

University students' entrepreneurial performance

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ABSTRACT

Low interest of student to entrepreneurship is a pity as the global university entrepreneurial spirit students survey. To improve the students entrepreneurial performance, such factors take part influencing entrepreneurial performance, such as innovativeness, risk taking, proactiveness, competitive aggressiveness, autonomy, and of course entrepreneurial mindset. This research aims to determine the effect of those variables on entrepreneurial performance of college students of management which are A accredited in Malang City, Indonesia. The samples are 374 students from five universities. The analysis technique used is the test of Goodness Fit Model and Path Coefficients test with the help of the program SmartPLS 2.0 and SPSS. The results indicate that the entrepreneurial mindset has significant effect on innovativeness, risk taking, proactiveness, competitive aggressiveness, and autonomy. Moreover, the characteristics of innovativeness, risk taking, proactiveness, competitive aggressiveness, and autonomy have significant effect on the entrepreneurial performance of college students.

ABSTRAK

Minat rendah mahasiswa pada kewirausahaan adalah suatu yang memprihatinkan sebagaimana survei jiwa kewirausahaan mahasiswa universitas global. Untuk meningkatkan kinerja kewirausahaan mahasiswa, faktor-faktor seperti daya inovasi, daya mengambil risiko, daya proaktif, daya agresif kompetitif, otonomi dan pola pikir kewirausahaan mengambil peran mempengaruhi kinerja kewirausahaan. Penelitian ini bertujuan untuk mengetahui pengaruh variabel-variabel tersebut pada kinerja kewirausahaan mahasiswa Program Studi Manajemen yang terakreditasi A di kota Malang, Indonesia. Jumlah sampel adalah 374 mahasiswa dari lima universitas. Teknik analisis yang digunakan adalah uji Goodness Fit Model dan Path Coefficients dengan bantuan program SmartPLS 2.0 dan SPSS. Hasilnya menunjukkan bahwa pola pikir kewirausahaan memiliki efek signifikan pada daya inovasi, daya mengambil risiko, daya proaktif, daya agresif kompetitif dan otonomi. Selain itu, karakteristik daya inovasi, daya mengambil risiko, daya proaktif, daya agresif kompetitif berpengaruh signifikan pada kinerja kewirausahaan mahasiswa.

1. INTRODUCTION

Based on a research conducted by the Global University Entrepreneurial Spirit Students Survey, it said that the yearning for college students to have the desire to open their own business after graduating from the program of study is minimal, only 6.6%. The survey was conducted between the years 2013–2014, with the participants consisting of the survey of more than 100 thousand college students that were spread among 34 countries. Many things affect it such as the influence of family,

university, and socio-cultural aspects. In addition to these, the one that has a big impact on the entrepreneurial mindset is owned and earned by students in the surrounding environment.

The phenomenon of entrepreneurship students in Indonesia is also getting attention from both universities and the government. Particularly, the governments are realizing how important it is for entrepreneurship students to start conducting various programs that support the development of an entrepreneurial mindset of students, such as the Stu-

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dent Entrepreneurial Program and Student Creativity Program-Entrepreneurship.

The main reason why the entrepreneur is an important concern is because of these entrepreneurs can accelerate economic growth by generating new ideas and realize them into a profitable venture (Turker & Selcuk, 2009). Lack of student interest in being an entrepreneur is very unfortunate, because the formation of new businesses have an important role in economic development in the area, such as providing employment, opening new markets, and providing income for the area (Piperopoulos, 2012).

Entrepreneurs need a variety of knowledge that allows them to utilize the basic skills possessed to identify, evaluate, and explore various opportunities (Ackerman, Gross, & Perner, 2003). Many experts stated that there are several factors that influence the entrepreneurial mindset. Coulthard (2007) indicates that there are several factors that affect the characteristics of entrepreneurship, which include innovativeness, risk taking, and controlling. The establishment of new businesses require entrepreneurs to be creative, innovative and daring enough to take risks. After all, exploration activity does not always result in a successful effort (Freiling & Schelhowe, 2014). Campos, Acuna, Parra, and Valenzuela (2012) states that risk taking, proactiveness, and competitive aggressiveness have implications for entrepreneurial orientation.

De Jorge-Moreno, Castillo, and Triguero (2012) stated in their study that a student's wish to become an entrepreneur is decreasing, as they continue in their studies and get closer to the real working world. However, that desire increased when they decided to take the option to work in public administration. This is made possible with the development of students' knowledge about the work involved in the real world. If they do not have confidence in their own ability, it would be difficult to deal with the risks posed by setting up his own business.

Based on this phenomenon, research will be carried out on the characteristics of the entrepreneurial mindset, innovativeness, risk taking, proactiveness, competitive aggressiveness and autonomy on A accredited college student's entrepreneurial performance in Malang City, Indonesia. Specifically, this research aims to determine whether the entrepreneurial mindset has an impact on innovativeness, risk taking, proactiveness, competitive aggressiveness, and autonomy, as well as to determine whether innovativeness, risk taking, proactiveness,

competitive aggressiveness, and autonomy have an impact on entrepreneurial performance.

2. THEORETICAL FRAMEWORK AND HYPOTHESES

Entrepreneurial Mindset

Entrepreneurial Mindset is a business mindset that captures a benefit in a situation of uncertainty (McGrath & MacMillan, 2000). When someone receives a lot of feedback regarding entrepreneurship, then gradually this mindset will become habit forming in their actions. This will be seen once someone starts to think and act like a habitual entrepreneur. This type of person will have the ability to see an opportunity in situations of uncertainty. Entrepreneurial mindset can be measured with:

1. Number of entrepreneurial thoughts. The number of thoughts regarding entrepreneurial activity would indicate whether an entrepreneurial mindset has been formed or not (Mathisen & Arnulf, 2014).
2. The ability to identify business opportunities. When entrepreneurship becomes a natural ability, the business opportunities will automatically be captured in conditions of uncertainty (McGrath & MacMillan, 2000).

Innovativeness

Innovativeness in entrepreneurship is described by Elenurm (2012), as a way to introduce a new business that can change the nature or characteristics of the market itself. Ferreira and Serra (2009) stated that creativity or innovation refers to the development of new methods rather than using standard procedures. Innovativeness is very useful when an entrepreneur is faced with uncertainty, where the results of business development have different probabilities. With high innovativeness, an entrepreneur can customize how he executes a newly found opportunity. Adaptive execution is needed by entrepreneurs in order to adapt to various changes, such as direction changes to a real chance, and the best way to use it (McGrath & MacMillan, 2000). Based on Ferreira and Serra (2009), innovativeness can be measured with:

1. Fluidity refers to the ability to produce a lot of ideas. New ideas are widely used as the market grows and there is greater competition. The ability to produce ideas is necessary in order to create something new, especially in those markets that require breakthroughs and innovations to succeed. Exploiting the right time will give great value to the new idea, as

well as make it cherished by all those that have been longing for it.

2. Originality refers to the ability to produce many new ideas that are uncommon. One's originality is an advantage because it cannot be imitated. The original work of someone would have the respect of others due to its originality. New works would be produced dependant upon the ideas of each individual person.

Risk Taking

Risk-taking, according to Wenhong and Liuying (2010), is the tendency to take action against something which was considered risky. Dollinger (2008) argued that risk-taking is one of perception that allows for entrepreneurship. An initiator must position itself at risk. They are affected personally by the variability of the results obtained from the business and the likelihood of success or failure. Risk-taking is essential for the development of an entrepreneurial mindset (Ireland, Hitt, & Sirmon, 2003). Many things can make a person brave in making decisions that involve risks. Some experts believe that the level of risk that one is willing to take is effected by some of the following factors: the risk takers experience, age, risk perception, and gender.

Yurtkoru, Acar, and Teraman (2014) and Rohrmann (2005) identifies a person's risk taking through the following indicators:

1. The ability to deal with risky situations. The ability of a person in the face of risk, both in their work and daily life, indicates that the individual has to have a high threshold for risk taking.
2. Willingness to try something new. Try something new signifies that a person has a high desire for adventure, and it also ensures that the person has a high threshold risk taking.
3. Courage to carry out activities outside their comfort zone. An example is their determination to conquer their fear.

Competitive Aggressiveness

Competitive aggressiveness can be interpreted as a tendency to challenge their competitors directly and with great intensity, and their determination to achieve entry or improve their position in the industry or marketplace (Stambaugh, Yu, & Dubinsky, 2011). Ferrier, Fhionnlaioich, Smith, and Grimm (2002) revealed that competitive aggressiveness is interpreted as a new step in marketing, one that challenges the status quo of the marketing process. Demonstrating actions of competitiveness is very important, because these actions will definite-

ly affect and threaten the position of competitors. Ferrier *et al.* (2002) says that the competition will generally begin with promotional activities that interfere with their rivals business and grab some of their market share. Another possibility that could happen, besides using promotional activity, is to change the market segment by raising the quality of the old market, so as to guide consumers to move the market segments and suppliers.

Hadiati (2008) states that the emergence of the competitive factors aggressiveness can be affected by two kinds of environmental factors, namely internal and external. Internal environmental factor is a factor that comes from within the company itself, such as human resources, management, and location. While external environmental factors are factors that come from outside the company, such as market conditions and government policies.

Competitive aggressiveness can be measured by adopting the theory of competitive behavior. Stambaugh, Yu, & Dubinsky (2011) states that competitive behavior has three main indicators, namely:

1. Awareness of rival refers to the analysis of the rival organization, the tracking of rival's competitive activity, and dissemination of this information. High level of awareness is also necessary to identify a blue-ocean market and to avoid a market that is already saturated or has already well-established competitors.
2. Motivation to Compete is necessary so that the company can survive and even do better than its rival companies.
3. Capability to Compete refers to a company's ability to respond to competition presented by its rival companies. A company will not be competitively capable if it is not backed by good awareness and high motivation. Competitive capability to accept the fight begins by analyzing the strengths and weaknesses of the opponent, to think like the opponent in order to discover flaws that can be exploited, and conduct a competitive fight. Competitors can be used as a trigger to pursue a better position in the competition.

Proactiveness

Coulthard (2007) defines proactiveness as the search for new opportunities, which may be related to the operating channel. Davis, Bell, Payne, and Kreiser (2010) defines proactiveness as not only the pursuit of business opportunities, but also a willingness to face the competitive rivalry. From the dimensions of human resources, active personality

can be defined as a stable tendency to affect environmental change (Kanten & Ulker, 2012). Individuals with a typical active personality will show initiative, take action, and last until significant changes occur.

Proactiveness a person can be influenced by several factors, namely (Major *et al.* in Kanten & Ulker 2012):

1. Job satisfaction can increase a person's motivation. A person with a high level of job satisfaction tends to be more active in doing their job.
2. The high level of performance makes a person more eager to do his job. The spirit in carrying out the work will make someone become more active in their organization.
3. The behavior of organizations to form the habit in the organization. Active habits can also be increased by the organization by demonstrating their appreciation or by encouraging someone to become active.

Kanten and Ulker (2012) states that a person is said to have a high proactiveness when:

1. Initiate to act without being ordered.
2. Actively confront and resolve the problem.

Autonomy

Autonomy is a support action that comes from individuals themselves. Autonomy relates to efforts towards the development and realization of the goals, values, and personal interests (Deci & Ryan, 1995; Assor *et al.* in Gelderen, 2011). Callaghan and Venter (2011) states that autonomy refers to the independent action in terms of delivering an idea or vision, and making it a reality.

Kanfer (in Gelderen & Jansen, 2006) in his research found that motivation occurs independently, and is driven by two types, namely:

1. Motif proximal. Proximal motive is the motive related to the characteristics of the task to be self-employed. This motive is the primary motive for the freedom to decide without the influence of others.
2. Motif distal. Distal motive is the motive that promotes liveliness and becomes the driving force. This motive is used for someone to be able to fulfill his desire, such as want to rule, avoid the boss or regulations, and act in the manner of supported and approved.

Gelderen and Jansen (2006) identified that a person's autonomy can be seen by the following indicators:

1. Ability in someone to act without the influence of others.
2. Belief that one has the ability to work on things or become an expert in their preferred field.
3. Ability to determine and decide which regulations, work targets, and processes that occur in an effort to be undertaken.

Entrepreneurial Performance

Gorgievski, Moriano, and Bakker (2014) defines entrepreneurial performance as an analysis of employee work habits done on certain points to determine the extent to which the objectives and expectations have been met. Landzani and Van Vuuren (2002) states that entrepreneurial performance is based on the utilization of existing opportunities and development of business ideas. Van Vuuren and Botha (2010) considers that the achievement would be associated with entrepreneurial success in that role. Entrepreneurs who have a high motivation for achievement were better able to face the challenges, to manage all resources that provide assistance, and to enhance its capabilities. Entrepreneurial performance of students can be measured by several indicators:

1. Oosterbek, Praag, and Ijsselstein (2007) say that entrepreneurs will benefit from high value of need for achievement by means of striving and competing for better performance. They built professional goals in their minds. They put a high standard for targets and give their best effort in order to achieve those targets.
2. Molaei, Zali, Mobaraki, and Farsi (2013) says that entrepreneurs either have a view of intuition and analysis requires enthusiasm and passion to be able to progress from level to get the chance to develop into a level of entrepreneurial intentions. A good entrepreneur will have good enthusiasm about entrepreneurship that will take advantage of entrepreneurial opportunities that exist.

Dhliwayo and Van Vuuren (2007) states that entrepreneurship will ultimately culminate in the creation or realization of entrepreneurial and management strategic plans that achieve the best performance. A person who is self-employed, who is determined to have good performance, because a person who can realize and execute planning well is proof that the entrepreneurial performance is very good. The research framework is shown on Figure 1.

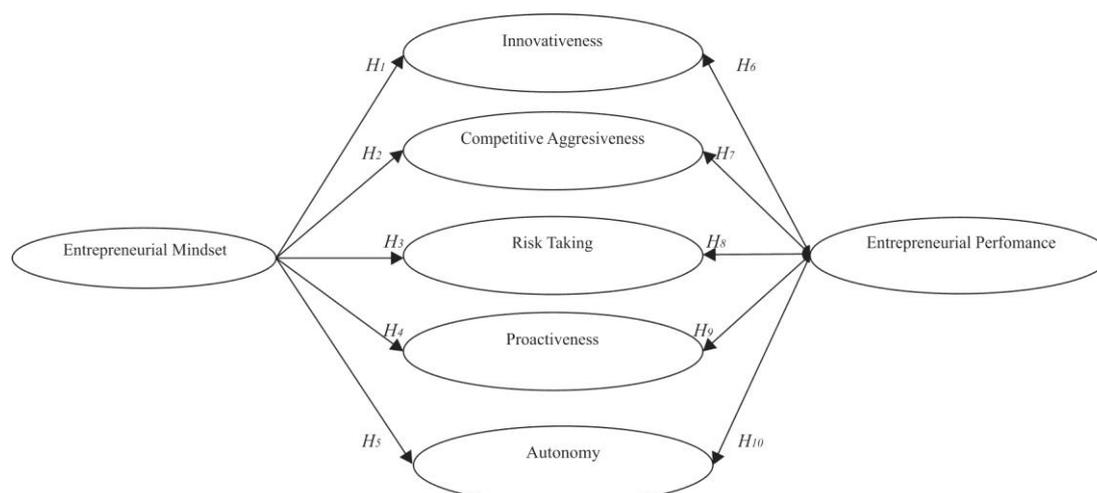


Figure 1
Research framework

3. RESEARCH METHOD

This type of research is quantitative explanatory research. This study uses an explanatory study because it is intended to explain and examine the relationship between variables as independent variables: entrepreneurial mindset, innovativeness, risk taking, competitive aggressiveness, proactiveness, autonomy as an intervening variable, and entrepreneurial performance as the dependent variable. The subjects were students of school of management in which the universities are accredited A in Malang City, Indonesia. The population are students of private and public universities which consists of five universities. The total population of 5691s based on the data from forlap.dikti.go.id. The sample was taken using a purposive sampling. And Slovin’s formula was used to determine the number of samples. and The total sample was 374. Distribution of the proportions of each university

was calculated from the proportion of each program of study on the population. Overall it can be seen in Table 1.

The data were collected using questionnaires. The questionnaire consisted of two parts. The first section aims to provide a profile of respondents such as name, gender, age and origin of the college. In addition to the profile of respondents, the first part of the questionnaire also aims to determine the student’s interest in entrepreneurship and whether they have experience on entrepreneurial learning in their college. The second part is the measurement of the variables by using a Likert scale in the form of positive statements with five answer options. Answer then classified into three classes with low = 1.00 to 2.33, moderate = 2.34 to 3.67, and high = 3.68 to 5.00.

Table 1
Samples Proportion

College	Samples Proportion
Sekolah Tinggi Ilmu Ekonomi Malang	52
Universitas Brawijaya	100
Universitas Muhammadiyah Malang	136
Universitas Islam Malang	35
Universitas Islam Negeri Maulana Malik Ibrahim	50

4. DATA ANALYSIS AND DISCUSSION

Validity and Reliability Test

Validity test conducted to 374 respondents’ questionnaire that were deployed at five universities. Based on these results, it can be said all indicators in this study have met convergent validity, so it can be used for further analysis. Moreover, all

the indicators have the greatest value of cross loading the variables, compared to other variables. It could be argued that the indicators used in this study have had good validity discriminat in compiling the variables respectively. The AVE produced by all the constructs reflective ie above 0.5 so that it meets the requirements of validity. The out-

put value of Cronbach's alpha generated all very well construct that is above 0.7 so that it can be concluded that all indicators reflective construct are reliable or they meet the reliability test. In addition, the reliability of the resulting composite value is all

excellent reflective construct that is above 0.7. For that reason, it can be concluded that all indicators reflective constructs are reliable or they meet the reliability test.

Table 2
Coefficients of the Effects

Hypotheses	Influence	Coefficient	t-statistic	Decision
H ₁	Entrepreneurial Mindset -> Innovativeness	0.753544	13.460284	Accept
H ₂	Entrepreneurial Mindset -> Risk Taking	0.869771	34.185097	Accept
H ₃	Entrepreneurial Mindset -> Competitive Aggresiveness	0.589194	7.408252	Accept
H ₄	Entrepreneurial Mindset -> Proactiveness	0.581294	7.639315	Accept
H ₅	Entrepreneurial Mindset -> Autonomy	0.648615	9.416972	Accept
H ₆	Innovativeness -> Entrepreneurial Perfomance	0.274192	2.443586	Accept
H ₇	Risk Taking -> Entrepreneurial Perfomance	0.174024	2.273237	Accept
H ₈	Competitive Aggrsiveness -> Entrepreneurial Mindset	0.185410	2.057285	Accept
H ₉	Proactiveness -> Entrepreneurial Mindset	0.200248	2.112133	Accept
H ₁₀	Autonomy -> Entrepreneurial Mindset	0.225744	2.060432	Accept

Partial Least Square Analysis

Research hypothesis could be accepted if the *t*-statistic values > 1.96. Here is the coefficient of influence (original sample estimate) and the value of *t*-statistic on the inner models. Therefore, it can be implied that all the charactersitics describing the mind sets of being entrepreneurs are important.

All coefficients are greater than 1.96 as shown on Table 2. There are positive and significant effects between those variables. The higher the entrepreneurial mindset of the students, the greater their innovativeness, their risk taking, their competitive aggresiveness, their proactiveness, their autonomy, and their entrepreneurial performance.

5. CONCLUSION. LIMITATION, IMPLICATION, AND SUGGESTION

Since the entrepreneurial mindset found a significant effect on innovativeness, risk taking, competitive aggresiveness, procativeness, autonomy, and entrepreneurial performance, it is all of the reason for the government to make significant efforts to

enhance the students' entrepreneurial mindset. Limitation of this study can possibly be due to the city where the universities are based. Therefore, conducting further research in other cities on the universiy sudents can be of great input for the research.

Suggestion for universities is that it is imperative that they create and design a project base curriculum, which focuses not only on entrepreneurial knowledge, but also linking it with the real business world through more business practice and networking.

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