

# Studentpreneur Innovative Behavior

## *How Does Creativity Boost The Behavior? A Case From Indonesia*

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### ABSTRACT

Innovative behavior is very important for students, especially studentpreneur, because innovative behavior plays an important role in the student entrepreneurial process. This study aims to analyze the extent to which internal factors such as creativity can encourage innovative behavior, and examine the impact of creativity in moderating the impact of perceived university support on innovative behavior. This study was tested on student entrepreneurs in the university entrepreneurship community spread across the city of Semarang, with a total sample of 164 through a questionnaire-based survey method and using the Warp PLS SEM analysis method. The results showed that either perceived university support or creativity had an impact on innovative behavior, and creativity was also significant in moderating the effect of perceived university support on innovative behavior. Therefore, in the future, it is necessary to have a higher education curriculum to pay more attention to the outcome of creativity than just the element of knowledge because of its significant impact in increasing innovative behavior.

**Keywords:** *Perceived University Support, Creativity, Innovative Behavior*

### 1. INTRODUCTION

The impact of global competition era began to be felt by some countries with relatively low competitiveness, including Indonesia. The lowest competitiveness ranking was in 2008 with a ranking of 55, but it was ranked high in 2014 with a ranking of 34, while for 2019 it was ranked 50 [1]. Competitiveness is closely related to creativity and innovation, if competitiveness increases, creativity and innovation will decrease, but if competitiveness decreases, creativity and innovation will decrease [2].

This is reinforced by data from the Global Innovation Index [3] which shows Indonesia has a score of 29.8 and ranks 85th out of 129 countries around the world. In the ASEAN region, Indonesia's ranking is in the second-lowest position. Innovation is a driving force in the socio-economic development of a country because in the economic process it requires innovation to generate new ideas [4]. A country that can innovate well will improve the country's economy. However, countries that have a low level of innovation show a low level of economic productivity.

According to [5] human resources play an important role in imagining, innovating and creating which can have a significant impact on Indonesia. But becoming an important issue for Indonesia if human resources cannot be innovation and creativity on the natural resources,

therefore to improve the competitiveness of Indonesia and Indonesia innovation index global level, one way to human investment. One form of human investment is in the realm of education. The more educated the individual is, the higher the level of awareness of health, political participation and other activities [6]. At the International Conference in Jomtien Thailand, 1990 sparked a good education for all among adolescents and adults are entitled to benefit in the educational process [7].

One lesson that can be done at higher education, as students are one aspect in solving the problems of the nation in the future, especially the aspect of innovation [8]. Higher education learning process by conducting student entrepreneurial activities [9]. According to [10] entrepreneurship is closely related to creative and innovative processes. Entrepreneurial consist of not only the elderly but also the young group.

The number of young Indonesian entrepreneurs is only 3.5% of the population, compared to other countries such as Malaysia 5%, China 10%, Singapore 7%, Japan 11%, and the United States 12% Kemenkop and SMEs [11]. This proves that the number of Indonesian entrepreneurs is still low compared to other countries. Therefore, the university as a candidate for the nation's successor is expected to be able to support non-academic learning, to improve soft skills in the creative and

innovative aspects of students. Although universities can support student entrepreneurship in some ways, to understand the effects of such support it is important to measure the extent to which it impacts students [12]. This can be achieved by measuring students' perceptions of the university support they feel.

Therefore, the purpose of the study is to analyze how effective the university perceived support and encourage creativity in innovative behavior. Another aim is to encourage creativity in improving the perceived university support innovative behavior

**1.1. Social Cognitive Theory**

Social cognitive theory or social learning theory is a theory introduced by [13] which explains that learning is created when individuals observe and imitate other people's behavior or pay attention to events in the environment. In general, this theory holds that humans have brains that can think, reason and judge. Albert Bandura explained that the concepts of behavior, environment and personal factors are interrelated in influencing learning. Concerning behavior, this study uses innovative behavior as an independent variable. Environmental factors, namely perceived university support as the dependent variable and personal factors, creativity as a moderating variable.

**1.2. Innovative Behavior**

Innovation will always be followed by changes and generating new ideas [14]. Experts argue that there is a difference between innovative behavior and creativity, namely the level of novelty of ideas and the level of social interaction as a consequence of the application of ideas in everyday life. Innovative behavior is the ability of individuals to change the way they work in adopting new work practices and techniques in completing their work [15]. According to [16], innovative behavior is not only influenced by internal factors but also by external factors. Based on the explanation above, it can be concluded that innovative behavior is an attitude that is deliberately created.

**1.3. Perceived University Support**

Developments related to universities that teach entrepreneurship is currently under discussion for policymakers. According to [17] related universities that teach entrepreneurship is appreciated for its output based economy which means that (patents, licenses, and new companies) and there is a technology transfer. The number of scholarships that increase every year will provide support to students and can increase the growth of an entrepreneurial spirit and culture. Universities play an important role in identifying and developing entrepreneurial traits among students so that they can make their businesses and effectively contribute to economic prosperity and create jobs [18].

Universities have an important role by providing entrepreneurship courses, research conducted by [19] proved that students taking entrepreneurship courses have great interest to become entrepreneurs. The entrepreneurship created by the university is expected not only ordinary entrepreneurs, but entrepreneurs who have innovative behavior so that the products produced do not lose in market competition. It can be concluded to raise student entrepreneurs who have innovative behavior requires a university perceived support. Based on the above explanation the authors propose the following hypothesis.

H1: There is a positive and significant effect of perceived university support on innovative behavior.

**1.4. Creativity**

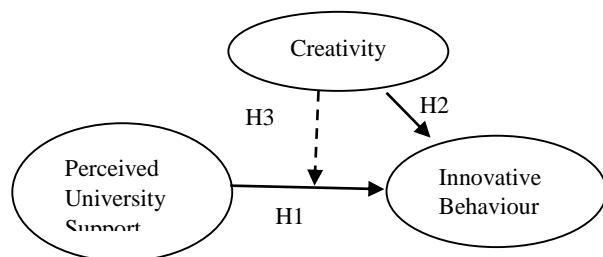
Creativity is an activity to generate new ideas or unique approaches to solving work problems by looking for job opportunities [20]. Meanwhile, according to [21] creativity is the behavior to design, establish, create or do something new and different things than before. Facilitating creativity is a necessity, not an option. Entrepreneurs must be interested in technological advances, environmental changes, how to survive with competitors by improving products, processes, services, but also pay attention to changes in consumer tastes, [22]. So as an entrepreneur is expected to keep up with technology and consumer tastes. This is so that the products produced do not lose in market competition. Creativity and innovation are often regarded as the same construct, whereas creativity and innovative are different constructs.

According to [23] creativity is a significant antecedent for the implementation of individual innovation. Based on this explanation it can be concluded that individuals who have a high level of creativity will show high innovative behavior. Creativity is a moderating variable, based on this explanation, the authors propose two hypotheses as follows,

H2: There is a positive and significant impact of creativity on innovative behavior,

H3: creativity is significant in moderating the effect of perceived university support on innovative behavior.

Based on the description of the literature above, the empirical model development of this research is:



**Figure 1. Empirical Research Model**

**2. METHOD**

The design of this study was to test the hypothesis of the associative quantitative relationship between variables through inferential statistical techniques, with research sites in the public university or private university in the city of Semarang. This study uses primary data obtained from a questionnaire-based survey with an agree to disagree interval scale in the 1-5 scale range with extreme angles of strongly agree and strongly disagree. With student respondents participating in the HIPMI PT entrepreneurial community, (Indonesian College Student Young Entrepreneurs Association) sampling technique according to the lameshow to find sample size with an unknown population with an error margin of 0.05 percent or a Z value of 1.96 as follows  $n = (Z^2 p(1-p))/d^2$ . so that the total sample size is 160 respondents. Measurement of each based variable is as follows.

- 1) Innovative behavior is measured through indicators adopted according to Janssen [24], indicators to measure innovative behavior, namely: (1) idea generation, namely the development and use of ideas that can benefit the organization. (2) idea promotion, which refers to the behavior of individuals aimed at promoting their innovative ideas. (3) idea implementation, where individuals begin to lead to the realization and application of ideas

original ideas. (4) Elaboration, namely the ability to describe in detail.

To obtain valid and reliable inferential statistical measurement results from either the measurement model or the structural model, the following steps were taken (1) conducted a pilot test, the results of the pilot test were then used as a reference in the field test; (2) After the data is collected from the field, the following is done: Analysis of the validity and reliability of the constructs (3) then proceed to inferential statistical analysis using WARP PLS - SEM; (4) evaluating and privileging the inner model, with the basic Warp PLS mode A algorithm, to determine the t statistical value and (5) to report the results of the analysis.. (Ghozali & latan, 2014).

**3. RESULT**

After a pilot test, there are some improvements to the questionnaire items, and after the pilot test, the entire item indicates valid and reliable results. These results can then be carried out for field testing which is then carried out further testing namely construct validity and construct reliability. The construct validity was tested on the convergent validity test and the discriminant validity test, while the construct reliability was tested based on Cronbach's alpha value and composite reliability while the test results on the outer model can be presented in the table as follows.

**Table 1.**Construct Validity and Reliability

Variabel/Item	Loading faktor	AVE	Alpha Cronbach	Composite Reliability
Inno_1 sd Inno_6	0.56 sd 0.83	0,68	0,84	0,88
PUC_1 sd PUC_6	0.58 sd 0.87	0,69	0,88	0,89
Crtv_1 sd Crtv_8	0.54 sd 0.88	0,74	0,78	0,93

Note : Inno = Innovative behavior; PUC = Perceived university support; Crtv = Creative

- 2) Perceived university support is measured through indicators proxied by Saeed et al. [25], namely: (1) Perceived Educational Support, namely whether the university organizes a learning process both classroom learning and internships related to entrepreneurship to generate innovative behavior. (2) Support for the development of a perceived concept to generate innovative behavior in entrepreneurship. (3) Perceived Business Development Support to generate innovative behavior in entrepreneurship.
- 3) Creativity is measured through adapted indicators according to Fatmawiyati [26]: (1) fluency, namely the ability to generate ideas (2) flexibility (flexibility), namely the ability to present problem-solving. (3) Originality, namely the ability to come up with

Results outer model or loading factors indicate that any variables that item meets the criteria of convergent validity, that is, each loading factor of each item above the cut value above 0.5. It is also in line with the results

Furthermore, in this study continued on the inner model test (goodness of fit test and t / hypothesis test). The goodness of fit test, in this study consists of several analyzes, namely average path coefficient (APC),

**Table 2.** Model Fit And Quality Indices

Index	Value	Cut of Value	Remarks
Average path coefficient (APC)	0.363, P<0.001	P<0.05	Good
Average R-squared (ARS)	0.354, P<0.001	P<0.05	Good
Average adjusted R-squared (AARS)	0.387, P<0.001	P<0.05	Good
Average block VIF (AVIF)	1.002	acceptable if <= 5, ideally <= 3.3	Ideal
Average full collinearity VIF (AFVIF)	1.120	acceptable if <= 5, ideally <= 3.3	Good
Tenenhaus GoF (GoF)	0.501	small >= 0.1, medium >= 0.25, large >= 0.36	Large
Sympson's paradox ratio (SPR)=,	1.000	acceptable if >= 0.7, ideally = 1	Ideal
R-squared contribution ratio (RSCR)	9.321	acceptable if >= 0.9, ideally = 1	Ideal
Statistical suppression ratio (SSR)	1.000	acceptable if >= 0.7, ideally = 1	Ideal
Nonlinear bivariate causality direction ratio (NLBCDR)	1.000	acceptable if >= 0.7	Good

of discriminant validity can be seen from the Average Variance Extracted (AVE) above the cut value of 0.5. Meanwhile, the reliability-based study comprising Cronbach alpha and composite reliability is above 0.7, so it can be concluded that all the variables are reliable. So that it can be stated that all these items can form constructs on these variables both in innovative behavior,

average R-squared (ARS), average adjusted R-squared (AARS), average block VIF (AVIF), average full collinearity VIF (AFVIF). ), tenenhaus GoF (GoF), sympson's paradox ratio (SPR), r-squared contribution ratio (RSCR), statistical suppression ratio (SSR), nonlinear bivariate causality direction ratio (NLBCDR). The results of the goodness of fit are as follows.

**Table 3.** Hypothesis testing

Hypothesis	Path Coefficient	Standard error	p-value	Remarks
H <sub>1</sub> : perceived university support →innovative behavior	0.284	0.078	0.004	Supported
H <sub>2</sub> : creativity →innovative behavior	0.377	0.072	<0.001	Supported
H <sub>3</sub> : creativity * perceived university support →innovative behavior	0.219	0.079	0.011	Supported

perceived university support, creativity.

Based on the results of the goodness of fit test on the WARP PLS-SEM model, it can be seen that all of the goodness of fit test criteria, from the average path coefficient (APC) to the nonlinear bivariate causality direction ratio (NLBCDR), meet good or ideal criteria. So that the evaluation or test on the inner model meets the WARP PLS-SEM criteria well, then it can be continued in hypothesis testing. The hypothesis test results can be shown in the following table.

The results of all hypothesis tests show that both hypotheses 1, 2 and 3 are all statistically significant, as indicated by the overall p-value of the three above 0.05. This means that perceived university support has a positive and significant impact on increasing studentpreneur innovative behavior, while creativity in addition to having a positive and significant impact on studentpreneur innovative behavior, creativity also significantly moderates the effect of perceived university support on studentpreneur innovative behavior.

**5. DISCUSSION**

Perceived university support empirically proven positive and significant effect on the behavior of studentpreneur innovative. This shows that the higher Perceived university support, the higher the innovative behavior of studentpreneurs. This is understandable because of the studentpreneur innovative behavior is formed due to the support of the university. As described in the Social cognitive theory [13] emphasizes that the learning process is created as well as support the environment. One form of support from this university to encourage innovative behavior of the studentpreneur.

The same thing is also present in the second and third hypothesis, which suggests that creativity is empirically proven positive and significant effect on the behavior of studentpreneur innovative, and creativity were significantly moderate the perceived impact of university support to innovative behavior studentpreneur. These

findings demonstrate creativity in addition to high impact on the behavior of innovative behavior studentpreneur high, but the high creativity also have an impact on the high perceived influence of university support to innovative behavior studentpreneur

The findings show that creativity has an important role to create innovative behavior. Creativity is the basis for creating new ideas or unique approaches to solving problems. Therefore, as studentpreneur certainly need to understand the advances in technology, changes in the environment, how to survive with competitors by improving products, processes, services, but also must pay attention to changes in consumer tastes. In line with this, the social cognitive theory of [13] also strengthens personal factors such as creativity has an important role in improving the environmental factors, such as in the context of this research is the perceived support university. Therefore, through good creativity, it can encourage efforts or programs that provide university students to increase entrepreneurial activity

## 6. CONCLUSION

Universities have an important role in improving the behavior of innovative student especially on studentpreneur, this is because the university's efforts in providing an environment such as entrepreneurial community (HIPMI PT) is a step that is sufficient to support the innovative behavior of students, but often the high-low effect of university support is also determined by the internal factors such as creativity because creativity is the best antecedent in the process of formation of innovative behavior of students especially studentpreneur. Therefore, the academic field and university student affairs must create an intracurricular or extracurricular-based curriculum to support the creation of creativity outcomes in each learning process, and there is a need for a student creativity program, especially related to entrepreneurship. This research is limited in measuring the scope of the university and students' internal factors, future research is expected to add variables from other external factors.

## AUTHORS' CONTRIBUTIONS

Aprilia Susanti had contributed in reviewing literature deeply, and Kemal Budi Mulyono and Siti Listyaningsih had contributed in analyzing data.

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