Is The Quality of Business Incubator Programs Capable of Boosting Entrepreneurial Orientation and Intention at Higher Education?

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Abstract: This research attempts to expand on and explore the formation model of Entrepreneurial Orientation & Intention by testing the effect of The Quality of Incubator Program that is mediated by Perceived Entrepreneurial Self-Control. The model expanded here is a synthesis of Entrepreneurship Theory, The Theory of Planned Behavior and Human Capital Theory. The research model was empirically tested on university business students in Indonesia with a sample of 200 respondents and then analyzed using Structured Equation Modeling. Business incubation programs in the form of quality services such as Infrastructure Provider, Business Services, Financing Provider and People Connectivity, can produce business students that possess a variety of business skills that generate confidence and a positive self-perception in conducting business. Later this confidence and positive self-perception can generate students that are entrepreneurial oriented—innovative, proactive, risk-taking, to the extent that they will be capable of increasing the intention in conducting business.

1 INTRODUCTION

Universities believe that business incubator is a strong tool for promoting innovation and entrepreneurship through a variety of activities like: business development process monitoring, management mentoring, and product/service life cycle analysis for a business all the way up until the exit strategy. (Aerts et al., 2007). The purpose of these incubation activities is as learning media for new ventures, a forum for exchanging ideas, receiving psychological support, maintaining partnerships, and establishing business relationships with outside entities (Li et al., 2017). If business incubator can be managed well, it will certainly produce high quality business programs that can help students gain self-confidence and feel capable of conducting business. This self-confidence and feeling of capability will also later encourage prospective entrepreneurs in the formation of their interest and business orientation. Students who have high motivation and business orientation certainly will actively participate in the creation of businesses or innovations and have interest in developing business tools in order to create a business ecosystem within the university (De Jorge-Moreno et al., 2012).

Unfortunately, at this time there is very little research that presents the effect of quality business incubator programs on entrepreneurial orientation and intention at the higher education. Researchers such as Sondari (2014) and Usaci (2015) have indeed focused their studies on the entrepreneurial intention of students at the higher education, but have not clearly included inputs in the form of training activities and business choosing to discuss the mental indicators of an entrepreneur. Marques et al. (2018) and Alvarez et al. (2006) have also done research about business orientation at the higher education, but have placed emphasis on curriculum, learning methodology, or the impact of various demographics. Although much research has been done on The Theory Of Planned Behavior, to date none has specifically focused on the role of entrepreneurial perceived Self-Control as having a causal relationship with the formation of entrepreneurial orientation and intention which have a significant impact compared to other TPB dimensions (Mei et al., 2015).
Several studies that have been presented show that the development models for the formation of entrepreneurial orientation and intention through business incubator programs are still very limited. As a result, this research attempts to establish and explore a development model for entrepreneurial orientation and intention through the quality of business incubator programs that is mediated by entrepreneurial perceived Self-Control. This article is comprised of several sections. Initially, we will discuss the theories that form the basis for the development model—particularly the theory of planned behavior, human capital theory and entrepreneurship theory. Then a variety of hypotheses will be tested in order to support empirical model. In the second section we will present a model that will test the goodness of fit and be used to prove the hypothesis. The third section will discuss the findings that fill in the research gaps that have surfaced.

2 LITERATURE REVIEW & HYPOTHESIS

2.1 Higher Education Business Incubators and Their Business Services

The business incubator is one organization currently used as a strategic initiative to stimulate and support economic growth through innovative creation and company growth activities (Morgan, 2014). Many definitions of business incubator exist, one of which comes from Blackburne and Buckley (2017) stating that a business incubator is a collaborative work space that offers tenants a variety of intervention systems that add strategic value—in business incubation, typically these include business growth system monitoring and business support. This system controls and connects a variety of resources in order to facilitate successful business growth, while at the same time limiting the businesses potential failure expenses.

There are four services generally offered by business incubators, the first of which is Infrastructures Provider such as offices, meeting rooms, laboratory facilities, internet, etc. The purpose of this particular service is for economies of scale, to reduce the business start-up costs and be capable of creating a “professional and branded look” (Hong et al., 2018). The next service is the availability of business services like: strategy consulting, market research, financial training, even registering or licensing brands. The purpose of this service is to assist in the process of a business’ management growth (van Weele et al., 2017). The third service is to provide or develop partnerships with those offering financing or capital funds (Financial Provider & Facilitation). The purpose here is to give leverage for new businesses so they can receive finances for business growth (Wright, 2017). The fourth service is People Connectivity which consists of mentoring and coaching services, interaction with other entrepreneurs or even market connections.

2.2 The Quality of Incubator Programs, Entrepreneurial Perceived Self-Control, Entrepreneurial Orientation, and Entrepreneurial Intention

In business literature, entrepreneurship is defined in various ways by experts. According to Woodside et al. (2016), entrepreneurship is a process of applying creativity and innovation to look for opportunities and solve problems that are faced by people in their daily lives. It can be said that the core of entrepreneurship is creativity and innovation that is capable of producing something new and valuable for oneself and others. According to this definition, entrepreneurship not only seeks personal gain but must also have value for society (Murphy et al., 2006). By using human capital theory, which states that people are a form of capital just like other forms, human resource development will be strongly tied to the experience and exposure used to increase productivity. As a result, entrepreneurship expertise can be obtained through a process of socialization, schooling, training, and workshops, all of which are human capital investments (Adom and Asare-Yeboa, 2016). One method of improving a person’s entrepreneurial investment capital is to implement a Business Incubator program which is comprised of 4 basic services: Infrastructure Provider, Business Services, Financial Provider and People Connectivity. These four services collectively will form the Quality of Incubator Programs to support a person’s entrepreneurial capital (Li et al., 2017). Based on this information, the researchers will establish The Quality of Incubator Programs as defined by a collective of entrepreneurial programs comprised of Infrastructures Provider, Business Services, Financial Provider and People Connectivity that are part of a business incubator.
and capable of significantly improving the business skills of the participants.

Moreover, when we talk about the intention to engage in entrepreneurial activities, it cannot be discussed apart from the theory of planned behavior. There is one dimension that is closely tied to the results of human investment that have been conducted, and that is the creation of Perceived Behavior Control (Murugesan and Jayavelu, 2015). Perceived behavioral control is the perception of the ease or difficulty of doing something and it assumingly reflects past experience and an anticipation of obstacles. Perceived behavioral control is a function of control beliefs, which are beliefs regarding factors that ease the doing of something or make it more difficult, and the perception of the weight of these factors (Ajzen, 1991). According to Mei et al. (2015) the result from entrepreneurial human capital investment usually expects that the individual subject can more easily solve problems and, full or self-confidence, will be capable of controlling a variety of entrepreneurial initiatives in the form of Entrepreneurial Perceived Self-Control. Because of this, Entrepreneurial Perceived Self-Control can be defined as the perception and belief of an individual regarding his/her capability to engage in entrepreneurial business processes with either ease or difficult.

From this information, a hypotheses can be formed that represents the relationship between The Quality of Incubator Programs and Entrepreneurial Perceived Self-Control, as follows:

H1a: The Quality of Incubator Programs has a positive impact on Entrepreneurial Perceived Self-Control, in that the higher the quality of incubator programs, the greater the Entrepreneurial Perceived Self-Control of a college student.

H1b: The Quality of Incubator Programs has a positive impact on Entrepreneurial Orientation, the higher the quality of incubator programs, the greater the degree of Entrepreneurial Orientation of a college student.

H1c: The Quality of Incubator Programs has a positive impact on Entrepreneurial Intention, the higher the quality of incubator programs, the greater the degree of Entrepreneurial Intention for a college student.

### 2.3 Entrepreneurial Perceived Self-Control and Entrepreneurial Orientation

Entrepreneurship indicates the attitude, mindset, and characteristics of someone who has the strong desire to produce innovation real-world business and develop it (Viinikainen et al., 2017). Entrepreneurs therefore are those who: have initiative, organize, and reorganize social and economic mechanisms to alter resources and situations based on practical evaluations and the acceptance of risk and potential failure (Poole, 2018). These things demonstrate that a successful entrepreneur must have an entrepreneurial orientation defined by process, practice, and decision making that has the three aspects of entrepreneurship: innovation, taking proactive steps, and the courage to take risks. (Randerson, 2016).

Entrepreneurial orientation plays a prominent role in the life of an entrepreneur to enable him/her to understand and assist in business development strategy and making the business more competitive in the long term (Kamal et al., 2016). This is made possible because innovation, as one of the entrepreneurial orientation dimensions, can cause a tendency for someone to develop new ideas and processes that result in new products, services, or even technologies. The ability to always be proactive is also important for an entrepreneur because it enables them to introduce new products and services as soon as possible by taking advantage of market opportunities. At the same time, the courage to take risks is necessary to face obstacles and exploit or take part in business strategies that are likely full of uncertain outcomes. The primary function of the importance of entrepreneurial orientation is how to calculate and take risks optimally. (Rodrigo-Alarcón et al., 2018).

An important question that must be answered is what encourages the development of entrepreneurial orientation? A study by Montiel Campos (2017) shows that if an entrepreneur has energy, confidence, and mastery of skills, he/she will typically be able to involve himself/herself in activities that find new opportunities, grow the market, and even optimize organizational processes to be more adaptive to the times—in other words a tendency to demonstrate an entrepreneurial orientation. Other studies have suggested that trainings, workshops, or consultations are capable of increasing a person’s entrepreneurial orientation. This fact shows that there is a possible relationship.
between Entrepreneurial Perceived Self-Control and Entrepreneurial Orientation.

From this information, a hypothesis can be proposed representing the relationship between Entrepreneurial Perceived Self-Control and Entrepreneurial Orientation, as follows:

H2: Entrepreneurial Perceived Self-Control has a positive impact on Entrepreneurial Orientation, in that the higher the Entrepreneurial Self-Control of a college student the greater the degree of Entrepreneurial Orientation he/she will have as well.

2.4 Entrepreneurial Perceived Self-Control and Entrepreneurial Intention

In recent years, many researchers have in interested in doing studies on the entrepreneurial intention of students at the higher education, which among them are Ferrandiz et al. (2018); Herman and Stefanescu (2017). Generally speaking, entrepreneurial intention can be defined as the awareness and conviction of an individual to establish a new business or at least to establish one in the future (Nabi et al., 2010). There are many models that have been used to explain the formation of this entrepreneurial intention. Some of the more famous are Shapero’s Model of the Entrepreneurial Event dan Ajzen’s Theory of Planned Behaviour (Krueger and Carsrud, 1993). According to Krueger et al. (2000), the formation of entrepreneurial intention tends to approach a planned behavior because the decision to become an entrepreneur is not like classical conditioning, where one hides a bell and people change their behavior to become an entrepreneur. Rather the decision to become an entrepreneur requires the weighing of many options and is full of planning.

One of the antecedent variables in TPB that has a great impact on entrepreneurial intention is Perceived Behavioral Control (PCB), or the subjective evaluation of a person regarding his/her entrepreneurial Orientation and Entrepreneurial Intention:

H4: Entrepreneurial Orientation has a positive impact on Entrepreneurial Intention, such that the higher the degree of Entrepreneurial Orientation a college student has, the higher own ability to solve problems and achieve success in a particular situation. Self-confidence regarding one’s capacity in intelligence, patience, resilience, and adaptability significantly impacts the formation of intent, and its manifestation become the entrepreneurial actions. The belief in this ability does not always mean having the ability in a real and measurable way, but is sometimes limited to a personal evaluation of what can be accomplished with the ability on has. The results of empirical testing have shown the strength of this PCB impact on the targeted behavioral intentions (Krueger et al., 2011).

From this information, a hypothesis that represents the relationship between Entrepreneurial Perceived Self-Control and Entrepreneurial Intention, can be established as follows:

H3: Entrepreneurial Perceived Self-Control has a positive effect on Entrepreneurial Intention, such that the higher the Entrepreneurial Self-Control of a college student, the higher the degree of their Entrepreneurial Intention.

2.5 Entrepreneurial Orientation and Entrepreneurial Intent

Based on the study conducted by Ismail et al. (2015), presently universities are beginning to reemphasize entrepreneurship not only among the students, but also lecturers, staff, and third-parties. The main point of their study was that in order to become an entrepreneurial university, all parties must have an entrepreneurial oriented mindset, and not just the academics. If entrepreneurial intention and orientation can be combined, the academic commercialization of the university is guaranteed to succeed. A similar discovery was made by (Alvarez et al., 2006) who stated that there is a significant relationship between entrepreneurial orientation and entrepreneurial intention which is supported by the development of good entrepreneurial education curriculum. Based on this information a hypothesis can be stated representing the relationship between their degree of Entrepreneurial Intention as well.

Based on the theories and hypotheses above, a theoretical frameworks can be created to show the impact of university business incubator program quality on entrepreneurial intent and orientation as shown in Figure 1.
3 METHODS

3.1 Sample and Data Acquisition

This research was conducted using a sample of college students from 7 universities in Indonesia that have active Business Incubators. Those targeted were IIB Darmajaya, UNILA, Universitas Indonesia, Universitas Padjajaran, Universitas Media Nusantara, Universitas Bina Nusantara and Universitas Telkom. The total sample size was 200 students, all of which had joined the entrepreneurship program from the business incubator at their university. The program services from the different incubators varied, but can be categorized generally into 4: Infrastructure Provider, Business Services, Financial Provider and People Connectivity.

3.2 Instrument and Evaluation

The survey instrument was a 10 point Likert scale ranging from Strongly Disagree to Strongly Agree. The instrument was distributed online and had previously undergone a validity and reliability test. The survey instrument was an expansion of the previous evaluations performed, namely: The Quality of Incubator Programs from the work of Misoska et al. (2016), Entrepreneurial Perceived Self-Control based on the evaluation of Solesvik (2013), Entrepreneurial Orientation based on the evaluation of Song et al. (2017), and Entrepreneurial Intention from the work of Miranda et al. (2017).

3.3 Analysis

The researchers used Structural Equation Modeling as the method of analysis and were assisted by the statistical software AMOS 22.0 which enabled them to test alternative models that were fairly complex. This analysis with SEM-AMOS was done in two stages, the first of which was a measurement test which was followed by a structural test. The purpose of this analysis was to determine the impact of The Quality of Incubator Programs and Entrepreneurial Perceived Self-Control on Entrepreneurial Orientation and Entrepreneurial Intentions.

4 RESULTS

The data gathered was analyzed using the software package SEM IBM-AMOS 22 in order to test the validity of the model and the relationship between its variables. Before performing further analysis, the researchers performed a data normalizing test to guarantee the quality of the data. Based on the analysis and normalizing test performed, the c.r. value for all indicators was between +2.58 and -2.58 with a multivariate kurtosis of 3.386 which is well below the cut off value of 8. All of this indicates that there is no evidence to suggest that the data has an non normal distribution.

After the model passed the normality test, the validity and reliability of it was also tested. Table 1 shows the scale indicators with their standardized estimates and critical ratios in order to evaluate the validity of the construct for the concepts used in this research based on the AMOS 22 output from the Confirmatory Factor Analysis.
The Confirmatory Factor Analysis generated a loading factor for each construct or variable in the model to show level (acceptable magnitude/value) which was acceptable, all of which were above 0.60 with a critical ratio above 1.96. As a result, the indicators give a good reflection of the actual construct. Additionally, the construct validity measurements showed good AVE values: The Quality of Incubator Programs (0.937), Entrepreneurial Perceived Self-Control (0.973), Entrepreneurial Orientation (0.993), and Entrepreneurial Intention (0.863) all of which were above the cut-off AVE >= 0.50. Therefore, it can be concluded that the instrument measuring the four variables and the indicators are both valid and reliable.

The measurements for reliability of the constructs also showed good results, having the following values: The Quality of Incubator Programs (0.990), Entrepreneurial Perceived Self-Control (0.928), Entrepreneurial Orientation (0.920), and Entrepreneurial Intention (0.974) which all show values above the cut-off CRI >= 0.70.

Based on the results of the validity and reliability studies performed, the model could proceed to the hypothesis testing phase. A diagram of the results analysis and empirical model testing can be seen in Figure 2.

### Table 1: Scale, Measurement, Validity, Reliability

<table>
<thead>
<tr>
<th>Code</th>
<th>Scale Indicators</th>
<th>Reference</th>
<th>Std. Estimate</th>
<th>Critical Ratio</th>
<th>Convergent Validity-Ave</th>
<th>Construct Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Quality Of Incubator Programs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPQ1</td>
<td>Better Skill To Conduct Business Plan</td>
<td>Misoska, Dimitrova, and Mrsik (2016)</td>
<td>0.963</td>
<td>36,403</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPQ2</td>
<td>Thorough Understanding For Business Risks</td>
<td></td>
<td>0.968</td>
<td>37,768</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPQ3</td>
<td>High Confidence To Develop Business</td>
<td></td>
<td>0.970</td>
<td>38,451</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPQ4</td>
<td>Motivation Toward Achievements</td>
<td></td>
<td>0.969</td>
<td>38,163</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPQ5</td>
<td>Abilities To Harness Incubator Services</td>
<td></td>
<td>0.969</td>
<td>38,009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPQ6</td>
<td>Easiness To Access Capital Venture</td>
<td></td>
<td>0.971</td>
<td>38,577</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPQ7</td>
<td>Having A Strong Business Network</td>
<td></td>
<td>0.966</td>
<td>38,577*</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Entrepreneurial Perceived Self-Control</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>0.899 0.973</strong></td>
</tr>
<tr>
<td>EPC1</td>
<td>Perceived Of Business Knowledge Gains</td>
<td>Solesvik (2013)</td>
<td>0.941</td>
<td>28,824*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPC2</td>
<td>Perceived Easiness To Start A Business</td>
<td></td>
<td>0.950</td>
<td>28,824</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPC3</td>
<td>Perceived Confidant To Handle A Business Problems.</td>
<td></td>
<td>0.948</td>
<td>28,475</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPC4</td>
<td>Perceived Control Of Choice To Become Entrepreneur</td>
<td></td>
<td>0.953</td>
<td>29,222</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Entrepreneurial Orientation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>0.962 0.993</strong></td>
<td></td>
</tr>
<tr>
<td>EO1</td>
<td>Active to Grow &amp; to Innovate</td>
<td>Song, Min, Lee, and Seo (2017)</td>
<td>0.986</td>
<td>50,561</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EO2</td>
<td>Creative Doing Many Things</td>
<td></td>
<td>0.983</td>
<td>48,329</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EO3</td>
<td>Fondness To Have High-Risk Projects</td>
<td></td>
<td>0.980</td>
<td>46,769</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EO4</td>
<td>Easy To Make Decisions</td>
<td></td>
<td>0.979</td>
<td>46,126</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EO5</td>
<td>First To Take Action.</td>
<td></td>
<td>0.980</td>
<td>46,624</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EO6</td>
<td>Always Take Advantage Of New Opportunities.</td>
<td></td>
<td>0.976</td>
<td>46,624*</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Entrepreneurial Intention</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>0.863 0.974</strong></td>
<td></td>
</tr>
<tr>
<td>EI1</td>
<td>Entrepreneurship Readiness</td>
<td>Miranda, Chamorro, Mera, and Rubio (2017).</td>
<td>0.842</td>
<td>15,430*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EI2</td>
<td>Entrepreneur As Professional Purposes</td>
<td></td>
<td>0.840</td>
<td>15,430</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EI3</td>
<td>Committed To Developing Business</td>
<td></td>
<td>0.971</td>
<td>20,448</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EI4</td>
<td>Keen To Starting A New Business.</td>
<td></td>
<td>0.974</td>
<td>20,562</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EI5</td>
<td>Interest To Develop New Business</td>
<td></td>
<td>0.968</td>
<td>20,305</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EI6</td>
<td>Plan To Start A Business After Graduating.</td>
<td></td>
<td>0.966</td>
<td>20,190</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*This variable was estimated twice: first as a constrained variable and then as an unconstrained variable in order to calculate the critical ratio.
Table 2 displays the results of the structural equation model analysis. The Goodness of Fit test was performed using both Statistic and Non-statistic measurement against the hypothesis and shows that this model fits the empirical data. This can be seen through the value of Chi-Square = 56,678 with a probability of $p = 0.089$ demonstrating that there is no difference between the the sample covariance and the covariance of the estimated population. Further, the values of $GFI (0.943)$; $TLI (0.988)$; $CFI = 0.990$ and $RMSEA (0.050)$ fall within the acceptable range. Therefore, this model is acceptable.

Table 2: The Coefficient of Regression

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Std.estimate</th>
<th>Estimate</th>
<th>Std.error</th>
<th>Critical Ratio</th>
<th>Significance</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a: The Quality of Incubator Programs → Entrepreneurial Perceived Self-Control</td>
<td>0.972</td>
<td>0.893</td>
<td>0.032</td>
<td>27.901</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H1b: The Quality of Incubator Programs → Entrepreneurial Orientation</td>
<td>0.465</td>
<td>0.563</td>
<td>0.095</td>
<td>5.929</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H1c: The Quality of Incubator Programs → Entrepreneurial Intention</td>
<td>0.176</td>
<td>0.136</td>
<td>0.077</td>
<td>1.766</td>
<td>0.077</td>
<td>Not Supported at 0.05</td>
</tr>
<tr>
<td>H2: Entrepreneurial Perceived Self-Control → Entrepreneurial Orientation</td>
<td>0.53</td>
<td>0.698</td>
<td>0.105</td>
<td>6.672</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H3: Entrepreneurial Perceived Self-Control → Entrepreneurial Intention</td>
<td>0.185</td>
<td>0.156</td>
<td>0.101</td>
<td>1.536</td>
<td>0.125</td>
<td>Rejected</td>
</tr>
<tr>
<td>H4: Entrepreneurial Orientation → Entrepreneurial Intention</td>
<td>0.628</td>
<td>0.402</td>
<td>0.087</td>
<td>4.626</td>
<td>***</td>
<td>Supported</td>
</tr>
</tbody>
</table>
From the results of this analysis it can be observed that hypothesis H1a which states “The Quality of Incubator Programs has a positive effect on Entrepreneurial Perceived Self-Control,” can be accepted as shown by a critical ratio of 27.901 > 1.96 and a parameter of 0.972. Hypothesis H1b which state that “The Quality of Incubator Programs has a positive effect on Entrepreneurial Orientation” can also be accepted with a critical ratio of 5.929 > 1.96 and a parameter of 0.465. Hypothesis H1c which states “The Quality of Incubator Programs has a positive effect on Entrepreneurial Intent” must be rejected due to a critical ratio of 1.766 < 1.96 and a parameter of only 0.176 at a significance of 0.05; however, if we use a significance of 0.1 this hypothesis can be accepted, albeit with a weak parameter value.

Hypothesis H2 which states “Entrepreneurial Perceived Self-Control has a positive effect on Entrepreneurial Orientation” can be accepted since it has a critical ratio of 6.672 > 1.96 with a parameter of 0.53. On the other hand, hypothesis H3 which states “Entrepreneurial Perceived Self-Control has a positive effect on Entrepreneurial Intent” must be rejected due to a critical ratio of only 1.536 < 1.96 with a weak parameter of 0.185 — for both a 0.05 & 0.10 significance. This means that even university students with high Entrepreneurial Perceived Self-Control, do not necessarily desire to become directly involved in entrepreneurial activities. Finally, hypothesis H4 which states “Entrepreneurial Orientation has a positive effect on Entrepreneurial Intention” can be accepted as it has a critical ratio of 4.626 > 1.96 with a parameter of 0.628.

5 DISCUSSION

This research attempts to determine an answer for the question of whether the programs organized by the higher education business incubator are able to boost the entrepreneurial orientation and intention of college students. Additionally, what is the role of Entrepreneurial perceived Self-Control on the entrepreneurial orientation and intention when pre-exposed to the entrepreneurial programs of a business incubator. To that end, the researchers have expanded and explored entrepreneurial orientation and intention development models with an input of The Quality of Incubator Programs mediated by entrepreneurial perceived Self-Control. Based on the acceptance of the hypotheses and the relationships between variables, several conclusions can now be drawn.

One way of growing strong and tenacious entrepreneurs at the higher education is to give them assistance and guidance through a variety of entrepreneurial programs (Ghina, 2014). This means giving entrepreneurial students guidance over a period of time by assisting them in education, training, and internships that are supported by access to technology, management, marketplaces, capital, and information. These activities are then used to provide entrepreneurial skills for tenants so that they master a variety of areas like marketing and selling concepts, human resources management, financial strategy and management, quality control, networking, etc. (Kadir et al., 2012). With these skills it is hoped that students have the ability and self-confidence to both plan and solve business-related problems. The model and hypothesis testing performed support this statement, wherein we can see that there is a significant relationship and large impact between the quality of incubator programs and entrepreneurial perceived Self-Control – which is the degree of self-confidence and perception of whether someone is or is not able to conduct entrepreneurial activities.

Entrepreneurial programs are indeed able to improve one’s skills, but can they directly and immediately cause students to be interested in doing business? Many times students get involved in entrepreneurial programs with a variety of motives. Some get involved because they are part of an entrepreneurship class. As a result, they may later possess business skills, but not necessarily have a high entrepreneurial intention since they are merely completing a curriculum requirement. In addition, there are some students who may join a business incubator program, but part-way through they lose interest in the program for a reason related to the influence of their environment (Sondari, 2014). Such things were demonstrated in this research model where The Quality of Incubator Programs only had a small, insignificant relationship on the entrepreneurial intention directly.

An interesting discovery was that The Quality of Incubator Programs and Entrepreneurial Orientation have a significant relationship. This was made possible because usually every entrepreneurial program is designed to stimulate students to think creatively and innovatively, work proactively, and take risks. Not only that, Entrepreneurial Perceived Self-Control was shown to have a great mediating effect on The Quality of Incubator Programs and Entrepreneurial Orientation. This strengthens the research results of Montiel Campos (2017), who state that if entrepreneurs have energy, self-
confidence, and skills mastery, they tend to be able to involve themselves in finding new opportunities, growing the marketplace, and even optimizing organizational processes to be better adapted to the times.

Another conclusion that can be identified from the research is that there is no significant relationship between Entrepreneurial Perceived Self-Control and Entrepreneurial Intention in the model. However, when Entrepreneurial Perceived Self-Control is first paired with Entrepreneurial Orientation the result will be a significant relationship and a strong impact on Entrepreneurial Intention. This demonstrates that it is not easy for higher education business incubators to generate entrepreneurial intention. Rather the business incubator must first stimulate the students mindset to have an Entrepreneurial Orientation in order to increase their entrepreneurial intention.

6 CONCLUSION & FUTURE RESEARCH

The implications of this research are that there is an empirical model that demonstrates the formation of entrepreneurial orientation and intention. Business incubator programs—in the form of quality services like Infrastructure Provider, Business Services, Financial Provider and People Connectivity—can cause an entrepreneurial student to gain a variety of business skills that will give him/her self-confidence and a positive perception in doing business. Later this self-confidence and positive perception can shape students who have an entrepreneurial orientation—being innovative and proactive as well as taking risk—to the extent that it can increase their entrepreneurial intention. Therefore, what needs to be emphasized is the importance of business incubators ensuring that their programs are capable of increasing entrepreneurial orientation, as this variable is the key to improving the entrepreneurial intention among university students.

A study of The Quality of Incubator Programs related to Entrepreneurial Perceived Self-Control is a new initiative to help explain Entrepreneurial Orientation and Intention. This study was structurally prepared and scientifically performed, however, a few limitations must be addressed for further research. Firstly, the ontology of Quality of Incubator Programs and Entrepreneurial Perceived Self-Control has been clearly defined as a concept, but efforts to develop the dimensions of this concept are still very open, especially the expansion of the indicators. It is also possible that they could be retested not only among university students. Additionally, there are some insignificant relationships in the model related to the formation of Entrepreneurial Intention, such that these could be explored further to find the causes or antecedents that have a stronger relationship.

REFERENCES


