The Effect of Entrepreneurial Knowledge on Entrepreneurial Intention with the Moderation of Family Support (A Case Study on University Students in Indonesia)

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Abstract
Unemployment still becomes a major problem for most developing countries like Indonesians. It is generally acknowledged that one of the efforts to overcome such a problem is by creating new employments, particularly entrepreneurship, and in this respect to enhanced through entrepreneur education. Should it be given college students, it will provide prominent influence in the development of entrepreneurship activities., several studies also mention that family support is also influential, where children of entrepreneurs or people who own businesses tend to be entrepreneurs. Both factors are expected to raise a student's entrepreneurial intention, people's intention to start ventures. This study intends to identify the effect of entrepreneurial education and family support on entrepreneurial intention. This study uses a survey method with questionnaires and Partial Least Squares as its statistical instrument surveying all university students in Malang Raya who have taken an entrepreneurship course. Both hypotheses of this study are accepted where the main result stating that entrepreneurial knowledge positively and significantly influences entrepreneurial intention. Other major implications are also discussed in this article.

Keywords
Entrepreneurship; entrepreneurial knowledge; family support; the entrepreneurial intention

Introduction
Unemployment is still a major problem for Indonesians. ILO's report mentions that the Indonesian working-age population increased from 2013 to 2014, from 120.17 million to 121.87 million. In August 2014, from 180 million working-age people (15 years and over), 121.9 of them are active in the economy. Nevertheless, from 121.9 of the workforce, 7.2 million of them are still unemployed, or not secured in the labor market. According to Saiman (2009), unemployment is created by the gap between the number of job seekers in all educational levels, from junior to higher education, and the available jobs.

According to Sudrajad (1999), one of the efforts of overcoming unemployment is by creating new employments, particularly entrepreneurship. According to Frinces (2011), a nation will achieve its development if at least two percent of its populations are engaged in entrepreneurship. Therefore, on the brink
of decreasing employments, new occupations as entrepreneurs are a solution for reducing unemployment in Indonesia. The ASEAN economic community also brings opportunities for expatriates to work in Indonesia, intensifying Indonesian employment competition.

Malang is one of the cities of education in Indonesia which produces young entrepreneurs in Indonesia. This can be seen from the number of new students entering the city every year. This is supported by the statement of the Treasurer of HIPMI-PT said that there are around 200 students each year who become their members to get development related to the world of entrepreneurs for running their businesses. As well as many public and private universities that have Entrepreneur study programs as it's their superiority. This also makes this research very interesting to do.

The thinning job opportunity makes people figure out solutions to anticipate the increasing unemployment in Indonesia. One of which is trying to find another source of income by becoming entrepreneurs. This sector is expected to absorb laborers, which in near future can reduce unemployment in this country.

Entrepreneurship is an effort to create business activities based on self-will and self-intention (Saiman, 2009). It enables people to create broad employments, not depending on other people in getting jobs and helping the government to reduce unemployment by opening new job opportunities.

Wang and Verzat (2011) stated that entrepreneurship can be enhanced through entrepreneurship education. Romero (2013) found that entrepreneurship education in higher educations has a major impact on the development of entrepreneurial activities. Furthermore, he mentioned that a student's involvement in such subjects makes such learning more efficient.

According to Hattab (2014), entrepreneurship education is crucial, and it has been introduced to educational institutions such as schools, universities, and graduate and post-graduate training programs. The rapid development in entrepreneurial activities makes entrepreneur education to be expanded to two methods: constructive learning and self-experiential (Solomon et al., 2002). Collins et al. (2004) stated that formal entrepreneur education provided by higher educations can produce entrepreneurs. Zainal Abidin et al. (2011) found that informal entrepreneur education is more effective in affecting graduates to participate in entrepreneurship. Mohammad et al. (2015) confirmed that graduates who receive (formal and informal) entrepreneur education have higher potentials to become entrepreneurs.

In his research, Buchari (2011) affirmed that parents who work as entrepreneurs or have their businesses tend to give birth to entrepreneur children. They who grow in entrepreneur families have a higher likeliness of becoming entrepreneurs. Besides, supportive family environments also create higher entrepreneurial intentions.

Family is the first and main medium for influencing children’s behavior (Semiawan, 2010). Singgih (1990) mentioned that the foundation of an individual’s personality is created by the combination between his inherited characteristic and talent and the environment in which he exists and grows. The first environment giving profound influences to children is their family. Jusmin (2012) in his research claimed that family background influences children’s readiness of becoming entrepreneurs.

Lambing and Kuehl (2000) supported that most entrepreneur families bring their children into their business; the younger generations start to help in the companies’ activities at a very early age. Katz and Green (2009) proposed that children
exposed to entrepreneurial job experiences are assisted in developing skills, competencies, and confidence to become successful entrepreneurs. This is relevant to Frinces (2011), who stated that entrepreneur candidates are born from families whose parents are entrepreneurs.

Zimmerer (2002) suggested that one of the contributing factors for the growth of entrepreneurship in a country is the universities’ role in administering entrepreneur education. They are responsible for educating and training their students to become entrepreneurs, as well as motivating them to choose entrepreneurship as their career, so students will develop their entrepreneurial intention.

According to Souitaris et al. (2007), the entrepreneurial intention is an individual's deep involvement or willingness to start a business. According to Halim et al. (2010), the entrepreneurial intention is influenced by several characteristics such as attitude, innovation team player, risk-taker, and decision-maker. Based on the aforementioned definitions and statements, a conclusion regarding the definition of entrepreneurial intention can be drawn: people's awareness and intention that directly influence their decision to establish businesses.

Entrepreneurial intention can be defined as an initial step in the process of establishing ventures that, in general, are long term (Lee and Wong, 2004). According to Krueger (1993), entrepreneurial intention reflects people's commitment to start a new business, and it is a central issue that needs to be addressed in understanding entrepreneurial processes, or the establishment of new businesses.

In regards to the described phenomenon, entrepreneur education and family background are supposed to raise entrepreneurial intention in university students so that they can be entrepreneurs and help reduce unemployment in this country. Therefore, this research is entitled The Effect of Entrepreneurial Knowledge and Family Support on Entrepreneurial Intention: A Case Study on University Students in Malang City.

Theoretical foundation and Hypothesis Development

Entrepreneurial Knowledge

One of the basic concepts of which entrepreneurial knowledge is built is the opinion of Widding (2005) that knowledge and access to it is the most important resource in entrepreneurship. Wu and Chen (2008) also formulated that entrepreneurial knowledge is the main manifestation of human resources required for entrepreneurship success and sustainability. Studies regarding this variable in entrepreneurship literature were ambiguous and problematic due to the mix between pure entrepreneurship-related knowledge and entrepreneurship-related skills. However, in recent times entrepreneurial knowledge has been focused on the knowledge area so that the measurement of this concept is neither biased nor confusing (Schaper and Casimir, 2007).

Entrepreneurial knowledge is one of the crucial variables in shaping the characteristics of entrepreneurs. It can become one of the predictors for entrepreneurs to run their business because it has several positive values regarding business, i.e. concept, skill, and mentality. It can be defined as knowledge about the concept, skill, and mentality that must be possessed by entrepreneurs (Jack and Anderson, 1999). It can be acquired through both formal and informal education, directly and indirectly during on-site business practice. Furthermore, it can be obtained and developed through consistent exposures related to business activities (Massad and Tucker, 2009). When business activities are conducted, entrepreneurs are learning about developing their business, acquiring
customers, handling and conditioning problems in their business, making business plans and evaluations, and so on.

Tucker (2009) found that entrepreneurial knowledge has two types that complete each other during the process of creating new business. The first is the ability of individuals to identify opportunities, including discovering, analyzing, and evaluating new business opportunities. The second is knowledge related to the ability of individuals to optimally exploiting opportunities so that values are created at least for themselves. The collaboration of both types will provide great opportunities for entrepreneurs. Identification of new business opportunities followed by maximally exploiting those opportunities will produce profit for entrepreneurs.

Some studies on entrepreneurial knowledge also discuss two types viewed from a different perspective. The first is functional-oriented knowledge, which includes sales, marketing, production human resource, and financial management (Hindle, 2007; Widding, 2005; McMullan and Long, 1987). The second is strategic management-oriented knowledge, which includes strategic and competitive analysis, business development management, opportunity exploration and exploitation, and business environment evaluation (Shane, 2000; Fiet, 2000; Agrawal, 2005; Yu & Chan, 2004). Several previous studies have discovered that entrepreneurship-related education and training influences the behavior and intention to establish businesses (Fayolle et al., 2005; Zhao et al., 2005), but Roxas et al. (2008) found that the results of the studies are still unclear and their empirical evidence is not robust.

H1 = Entrepreneur education influences entrepreneurial intention

Family Support

Previous studies rarely include family as a variable that influences the intention of youngsters to do business activities. The role of the family still receives a little attention from researchers (Edelman et al., 2016), which is quite surprising because family is the main financial supporting resource for young people who are going to start their venture (Bygrave et al., 2003), information-providing resource (Steier, 2009), mentoring provider (Sullivan, 2000), and moral support (Renzulli et al., 2000). Besides, the family is an important incubator for the newly established businesses (Rodriguez et al., 2009). Buchari (2011) stated that parents who are entrepreneurs or have their businesses tend to give birth to entrepreneur children. They who live in entrepreneur families are likely to become entrepreneurs. A supportive family environment fosters greater entrepreneurial intention.

Lambing and Kuehl (2000) stated that most entrepreneur families will finally bring their children into the business. The children start to help their parents in the business from an early age. Katz and Green (2009) found that children with early entrepreneurship experience can develop their entrepreneurial skills, competency, and confidence better since they have entrepreneur parents or lineage.

H2 = Family support moderates the influence of entrepreneurial knowledge on entrepreneurial intention

Entrepreneurial Intention

According to Souitaris et al. (2007), the entrepreneurial intention is a deep involvement or intention of individuals to start a business. According to Halim et al. (2010), entrepreneurial intention is influenced by some characteristics: attitude, innovation, team player, risk-taker, and decision-maker. From the definitions or statements above it can be concluded that entrepreneurial intention is the awareness and intention of people that directly influence them to engage in business.
Entrepreneurial intention can also be defined as the initial step for the business establishment process, which is long-term in general (Lee and Wong, 2004). According to Krueger (1993), entrepreneurial intention reflects a person's commitment to start a new business, and it is a central issue that needs to be addressed in understanding the entrepreneurial process of new business establishment.

The creation of entrepreneurial spirit is influenced by internal and external factors (Priyanto, 2008). Internal factors come from the self of an entrepreneur, and it can be in the form of personal traits, attitude, willingness, and ability that empowers him to be an entrepreneur. External factors come from the outside of an individual, the environmental elements, such as family environment, business environment, physical environment, and socioeconomic environment.

According to Nowiński et al. (2017), who studied the influence of entrepreneur education on the entrepreneurial intention of university students in Czech Republic, Hungary, Poland, and Slovakia, entrepreneur education has a direct influence in one country, Poland, the only country that has introduced entrepreneur education to high-school students. Furthermore, Linan et al. (2005) found that entrepreneurial intention is not only the antecedent of behavior; it is a prominent element for creating new companies.

**Research Method**

Data collection techniques used in this study are questionnaires that are reflected through statements and statements arranged in such a way as to represent the three variables that exist using five levels of Likert scale preference. The sample used was 100 students in Malang. The data analysis technique used in this study is the Partial Least Square (PLS) method. PLS is a multivariate statistical technique that makes comparisons between dependent variables and independent variables, according to Willy and Jogiyanto (2015). Willy and Jogiyanto (2015) also said that this PLS is a powerful analysis method, therefore it is based on many assumptions besides that PLS can also analyze the factors formed with reflective and formative indicators.

![Research Model](image)

**Figure 1. Research Model**

**Discussion**

This study was conducted with 100 university students who were taking an entrepreneurship course. Based on the obtained and processed data, the variables of this research have good results. The following is the result of data processing using descriptive statistics.
Table 1. Descriptive Statistics of Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Knowledge (X)</td>
<td>3,670</td>
<td>Quite high</td>
</tr>
<tr>
<td>Entrepreneurial Intention (Y)</td>
<td>3,860</td>
<td>Quite high</td>
</tr>
<tr>
<td>Family Support (Z)</td>
<td>4,073</td>
<td>High</td>
</tr>
</tbody>
</table>

Based on the data above, it can be interpreted that the respondents, on the average, perceived the variables as quite high to high. The respondents believe that they have quite high knowledge of entrepreneurship. Besides, they know how to start a business, legal requirements for starting a business, how to find good human resource for their business, and how to plan, market, and manage their business ideas. This indicates that they have sufficient information about entrepreneurship, so they have quite high knowledge of entrepreneurship.

Further, the respondents are identified as having quite high determination and intention. This is proven by the descriptive statistic results which show the value of 3.860. Besides, the data above also shows that family gives quite high motivation for the respondents to start a business. This is proven by the high descriptive statistic result, reaching 4.073. To determine the assessment results on the proposed model the following points need to be discussed.

Validity Test

Validity test on the indicators used in this study needs to be conducted to ensure that the indicators used in this study are valid for use. The following is the data showing the validity of each indicator.

The result of the data processing presented in Table 2 suggests that almost all indicators have valid values (≥ 0.5, Hair et al., 2010), except the indicator of the first entrepreneurial knowledge (X), whose outer loading value is 0.4307. Therefore, this indicator must be deleted because it could not reflect entrepreneurial knowledge in the context of convergent validity achievement. After the indicator was deleted and reprocessed in PLS, it is identified that all indicators are valid in their convergent validity. The identification of discriminant validity also concludes that each indicator has a sound and high value compared to other indicators, shown by the AVE values of above 0.5.

Table 2. Results of Outer Loading and SRAVE

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Validity / Outer Loading Results</th>
<th>SRAVE</th>
<th>Entrepreneurial Knowledge (X)</th>
<th>Entrepreneurial Intention (Y)</th>
<th>Family Support (Z)</th>
<th>Valid/ Not Valid</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X.1</td>
<td></td>
<td></td>
<td>0.4307</td>
<td></td>
<td></td>
<td>Not Valid</td>
</tr>
<tr>
<td>X.2</td>
<td></td>
<td></td>
<td>0.5259</td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>X.3</td>
<td></td>
<td></td>
<td>0.7714</td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>X.4</td>
<td></td>
<td></td>
<td>0.8011</td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>X.5</td>
<td></td>
<td></td>
<td>0.8578</td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>X.6</td>
<td></td>
<td></td>
<td>0.7969</td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>Z.1</td>
<td></td>
<td></td>
<td></td>
<td>0.5449</td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>Z.2</td>
<td></td>
<td></td>
<td></td>
<td>0.5668</td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>Z.3</td>
<td></td>
<td></td>
<td></td>
<td>0.5361</td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>Z.4</td>
<td></td>
<td></td>
<td></td>
<td>0.6722</td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>Z.5</td>
<td></td>
<td></td>
<td></td>
<td>0.7973</td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>Y.1</td>
<td></td>
<td></td>
<td></td>
<td>0.8261</td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>Y.2</td>
<td></td>
<td></td>
<td></td>
<td>0.8583</td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>Y.3</td>
<td></td>
<td></td>
<td></td>
<td>0.7644</td>
<td></td>
<td>Valid</td>
</tr>
</tbody>
</table>

Note: SRAVE is Square Root of Average Variance Extracted
Reliability Test

Table 3. Result of Composite Reliability and Cronbach’s Alpha

<table>
<thead>
<tr>
<th>Variables</th>
<th>Composite Reliability</th>
<th>Cronbach’s Alpha</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Knowledge (X)</td>
<td>0.8694</td>
<td>0.8174</td>
<td>Reliable</td>
</tr>
<tr>
<td>Entrepreneurial Intention (Y)</td>
<td>0.8575</td>
<td>0.7510</td>
<td>Reliable</td>
</tr>
<tr>
<td>Family Support (Z)</td>
<td>0.7647</td>
<td>0.6859</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

Based on the data presented above, it is identified that all indicators in this study are reliable, proven by the table above that all variables have good composite reliability scores, above the rule of thumb (≥ 0.70).

Furthermore, to strengthen the reliability results in the research model, the Cronbach’s alpha values should be identified. The table above also shows that the values of each variable fulfill the required minimum value (≥ 0.60), showing that all constructs in the estimated model meet the reliability criteria.

Structural (Inner) Model Assessment

Table 4. Result of R-Squared

<table>
<thead>
<tr>
<th>Variables</th>
<th>R-Squared</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Knowledge (X)</td>
<td>0.000</td>
<td>-</td>
</tr>
<tr>
<td>Entrepreneurial Intention (Y)</td>
<td>4.731</td>
<td>Moderate</td>
</tr>
<tr>
<td>Family Support (Z)</td>
<td>0.000</td>
<td>-</td>
</tr>
</tbody>
</table>

After the model is declared fulfilling the outer model criteria, an inner model assessment was conducted to ensure that the proposed model is scientifically acceptable. The following is data related to inner model assessment. The table above suggests that entrepreneurial knowledge which is moderated by family support can explain the variance of entrepreneurial intention at 47.31%, moderate aggregate. Next, to assess the significance of the proposed hypotheses, bootstrapping was conducted using SmartPLS. The following is the data of hypothesis testing through bootstrapping.

Table 5. Result of Hypothesis Testing

| Variables                     | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | Standard Error (STERR) | T Statistics (|O/STERR|) |
|-------------------------------|---------------------|-----------------|---------------------------|------------------------|--------|
| EK > EI                       | 0.8340              | 0.6548          | 0.2853                    | 0.2853                 | 2.9228 |
| FS > EI                       | 1.3098              | 1.1312          | 0.2617                    | 0.2617                 | 5.0055 |
| (Moderation) EK * FS > EI     | -1.2652             | 0.9429          | 0.4166                    | 0.4166                 | 3.0367 |

Based on the table above, using the significance value of $\alpha = 0.01$ (1%) for the relationship between entrepreneurial knowledge and entrepreneurial intention and the moderation of family support on entrepreneurial intention, as well as $\alpha = 0.002$ (0.2%) for the relationship between family support and entrepreneurial intention, it can be interpreted that all proposed hypotheses are accepted, where
all hypotheses show significant status. The hypothesis testing of the influence of entrepreneurial knowledge on entrepreneurial intention is identified with the t-statistics of 2.9228, which is over the predetermined significance value of 2.267. Therefore, the first hypothesis stating that entrepreneurial knowledge influences entrepreneurial intention is accepted, in which entrepreneurial knowledge has a positive influence and can explain 0.8340 of the entrepreneurial intention of students. This result supports the findings of Fayolle et al. (2005) and Zhao et al. (2005), who found that entrepreneurship-related education and knowledge influence the intention to do business activities or behaviors related to entrepreneurship.

Although the relationship between family support and entrepreneurial intention is not hypothesized in this study, it is identified that family support has a positive and significant influence on the entrepreneurial intention with a quite high t-statistics value (5.0055). The result of the relationship between family support and entrepreneurial intention serves as a foundation and support for the second hypothesis, i.e. family support moderates the effect of entrepreneurial knowledge on entrepreneurial intention. According to Baron and Kenny (1986), whenever two hypotheses that are used as the basis of the moderation hypothesis are accepted, the testing of the moderation hypothesis can proceed because the assumption of the independent variable's main effect on the dependent variable that must produce the significant effect has been fulfilled. Based on the table above, the hypothesized family support moderates the effect of entrepreneurial knowledge on entrepreneurial intention with the t-statistics of 3.0367, above the required significance value. This result shows that the second hypothesis is accepted, but the influence is negative and can explain 1.2652 of the influence of entrepreneurial knowledge on entrepreneurial intention.

**Conclusion**

Based on the outer model test, university students in Malang City have sufficient knowledge in entrepreneurship, which is acquired from formal and informal education as well as from their activities. The knowledge varies, mostly about how to market their products and services. The reason behind their interest in entrepreneurship is to help their parents. They believe that they can help the economy of their family by starting a business, and this becomes one of the forms of family support, which is a variable in this study.

Both hypotheses of this study are accepted. Entrepreneurial knowledge positively and significantly influences entrepreneurial intention. It can be interpreted that university students in Malang city who know about entrepreneurship have the intention of starting a business. Next, the moderation of family support in the influence of entrepreneurial knowledge on entrepreneurial intention is negative and significant. This result is quite different from the research result in general. The negative effect shows that family support weakens the influence of entrepreneurial knowledge on entrepreneurial intention. The presence of families that supports entrepreneurial activities will only diminish the influence of students' knowledge about entrepreneurship on their intention to start a business or to engage in entrepreneurial activities. This study also finds that the moderation in the above relationship is quasi.

Based on the findings, the first hypothesis of this research supports the distrust of previous studies due to varied results and weak empirical evidence. The second hypothesis of this research can be used to initiate further studies, either qualitatively or quantitatively, so that the reason behind the negative effect of family support in the relationship between entrepreneurial education and entrepreneurial intention can be identified and whether this relationship...
is positive for different objects can be determined.

The contribution of this research in the field of human resource management is entrepreneurial knowledge encourages students to have entrepreneurial intentions. This proves that students have an entrepreneurial intention when they are provided with basic education or knowledge related to entrepreneurial knowledge. At least students have basic planning in managing their business.

Based on the results of the above study also proved that family support has a significant but negative effect, it proves that family support cannot be a determining factor for a student in his development when he wants to be entrepreneurial. Suggestions for further research are that maybe moderation variables can use other supporting variables as well as different respondents and different cities will also affect the results of future studies.

Notes on Contributors

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References


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