

# Influencing Factors on the Teacher–Students Pedagogical Creativity of the FKIP Bengkulu University

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**Abstract**—The purpose of this study was to study the factors that influence pedagogical creativity. Factors that are thought to influence pedagogical creativity are parental guidance, self-motivation, adversity quotient as independent variables, while the dependent variable is pedagogical creativity. This research includes surveys where the variables studied cannot be controlled. The instruments of parental guidance, self motivation, adversity quotient each consisted of 12 items, 12 items, and 14 items, with a choice of 3 answers. Pedagogical creativity instruments consist of 16 open questions with maximum 3 answers. Analysis techniques used by structural equation methods. The results obtained are a positive and significant relationship between parental guidance and work motivation, but the relationship of parental guidance with creativity is not significant. There is a positive relationship between parental guidance and adversity quotient. There is a positive and significant relationship between work motivation and adversity quotient, but the relationship between work motivation and creativity is not significant. There is a negative and significant relationship between adversity quotient and creativity.

**Keywords:** *parental guidance, work motivation, adversity quotient, pedagogical creativity*

## I. INTRODUCTION

The National Education Law mandates that education outcomes have high competitiveness. National education functions to develop capabilities and shape the nation's character and civilization with dignity in the context of educating the life of the nation, aiming at developing the potential of students to become human beings who believe in and fear God Almighty, have noble, healthy, knowledgeable, skilled, creative, independent, and be a democratic and responsible citizen.

Educators must have a minimum qualification and certification in accordance with the level of teaching authority, physically and mentally healthy, and have the ability to realize national education goals.

The implementation of the curriculum-2013 has begun to be implemented in a number of target schools in almost all provinces in Indonesia starting in the 2013 school year. This change in curriculum has had an impact on several dimensions of learning that have so far been applied to the Education Unit Level Curriculum. The thematic learning model is one of them, and the one most affected by this change is the teacher, because the teacher is the central holder of the teaching and learning process in class. In the 2013 curriculum in the implementation of the national exam, the items demanded test takers think creatively. In this connection the teacher is also required to be creative in teaching in order to develop students' creative abilities.

Creative teachers become the main needs in the implementation of the 2013 curriculum. In its implementation, teachers must have a variety of concepts and ways to boost the quality of learning by providing a conducive environment, a democratic learning climate, involving students optimally in learning physically, socially, and emotionally. [1]

Problem solving and struggling to overcome difficulties are very important for human life, because humans will have a happy life or not depending on how well he can solve the problems they have[2]. This means that creativity is very important to solve life problems.

Research conducted by Krissandi and Rusmawan found that in the implementation of K-13 many teachers had difficulty in making instructional media, integrating learning content in thematic learning[3]. This finding means that the teacher has difficulty finding alternative media making related to thematic learning. This implies that the teacher is less creative in finding and creating learning media in accordance with the theme of the lesson.

The research conducted by Sinwan mentioned the obstacles faced by teachers in SMA Negeri 1 Gebog Kudus in carrying out the 2013 curriculum

(K-13) in terms of the aspects of preparation, implementation aspects, and evaluation aspects, some teachers still lacked understanding of the K-13 and the assessment system conducted by teachers was not structured because the teacher feels the assessment system is too complicated [4].

From the two studies, it turns out that teachers still lack innovation and creativity in implementing K-13 learning, even though the implementation of K-13 requires the creativity of teachers in carrying out learning so that students do not experience learning difficulties.

In the process of learning in tertiary institutions, many learning processes carried out by lecturers are still one-way, even though active learning in higher education (ALIHE) has been active in active learning in higher education. Not all lecturers have been trained by ALIHE, thus it is allegedly that many lecturers in the learning process are conducted in one monotonous direction, where lecturers are still teaching traditionally, lecturers are the only source of learning for students. This condition will result in underdeveloped creativity of students in learning.

Many factors affect the pedagogical creativity of students, namely the demands of the task, motivation to solve problems, adversity intelligence, local culture, and so on.

How is the development of educational student creativity in teaching required in K-13? What factors influence the development of teacher creativity in teaching? What internal factors have a greater influence on creative teaching, or are external factors influencing teaching creativity in K-13?

In this study limited to internal factors that are thought to influence the development of student creativity in the learning process. Is parental guidance related to pedagogical creativity? Is the intrinsic task motivation for completing tasks related to pedagogical creativity? Is adversity intelligence related to pedagogical creativity? How to model appropriate relationships between variables of intrinsic motivation, parental guidance, difficulty of intelligence, and pedagogical creativity.

The research objective is to find out the most dominant factor influencing the development of teaching creativity of prospective teachers, to know the relationship between parental guidance and pedagogical creativity. To find out the magnitude of the relationship between intrinsic task motivation is related to pedagogical creativity. To find out the great relationship between adversity intelligence is related to the creativity of the pedagogical. To determine whether or not the fit converge model is a variable relationship between parental guidance,

intrinsic motivation, adversity intelligence, and pedagogical creativity.

Creativity theory is a comprehensive social psychological model that is needed for an individual to produce creative work. This theory is based on the definition of creativity as the production of ideas or results that are both new and appropriate for several purposes [5]. Creativity is the process of sensing and observing a problem, making guesses about the shortcomings of this problem, assessing, and testing the assumption or hypothesis, then changing and testing it again, and finally preparing the results. The product aspect of creativity emphasizes that what is produced from the creativity process is something new, original [6]. Creativity as the interaction between talents, processes, and the environment in which individuals or groups produce products that are useful for their social environment [7]. One characteristic of creative thinking is divergent thinking. Divergent thinking ability is the ability to think that can produce answers that vary from a problem [8]. The process of creative thinking includes 4 stages, namely preparation, incubation, illumination, and verification [9][10]. The characteristics of a creative personality are the following characteristics. Creative individuals have a lot of energy, but they also often do not experience tension. Creative individuals tend to be smart, but also simple at the same time. Creative individuals have a combination of playfulness and discipline. The way of thinking between imagination and fantasy alternates, and has a strong sense of reality in other individuals. Creative people seem to have different tendencies with extroverts and introverts. Creative individuals who are also humble are extraordinary and proud at the same time. Creative individuals to a certain extent have the nature of rigid gender roles and have androgynous tendencies. Generally, creative people are considered against independent habits and attitudes. Most creative people have a strong passion about their work, but they can be very objective. Openness and sensitivity of creative individuals often creates difficulties but there are many benefits for them [11]. Creativity produces relatively new, high-quality, and earnest work [12];[13]. Pedagogical creativity is an attempt to combine various ways that have been done before or find new ways so that it becomes a relatively new way that can increase the enthusiasm of student learning. Pedagogical creativity consists of speed of thinking, flexibility of thinking, authenticity of thinking, and elaboration of thinking about educating[14].

The creativity is strongly influenced by personality, it is not found that high creativity is determined by high intelligence [15]. Research on Korean society conducted by Kim mentioned that creativity is influenced by culture [16]. This low

correlation shows that empirically the creativity of pedagogy is different from the concept of IQ intelligence.

Research conducted by Boonchan, Papat and Seesan states that leadership administration, learning, learning behavior, motivation and character affect the creativity of undergraduate students in education [17]. Research conducted by Hung-YiWu et al. stated that communication skills, freedom of activity, freedom of opinion, and stimulation of imagination in the family have a close relationship with children's creativity [18] Research conducted by Purwaningrum states that adversity quotient affects the creativity of thinking in high school children [19].

Parental guidance is the first place children learn to understand life in all fields. The education level of parents was found to be very closely related to the educational attainment of their children [20]. This means that the contribution of people to the success of their children's education is very large. Research conducted by Mirashrafi, Bol, and Nakhaiezadeh states that parental guidance factors influence the educational attainment of participants. Several factors have a positive effect on the average total value such as: parent education, parent occupation and family income [21].

The intrinsic task motivation includes two elements: the basic attitude of the individual to the task, and the individual's perception of the reason for doing the task in the example given. In this basic component, self-motivation stands out. It is said that when students enjoy work assignments themselves, they process information in a flexible way, they experience positive influence and they become willing to take risks and persevere in efforts to develop and refine ideas [22].

The Adversity Quotient is intelligence to face difficulties. Stoltz classifies people into 3 AQ categories, namely: low AQ quitters, medium AQ campers, and high AQ climbers. Quitters are groups of people who don't have the will to accept challenges in their lives. Campers are groups of people who already have the will to try to face the problems and challenges, but they give up because they feel they are no longer able to face challenges [23].

A climber is a group of people who choose to stay afloat in a variety of things that may come, whether it is a problem, a challenge, an obstacle, and other things that continue to come every day. Research conducted by Parvathy and Praseeda states that adversity quotient is negatively related to academic problems. This means that the higher the AQ the lower the academic problems of students [24].

Research states that Adversity Quotient and Work Commitment have a significant correlation with Teacher Creativity; there is no significant positive correlation between Adversity Quotient and Teacher Creativity where  $t = -0.196$ ;  $p = 0.238$ [25]. Research conducted by Jongman Park, Minkee Kim & Shinho Jang mentioned that scientific attitude, attention and creativity have shown positive effects on each other, the effect is stronger than scientific attitude for creativity 0.659 than the other two, attention & scientific attitude 0.32 and attention & creativity 0.368. Scientific attitude directly influences creativity 0.659, and attention will influence creativity more as a cofactor in addition to the scientific attitude of 0.213 than when it self is 0.154. If a teacher designs a certain way to increase students' attention during their science class, their scientific attitude and attention will increase, giving them a strong chance to increase their creativity [26]. Research conducted by Anggita Paramitha and Nurul Astuti states that intrinsic motivation influences work innovation and creativity [27].

The family is the first place of education for all individuals. In the family will be taught how to think and act to face life. For families who rarely communicate that they give direction, even if something is done is doctrine. This kind of situation does not support the motivation of children. On the other hand, families who promote dialogue to face life will encourage children's optimism in solving life's problems. Family dialogue is accompanied by directives that stimulate the growth of the courage to solve problems in the end will affect intrinsic motivation to solve life's problems. This motivation will affect the adversity quotient, and the adversity quotient will affect the creativity of children in solving life problems related to the tasks faced, including educational creativity.

A hypothetical model of the relationship between endogenous variables and exogenous variables is illustrated in the following diagram.

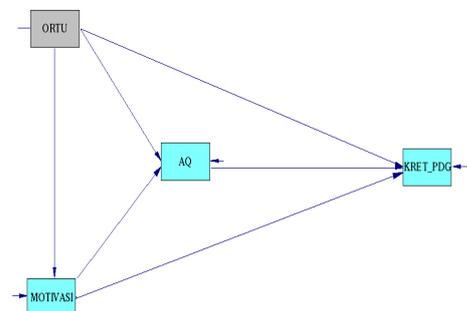


Fig. 1. Hypothetic Model of Relationships between Independent and Dependent Variables

## II. RESEARCH METHOD

The study was designed to find out the factors that influence pedagogical creativity of FKIP Bengkulu University students. The study design was

a survey with multi-correlation techniques. The study was conducted at Bengkulu University FKIP. The study began in June to November 2018. The population was FKIP Bengkulu University students enrolled in the 2017/2018 academic year. Samples will be taken from each study program. Respondents from each study program will be taken on 5th semester students, assuming that the 5th semester students have gained sufficient educational knowledge. The number of each study program is 30 people, so the number of samples to be taken is 330 students. The sample selection is done randomly, but the randomized one is not individual but class. By random selection the class of data obtained is easier and does not interfere with the learning process individually. From the samples obtained there are 206 samples that can be analyzed. The lack of sample is that the respondent did not fill in some questions.

The data collected by tests and questionnaires. The test is used to obtain pedagogical creativity data. A pedagogical creativity test was developed by Wasidi consisting of 16 open-ended question items but limited to a maximum of 6 words. Each question is open with a maximum of 3 answers. Each answer is decorated with 1 if the answer shows an indicator of creativity. The instrument has fulfilled the content validity and reliability of 0.85. The questionnaire was used to measure motivation consisting of 12 statements. Each statement is followed by three choices by scoring 3, 2, and 1 if the sentence is positive, and 1 2 3 if the sentence is negative. The motivation of the questionnaire was 0.698. The adversity quotient instrument consists of 14 statements, each statement followed by three choices by scoring 3, 2, and 1 if the sentence is positive, and 1, 2, and 3 if the sentence is negative. The reliability of this instrument is 0.786. Family background instrument consisting of 12 questions, each statement is followed by three choices with scoring 3, 2, and 1 if the sentence is positive, and 1, 2, and 3 if the sentence is negative. The reliability of this instrument is 0.857.

Before testing the relationship model of all variables, a multicollinearity test was performed, the correlation between variables was smaller 0.5[28]. The techniques of analysis data using structural equation models. With structural equation models, it is known that dependency and dominant factors influence pedagogical creativity. The model is fit if it meets three criteria, namely the chi-square value is less than twice the degree of freedom, the probability of occurring is greater than 0.05, and the RMSEA value is less than 0.08 [29, 30].

**III. RESULTS AND DISCUSSION**

*A. Description of the each variable*

The data of this research was displayed in the Table 1. The data normality test is done by observing observational data with theory. Based on Table 2 the results of the chi-square test show all variables have  $\alpha$  value > 0.95. This means that there is no difference between observational data and theoretical data, so it can be concluded that all variables are normally distributed.

TABLE I. DESCRIPTION OF EACH VARIABLE

No	Descriptive Statistics				
	Variables	Minimum	Maximum	Mean	SD
1.	Kre Pdgg	6.00	47.00	30.482	7.310
2.	Motv Tugas	18.00	32.00	25.952	2.650
3.	Ortu	16.00	36.00	29.059	4.616
4.	AQ	21.00	40.00	30.416	3.368

*B. Normality test*

TABLE II. CHI-SQUARE SKEWNESS AND KURTOSIS TEST

No	variables	Skewness and Kurtosis	
		Chi-Square	$\alpha$ -Value
	ORTU	0.095	0.954
	MOTIV TUGAS	0.003	0.999
	AQ	0.007	0.996
	KRET PDG	0.008	0.996

*C. Bivariat correlation*

TABLE III. THE BIVARIAT CORRELATION

	Kre Pdgg	Motv Tugas	Ortu	AQ
Kre Pdgg	1	-.020	-.026	-.174
Motv Tugas		1	.255	.431
Ortu			1	.303
AQ				1

Based on Table 3, the correlation between variables is at most 0.432 < 0.5 as required by a maximum of multicollinearity. Thus the analysis of the relationship between variables can be continued.

*D. Relationships between variables*

To test the hypothetical model of the relationship between variables used the LISREL program.

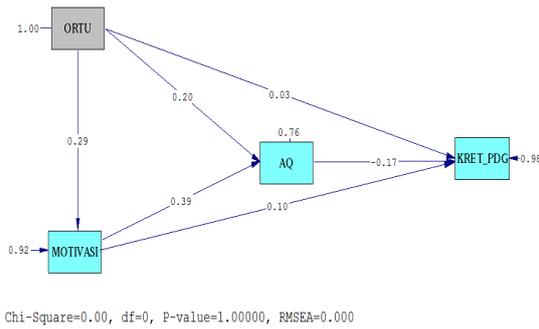


Fig. 2. Standardized Model

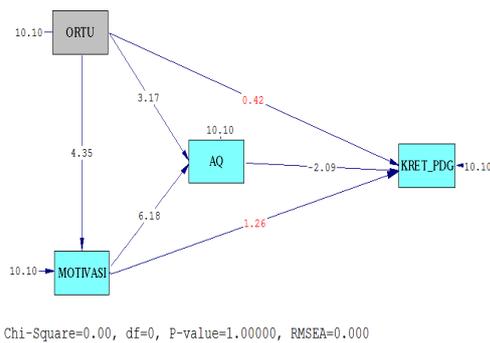


Fig. 3. t Value Model

The relationship model of the three variables of parental guidance, self motivation, and adversity quotient on the creativity variable is very fix. This is indicated by the large RMSEA <0.08,  $p = 1.00$ . this model is very fix, because  $p = 1$ . Correlation of parental guidance with self motivation of 0.29 with a t-value of 4.35, this relationship is significant because t value is greater than 1.97. The relationship of parental guidance by 0.20 with  $t = 3.17$ , this relationship is significant because t value is greater than 1.97. The relationship between parents and creativity is 0.03 with a t value of 0.43. This relationship is not significant because the t-value <1.97. The relationship of motivation with adversity quotient of 0.39 with t-value of 6.18, this relationship is significant because t value is greater than 1.97. The direct relationship of motivation with creativity is 0.10 with a t-value of 1.26, this direct relationship is not significant because the t-value is smaller than 1.97. The adversity quotient relationship is -0.17 with a t-value of 2.09. This negative relationship is significant because the t-value is greater than 1.97.

Parental guidance is directly related to children's motivation. Parents as role models, give direction to their children. As a responsible person, parents will always give encouragement and guidance to their children. However, guidance is not always directed at children's creativity, the finding of the relationship of parental guidance to children's creativity is not significant. Relationship Parental guidance with creativity is apparently in accordance

with research conducted by Mehrinejad, Rajabimoghadam and Tarsafi who found an insignificant relationship between parenting style and children's creativity. The relationship of authoritarian style to children's creativity is negative, while the authoritative parenting style influences children's creativity[31].

The direct relationship between motivation and creativity is not significant, but the relationship between motivation and adversity quotient is significant. High motivation to find solutions to problems will have an impact on creativity, if there are problems that arise individuals will be motivated to look for alternative alternative solutions. This finding is in accordance with research conducted by Auger and Woodman which states that motivation and creativity have an impact on managerial practicality [32].

The relationship between adversity quotient of -0.17 and significant. This relationship is negative, this means that the higher the adversity quotient the lower the pedagogical creativity. This finding reinforces the research conducted by Parvathy and Praseeda that adversity quotient is negatively related to academic problems. From this sample the most camper group was obtained, namely 65%, so this group was people who already had the will to try to face the problems and challenges, but they gave up because they felt they were no longer able to solve problems or challenges.[33]. This means the willingness to solve problems that arise including surrender, if no longer able to face challenges.

IV. CONCLUSIONS AND SUGGESTIONS

There is a positive and significant relationship between parental guidance and work motivation, but the relationship between parental guidance and creativity is not significant. There is a positive relationship between parental guidance and adversity quotient. There is a positive and significant relationship between work motivation and adversity quotient, but the relationship between work motivation and creativity is not significant. There is a negative and significant relationship between adversity quotient and creativity. The most fixed model is the relationship of parental guidance influences motivation and adversity quotient, while notation affects adversity quotient, and adversity quotient directly influences pedagogical creativity.

From these findings it turns out, there are no variables that are directly related to pedagogical creativity. Pedagogical creativity research needs to be done by expanding the variables that are thought to have a strong relationship with pedagogical creativity.

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