



The Relationship between *Learning Agility* and *Innovative Work Behavior* in Teachers at Senior High School X

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Abstract

The ever-evolving education demands teachers to have the ability to innovate and adapt to changes in order to improve the quality of learning. *Innovative work behavior* demonstrated by teachers is closely related to *learning agility*. *Learning agility* is the ability to learn and adapt quickly to challenges and changes. This study aims to see whether there is a relationship between *learning agility* and *innovative work behavior* in teachers of SMA X. This study was conducted on SMA X teachers with a sample of 63 people with a quantitative research method where the subject determination technique used a total sampling technique, namely all members of the population were sampled or respondents. The measuring instrument used was the *learning agility adaptation scale* and the *innovative work behavior adaptation scale*. The results of the validity coefficient on the *innovative work behavior scale* ranged from 0.371 to 0.770 with a reliability coefficient of 0.860. The results of the validity coefficient on the *learning agility scale* ranged from 0.323 to 0.841 with a reliability coefficient of 0.916. Based on the results of the study, a correlation value of $r = 0.596$ was obtained with a significance level of 0.000. The hypothesis test shows a positive relationship between *learning agility* and *innovative work behavior* in high school X teachers. This finding also shows that there is a significant relationship between *learning agility* and *innovative work behavior* in high school X teachers, so the research hypothesis is accepted. This study found an effective contribution of the *learning agility variable* to *innovative work behavior* of 35.52%, which means that *learning agility* is able to contribute to *innovative work behavior* by 35.52%.

Keywords: teachers, *innovative work behavior*, correlation, *learning agility*, high school

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1. Introduction

Teachers are professional educators responsible for developing a quality generation. One way to fulfill this responsibility is by providing quality education to students. Good education encompasses not only the delivery of learning materials but also the creation of a learning environment that supports students' affective, cognitive, and psychomotor development. Teachers are required to create a learning process that supports students' creativity and higher-order thinking skills (HOTS) in critical thinking and problem-solving. Furthermore, teachers are responsible for helping students maximize their potential in facing the challenges of the fast-paced and ever-changing Industrial Revolution 4.0 era [1].

Educational institutions are crucial for developing human resources ready to face the Industrial Revolution 4.0. Teachers, as educators, instructors, and mentors, are required to adopt innovative behavior to ensure changes in education and ensure effective and efficient educational processes. According to the 2019-2024 National Medium-Term Development Plan (RPJMN), one of the priority issues in education development is the low quality of teachers and education personnel. Only 2% of Indonesian teachers are considered innovative out of a total of 5.6 million. This means that 98% of teachers

are non-innovative, even though in the fast-paced Industrial Revolution 4.0 era, teachers can leverage digitalization to develop innovation [2].

Changes occurring in this digital era require teachers to adapt their skills to remain relevant. Teachers who fail to adapt to technological advances and new teaching methods risk losing their influence in education. As educators, it is crucial for teachers to develop innovative behaviors, where creativity and the ability to apply new technologies are key requirements for improving the quality of learning [3].

Teachers are required to unleash all their abilities and ideas to produce something new, thus supporting professional development. Furthermore, innovation can help improve the quality of education at the institution where teachers work, enabling them to compete with other educational institutions. The success of an educational institution is inextricably linked to the performance of teachers in understanding and implementing innovative teaching practices. This innovation within educational institutions is known as *innovative work behavior* [4].

Innovative work behavior is an individual's actions that produce, introduce, and apply new things that come from the implementation of creative ideas that are useful for improving the performance of a group or organization [

5]. *Innovative work behavior* is also defined as the deliberate creation, introduction, and application of new ideas in a job, group, or organization to achieve benefits for individual performance in that environment [6]. In line with that, another opinion says that *innovative work behavior* is the deliberate introduction of problems in a work role to generate new and useful ideas about products, services, and work methods as well as a series of behaviors needed to develop, launch, and implement these ideas. *Innovative work behavior* consists of three dimensions, namely *idea generation*, *idea championing*, and *idea implementation*. [7].

Innovative work behavior can be influenced by two factors: internal and external. Internal factors include cognition, knowledge, motivation, personality, behavior, emotions and moods, and development. Cognitive factors such as intelligence play a crucial role in innovative behavior. However, high intelligence alone is not sufficient to demonstrate innovative behavior [8].

Other factors, such as knowledge, are necessary as support because individuals must understand the tasks and demands of the tasks before innovating. Furthermore, motivational factors are also crucial for stimulating individual innovative behavior. Knowledge factors can only emerge when individuals have experiences from which to draw and learn. Through these experiences, individuals can increase their potential for innovation [8].

Teachers will demonstrate innovation and creativity differently depending on their abilities and capacities. Teachers who are able to behave innovatively in an educational institution are individuals who have the ability to use their experience to solve problems even in situations with limited information and a lack of clear procedures. Nevertheless, these individuals are able to maintain balance in facing any situation and condition. This ability is known as *learning agility* [9].

Learning agility is defined as the ability and willingness to learn from experience, and then apply that learning to perform successfully in new situations and conditions [10]. *Learning agility* consists of four dimensions, namely: *mental agility*, *people agility*, *change agility*, and *result agility*. *Mental agility* refers to an individual's ability to analyze problems from multiple perspectives and feel comfortable facing complexity and uncertainty, while also being able to communicate their thoughts clearly to others. *People agility* refers to an individual's ability to understand themselves deeply, learn from experience, interact with others constructively, and remain calm and resilient in stressful and changing situations. *Change agility* is reflected in individuals who have a high curiosity and enthusiasm for new ideas, are committed to continuous improvement, and are active in skill development. Meanwhile, *result agility* describes a person's ability to achieve optimal results despite facing tough challenges, can inspire others to try harder, and

demonstrate attitudes that can build others' self-confidence [11].

Learning agility is the ability to adapt quickly and learn from experience and successfully apply that learning to new situations [10]. *Learning agility* is the real-world application of life experiences, learning from failure, and being open to learning by leveraging higher potential to improve performance and increase the likelihood of job success [13].

Teachers need to demonstrate competence and openness to new experiences, reflecting a readiness to face challenges and complex situations. This ability requires psychological resilience and a high level of self-awareness regarding the need to continuously develop new behaviors and competencies. Individuals who are agile in learning generally have the cognitive skills to understand and process information, as well as metacognitive skills to reflect, evaluate, and experiment with the experiences gained [14]. Teachers with high *learning agility have personalities that dare to take risks, have an open and tolerant mind, and accept challenges and innovation*. *Learning agility* is closely related to persistence in the face of ambiguity, risk preferences, and flexible thinking [15].

Learning agility makes individuals better able to understand new situations and identify areas for improvement, development, or appropriate management. This ability is considered important to optimize when seeking innovation because knowledge and skills gained from previous experience play a role in identifying what requires innovative input [9].

Individuals who have *learning agility* tend to learn from previous experiences, so they can improve and correct deficiencies from previous experiences when faced with similar situations that lead to better performance. This is in line with the requirement for individuals to start the innovation process at an early stage, namely the creation of ideas, which requires exploratory behavior in knowledge, skills, and experience to identify problems or situations that can be addressed through innovation [9].

Based on the results of initial interviews conducted by researchers with 10 (ten) teachers of SMA X, it was found that SMA X teachers had several new ideas to be applied in learning, but these ideas were rarely realized in the classroom. SMA X teachers said they were already comfortable with methods that had been proven to be successful for years, resulting in a reduced desire to explore new learning methods.

A high school teacher at X also stated that implementing a new idea takes a long time to adapt and get used to it, leading to a tendency to maintain previously mastered methods even when the results are less than optimal. Furthermore, fear of failure hinders the adoption of new learning methods. Criticism or rejection from superiors often hinders the courage to create something new.

Furthermore, high school teachers are less able to communicate and promote their new ideas to their colleagues, making it increasingly difficult to realize their ideas.

The problems experienced by teachers at Senior High School X are closely related to *learning agility*, where teachers should have the willingness to continuously learn from experience, adapt to change, and apply new knowledge in different situations. Meanwhile, teachers at Senior High School X tend to have shortcomings in exploring and lack the initiative to try new knowledge and things. In addition, teachers at Senior High School X tend to have difficulty adapting to change, and are afraid to take risks in trying various new, challenging and different ideas to be implemented in schools.

Research on *learning agility* and *innovative work behavior* has been conducted previously which resulted in a significant relationship between *learning agility* and *innovative work behavior* [8]. In subsequent research, it was found that *learning agility* has a significant and positive influence on *innovative work behavior* where the higher the level of *learning agility* possessed by workers, the more *innovative work behavior* will also increase. *Learning agility* plays an important role in company operational activities because basically employees who have a high level of *learning agility* will seek and learn from unusual experiences and then apply these lessons to succeed in new situations, thus providing an advantage for the company in facing change [3], [9], [12].

Based on the background and phenomena that have been stated above, the researcher is interested in conducting research on the relationship between *learning agility* and *innovative work behavior* in teachers at SMA X.

2. Research methodology

2.1. Research Subjects

This type of research is quantitative correlation with research variables. The dependent research variable is *innovative work behavior* (Y) and the independent variable is *learning agility* (X). The population in this study was 63 teachers of SMA X. The sampling technique in this study was a census/total sample, namely a sampling technique where all members of the population were sampled because the population was relatively small, namely less than 100, so that all members of the population were sampled as subjects studied or as respondents providing information [16].

2.2. Research Instruments

Data collection used the *learning agility adaptation scale* and the *innovative work behavior adaptation scale*. The *learning agility scale* consists of positive statements with five alternative answers: Never (1), Ever (2), Rarely (3), Often (4), and Always (5). Meanwhile, the *innovative work behavior scale* consists of positive statements and unfavorable, each consisting of five

alternative answers, namely Never (TP), Rarely (JS), Sometimes (K), Often (S), and Very Often (SS). The scale used in this study uses a *Likert* model response format.

2.3. Data Analysis

The data analysis process carried out in this study began with conducting a classical assumption test. The assumptions that must be met are the normality test, linearity test, and hypothesis test. The normality test was conducted to test whether the independent and dependent variables were normally distributed or not. This test used the *One Sample Kolmogorov-Smirnov*. Data normality can be said to be normal if the sig. p value > 0.05. The linearity test was used to determine the linearity of the data, namely whether two variables have a significant linear relationship or not. Two variables are said to have a linear relationship if the significance of p < 0.05. The hypothesis test in this study used the *Pearson Product Moment correlation technique* to find the relationship between the dependent variable and the independent variable where the hypothesis can be accepted if the sig. p value < 0.01 [17]. All data analysis techniques were carried out with the help of the IBM SPSS 21.0 program.

3. Results and Discussion

3.1. Normality Test

In this study, validity testing was necessary to determine validity. The validity tests used in this study were content validity and construct validity. to determine whether a measuring instrument is valid or not. Content validity is a common sense decision regarding the alignment or relevance of items with the measurement objectives of the scale that cannot be suggested only on the author's own assessment, but also requires the agreement of assessments from competent assessors (*expert judgment*). Meanwhile, construct validity is proving whether the measurement results obtained through test items are highly correlated with the theoretical construct underlying the preparation of the test [18].

The validity coefficient of the *learning agility scale* has a *corrected item-total correlation value* ranging from 0.323 to 0.841. The reliability coefficient is 0.916. The validity coefficient of the *innovative work behavior scale* has a *corrected item-total correlation value* ranging from 0.371 to 0.770 with a reliability coefficient of 0.860. The normality test in this study states that the data is normally distributed if the significance is greater than 5% or 0.05 [18]. Based on the results of data processing using the IBM SPSS Version 21.0 program, the results obtained can be seen in Table 1.

Table 1. Normality Test

Variables	N	KSZ	P	Distribution
<i>Learning Agility</i>	63	0.818	0.515	Normal
<i>Innovative Work</i>	63	0.830	0.497	Normal

Based on table 1 above, the significance value obtained on the *learning agility scale* is $p = 0.515$ with $KSZ = 0.818$ where the results indicate that the p value > 0.05 , meaning that the distribution of the *learning agility scale* is normally distributed. Meanwhile, for the *innovative work behavior scale*, the significance value obtained is $p = 0.497$ with $KSZ = 0.830$ where the results indicate that the p value > 0.05 , meaning that the distribution of the *innovative work behavior scale* is normally distributed.

3.2. Linearity Test

The linearity test is used to determine the linearity of the data, namely whether two variables have a significant linear relationship or not. Two variables are said to have a linear relationship if the significance $p < 0.05$. The statistical model used to see the linearity of the two variables is the test for linearity with the help of the IBM SPSS 21.0 program [17]. The results of the linearity test of the *learning agility scale* with the *innovative work behavior scale* can be seen in Table 2.

Table 2. Linearity Test

N	Df	Mean Square	F	Sig
63	1	771,337	36,554	0.000

Based on the table above, the F value = 36.554 was obtained with a significance of $p = 0.000$ ($p < 0.05$), meaning that the variance on the *learning agility scale* with *innovative work behavior* is classified as linear.

3.3. Hypothesis Testing

Research data processing on *learning agility* with *innovative work behavior* in high school X teachers to 63 teachers using hypothesis testing with *Pearson Product Moment correlation technique* to find the relationship between the dependent variable and the independent variable. The correlation value (r) ranges from 1 to -1, the closer the value is to 1 or -1 means the relationship between the two variables is stronger, conversely the closer the value is to 0 means the relationship between the two variables is weaker [19]. The *Pearson Product Moment statistical test* was carried out with the help of the IBM SPSS 21.0 program. The results of the hypothesis test of the *learning agility scale* with *innovative work behavior* can be seen in Table 3.

Table 3. Hypothesis Testing

P	(a)	Correlation Value (r)	R Squared	Conclusion
0.000	0.01	0.596	0.355	<i>sig</i> (2-tailed) 0.000 < 0.01 level of significance (a), means the hypothesis

Based on the table above, the correlation coefficient between the *learning agility variable* and *innovative work behavior* is obtained, namely $r = 0.596$ with a significance level of $p = 0.000$. This indicates a positive and significant correlation with a moderate level between the two variables, which means that if *learning*

agility is high, then *the innovative work behavior* of SMA X teachers will also be high, conversely if *learning agility* is low, then *the innovative work behavior* of SMA X teachers will also be low. The descriptive statistical table of the *learning agility* and *innovative work behavior* variables based on the empirical mean can be seen in Table 4 below.

Table 4. Descriptive Statistics

Variables	N	Mean	Standard Deviation	Min	Max
<i>Learning Agility</i>	63	70.68	9,498	43	90
<i>Innovative Work Behavior</i>	63	34.51	5,921	23	48

Based on the empirical mean value, grouping can be carried out which refers to the categorization criteria with the aim of placing individuals into separate groups in a hierarchical manner according to a continuum based on the attributes measured [17], where the categorization of research subjects was obtained in the variables of *learning agility* and *innovative work behavior* which can be seen in Table 5 as follows.

Table 5. Subject Categorization Grouping

Variables	Score	Amount	Percentage (%)	Category
<i>Learning Agility</i>	< 60	9	14	Low
	61 - 80	44	70	Currently
	≥ 81	10	16	Tall
<i>Innovative Work Behavior</i>	< 29	12	19	Low
	29 - 40	41	65	Currently
	≥ 41	10	16	Tall

Based on the table above, it can be described that in the *learning agility variable*, there are 9 teachers (14%) in the low category, 44 teachers (70%) in the medium category, and 10 teachers of SMA X (16%) in the high category. Meanwhile, in the *innovative work behavior variable*, it can also be seen that there are 12 teachers (19%) in the low category, 41 teachers (65%) in the medium category, and there are 10 teachers of SMA X (16%) who have high *innovative work behavior*.

Based on the results of the Product Moment (Pearson) correlation test conducted with the help of IBM SPSS version 21.0, where the level of significance (a) is 0.01 and the correlation coefficient value (r_{xy}) = 0.596 is obtained with a value of (p) $sig = 0.000$, because the value of (p) $sig = 0.000 < 0.01$. These results indicate a positive and significant correlation with a moderate level between the two variables, which means that if *learning agility* is high, then *the innovative work behavior* of SMA X teachers will also be high, conversely if *learning agility* is low, then *the innovative work behavior* of SMA X teachers will also be low, then the hypothesis in this study is accepted.

The results of this study are supported by previous research which states that individuals who have high *learning agility* have a strong desire to achieve innovation without fear of failure, have a high curiosity and dare to try new things, and produce results through communication with others. These characteristics are related to *innovative work behavior* that explores ideas and forms new methods, communicates with others to implement them in the agency, and forms results through execution [15].

Individuals who frequently encounter new experiences have a greater opportunity to grow and develop. Similarly, individuals with *learning agility* tend to be able to generate innovative ideas and view problems from multiple perspectives. The ability to learn new things, including from failure, is a direct experience that can shape innovation in a person [8].

The effective contribution of the *learning agility* variable to *innovative work behavior* is 35.52%, meaning that *learning agility* is able to contribute to *innovative work behavior* by 35.52%, while the remaining 64.48% is influenced by other factors. There are two factors that can influence *innovative work behavior*, namely internal factors and external factors. Internal factors consist of developmental factors, cognition, knowledge, motivation, personality, behavior, emotions, and mood. Meanwhile, external factors consist of social sources, work design, and organizational sources [20].

4. Conclusion

The conclusion of the study illustrates that there is a positive and significant relationship with a moderate level between *learning agility* and *innovative work behavior*, meaning the hypothesis is accepted. This means that if *learning agility* is high, then *the innovative work behavior* of SMA X teachers will also be high, conversely, if *learning agility* is low, then *the innovative work behavior* of SMA X teachers will also be low. The effective contribution of *learning agility* to *innovative work behavior* is 35.52% and another 64.48% is influenced by other factors.

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