easily pursue a career as an entrepreneur (Kolvereid, 1996b) would mediate the relationship of team learning and entrepreneurial intention
- 2b. If I wanted to, I could easily pursue a career as an entrepreneur (Kolvereid, 1996b) would mediate the relationship of team performance and entrepreneurial intention

#### *Perceived confidence*

- 3a. If I tried to start a business, I would have a high chance of being successful (Guerrero et al., 2009) would mediate the relationship between team learning and entrepreneurial intention
- 3b. If I tried to start a business, I would have a high chance of being successful (Guerrero et al., 2009) would mediate the relationship between team performance and entrepreneurial intention
- 4a. I have skills and capabilities to succeed as an entrepreneur (Grundstén, 2004; Autio et al., 2001) would intervene in the relationship of team learning and entrepreneurial intention
- 4b. I have skills and capabilities to succeed as an entrepreneur (Grundstén, 2004; Autio et al., 2001) would intervene in the relationship of team performance and entrepreneurial intention
- 5a. I am confident that I would succeed if I started my firm, would mediate the relationship of team learning and entrepreneurial intention

5b. I am confident that I would succeed if I started my firm, would mediate the relationship of team performance and entrepreneurial intention

6a. I am certain that I can start a firm and keeping it viable would intervene in the relationship of team learning and entrepreneurial intention.

6b. I am certain that I can start a firm and keeping it viable would intervene in the relationship of team performance and entrepreneurial intention

*Perceived controllability*

7a. I can control the creation process of a new firm (Liñán and Chen, 2009) would mediate the relationship between team learning and entrepreneurial intention.

7b. I can control the creation process of a new firm (Liñán and Chen, 2009) would mediate the relationship between team performance and entrepreneurial intention.

8a. The number of events outside my control that could prevent me from being an entrepreneur is very few (Kolvereid, 1996b) would intervene in the relationship of team learning and entrepreneurial intention

8b. The number of events outside my control that could prevent me from being an entrepreneur are very few (Kolvereid, 1996b) would intervene in the relationship of team performance and entrepreneurial intention

9a. As an entrepreneur, I would have complete control over the situation, would mediate the relationship of team learning and entrepreneurial intention

9b. As an entrepreneur, I would have complete control over the situation, would mediate the relationship of team performance and entrepreneurial intention

**Choice intention**

1. I would rather own my own business than earn a higher salary employed by someone else. Kolvereid and Isaksen (2006)

2. I would rather own my own business than pursue another promising career.

3. I am willing to make significant personal sacrifices to stay in business.

4. I would work somewhere else only long enough to make another attempt to establish my business.

**Self-regulated Learning** (Toering et al., 2012)

1a. Planning (how well I conduct planning in project-based learning entrepreneurship course would strengthen the effect of team learning on their motivation to start and run my own business)

1b. Planning (how well I conduct planning in project-based learning entrepreneurship course would strengthen the effect of team performance on their motivation to start and run my own business)

2a. Self-monitoring (how well I monitor myself in project-based learning entrepreneurship course would strengthen the effect of team learning on their motivation to start and run my own business)

2b. Self-monitoring (how well I monitor myself in project-based learning entrepreneurship course would strengthen the effect of team performance on their motivation to start and run my own business)

3a. Evaluation (how my strengths and weaknesses assessment about project-based learning entrepreneurship course would strengthen the effect of team learning on my motivation to start and run my own business)

3b. Evaluation (how my strengths and weaknesses assessment about project-based learning entrepreneurship course would strengthen the effect of team performance on my motivation to start and run my own business)

4a. Effort (how big my effort in project-based learning entrepreneurship course would strengthen the effect of team learning on my motivation to start and run my own business)

4b. Effort (how big my effort in project-based learning entrepreneurship course would strengthen the effect of team learning on my motivation to start and run my own business)

5a. Self-efficacy (how my beliefs of ability to complete a particular task in project-based learning entrepreneurship course would strengthen the effect of team learning on my motivation to start and run my own business)

5b. Self-efficacy (how my beliefs of ability to complete a particular task in project-based learning entrepreneurship course would strengthen the effect of team performance on my motivation to start and run my own business)

6a. Reflection (to compare the actual final learning results with the intended learning goals in project-based learning entrepreneurship course would strengthen the effect of team learning on my motivation to start and run my own business)

6b. Reflection (to compare the actual final learning results with the intended learning goals in project-based learning entrepreneurship course would strengthen the effect of team performance on my motivation to start and run my own business)

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