The Influence of Language Attitude and Linguistic Intelligence on Creative Thinking

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Abstract

This research aims to analyze and describe the influence of language attitudes and linguistic intelligence on creative thinking. This research was carried out at MAN 1 Serang City, Banten, Indonesia with a sample of 152 class XI students spread across science, social studies, and religion departments. The research instruments used in this research were questionnaires and tests. This research is correlation research using a quantitative approach and the data analysis technique used in this research is regression. Based on the results of the data analysis, it can be concluded that there is an influence of language attitudes and linguistic intelligence on creative thinking. Simultaneous language attitudes and linguistic intelligence in creative thinking are a strong synergy. They serve as tools that can stimulate and facilitate creative thinking in individuals while enabling them to communicate and collaborate in ways that support the development of innovative ideas and creative problem-solving. The two work together to form a more robust and diverse creative mind.

Keywords: language attitude, linguistic intelligence, creative thinking.

1. Introduction

Creative thinking is a skill related to efforts to find references, elaborate various information, and manage, and produce new ideas or ideas in certain situations. The most important and basic thing in creative thinking is making decisions regarding various situations that require creative thinking. Creative thinking is a high-level thinking ability because it is related to the ability to process thoughts, elaborate, and develop them to produce new ideas or ideas that do not yet exist or are the result of the development of this thinking ability. This thinking ability needs to continue to be developed to support students' abilities in supporting student learning outcomes.

Creative thinking involves the ability to generate new ideas, innovative solutions, and original views. In this context, language attitude and linguistic intelligence play an important role in shaping and influencing a person's creative thinking. A positive attitude towards language can motivate someone to explore the use of new words, creative expressions, and unique language styles as well as the ability to convey ideas clearly and effectively. An open attitude towards a particular language or culture can broaden your knowledge base and spark inspiration from various sources. In addition, someone with high linguistic intelligence tends to have the ability to understand and manipulate language structures easily so that they can support creative thinking processes in arranging words well. Linguistic intelligence can produce skills in using words, language games, and metaphors which can be a source of creative ideas. The interaction of a positive language attitude and high linguistic intelligence can be a communication medium for formulating and organizing ideas in the creative thinking process.

Based on the description above, we attempt to provide an overview and analysis of the influence of language attitude and linguistic intelligence on creative thinking. Furthermore, this research will also investigate how this influence occurs.

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2. Literature Review

2.1. Creative Thinking

Creative thinking is the ability to produce new ideas, and innovative solutions, and see things from various points of view. Creative thinking is a very important thing that will have implications in various aspects of life, and there are several reasons why creative thinking is important: Creativity allows us to find solutions that we might not have thought of before. In various aspects of life, especially in the context of business and science, the ability to think creatively can help overcome difficult problems. Furthermore, creativity allows individuals to develop themselves, explore their unrevealed potential, and discover new interests and talents. Creativity can also increase your sense of accomplishment and personal satisfaction. Furthermore, creativity in an educational context can help students understand material better, improve problem-solving, and increase their interest in learning. It also allows educators to teach more engagingly and effectively. In general, creativity in thinking is a powerful tool for achieving various goals, both in individual and societal contexts. This helps encourage innovation, improve problem-solving abilities, and provide a more colorful and meaningful feel to life.

Even though it has different dimensions, creativity is closely related to innovation, where creative people are often called innovators. Creativity is related to the internalization process or the process of looking for ideas or thoughts related to a particular problem or situation (Nurlaela, 2019). So in short, creativity is an operational step in the context of using or actualizing all the abilities and resources you have to solve certain problems or discover new things that did not exist before. Meanwhile, innovation is a product or output as a result of someone's creativity in creating or discovering something. As an operational dimension to mobilize all abilities possessed to discover something new or find answers to problems faced, creativity can be described on figure 1.

![Figure 1. Creativity Dimension (adapted from Lutfiyah et al, 2019)](image)

Creativity is an individual mental process that gives birth to effective new ideas, processes, methods, or products that are imaginative, flexible, successive, and discontinuous, which are useful in various fields for solving problems (Safi’i, 2019). It was further stated that creativity is not only an act of the brain, but emotional variables and mental health greatly influence the birth of creative work. Intelligence without a healthy mentality is very difficult to produce creative work. Creativity is a process that produces new work that can be accepted by certain communities or can be recognized by them as something useful (Yuswatiningsih, 2017). A person's creativity is characterized by the ability to overcome challenges or problems with new solution ideas (Susanti, Wilda, Linda Fatmawati Saleh; Nurhabibah, 2022). Creativity is originality, meaning that the product, process, or person can create something that no one else has created (Lismayanti, 2019). Creativity is the ability to think that has fluency, flexibility, originality, and detail, while from an affective perspective, creativity is characterized by strong motivation, curiosity, interest in complex tasks, courage to face risks, not giving up easily, appreciation of beauty, having a sense of humor, always want to seek new experiences, respect oneself and others, and so on (Lestari, 2019). Creativity is the ability possessed by a person to produce a new/original idea/product that has useful value, where the results of the idea/product are obtained through a process of imaginative activity or synthesis of thoughts whose results are not just a summary, but include the formation of new patterns and combinations, information obtained from previous experience (Sit et al., 2016). Creativity is an active process required in innovation that requires special skills and an understanding of the context in which creativity is applied (Uloli, 2021). It is further stated that creativity involves divergent thinking, namely the ability to produce new and original ideas that are unusual by their nature. The following is an illustration of divergent thinking. Silalahi, et al. define creative thinking skills as the ability to use reason to consider and decide on things to
create new things or have novelty value in different ways (Silalahi, 2020). Creative thinking is imaginative thinking directed at innovation. It is based on questions that ask "what if", "why", "why not"; "how" and "how else"? creative thinking is based on considering alternatives, possibilities, and other ways of imagining and doing things. Furthermore, thinking can also be interpreted as using all the potential of the mind and mind to consider and decide something in memory so thinking requires several aspects of reasoning, considering, and strengthening a decision (DiYanni, 2016). It was further stated that the process of looking for solutions to the problems faced and finding something new that may not have previously existed is related to creative thinking. Through creative thinking, someone creates something new that arises or emerges through the insight process. Creativity is an active process required in innovation that requires special skills and an understanding of the context in which creativity is applied (Uloli, 2021). It is further stated that creativity involves divergent thinking, namely the ability to produce new and original ideas that are unusual by their nature. The table 2 show the illustration of divergent thinking.

![Figure 2. Divergent Thinking](image)

Based on the description, it can be synthesized that creative thinking is the ability to process thoughts, elaborate, and develop them to produce new ideas, notions, or discoveries that do not yet exist or are the result of the development of previous ideas, notions or discoveries which include aspects of fluency, flexibility, authenticity, and elaboration.

Based on the dimensions mentioned above, Birgili explains the characteristics of creative thinking as follows:

a. Flexibility
b. Authenticity
c. Multiple thinking
d. Wondering
e. Thinking fast and independent
f. Open to criticism
g. Rationalism
h. Suspicious
i. Come up with different solutions
j. Realize and define the problem
k. Suggest possible solutions (Birgili, 2015)

2.2. Language Attitude

Language is one of the characteristics of humans that distinguishes them from other creatures. Apart from that, language has a social function as a means of communication and as a way to identify social groups. With this language, interactions between humans become better because language becomes the glue for communication between one another in a particular social system (Malabar, 2015).

Human social systems in society are built based on linguistic communication. Therefore, without language the human communication system would not exist and human interaction patterns would be very limited (Saleh, 2017). This is the basis that language cannot be separated from human life and its speakers, both individually and in groups, understand the importance of language in the context of social interaction. One important element that can influence language skills, both receptive skills (listening and reading) and productive skills (speaking and writing) is language attitude.

Attitude is a psychological phenomenon, which is usually manifested in the form of actions or behavior. However, in many studies, what is manifested outwardly is not always a reflection of the inner attitude. He further explained that
attitude is a readiness to react to a situation or event faced. Readiness as referred to is related to mental conditions or "behavioral attitudes" (Malabar, 2015). Stuart Oskamp and P. Whwsley Schutlz suggest that the word attitudes is generally used in everyday expressions to describe someone or explain attitudes. A person's attitude is the cause of a person's actions toward other people or a particular object (Schultz, 2005). Attitude is also a readiness to respond. Attitudes in the scheme are intentions, knowledge, attitudes, and behavior. Before an individual forms an attitude towards an object, the individual will intend and build knowledge about the object, and will ultimately show behavior. This meaning also shows that there is an evaluative aspect in the attitude area before deciding to demonstrate certain behaviors (Saleh, 2020). Language attitude is a concept related to language ideology, beliefs, or judgments that a person has about the language style of a particular society, language characteristics, or language variations. Attitude is a construct or an abstraction that cannot be understood directly because attitude is an inner component of mental life that expresses itself, directly or indirectly, through more obvious processes such as stereotypes, beliefs, verbal statements or reactions, ideas and opinions, selective memory, anger or satisfaction or other emotions and in various other aspects of behavior (Peterson, 2020). Language attitude in linguistic studies refers to behavior or actions carried out based on views as a reaction to the existence of a phenomenon regarding the use of a particular language by language speakers. It was further explained that the language attitude component refers to or is related to knowledge or a category called thinking processes. The affective component is related to judgments such as good, bad, like, or dislike of something or a situation. If someone has a good feeling or likes a situation, then that person is said to have a positive language attitude. The conative component concerns behavior or actions as a final decision regarding reactive readiness to a situation (Fahmi & Rachmijati, 2021).

Attitudes have tendencies that can guide a person's behavior in doing something related to language, both positive and negative attitudes towards the language itself. A positive attitude towards language is an attitude that can influence someone to appreciate a particular language and use it to communicate with other people more easily. Meanwhile, a negative attitude towards language will result in someone having difficulty communicating confidently. Apart from that, belief in the benefits of a particular language where when someone masters that language will have implications for convenience and/or prestige in certain spaces or communities, can give birth to a positive language attitude towards the language in question. On the other hand, if someone feels that a certain language will not have positive implications for convenience and guaranteeing the future, then this will automatically give rise to a negative attitude towards that language.

Based on the description, it can be synthesized that language attitude is a person's behavior or mental condition towards a language which is manifested in the form of actions as a reaction to certain phenomena or circumstances related to a person's use of a particular language. Language attitudes consist of three components, namely cognitive, affective, and conative. If someone appreciates and has a sense of pride in a particular language, then he will use that language well and correctly by paying attention to suitability for the situation. On the other hand, if someone does not have an attitude of respect and is not proud of their language, they will have a tendency not to use the language well and correctly and ignore the norms that exist in that language.

2.2.1. Components and Indicators of Language Attitude

Garrett explains that attitudes consist of three components, namely the cognitive component, the affective component, and the conative component (action) (Garrett, 2010). These three components can be seen in diagram on figure 3.

2.2.2. Types of Language Attitudes

Malabar suggests that language attitudes can be divided into two types, namely positive attitudes and negative attitudes.
a. Positive Language Attitudes

A positive language attitude is an attitude of enthusiasm towards the use of language by the speaking community group where they are, which shows a tendency to favor the use of language properly correctly, and appropriately according to the situation.

b. Negative Language Attitudes

A negative language attitude is an attitude or action that has a tendency to be indiffere
tent and does not care about the aspects of using language properly and correctly by the rules of the language and does not consider the situation of language use and does not try to improve it. (Malabar, 2015)

2.3. Linguistic Intelligence

Intelligence is the spiritual ability to adapt to new situations by using thinking according to one's goals. A person can be said to act intelligently if, in certain situations, he can act in appropriate ways. This means that he can solve the difficulties and problems that arise in that situation (Warsah & Daheri, 2021). Jozsef explains that intelligence means the power of learning, understanding, and reasoning mental ability (Jozsef, 2001). The word linguistics is the scientific study of language or the comparison of particular languages. So linguistic intelligence means the ability to understand knowledge related to language based on scientific principles.

Linguistic intelligence is the ability or capacity to use words effectively, either orally (for example, as a storyteller, orator, or politician), or in written form (for example, as a poet, playwright, editor, or journalist). This intelligence also includes the ability to manipulate or imitate syntax or language structure, phonology or language sounds, semantics or the meaning of language expressions, or pragmatic dimensions or at the practical level of language use (Amstrong, 2009). Some of the uses of language include rhetoric (using language to convince other people to take certain actions), mnemonics (using language to remember information, explanation (using language to provide information), and metalanguage (using language to talk about oneself). Linguistic intelligence is the ability to use words interpret words, and communicate ideas through spoken language and body language. The characteristics of students who have linguistic intelligence are that they enjoy reading and communicating, are good at putting words together, are good at interpreting words, like music, are good at remembering/memorizing, and are humorous.

Linguistic intelligence includes sensitivity to spoken and written language, the ability to learn languages, and the ability to use the language well for certain purposes (Gardner, 1999).

Based on the definitions as stated by the experts above, it can be concluded that linguistic intelligence is the ability to understand knowledge related to language based on scientific principles which also includes the ability to manipulate or imitate the syntax or structure of language, phonology, or language sounds, semantics or meaning of language expressions, or pragmatic dimensions at the practical level of using language in daily interactions and/or for certain purposes.

2.3.1. Aspects of Linguistic Intelligence

According to Garret, linguistic intelligence consists of several very important aspects in society, those are:

a. Rhetorical Aspects of Language

The rhetorical aspect of language is the ability to use language to convince individuals or other people about an action. This ability is an ability that is developed and possessed by political leaders and legal experts to the highest level,

b. Mnemonic Potential of Language

The Mnemonic Potential of Language is the capacity to use these tools to help a person remember information, from lists of possessions to game rules, from directions for finding one's way to procedures for operating a new machine.

c. Aspects of the Role of Language

Much teaching and learning occur through language at any one time, especially through verbal instructions, the use of verse, a collection of proverbs, or simple explanations; through words in written form. Interesting examples of this aspect can be found in science. (Garrett, 2010)
3. Research Methods

3.1. Method

This research was carried out at the State Islamic Senior High School in Serang City, namely MAN 1 Serang City, Banten Province, Indonesia, and carried out for 5 (five) months starting from October 2022 to February 2023 with the research sample being class XI students. The following is the table of class XI students:

Table 1. Data of XI Grade Students

<table>
<thead>
<tr>
<th>Class</th>
<th>XI IPA.1</th>
<th>XI IPA.2</th>
<th>XI IPA.3</th>
<th>XI IPA.4</th>
<th>XI IPS.1</th>
<th>XI IPS.2</th>
<th>XI IPS.3</th>
<th>XI Agama</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lk</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>13</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>118</td>
</tr>
<tr>
<td>Pr</td>
<td>24</td>
<td>20</td>
<td>22</td>
<td>23</td>
<td>19</td>
<td>16</td>
<td>16</td>
<td>15</td>
<td>155</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>35</td>
<td>38</td>
<td>36</td>
<td>34</td>
<td>31</td>
<td>31</td>
<td>30</td>
<td>273</td>
</tr>
</tbody>
</table>

Determination of sample size is based on the formula proposed by Isaac and Michael as follows:

\[ s = \frac{\lambda^2 N P Q}{d^2(N-1)+\lambda^2 P Q} \]

Based on the table of the number of students in class XI MAN 1 Serang City and the table for determining the number of samples from a certain population using the Isaac and Michael formula, using an error rate of 5%, the number of samples taken by researchers was 152 students from 273 the number of students in class XI MAN 1 City of Serang in the 2022/2023 academic year. The figure 4 show the sample of this study.

![Figure 4. Sample of the Research](image)

3.2. Materials

Materials used to collect research data are as follows:

a. Self Assessment

Self-assessment takes the form of a questionnaire containing questions and statements relating to the operational aspects of language attitude in the form of cognitive, affective, and conative aspects. The self-assessment sheet is then filled in by the students according to the conditions that exist for each student. The answer options available are in the form of a Likert scale according to each student's condition.

b. Written Test

Tests are used to obtain data and information related to linguistic intelligence and creative thinking. The form of test used to measure linguistic intelligence is in the form of questions consisting of aspects of students' understanding of English language rules (grammar), mastery of vocabulary, semantics, and pragmatics. The creative thinking test instrument items contain aspects of fluency, flexibility, originality, and elaboration.

3.3. Data Analysis

The data collected using the research instruments as stated above were then analyzed using regression analysis to find the influence of X1, and X2 on Y. Data analysis was carried out in 2 stages, the first stage was simple regression and
multiple regression. Simple regression was carried out to analyze the influence of X1 on Y and X2 on Y. Meanwhile, multiple regression was used to analyze the influence of X1 and X2 simultaneously on Y.

4. Results and Discussion

4.1. Results

The results of the analysis were carried out to test the influence of two independent variables, namely Language Attitude (X1) and Linguistic Intelligence (X2) simultaneously on Creative Thinking (Y) as can be seen in the figure 5.

![Figure 5. Research Design](image)

Based on data analysis and calculations using the SPPS version 25 program, the results can be obtained and show on Table 2.

**Table 2. Coefficient Table**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>26.180</td>
<td>5.696</td>
<td>4.596</td>
<td>.000</td>
</tr>
<tr>
<td>Language Attitude</td>
<td>.171</td>
<td>.083</td>
<td>.144</td>
<td>2.054</td>
</tr>
<tr>
<td>Linguistic Intelligence</td>
<td>.422</td>
<td>.054</td>
<td>.545</td>
<td>7.798</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Creative Thinking

Referring to the data of the coefficient table 2, it can be seen that the significance of language attitude (X1) is 0.042, and Linguistic Intelligence (X2) is 0.000. This shows that the significance value of the variables X1 and X2 is less than 0.05. These results provide the conclusion that X1 and X2 have a significant effect on creative thinking (Y).

The next step is to carry out an F test which aims to find out whether the independent variables (language attitudes and linguistic intelligence) simultaneously influence the dependent variable (creative thinking). The analytical assumption used is 0.5 or 5%. This means that if the significance value of F <0.05 then it can be interpreted that the independent variable simultaneously influences the dependent variable. The Table 3 is a table of F test results in regression analysis.

**Table 3. ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>8728.045</td>
<td>2</td>
<td>4364.022</td>
<td>45.095</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>14419.429</td>
<td>149</td>
<td>96.775</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>23147.474</td>
<td>151</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Creative Thinking

From the regression results, as can be seen in Table 3, the following equation can be obtained:

\[ Y1 = 0.144 \times X1 + 0.545 \times X2 \]
The regression equation above also has the following meaning:

a. The regression coefficient of the language attitude variable and linguistic intelligence has a positive and significant influence on the creative thinking variable;

b. The regression coefficient of linguistic intelligence is 0.545 and is greater than language attitude of 0.144. This means that linguistic intelligence has a more dominant influence on creative thinking.

Based on the table of F test calculation results (Table 3), it can be seen that the regression of X1 (language attitudes) and X2 (linguistic intelligence) on X3 (creative thinking) is 0.000 and is smaller than 0.05. Apart from that, from the table above it can be seen that \( F_{\text{count}} = 45.095 \) and \( F_{\text{table}} = 26.509 \) at the real level \( \alpha=0.05 \) so \( F_{\text{count}} > F_{\text{table}} \), so it can be concluded that Ho is rejected, meaning the regression model is significant.

### Table 4. Model of Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.614</td>
<td>0.377</td>
<td>0.369</td>
<td>9.83741</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Linguistic Intelligence, Language Attitude

Furthermore, in the table 4, it can also be seen that the R2 or R square value is 0.377. This shows that the contribution of the influence of X1 and X2 to Y is 37.7%.

The value of \( e_1 \) in substructure 1 can be found using the formula \( e_1 = \sqrt{(1-R^2)} = 0.789 \). Thus, the regression model diagram can be described on figure 6.

![Figure 6. Diagram of Regression](image)

### 4.2. Discussion

Language attitudes and linguistic intelligence are two important elements that can work together simultaneously to influence a person's creative thinking. Someone who has good language attitudes tends to have a deep understanding of how language is used to communicate, while linguistic intelligence includes their ability to master various aspects of language.

One way in which language attitudes and linguistic intelligence work together is through the appropriate use of words and expressions to stimulate creative thinking. People with creative language attitudes tend to use unconventional words or innovative imagery to illustrate ideas. This ability is strengthened by linguistic intelligence which makes it possible to understand the implications and nuances of the words used. The result is the ability to generate fresh ideas and deep thinking.

Linguistic intelligence also supports a person's ability to craft powerful narratives, which can motivate creative thinking in themselves and others. Someone who has good linguistic intelligence tends to be able to explore multiple points of view in writing, use metaphors and analogies to connect concepts that may not be directly related, and express ideas in a unique style. All of this plays a role in stimulating creative thinking.

In addition, the combination of language attitudes and linguistic intelligence allows a person to communicate with flexibility and effectiveness in a variety of contexts. Each person may speak or write differently according to their audience, purpose, or type of message they are conveying. This adaptability can help in designing innovative and adequate thinking in various situations.

Ghonsooly & Showqi (2012) in his research entitled The Effects of Foreign Language Learning on Creativity stated that learning English as a foreign language (EFL) to an advanced level can significantly improve the 4 pillars of
divergent thinking, namely fluency, originality, flexibility, and elaboration which are also characteristics of the ability to think creatively (Ghonsooly & Showqi, 2012).

Referring to the research data and based on the results of path analysis (path analysis) substructure 1 of this research as explained above, it shows that the significance score for language attitude is 0.042 and linguistic intelligence is 0.000. This shows that the significance value of language attitude and linguistic intelligence is less than 0.05. Therefore, it can be seen that language attitude and linguistic intelligence have a significant effect on creative thinking.

In other words, the influence of language attitudes and linguistic intelligence simultaneously on creative thinking is a strong synergy. They serve as tools that can stimulate and facilitate creative thinking in individuals while enabling them to communicate and collaborate in ways that support the development of innovative ideas and creative problem-solving. The two work together to form a more robust and diverse creative mind.

5. Conclusion

There is an influence of language attitude and linguistic intelligence on creative thinking. Language attitudes and linguistic intelligence have a very important role in stimulating and shaping creative thinking. These two factors complement and support each other to create mental processes that support creative thinking. A positive language attitude towards English will contribute to the activity of thinking expressively using English and linguistic intelligence is the foundation that allows someone to compose narratives and communicate ideas creatively. A positive language attitude combined with high linguistic intelligence, enables a person to have the ability to use words creatively, design unique sentences, and describe ideas in an inspiring way. This combination allows creative thinking to form in writing. Therefore, it can be concluded that the simultaneous influence between language attitudes and linguistic intelligence is a strong synergy that forms the basis for creative thinking in the context of writing and communication. Both complement each other and provide a solid foundation for someone to produce innovative ideas, interesting narratives, and effective communication.

References


