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Exploration of the Influence: Self Action, Self Efficacy on Student Creativity in General Biology

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ABSTRACT

Purpose of the study: This study aims to explore the relationship between self-action and self-efficacy with students' creativity in Biology practicum activities. In the context of higher education, understanding the factors that influence creativity, such as self-action and self-efficacy, is very important for designing.

Methodology: This is a quantitative study with an ex post facto research method. This study involves three variables, two independent variables and one dependent variable. The sample variables were taken using the Simple Random Sampling technique, so that the researcher obtained sample of 74 students. This study used questionnaire instrument. The data analysis techniques used were descriptive statistics and inferential statistics.

Main Findings: The results of this study indicate that for self-action and self-efficacy, the average score is in the moderate category. While for student creativity, the average score is also in the moderate category. The results of inferential statistical analysis with the F test indicate a significant influence between self-action and self-efficacy on student creativity in General Biology practicum activities in the Biology Education Study Program, Fatmawati Sukarno State Islamic University, Bengkulu.

Novelty/Originality of this study: This research pays attention to psychological aspects, such as how individuals act towards themselves (Self Action) and individual beliefs in their abilities (Self Efficacy), which may have a significant influence on students' ability to produce creativity when participate in General Biology practicum activities. Focusing on the context of practicum activities can illustrate the influence of these variables in real.

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1. INTRODUCTION

Education is very important and very basic for every development and progress of a nation, in fact all religious teachings require their adherents to seek knowledge/education [1]–[3]. In Islamic teachings itself, it is strongly recommended for its adherents to always seek knowledge. In fact, Islam requires every believer to seek knowledge. It is important to know that everything that is done must contain wisdom or something important for humans, as well as the command to seek knowledge. The state has the right and obligation to provide education and teaching for its citizens, in accordance with the basic objectives of the state itself, namely to regulate public life according to healthy standards so that it becomes an aid to family education and can prevent anything that is detrimental to the development of children for reach maturity. Competency Standards for Education Unit

Graduates (SKL-SP) were developed based on the objectives of each educational unit and then further developed into Subject Competency Standards [4], [5].

One of the subjects in schools as education providers that can be used as an object of creative activity is the natural sciences program. One of them is Biology. Biology is a branch of natural science which studies living things and all their aspects [6], [7]. As a natural science, biology was born and developed over time through observations and experiments. These observation and experimentation skills must be supported by an attitude of creativity for the sake of work safety, asking questions, interpreting data, and communicating findings orally or in writing, exploring and sorting factual information that is relevant to testing ideas or solving everyday problems. So a biologist or someone who studies biology requires more careful thinking than other scientists in the field of science, even in the field of science.

Creativity is the ability to find ideas, thoughts and something new [8]–[10]. Creativity is also a control mechanism carried out by humans against the various pressures they experience because theories based on personality development explain that creativity is part of personality. If the pressure is experienced by an individual, setbacks or regression will occur. These pressures come from within and from outside the student. Pressures that originate from outside the student include family conditions, community conditions and school conditions. Meanwhile, the pressure that comes from within students is the level of intelligence, self-confidence, talent and personality of students. In the learning process, personal (cognitive) factors play an important role which has been emphasized recently, namely self-action and self-efficacy [11], [12].

Self action in this context refers to activities or actions carried out by individuals to express or implement their own creative ideas is line research with [13], [14]. This involves a person's ability to act independently in conveying the ideas or concepts they have. Creative children often have a tendency to express themselves in unique and original ways, combining several ideas or concepts to create more complex and detailed answers or works [15]–[17]. Self action in the context of creativity allows children to express their ideas freely, combine various concepts, and create something new or unique. It is an important part of the creative process where individuals can develop their ideas in a way that combines critical thinking, exploration, and innovative self-expression.

Self-efficacy is the belief that "I can" [18], [19]. Helplessness is the belief that “I can't”. Children need to develop a belief in their ability to do something, so that they will feel valuable [20], [21]. The feeling of "can do" encourages them to carry out new behaviors to create a sense of security when they go to school. Sometimes parents make children feel worthless by paying attention to the fact that they are too small to do things, forgetful, or lack skills. If a child's self-confidence is destroyed, they will always feel afraid to do something. Meanwhile, increasing self-confidence in children will give rise to encouragement and courage to act.

This research has high urgency because student creativity in General Biology practicum activities is a crucial aspect in producing innovative and competent graduates in the field of biology education. In the context of higher education, understanding the factors that influence creativity, such as self-action and self-efficacy, is very important for designing educational interventions that can optimize students' creative potential. The purpose of this study is to explore the relationship between self-action and self-efficacy with student creativity, and to identify the extent to which both factors influence creativity in the context of General Biology practicum. Thus, the results of this study are expected to provide significant contributions in the development of more effective curriculum and learning strategies to improve student creativity in the field of biology education.

2. RESEARCH METHOD

2.1 Type of Research

This type of research is quantitative research with ex post facto research methods. Ex Post Facto research is research carried out to examine events that have occurred and then trace them back to find out the factors that could precede or determine the causes that occurred because of the research event [22], [23]. The ex post facto method is used to examine events that have occurred and trace factors that may precede or determine the cause of the event. This study aims to understand the relationship between self-action, self-efficacy, and creativity of students in General Biology practicums in the Biology Education Study Program, Faculty of Tarbiyah and Teacher Training, Fatmawati Sukarno State Islamic University, Bengkulu.

2.2 Population and Sample

The population referred to in this study is all Biology Education Students at Fatmawati Sukarno State Islamic University, Bengkulu, consisting of 11 classes with a total of 400 students. The sample was taken using the Simple Random Sampling technique, where 74 respondents were randomly selected from the population. This sample represents approximately 18% of the total population, selected without regard to strata in the population to ensure homogeneous representation. The sampling in a homogeneous population was carried out randomly without paying attention to the strata in the population [24]–[26]. So a sample of 74 people was obtained, namely 18% of the total population.

2.3 Data Collection Techniques

The data collection technique used in this study is a questionnaire. A questionnaire is a series of written questions used to obtain information from respondents regarding their reports regarding their personality or things they know. This questionnaire instrument is designed to measure aspects of self-action, self-efficacy, and creativity of students, with a different number of questions for each variable.

2.4 Data Analysis Techniques

The data analysis techniques used include descriptive statistics and inferential statistics. Descriptive analysis is used to explain the characteristics of each variable studied, while inferential analysis includes normality tests, linearity tests, and multiple regression tests. This approach helps researchers to determine the relationship and influence between self-action, self-efficacy, and creativity of students. The research instrument used in this research is a questionnaire or questionnaire. A questionnaire or questionnaire is a number of written questions that are used to obtain information from respondents in the sense of reports about their personality, or things they know [27]–[29]. The data analysis techniques used in this research are descriptive statistics and inferential statistics. The tests that will be used in inferential statistics are the normality test, linearity test and multiple regression test. The questionnaire grid used in this research is as follows:

Table 1. Questionnaire Grid for Each Variable

Variable	Assessment Aspects	Number of Questions
Self-Action	1. Imaginative 2. Enjoy exploring the environment 3. Ask lots of questions 4. Have a strong curiosity 5. Likes to do experiments 6. Likes to receive new stimuli 7. Interested in doing many things 8. Don't get bored easily	23
Self Efficacy	1. Able to do tasks 2. Able to organize their own learning activities 3.Arsetive 4. Do activities in your spare time 5. Prevent risky activities	16
Creativity	1. Think from all directions 2. Think in all directions 3. Conceptual flexibility (conceptual flexibility) 4. Originality (Originality) 5. Prefer complexity over simplicity 6. Skills in many things	19

For the categorization of self-action, self-efficacy and creativity, there are no standard categories, so the statistical categorization concept is used as follows.

Table 2. categorization of self action, self efficacy, and creativity

Intervals	Category
$x < (\mu - 1{,}0\sigma)$	Low
$(\mu - 1{,}0\sigma) \leq x < (\mu + 1{,}0\sigma)$	Currently
$(\mu + 1{,}0\sigma) \leq x$	High

2.5 Research Procedure

The research process begins with data collection using a prepared questionnaire. After the data is collected, a descriptive analysis is carried out to obtain an overview of the level of self-action, self-efficacy, and creativity of respondents. Then an inferential analysis is carried out to test the proposed hypothesis regarding the influence of self-action and self-efficacy on student creativity. The results of this analysis provide in-depth insight into the factors that contribute to student creativity in the context of General Biology practicum at the university.

3. RESULTS AND DISCUSSION

3.1. Results

Based on the results of research carried out at the Biology Education Laboratory, researchers collected data through questionnaires or Self Action questionnaires filled out by Biology Education students who were then given a score for each question item. The following are the results of the biology education students' self-action questionnaire.

Table 3. Distribution of Student Self Action in General Biology Practicum Activities, Biology Education Department

Intervals	f_i	x_i	$f_i x_i$	$x_i - \bar{x}$	$(x_i - \bar{x})^2$	$f_i(x_i - \bar{x})^2$
56 – 60	4	56	232	-12.09	146.1681	584.6724
61 – 65	15	63	945	-7.09	50.2681	754.0215
66 – 70	21	68	1428	-2.09	4.3681	91.7301
71 – 75	18	73	1314	2.91	8.4681	152.4258
76 – 80	13	78	1014	7.91	62.5681	813.3853
81 – 85	2	83	166	12.91	166.6681	333.3362
86 – 90	1	88	88	17.91	320.7681	320.7681
Amount	74	-	5187	-	-	3050.3394

$$\bar{X} = \frac{\sum f_i x_i}{\sum f_i} = 70{,}09 \qquad SD = \sqrt{\frac{\sum f_i (x_i - \bar{x})^2}{n-1}} = 6{,}46$$

To make it easier to determine the level of self-action, a breakdown is made according to value categories. These details include three categories, namely: high category, medium category and low category. For more details, see the description below:

Table 4. Self Action Category for Biology Education Students

Intervals	Frequency	Category	Percentage (%)
x < 63.63	13	Low	17.56
63.63 ≤ x < 76.55	49	Currently	66.21
76.55 ≤ x	12	High	16.21
Amount	74		100

Based on the data obtained in the table above, by looking at the 74 students as a sample it can be seen that 13 people (17.56%) are in the low category, 49 people (66.21%) are in the medium category, and 12 people (16, 21%) are in the high category. Meanwhile, if you look at the average value obtained which is 70.09 when included in the three categories above, it is in the medium category so it can be concluded that Biology students at Fatmawati Sukarno State Islamic University of Bengkulu have a level of Self Action which is being.

Based on the results of research carried out at the Biology Education Laboratory, Faculty of Tarbiyah and Teacher Training, Fatmawati Sukarno State Islamic University of Bengkulu, researchers collected data using a psychological scale, namely the Self Efficacy scale, which was filled in by Biology Education Students and then given a score for each question item. The following are the results of the self-efficacy questionnaire for biology education students:

Table 5. Distribution of Student Self-Efficacy in General Biology Practicum Activities, Biology Education Department

Intervals	f_i	x_i	$f_i x_i$	$x_i - \bar{x}$	$(x_i - \bar{x})^2$	$f_i(x_i - \bar{x})^2$
32 – 36	6	34	204	-11.35	128.8225	772,935
37 – 41	12	39	468	-6.35	40.3225	483.87
42 – 46	28	44	1232	-1.35	1.8225	51.03
47 – 51	18	49	882	3.65	13.3225	239,805
52 – 56	5	54	270	8.65	74.8225	374.1125
57 – 61	4	59	236	13.65	186.3225	745.29
62 – 66	134	64	64	18.65	347.8225	347.8225
Amount	74	-	3356	-	-	3014,865

$$\bar{X} = \frac{\sum f_i x_i}{\sum f_i} = 45{,}35 \qquad SD = \sqrt{\frac{\sum f_i (x_i - \bar{x})^2}{n-1}} = 6{,}42$$

To make it easier to find out the level of self-efficacy, a breakdown is made according to value categories. These details include three categories, namely; high category, medium category and low category. For more details, see the following description:

Table 6. Self Efficacy Category for Biology Education Students

Intervals	Frequency	Category	Percentage (%)
x < 33.93	12	Low	16.21
33.93 ≤ x < 51.77	52	Currently	70.27
51.77 ≤ x	10	High	13.51
Amount	74		100

Based on the data obtained in the table above, by looking at the 74 students as a sample it can be seen that 12 people (16.21%) are in the low category, 52 people (70.27%) are in the medium category, and 10 people (13.51%) are in the low category. %) is in the high category. Meanwhile, if you look at the average value obtained, it is 45.35 when included in the three categories above, it is in the medium category, so it can be concluded that students majoring in biology education at Fatmawati Sukarno State Islamic University of Bengkulu have moderate self-efficacy.

Based on the results of research carried out at the Biology Education Laboratory, Tarbiyah and Teacher Training Faculty, Fatmawati Sukarno State Islamic University of Bengkulu, researchers collected data through questionnaires filled out by Biology Education Students who were then given a score for each question item and can be seen in the creativity score attachment. The following are the results of a creativity questionnaire for biology education students:

Table 7. Distribution of Student Creativity in General Biology Practicum Activities, Biology Education Department

Intervals	f_i	x_i	$f_i x_i$	$x_i - \bar{x}$	$(x_i - \bar{x})^2$	$f_i (x_i - \bar{x})^2$
41 – 44	2	42.5	85	-9.63	92.7369	185.4738
45 – 48	20	46.5	930	-5.63	31.6969	633,938
49 – 52	22	50.5	1111	-1.63	2.6569	58.4518
53 – 56	17	54.5	926.5	2.37	5.6169	95.4873
57 – 60	5	58.5	292.5	6.37	40.5769	202.8845
61 – 64	6	62.5	375	10.37	107.5369	645,221
65 – 68	1	67.5	67.5	15.37	236.2369	236.2369
69 – 72	1	70.5	70.5	18.37	337.4569	337.4569
Amount	74	-	3858	-	-	2395.1506

$$\bar{X} = \frac{\sum f_i x_i}{\sum f_i} = 52{,}13 \qquad SD = \sqrt{\frac{\sum f_i (x_i - \bar{x})^2}{n-1}} = 5{,}72$$

To make it easier to determine the level of creativity, a breakdown is made according to value categories. These details include three categories, namely; high category, medium category and low category. For more details, see the description below:

Table 8. Creativity Categories of Biology Education Department Students

Intervals	Frequency	Category	Percentage (%)
x < 46.41	10	Low	13.51
46.41 ≤ x < 57.85	53	Currently	71.62
57.85 ≤ x	11	High	14.86
Amount	74		100

Based on the data obtained in the table above, by looking at the 74 students as a sample it can be seen that 10 people (13.51%) are in the low category, 53 people (71.62%) are in the medium category, and 11 people (14, 86%) are in the high category. Meanwhile, if you look at the average score obtained, it is 52.09 when included in the three categories above, it is in the medium category, so it can be concluded that students majoring in biology education at Fatmawati Sukarno State Islamic University of Bengkulu have a medium level of creativity.

The data normality test in this study is intended to test the variables of self-efficacy, self-action and creativity. Testing whether the data in this study is normal or not uses the SPSS 16 program via the Kolmogorov Smirnov test. Following are the results of the normality test obtained from the variables tested.

Table 9. Normality Test Results

Variable	K-SZ	Sig.	Information
Self-Action	0.751	0.625	Normal
Self Efficacy	0.950	0.328	Normal
Creativity	1,070	0.202	Normal

Based on the normality test using the Kolmogorov-Smirnov test above, the K-SZ value for the self action variable was 0.751, for the self efficacy variable it was 0.950, and for the Creativity variable it was 1.070. Asymp.Sig value. (2-tailed) for the self action variable is 0.625, for the self efficacy variable it is 0.328, and for the creativity variable it is 0.202. The results obtained are greater than 0.05 (> 0.05), so it can be concluded that the data is normally distributed.

The linearity test in this research was carried out using analysis of variance. The rule used is if Sig < α (0.05), and $F_{count} < F_{table}$, then the relationship between the two variables is linear. The conclusion of the linearity test results can be seen in the table below:

Table 3. Linearity Test Results

Correlation	F	Sig.	Deviation	Information
$X_1 Y$	2,569	0,000	0.003	Linear
$X_2 Y$	1,846	0,000	0.035	Kinear

Based on the table above, the linearity test between the independent variables (self action and self efficacy) and the dependent variable (student creativity) resulted in: between self action and creativity ($X_1 Y$) the linear deviation is 0.003 < α (0.05) and sig value. 0.000 < α (0.05) and $F_{count} < F_{table}$ (2.569 < 3.13), then between self-efficacy and creativity (X 2 Y) the linear deviation is 0.035 < α (0.05) and the sig. 0.000 < α (0.05) and F count < F table (1.846 < 3.13) which means the data is linear. This means that the relationship can be expressed as a straight line, so if one variable increases, the other variable will increase. Vice versa.

Correlation analysis (R) is used to determine the relationship between the independent variable (X) and the dependent variable (Y). The R value ranges from 0 to 1, if the value is closer to 1, it means the relationship is getting stronger, conversely, the value is closer to 0, the relationship is getting weaker. Based on the SPSS 16 analysis application, the conclusions of the analysis results are as follows:

Table 4. Correlation Analysis Results

R	R^2	F	Sig	Conclusion
0.529	0.280	13,778	0,000	Significant positive correlation

Based on the results of this analysis, an R value of 0.529 was obtained. This shows that there is a moderate relationship between self action and self efficacy on student creativity in general Biology practicum activities in the Biology Education Department at Fatmawati Sukarno State Islamic University of Bengkulu. Because $f_{calculated} > f_{table}$ (13.778 > 3.13) then H_0 is rejected. Thus, the decision for this test is to reject H0 and accept Ha , which means that there is a significant influence between self-action and self-efficacy on student creativity in general Biology practicum activities in the Biology Education department at Fatmawati Sukarno State Islamic University of Bengkulu. Based on the table, the R^2 (R Square) figure is 0.280 or (28.0%). This shows that the percentage contribution of self action and self efficacy to student creativity in general biology practicum activities in the Biology Education department at Fatmawati Sukarno State Islamic University of Bengkulu is 28.0% while the remaining 72.0% is influenced or explained by other variables not included in this research. Such as interests, motivation, learning styles and so on.

The description of the self-action of Biology education students at Fatmawati Sukarno State Islamic University of Bengkulu shows that 13 people (17.56%) are in the low category, 49 people (64.86%) are in the medium category, and 12 people (66.21%) are in the high category. . If we look at the average value obtained at 70.20 when included in the three categories of self action, the value is in the interval 65-77, namely in the medium category, so it can be concluded that Biology students at Fatmawati Sukarno State Islamic University of Bengkulu have a moderate level of Self Action. .

Meanwhile, the description of the self-efficacy of Biology education students at Fatmawati Sukarno State Islamic University of Bengkulu shows that 12 people (16.21%) are in the low category, 52 people (70.27%) are in the medium category, and 10 people (13.51%) are in the high category. . Meanwhile, if you look at the average value obtained, it is 45.28. If included in the three self-efficacy categories, the value is in the 40-51 interval, namely in the medium category, so it can be concluded that students majoring in biology education

at Fatmawati Sukarno State Islamic University of Bengkulu have a moderate level of self-efficacy, not low and not high.

Meanwhile, a picture of student creativity in general Biology practicum activities for Biology students at Fatmawati Sukarno State Islamic University of Bengkulu. Based on the data obtained in the table above, by looking at 74 students as a sample, it can be seen that 10 people (13.51%) are in the low category, 53 people (71.62%) were in the medium category, and 11 people (14.86%) were in the high category. Meanwhile, if we look at the average value obtained, it is 51.93 if it is included in the three categories above, it is in the medium category. If it is included in the three creativity categories, the value is in the interval 47-57, namely in the medium category, so it can be concluded that students majoring in biology education at Fatmawati Sukarno State Islamic University of Bengkulu have a moderate level of creativity.

From the linearity test carried out between self action and creativity (X_1 Y), the linear deviation was $0.003 < \alpha$ (0.05) and the value sig. $0.000 < \alpha$ (0.05) and $F_{count} < F_{table}$ (2.569 < 3.13) which means the data is linear. This means that the relationship can be expressed as a straight line, so if one variable increases, the other variable will increase and vice versa. The data above shows that there is an influence of self-action on student creativity. This is because self is an arsenive that motivates people's struggle towards wholeness. The self becomes the center of the personality, surrounded by all other systems. The self directs the individuation process, through the self aspects of creativity become realized and channeled into productive activities.

From the linearity test carried out between self-efficacy and creativity (X_2 Y), the linear deviation was $0.035 < \alpha$ (0.05) and the sig. $0.000 < \alpha$ (0.05) and $F_{count} < F_{table}$ (1.846 < 3.13) which means the data is linear. This means that the relationship can be expressed as a straight line, so if one variable increases, the other variable will increase and vice versa. The data above shows that there is an influence of self-efficacy on student creativity. This is because in the learning process Self-efficacy (self-confidence) plays an important role in personality development, including the development of children's creativity. Because with self-efficacy (self-confidence) a person can overcome situations and produce positive results so that their creativity increases.

The research results show that there is a significant influence between self-action and self-efficacy on student creativity in general Biology practicum activities in the Biology Education department at Fatmawati Sukarno State Islamic University of Bengkulu. Based on the results of hypothesis testing which shows that the F value obtained from the calculation results ($F_{calculated}$) is greater than the F value obtained from the F distribution table (F_{table}) with a significance level of 5% ($F_{calculated} > F_{table}$) proving that there is an influence There is a significant difference between self action and self efficacy on student creativity in general Biology practicum activities in the Biology Education Department at Fatmawati Sukarno State Islamic University of Bengkulu. However, at a low level, namely 28.0% and the remaining 72.0% is influenced by other factors such as motivation, interests, learning styles and so on, which are not included in this research.

Self action (self-attitude/activities or things related to expressing one's ideas) of children in expressing ideas despite the fact that these children have many great ideas, they are quickly said to have strange, unreasonable ideas or naughty and it is difficult to determine what their personality and creative talents will develop in the future. In fact, this is wrong, because personal (cognitive) factors and matters related to the attitude of expressing a child's own ideas are very important for the development of a child's personality, including the development of his or her creativity. Creative children are able to provide many ideas by combining several ideas for the answers put forward, so that they are able to develop, enrich answers in detail and detail down to small things [30]–[32]. Some examples of children's actions in developing their creativity include liking to do experiments, liking to receive new stimuli, having a strong curiosity, being interested in doing many things, thinking smoothly and so on.

Self-efficacy is a crucial personality element. Self-efficacy is self-confidence (a confident attitude) in one's own ability to display behavior that will lead to the expected results [33], [34]. To improve skills and creativity, a student needs to develop confidence in their ability to do something, so that they will feel valuable. Sometimes parents, including teachers, cause their children/students to feel worthless by paying attention to the fact that they are not yet mature enough to do something, like to forget, or lack skills. If children/students' self-confidence is destroyed, they will always be afraid to take action so that their creativity will not develop. Meanwhile, increasing self-confidence in children/students will give rise to encouragement and courage to act, so that their creativity will increase.

The results of this research are in accordance with the theory put forward by Jordan E. Ayan who says that curiosity is the main need of the creative soul. Curiosity is what drives someone to investigate new fields or look for ways to do something better. Curiosity controls the urge to create, experiment and build. Jordan E Ayan further explained that the creative spirit also requires the courage to take risks, even without the courage to take risks, most creative achievements will never be realized. Then the theory put forward by Jamaris states that creativity is a control mechanism carried out by humans against the various pressures they experience. If the pressure is experienced by an individual, setbacks or regression will occur.

The novelty of this study lies in the holistic approach used to explore the influence of self-action and self-efficacy on students' creativity in the context of General Biology practicum. Unlike previous studies that

tend to separate the influence of psychological factors on academic performance, this study combines both aspects to provide a more comprehensive understanding of how self-action and self-efficacy together influence students' creativity. In addition, this study also uses an ex post facto method to trace events that have occurred and identify factors that may precede or determine the causes of students' creativity, something that is rarely done in similar studies in the field of biology education. Thus, this study not only adds new insights into the psychological dynamics in the practicum learning process, but also provides a strong empirical basis for the development of more effective educational strategies in enhancing students' creativity.

Students' self-action, as stated by Jordan above, courage to take risks (not limiting students' self-action to expressing their ideas) as well as an attitude of high curiosity are absolutely necessary for students to develop their creativity and develop themselves in the right direction. Better, if we instill this in every student, then in the future we will rarely find students who are less able to express their ideas. Then the development of students' creativity will be hampered and will even experience a setback or regression, as in the theory proposed by Jamaris above, if the students experience pressure. For example, if a student is intellectually intelligent but is less able to express his ideas, one of the reasons is because he is experiencing pressure in the form of a crisis of self-confidence. There are many things that can cause a student's self-confidence to decrease, such as the attitude of parents/educators who like to yell at and destroy students' self-confidence by saying that they are too small to do something, lack skills, without even thinking about it, we say that their ideas their ideas are strange and inconsequential.

4. CONCLUSION

Based on the results of this study, it can be concluded that self-action and self-efficacy have a significant influence on students' creativity in General Biology practicum activities in the Biology Education Study Program, Faculty of Tarbiyah and Teacher Training, Fatmawati Sukarno State Islamic University, Bengkulu. These findings indicate that both self-action and self-efficacy of students play an important role in driving and enhancing their creativity in the context of biology practicums. Although there are still other factors that influence students' creativity, these results provide an important foundation for the development of more effective biology education in facilitating the growth of students' creativity.

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