



JURNAL EKONOMI DAN BISNIS

Journal homepage: www.ejournal.uksw.edu/jeb

ISSN 1979-6471 E-ISSN 2528-0147

Entrepreneurial orientation and entrepreneurial intention: When more learning exposures are efficacious**Hardo Firmana Given Grace Manik^a, Airlangga Surya Kusuma^b**^a Faculty of Business, Universitas Kristen Duta Wacana, Yogyakarta, Indonesia; hardofggmanik@staff.ukdw.ac.id*^b Faculty of Economics and Business, Universitas Pembangunan Nasional Veteran Jakarta, Jakarta, Indonesia; airlanggasuryak@upnvj.ac.id

ARTICLE INFO

Article History:

Received 10-30-2020

Revised 04-21-2021

Accepted 09-02-2021

Keywords:

individual entrepreneurial orientation, entrepreneurial intention, entrepreneurship course, college student organization

Kata Kunci:

orientasi kewirausahaan individu, niat berwirausaha, kursus kewirausahaan, organisasi kemahasiswaan

ABSTRAK

Banyak sekolah bisnis di dunia telah terlibat dalam menciptakan calon wirausaha baru mulai dari ketika mereka belajar di universitas. Banyak universitas di Indonesia juga terlibat dalam upaya yang menantang ini. Penelitian ini mengkaji pengaruh orientasi kewirausahaan individu terhadap niat berwirausaha melalui analisis regresi dan uji perbandingan (uji-t) yang diujikan pada 200 mahasiswa dari beberapa perguruan tinggi besar di Indonesia. Hasil penelitian ini menunjukkan bahwa semua dimensi orientasi kewirausahaan individu (yaitu, keinovatifan, pengambilan risiko, keproaktifan, gairah, dan ketekunan) berdampak positif terhadap niat berwirausaha. Temuan ini mengisi kesenjangan terkait pengujian orientasi kewirausahaan individu dalam konteks lain dengan penambahan dua dimensi baru, yaitu gairah dan ketekunan. Lebih lanjut, temuan menarik dari penelitian ini adalah bahwa efek orientasi kewirausahaan individu pada niat berwirausaha ditemukan lebih tinggi pada siswa yang pernah mengikuti kursus kewirausahaan, tetapi hanya pada dua dimensi orientasi kewirausahaan individu (yaitu, pengambilan risiko dan proaktif). Selain itu, tingkat orientasi kewirausahaan mahasiswa yang aktif dalam organisasi kemahasiswaan lebih tinggi daripada yang tidak berpartisipasi, terkhusus pada tiga dimensi (yaitu, inovasi, pengambilan risiko, proaktif). Penelitian ini kemudian menganjurkan pentingnya berbagai eksposur pembelajaran (tidak hanya di dalam kelas) yang harus dialami oleh mahasiswa untuk mengembangkan orientasi kewirausahaan individu mereka.

ABSTRACT

Many business schools in the world seek to create newly aspiring entrepreneurs starting from their university years. Many Indonesian universities also engage in this challenging effort. This study investigates the effect of students' individual entrepreneurial orientation (IEO) on entrepreneurial intention (EI)

*Corresponding author

through regression analysis and t-test on 200 students from several major Indonesian universities. Our results indicate that all IEO dimensions (i.e., innovativeness, risk-taking, proactiveness, passion, and perseverance) positively affect EI. These findings fill in the gap regarding the IEO studies in other contexts by adding two new dimensions, namely passion and perseverance. Further, this study demonstrates that students who have taken entrepreneurship courses exhibit greater effect of IEO on EI, but only in two dimensions (i.e., risk taking and proactiveness). Besides, students who actively participate in student organizations exhibit higher IEO than those who do not, especially in three dimensions (i.e., innovativeness, risk taking, proactiveness). Hence, this study underscores the importance of various learning exposures (not only in the classroom) for university students to develop their IEO.

INTRODUCTION

Entrepreneurship and innovation are at the heart of economic growth, business sustainability, social change for the sake of human well-being, and welfare (Schoemaker et al., 2018; Schumpeter, 1943). Therefore, various countries around the world are struggling to create new entrepreneurs to eradicate poverty and create jobs.

The concept of innovation and entrepreneurship came to the fore and was widely studied by researchers, especially since the entry of the Industrial Revolution 3.0 with the presence of computers and the Internet and the Industrial Revolution 4.0 with digital technologies such as the Internet of Things, Artificial Intelligence, Cloud Computing, etc. (Maier & Reimer, 2018). Due to the rapid changing of the industrial situation, the entrepreneurial orientation (EO) was then advocated as a tendency and behavior that companies should have to survive (Covin & Lumpkin, 2011). The entrepreneurial orientation of a company is characterized by a tendency to be proactive, innovative, and like to take risks for its survival and adaptability (Lumpkin & Dess, 1996). Some prominent scholars found that entrepreneurial companies have relatively good performance, especially those related to profitability, growth, and innovation in various research settings (Covin & Lumpkin, 2011). However, the research on EO dominantly existed at the level of organizational analysis (Covin et al., 2020). The side that is no less crucial to discuss and still under-researched is the individual level, namely the intention of aspiring entrepreneurs as an individual to start a business aka IEO (Santos et al., 2020). Therefore, researching EO at the level of individual unit analysis will provide new insights and useful implications for various stakeholders (Ferreira et al., 2017; Santos et al., 2020).

In various studies on the relationship between IEO and entrepreneurial intentions, the IEO dimensions were derived from the firm-level EO dimensions as suggested by Lumpkin and Dess (1996), namely proactiveness, innovativeness, and risk-taking. Yet, Santos et al. (2020) stated that these three dimensions are not

sufficient to describe the overall orientation needed to generate entrepreneurial intention. Accordingly, two new dimensions are proposed to be tested, namely passion and persistence. Thus, this study intends to re-examine the effect of the five dimensions of the IEO on the entrepreneurial intention of students of the faculty of business and social sciences at several universities in Indonesia. The Indonesian context is explored because this country is massively promoting entrepreneurial pathways as the silver bullet of poverty alleviation.

Furthermore, many business schools in the world have also adopted entrepreneurship curricula and implemented them with various learning methods, ranging from class lectures, case study analysis, to direct business practices (Elenurm, 2012). However, further evaluation needs to be carried out regarding the effectiveness of entrepreneurship education in Indonesia in facing generation Z, the digital native (Frunzaru & Cismaru, 2021). This generation differs from previous generations (Gen Y and Baby Boomers) in terms of career ambitions or dreams (Berkup, 2014). Generation Z is identified to be more oriented towards living matters today than in the future and has a strong virtual network but a weak real-world network (Bencsik et al., 2016). The good news is that they are a generation that understands the digital world and wants to influence the world through it. The suitability between the Gen Z behavior and learning content/method provided by the universities certainly needs to be evaluated (Frunzaru & Cismaru, 2021). Therefore, students studying at the faculty of business and social sciences in Indonesia were selected as respondents to explore whether the entrepreneurship learning held influenced in directing entrepreneurial orientation to entrepreneurial intentions of generation Z.

The last issue that this research wants to investigate is how to foster an entrepreneurial mindset/orientation of college students. Several studies state that an entrepreneurial mindset can be cultivated if the college students are actively involved in organization activities, such as practicing leadership at the group and organizational level, organizing activities, and voicing aspirations to the government (Ebede, 2015). Active involvement in college student organizations is considered to be a complementary learning exposure for them to foster an entrepreneurial mindset in five dimensions, namely innovativeness, proactivity, risk-taking, passion, and perseverance (Guthrie & Jones, 2012). In the Indonesian context, the influence of this variable needed to be examined further.

In summary, this study aims to answer three questions: 1) Does the IEO, with its five dimensions, have a significant and positive effect on entrepreneurial intentions; 2) Is the influence of the IEO on the EI higher when entrepreneurship course has been provided?; and 3) Do students who actively participate in student organizations have a higher IEO than those who do not?

This paper is organized as follows. The first and second sections discuss the introduction and literature review including hypothesis development. The research

methodology is discussed in the third section and then closes with the results and conclusions in the fourth and fifth sections.

LITERATURE REVIEW AND HYPOTHESIS FORMULATION

Entrepreneurial Intention

Entrepreneurial intention (EI) is defined as a state of mind that directs one's attention, experience, and actions to carry out a business concept or establish a new company or create new values in an existing company (Bird, 1988). The keyword is intentionality that means a process occurs intentionally or naturally through choices, not by accident. In other words, when viewed from the lens of the theory of planned behavior (TPB), entrepreneurship is categorized as a planned behavior (Ajzen, 1991). Three important dimensions in the TPB that explain entrepreneurial behavior, namely perceived behavioral control, attitudes towards the behavior, and perceived social norms (Ajzen, 1991; Liñán et al., 2011). Perceived behavioral control is a person's perception of the ease or difficulty of realizing his intention to become entrepreneurial. Attitudes towards the behavior refer to the extent to which a person has positive or negative personal valuations about being an entrepreneur. Perceived social norms are about how strong social pressure from family, friends, or significant others is perceived to behave or not behave in entrepreneurial behavior.

Entrepreneurial intention is a key precursor to one's stage of establishing and developing a business. In a study conducted by Fragoso et al. (2020) about the important determinants of university students' EI in Brazil and Portugal using the TPB, self-efficacy, personality traits, and entrepreneurial attitude were found to affect the EI the most while the social recognition and country of origin had no significant impact.

Individual Entrepreneurial Orientation

The EO is a variable originally suggested by Miller (1983) which was further operationalized by Covin and Slevin (1989) by terming it as entrepreneurial strategic posture. Lumpkin and Dess (1996) finally refined the dimensions of EO, namely proactiveness, innovativeness, and risk-taking. In general, the EO reflects a comprehensive perspective related to business which consists of a mindset, beliefs, and values that are deeply rooted in terms of proactiveness, love of risk, and innovativeness (Covin et al., 2020). This dimension is then adapted to measure EO at the individual level because research at this level is considered to be able to provide important suggestions regarding what learning schemes should be done to grow it. Furthermore, based on the latest research studies and empirical tests, Santos et al. (2020) proposed the addition of two new dimensions to enrich the IEO measurement, namely passion and perseverance.

Innovation reflects the tendency to be involved and support the creation of new

ideas (Ferreira et al., 2017). Proactiveness refers to a propensity to take the initiative to seek and pick up business opportunities (Covin et al., 2020). Taking risk is the tendency to commit large amounts of resources even though the business initiated is new and uncertainty remains (Koe, 2016). Passion is a series of intense and meaningful positive feelings experienced when engaging in entrepreneurial activities (Cardon et al., 2009). Perseverance is concerned with sustainably pursuing goals or ensuring that actions and energy are directed towards achieving goals despite coping with many obstacles (Baum & Locke, 2004; van Gelderen, 2012).

Individual Entrepreneurial Orientation and Entrepreneurship Intention

Innovativeness is related to a person's tendency to engage and support new ideas, novelty, experimentation, and creative processes that ultimately produce new products, services, or technological processes (Lumpkin & Dess, 1996). In other words, someone with an innovative mindset always wants to challenge the status quo and break down irrelevant traditions, or referring to the term coined by Schumpeter (1943), creating creative destruction. The tendency to constantly think of new ways of doing things encourages individuals to become pioneers in entrepreneurship, especially in establishing businesses, both purely business and social (Koe 2016). Various previous studies have confirmed that innovativeness encourages entrepreneurial intentions (Koe, 2016; Kumar et al., 2020). Therefore, this research hypothesizes that:

H1a: Innovativeness has a positive effect on the EI.

The thing that distinguishes someone who has entrepreneurial intentions and who does not is the level of courage in taking risks. Risk-taking is associated with a high spirit of experimentation or venturing into the unknown (Lumpkin & Dess, 1996). Risk takers are committed to constant trial and error by allocating resources and believe that business opportunities can be seized and executed. In other words, they dare to make sacrifices and put themselves on the line. Risk-taking behavior usually exists in the range of “safe” risks such as saving money in a bank to high-risk actions such as borrowing large debts or investing in a sophisticated technology (Lumpkin & Dess, 1996). Additionally, a risk-taker individual tends to proactively map every business opportunity, identify competitors, and network aggressively with various parties to establish and develop a business. Previous studies have also shown that someone willing to take risks tends to choose to open their own business (Ferreira et al., 2017; Koe, 2016; Kumar et al., 2020). Thus, the proposed hypothesis is:

H1b: Risk-taking has a positive effect on the EI.

An important keyword in the discussion of proactiveness is initiative. A proactive person is someone who has a high tendency to start something first without

waiting for others to gain a first-mover advantage (Lumpkin & Dess, 1996). In other words, acting in anticipation of future problems, needs, or changes is a crucial feature of a proactive person. The opposite of activism is passiveness, which is the inability to seize opportunities. Someone who tends to act proactively or anticipatively is suitable to be an entrepreneur, or at least, has the intention to become entrepreneurial. This argument is supported by several previous studies (Ferreira et al., 2017; Koe, 2016; Kumar et al., 2020). Hence, we hypothesize that:

H1c: Proactiveness has a positive effect on the EI.

Passion is a set of intensely positive feelings about something a person is interested in and experiencing (Cardon et al., 2009). By possessing passion, one can continue to energize him/herself to start a business and be enthusiastic in preparing everything needed. In other words, passion is the heart of entrepreneurship that can encourage entrepreneurial intention (Gerschewski et al., 2016). Any problem that may arise in the entrepreneurial process will be easily conquered by people who have an entrepreneurial passion (Cardon et al., 2009). Santos et al. (2020) confirm the significant influence of passion in generating entrepreneurial intentions. Accordingly, we argue that:

H1d: Passion has a positive influence on the EI.

Perseverance is a steadfast ongoing quest to achieve goals despite dealing with many challenges (Gerschewski et al., 2016). A person who perseveres usually has a high energy level in facing each problem and trying to solve it. People who have this character tend not to give up easily and fight tooth and nail for their dreams, including in establishing and developing a business. Previous studies have proven that perseverance can encourage entrepreneurial intention (Gerschewski et al., 2016; Santos et al., 2020). Therefore, we propose the following hypothesis:

H1e: Perseverance has a positive effect on the EI.

Moderating Role of Entrepreneurship Course and Active Involvement in College Student Organization

According to Marques et al. (2018), people who have received an entrepreneurship education or course tend to have a higher IEO or at least have an increased belief that they will be able to complete entrepreneurial tasks. Therefore, educational institutions such as universities have a crucial role in fostering an entrepreneurial orientation as well as directing this orientation into an intention to establish a business through a series of learning methods (Mueller, 2011).

One of the learning methods that have been carried out as described in the research findings is experiential learning. This type of learning allows learning participants to have subjective personal experiences that are directly connected to phenomena (Guthrie & Jones, 2012). In other words, the experiential learning process integrates experiences, concepts, judgments, and actions (Guthrie & Jones, 2012). For example, students can explain business plans in class, get input from peers, and eventually start their own business. Lecturers can act as facilitators who provide a conducive learning ecosystem for business discussions as well as liaise with various business owners through personal and institution networks to be asked to become mentors. It is hoped that this series of learning processes can direct entrepreneurial orientation to be concrete into entrepreneurial intentions. So, the proposed hypothesis is:

H2a: The effect of IEO on EI is higher for students who have taken entrepreneurship courses than those who have not.

The next discussion is about the active involvement in college student organizations. Student organizations can be said to be laboratories for students to apply the management and business sciences they learn conceptually in the classroom (Munoz et al., 2016). In these organizations, students organize various programs and build networks. These activities hone leadership skills, negotiation, effective communication, the ability to think critically, live in a diverse culture, and prepare for future careers (Ebede, 2015).

In other words, by being actively involved, students' IEO can be nurtured because their mindset has been directed to always be innovative, proactive, risk-loving, passionate, and diligent. Several studies have confirmed the benefits of being actively involved in student organizations (Guthrie & Jones, 2012; Munoz et al., 2016; Pinto & Ramalheira, 2017) thus this research expects that:

H2b: IEO of students who participate in student organizations is higher than those who do not.

Figure 1 below illustrates our research model based on the proposed hypotheses.

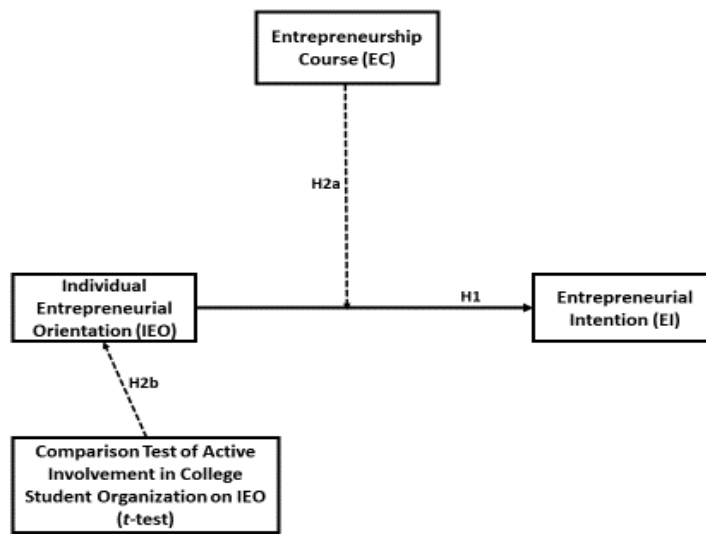


Figure 1
Research Model

RESEARCH METHODOLOGY

The current study utilized an explanatory research design to answer the research goals (Cooper & Schindler, 2014). An online survey was conducted during September 2020 to 200 business and social science students spread across several universities in Indonesia by using purposive sampling. This type of sampling is utilized to identify the sample group division i.e. active involvement in a college student organization or not and following entrepreneurship course or not. The collected data was then analyzed using SPSS and WarpPLS. The majority of respondents are women, amounting to 130 people (65 percent).

Table 1
Measurements

Variables	Dimension and Operational Definition	Statements: CFA*	Cronbach's Alpha	Item References
Individual Entrepreneurial Orientation	Innovativeness: The inclination of an individual to engage and support new ideas, experiments, and creative processes (Lumpkin & Dess, 1996).	I1 → I often try new activities that I never do before: 0.606 I2 → In general, I prefer an innovative or unique approach to doing things (doing things in a new way that has never been done before) than an approach that has been tested or has been used before: 0.794 I3 → When I learn something new, I prefer to try to do it in my own unique way rather than	0.654	Santos et al. (2020)

Variables	Dimension and Operational Definition	Statements: CFA*	Cronbach's Alpha	Item References
		doing it as everyone else does: 0.686 I4→ I prefer to try new (experimenting) approaches to problem solving rather than using methods other people often use: 0.712		
	Risk taking: An individual's proclivity to support projects in which the expected returns are uncertain (Lumpkin & Dess, 1996).	RT1→ I like to explore things I didn't know before and make risky decisions: 0.637 RT2→ I am willing to invest a lot of time and / or money in something that will provide a high return: 0.509 RT3→ I tend to act bold in risky situations: 0.681	0.668	Santos et al. (2020)
	Proactiveness: An individual's propensity to lead rather than follow in the development of new methods/procedures in doing something (Lumpkin & Dess, 1996).	0.668 Pro1→ I usually act in anticipation of problems, needs, or changes in the future: 0.720 Pro2→ I tend to plan other projects/jobs/things that I want to work on ahead of time: 0.857 Pro3→ I would rather take the initiative to do a job than sit around waiting for someone else to do it: 0.741	0.664	Santos et al. (2020)
	Passion: A set of intense positive feelings that are consciously accessible and experienced by those involved in entrepreneurial activities linked with roles entrepreneurs consider significant (Cardon et al., 2009).	Pas1→ I have enthusiasm for finding business opportunities: 0.849 Pas2→ I am passionate about and looking for the financial, human, and social network resources (e.g. relationships, family, and partnerships/sponsorships) needed to create a new business: 0.852 Pas3→ I have a high desire to imagine and grow my business in the future :0.811	0.724	Santos et al. (2020)

Variables	Dimension and Operational Definition	Statements: CFA*	Cronbach's Alpha	Item References
	Perseverance: Sustaining goal-oriented actions and energy levels even when confronted with obstacles (Baum & Locke 2004).	Pas4→ When I don't think about business, I tend to get discouraged :0.409 Persv1→ I have ever reached a goal that took me a long time and a lot of effort to achieve: 0.591 Persv2→ I am able to overcome obstacles when faced with a big challenge in realizing that goal: 0.689 Persv3→ I always end what I started: 0.382 ^{nv} Persv4→ Challenges did not discourage me: 0.750 Persv5→ In many complex and tough situations, I persist in achieving my goals despite seeing others give up: 0.748	0.665	Santos et al. (2020)
Entrepreneurial Intention	Entrepreneurs' states of mind that direct attention, experience, and action toward a business concept (Bird 1988).	EI1→ I will make every effort to start and run a business: 0.674 EI2→ My ultimate goal is to become an entrepreneur: 0.789 EI3→ I was determined to start a company: 0.754 EI4→ I am ready to do anything to become an entrepreneur: 0.807 EI5→ How to start business is on my mind all the time: 0.550 EI6→ My intention is firm to start a business: 0.745	0.815	Koe (2016)
Entrepreneurship Course	0=Yes, N=87 1=No, N=113			
Active Involvement in College Student Organization	0=Yes, N=118 1=No, N=82			

Notes: *Confirmatory Factor Analysis, factor loading ≥ 0.4 is valid (Hair Jr et al., 2016), *5-points Likert scale (1=strongly disagree; 5=strongly agree)

^{nv} Not valid.

Table 1 describes the measurements used in this research. The IEO is measured using items adapted from Santos et al. (2020) while EI is from Koe (2016). Entrepreneurship courses and activeness in student organizations are grouped into two

subsamples (yes vs. no, respectively). A confirmatory factor analysis was conducted to check the validity issue and found one invalid item (Persv3) with factor loading below 0.4. This item has been dropped. With Cronbach's alpha > 0.6, all the variables were reliable (Sekaran & Bougie, 2013).

ANALYSIS AND DISCUSSION

Before testing the hypothesis, the correlation test was carried out first to see the possibility of multicollinearity issues. As outlined in Table 2, there was a strong association between Proactiveness and Perseverance ($r = 0.500, p < 0.01$) and between Passion and Entrepreneurial Intention ($r = 0.529, p < 0.01$). Further tests (VIF and tolerance) were then performed to confirm the presence of the multicollinearity effect and found that the values for both were 1 and 1, respectively. These results indicate that there is no multicollinearity issue in the model (Hair et al., 2016).

Table 2
Correlation Analysis

Variables	Correlation Coefficient					
	I	RT	Pro	Pas	Persv	EI
Innovativeness (I)	1					
Risk Taking (RT)	0.243**	1				
Proactiveness (Pro)	0.342**	0.217**	1			
Passion (Pas)	0.332**	0.235**	0.388**	1		
Perseverance (Persv)	0.431**	0.142*	0.500**	0.372**	1	
Entrepreneurial Intention (EI)	0.275**	0.285**	0.230**	0.529**	0.218**	1

Notes: **correlation is significant at 0.01 level. *correlation is significant at 0.05 level.

Table 3
Hypothesis Test Results

Hypotheses	Effects	β	p^*	Findings	Conclusions
H1a	I→EI	0.285	<0.001	Significant, Positive	Supported
H1b	RT→EI	0.292	<0.001	Significant, Positive	Supported
H1c	Pro→EI	0.250	<0.001	Significant, Positive	Supported
H1d	Pas→EI	0.521	<0.001	Significant, Positive	Supported
H1e	Persv→EI	0.225	<0.001	Significant, Positive	Supported
H2aa	I→EI				
	With EC	0.309	0.001	Significant, Positive	Not Supported
Without EC	0.339	<0.001			
H2ab	RT→EI				
	With EC	0.360	<0.001	Significant, Positive	Supported
Without EC	0.298	<0.001			
H2ac	Pro→EI				
	With EC	0.316	<0.001	Significant, Positive	Supported
Without EC	0.250	0.003			
H2ad	Pas→EI				
	With EC	0.442	<0.001	Significant, Positive	Not Supported
Without EC	0.584	<0.001			
H2ae	Persv→EI				
	With EC	0.215	0.018	Significant, Positive	Not Supported
Without EC	0.277	0.001			

Notes: * p is significant at 0.05 level.

I=Innovation; RT=Risk Taking; Pro=Proactiveness; Pas=Passion; Persv=Perseverance;

EI=Entrepreneurial Intention, EC: Entrepreneurship Course.

Table 4
Results of Comparison Test of the IEO

Dimensions	Involvement in College Student Organization	Mean	<i>t</i> *	Conclusion
Innovativeness	Group 1: Yes	14.49	0.656**	Supported
	Group 2: No	14.26		
Risk Taking	Group 1: Yes	10.76	0.845**	Supported
	Group 2: No	10.57		
Proactiveness	Group 1: Yes	11.62	0.240**	Supported
	Group 2: No	11.56		
Passion	Group 1: Yes	14.92	-0.523**	Not Supported
	Group 2: No	15.08		
Perseverance	Group 1: Yes	14.66	-1.576**	Not Supported
	Group 2: No	15.25		

Notes: **p-value < 0.05; one tailed test, *negative means that the second subsample' score is higher than the first one.

Tables 3 and 4 summarize the results of testing hypotheses 1 and 2. The effect of all IEO dimensions on EI was found to be significant and positive. Reflecting on these findings, we are in line with various previous studies (Ferreira et al., 2017; Koe, 2016; Kumar et al., 2020; Santos et al., 2020) that indeed someone who has a high level of innovativeness, risk-taking, proactiveness, passion, and perseverance tends to have entrepreneurial intention. Moreover, the addition of the two newest dimensions (passion and perseverance) increasingly has a stronger conceptual and empirical basis because it is evident in different contexts, especially in Indonesia via this research. This finding thus fulfills the research call from Santos et al. (2020).

These five characteristics should thus become an integral part of the curriculum output developed by the university. This is a very serious matter that must be considered by the campus because students who are innovative, proactive, risk-loving, passionate, and persevere are also potential agents of change in society and this country at large (Saptono et al., 2020).

Furthermore, the next discussion is that not all the IEO dimensions have a higher effect on the EI on students who have already taken entrepreneurship courses or more precisely, only risk-taking and proactiveness. This could be because the majority of entrepreneurship learning methods are in the form of seminars and lectures at various campuses in Indonesia which are not yet effective enough to produce young entrepreneurs who are innovative, passionate, and persevere. Given the importance of fostering the five dimensions of the IEO and its influence on the EI, campuses in Indonesia are advised to multiply experiential learning models, aka doing business practices, accompanied by mentors who are already successful in business. The mentoring model allows for a continuous transfer of knowledge, experience, and motivation to ensure the business establishment. Universities can optimize their respective business incubation institutions to support this process.

The final finding is that the three IEO dimensions (i.e., innovativeness, risk-taking, and proactiveness) were found to be higher in students who actively participate in student organizations. This indicates that the learning exposures experienced in these organizations are indeed beneficial in fostering student entrepreneurial orientation, at least on the three dimensions. Therefore, campuses should campaign to every student that learning does not only occur in classrooms but also within college student organizations as the living laboratories or “galvanizing place” to cultivate entrepreneurial character or mindset (Mozahem & Adlouni, 2021).

Regarding the last two dimensions which were found not to be higher in students who participated in student organizations, other learning exposures might grow it. For example, a student’s passion can be grown through routine psychological counseling activities, while perseverance can be grown by engaging directly with the grassroots community to do social services. This is in line with Gen Z's behavior, which is relatively concerned with the practice rather than theory (Berkup, 2014).

CONCLUSION, LIMITATION, AND SUGGESTION

Previous studies have shown that the significance of all dimensions of IEO on EI is highly dependent on the research context because various studies reveal different results in different countries/regions (Ferreira et al., 2017; Goktan & Gupta, 2013; Koe, 2016), including that shown by this study. This study contributes to the entrepreneurial orientation literature by proving that all IEO dimensions, especially the two newest dimensions proposed by Santos et al. (2020) (i.e. passion and perseverance), have a significant effect on entrepreneurial intention. Therefore, theoretically speaking, future studies can use the IEO variable with these five dimensions as wholeness to test its effects with other relevant variables.

This research also provides practical implications, namely that campuses should increase strong support for the existence of student organizations to improve students' entrepreneurial orientation. In addition, the findings of this study which state that not all IEO dimensions have a positive effect on EI when entrepreneurship courses are given can also be a strong basis for changing the format of entrepreneurship courses, from lecture-based learning to experiential learning or project-based learning. The *Merdeka Belajar-Kampus Merdeka* (MBKM) curriculum which has been launched recently by the Ministry of Education, Culture, Research, and Technology can be a smart solution because it emphasizes entrepreneurial learning where students directly establish a business and are supported and monitored by the campus by providing special mentors.

As the limitation of this study is that the data used is cross-sectional data that cannot capture students' condition when they graduate, whether they eventually start a business or not. Therefore, future research can deploy longitudinal studies to

investigate it. In addition, other variables such as national or ethnic culture can be tested into this model for future research. Investigating EIO and EI in light of ethnic/cultural entrepreneurship in Indonesia is an appealing research agenda (Indarti et al., 2020; Manik et al., 2021)

REFERENCES

- Ajzen, I. (1991). The theory of planned behavior organizational behavior and human decision processes. *Organizational Behavior and Human Decision Process*, 50(2), 179–211.
- Andersson, T., Curley, M., & Formica, P. (2010). *Knowledge-driven entrepreneurship* (1st ed.). Springer Science. <https://doi.org/10.1017/CBO9781107415324.004>
- Baum, J. R., & Locke, E. A. (2004). The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth. *Journal of Applied Psychology*, 89(4), 587.
- Bencsik, A., Gabriella, H.-C., & Tímea, J. (2016). Y and Z generations at workplaces. *Journal of Competitiveness*, 6(3), 90–106. <https://doi.org/10.7441/joc.2016.03.06>
- Berkup, S. B. (2014). Working with generations X and Y In generation Z period: Management of different generations in business life. *Mediterranean Journal of Social Sciences*, 5(19), 218–229. <https://doi.org/10.5901/mjss.2014.v5n19p218>
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of Management Review*, 13(3), 442–453. <https://doi.org/10.1177/0896920511399938>
- Cardon, M. S., Wincent, J., Singh, J., & Drnovsek, M. (2009). The nature and experience of entrepreneurial passion. *Academy of Management Review*, 34(3), 511–532. <https://doi.org/10.5465/AMR.2009.40633190>
- Cooper, D. R., & Schindler, P. S. (2014). *Business research methods*. Mc Graw-Hill Irwin. <https://doi.org/658.0072—dc23>
- Covin, J. G., & Lumpkin, G. T. (2011). Entrepreneurial orientation theory and research: Reflections on a needed construct. *Entrepreneurship: Theory and Practice*, 35(5), 855–872. <https://doi.org/10.1111/j.1540-6520.2011.00482.x>
- Covin, J. G., & Miller, D. (2008). Entrepreneurial orientation and growth of SMEs: A causal model. *Entrepreneurship Theory and Practice*, 32(3), 507–528. <https://doi.org/10.1111/etap.12027>
- Covin, J. G., Rigtering, J. P. C., Hughes, M., Kraus, S., Cheng, C. F., & Bouncken, R. B. (2020). Individual and team entrepreneurial orientation: Scale development

- and configurations for success. *Journal of Business Research*, 112(October 2019), 1–12. <https://doi.org/10.1016/j.jbusres.2020.02.023>
- Covin, J. G., & Slevin, D. P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, 10(1), 75–87.
- Ebede, S. S. (2015). *The impact of student organizations on the development of core competencies*. University of Northern Iowa.
- Elenurm, T. (2012). Entrepreneurial orientations of business students and entrepreneurs. *Baltic Journal of Management*, 7(2), 217–231. <https://doi.org/10.1108/17465261211219822>
- Ferreira, F. A. F., Jalali, M. S., Bento, P., Marques, C. S. E., & Ferreira, J. J. M. (2017). Enhancing individual entrepreneurial orientation measurement using a metacognitive decision making-based framework. *International Entrepreneurship and Management Journal*, 13(2), 327–346. <https://doi.org/10.1007/s11365-016-0388-5>
- Fragoso, R., Rocha-Junior, W., & Xavier, A. (2020). Determinant factors of entrepreneurial intention among university students in Brazil and Portugal. *Journal of Small Business and Entrepreneurship*, 32(1), 33–57. <https://doi.org/10.1080/08276331.2018.1551459>
- Frunzaru, V., & Cismaru, D. M. (2021). The impact of individual entrepreneurial orientation and education on generation Z's intention towards entrepreneurship. *Kybernetes*, 50(7), 1969–1981. <https://doi.org/10.1108/K-05-2018-0272>
- Gerschewski, S., Lindsay, V. J., & Rose, E. (2016). Advancing the entrepreneurial orientation construct: The role of passion and perseverance. *Review of International Business and Strategy*, 26(4), 446–471. <https://doi.org/10.1108/RIBS-08-2016-0042>
- Goktan, A. B., & Gupta, V. K. (2013). Sex, gender, and individual entrepreneurial orientation: Evidence from four countries. *International Entrepreneurship and Management Journal*, 11(1), 95–112. <https://doi.org/10.1007/s11365-013-0278-z>
- Guthrie, K. L., & Jones, T. B. (2012). Teaching and learning: Using experiential learning and reflection for leadership education. *New Directions for Student Services*, Winter(140), 53–63. <https://doi.org/10.1002/ss>
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publications.
- Indarti, N., Hapsari, N., Lukito-Budi, A. S., & Virgosita, R. (2020). Quo vadis, ethnic entrepreneurship? A bibliometric analysis of ethnic entrepreneurship in

- growing markets. *Journal of Entrepreneurship in Emerging Economies*, 13(3), 427–458. <https://doi.org/10.1108/JEEE-04-2020-0080>
- Koe, W.-L. (2016). The relationship between individual entrepreneurial orientation (IEO) and entrepreneurial intention. *Journal of Global Entrepreneurship Research*, 6(13), 1–11. <https://doi.org/10.1186/s40497-016-0057-8>
- Kumar, S., Paray, Z. A., & Dwivedi, A. K. (2020). Student's entrepreneurial orientation and intentions: A study across gender, academic background, and regions. *Higher Education, Skills and Work-Based Learning*, 11(1), 78–91. <https://doi.org/10.1108/heswbl-01-2019-0009>
- Liñán, F., Rodríguez-Cohard, J. C., & Rueda-Cantuche, J. M. (2011). Factors affecting entrepreneurial intention levels: A role for education. *International Entrepreneurship and Management Journal*, 7(2), 195–218. <https://doi.org/10.1007/s11365-010-0154-z>
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Journal*, 21(1), 135–172. <https://doi.org/10.2307/258632>
- Maier, E., & Reimer, U. (2018). Digital change-new opportunities and challenges for tapping experience and lesson learned for organizational value creation. In K. North, R. Maier, & O. Haas (Eds.), *Knowledge Management in Digital Change* (pp. 705–713). Springer International Publishing. <https://doi.org/10.1007/978-3-319-73546-7>
- Manik, H. F. G. ., Indarti, N., & Lukito-Budi, A. S. (2021). Examining network characteristic dynamics of kinship-based families on performance within Indonesian SMEs. *Journal of Enterprising Communities: People and Places in the Global Economy (Forthcoming)*. <https://doi.org/10.1108/JEC-03-2020-0021>
- Marques, C., Santos, G., Galvão, A., Mascarenhas, C., & Justino, E. (2018). Entrepreneurship education, gender and family background as antecedents on the entrepreneurial orientation of university students. *International Journal of Innovation Science*, 10(1), 58–70.
- Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management Science*, 29(7), 770–791.
- Mozahem, N. A., & Adlouni, R. O. (2021). Using entrepreneurial self-efficacy as an indirect measure of entrepreneurial education. *International Journal of Management Education*, 19(1), 1–10. <https://doi.org/10.1016/j.ijme.2020.100385>
- Mueller, S. (2011). Increasing entrepreneurial intention: Effective entrepreneurship course characteristics. *International Journal of Entrepreneurship and Small*

- Business*, 13(1), 55–74. <https://doi.org/10.1504/IJESB.2011.040416>
- Munoz, L., Miller, R., & Poole, S. M. (2016). Professional student organizations and experiential learning activities: What drives student intentions to participate? *Journal of Education for Business*, 91(1), 45–51. <https://doi.org/10.1080/08832323.2015.1110553>
- Pinto, L. H., & Ramalheira, D. C. (2017). Perceived employability of business graduates: The effect of academic performance and extracurricular activities. *Journal of Vocational Behavior*, 99, 165–178. <https://doi.org/10.1016/j.jvb.2017.01.005>
- Santos, G., Marques, C. S., & Ferreira, J. J. M. (2020). Passion and perseverance as two new dimensions of an individual entrepreneurial orientation scale. *Journal of Business Research*, 112(March), 190–199. <https://doi.org/10.1016/j.jbusres.2020.03.016>
- Saptono, A., Wibowo, A., Narmaditya, B. S., Karyaningsih, R. P. D., & Yanto, H. (2020). Does entrepreneurial education matter for Indonesian students' entrepreneurial preparation: The mediating role of entrepreneurial mindset and knowledge. *Cogent Education*, 7(1), 1–16. <https://doi.org/10.1080/2331186X.2020.1836728>
- Schoemaker, P. J. H., Heaton, S., & Teece, D. (2018). Innovation, dynamic capabilities, and leadership. *California Management Review*, 61(1), 1–28. <https://doi.org/10.1177/0008125618790246>
- Schumpeter, J. A. (1943). *Capitalism, socialism and democracy*. Routledge.
- Sekaran, U., & Bougie, R. (2013). *Research methods for business*. John Wiley & Sons. https://doi.org/10.1007/978-94-007-0753-5_102084
- van Gelderen, M. (2012). Perseverance strategies of enterprising individuals. *International Journal of Entrepreneurial Behavior & Research*, 18(6), 630–648.