



CREATIVE THINKING AND STUDENTS' ACHIEVEMENT: A CORRELATIONAL STUDY AT MTS AL FALAH TOROH

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Abstract

The study aims to analyse the relationship between creative thinking and students' English achievement at MTs Al Falah Toroh. This research employed a quantitative correlational design to investigate the relationship between two variables. The sample consisted of 70 students, selected through a random sampling technique to ensure fairness and representativeness. Data on creative thinking ability were collected using a questionnaire adapted from Dr. Khumar and Dr. Holman, which produced an average score of 67. Meanwhile, students' English achievement scores were taken from their first-semester report cards, with an average score of 83.83, rounded up to 84. The data were analysed using the Spearman Rank correlation test and processed through SPSS software. The results of the test showed a correlation coefficient of $rs (68) = .10$ with a significance level of $p = .395$. This finding indicated a very weak and statistically not significant. In other words, the study found no meaningful relationship between creative thinking and students' English achievement. The interviews with students and teacher supported these results. They suggest that other factors influence on students' English achievement, such as the learning environment and educational support facilities, had a greater influence on students' English achievement.

Keywords: Creative Thinking, English Subject, Student English Achievement.

Introduction

Learning English in today's era is no longer simply about memorizing, understanding, or imitating existing sentence patterns. It also serves as a means to develop skills. This activity requires higher-level thinking that involves creative thinking. English language proficiency is also a key requirement for supporting international communication. According to Ayu et al. (2023), English, as an international language, plays a crucial role in opening access to information, facilitating global communication, and providing career opportunities. However, effective language acquisition cannot be achieved through a learning approach or simply emphasizing memorization. This is where creative thinking skills play a crucial role.

Creative thinking is a student's ability to think imaginatively when solving problems, discovering new ideas, or producing unique work. According to Torrance (1998), there are three indicators of creative thinking: fluency, originality, and elaboration skills. Fluency is the ability to generate many ideas spontaneously. Flexibility is the ability to see things from multiple perspectives. Originality is the ability to create new and unique ideas. Creative thinking skills are believed to help solve problems by finding alternative strategies when faced with difficulties. According to Fatmawati et al. (2022), their research found that creative thinking ability can help students solve problems. Furthermore, Suherman and Vidakovich (2022), found that creative thinking helps students solve problems in the category of solving higher-order thinking skills (HOTS).

In English subject, creative thinking ability is believed to encourage students to connect different ideas, develop new perspectives, and produce language that is non-monotonous, varied, and contextually relevant. Students with creative thinking skills tend to have greater confidence in expressing their opinions, are more willing to try new vocabulary and sentence structures, and can solve communication problems using a variety of strategies.

According to Ayu et al. (2023), in practice, creative thinking can be developed through various interactive learning models, such as project-based learning, problem-based learning, group discussions, language games, debate simulations, and assignments to create innovative written works or presentation media. These strategies not only train technical language skills but also hone divergent thinking skills, namely the ability to generate various answers or solutions to a problem.

Theoretically, the relationship between English subject and creative thinking skills is believed to impact students' final achievement. Final achievement are typically derived from academic achievement and the ability to apply knowledge in various situations. Students with high levels of creative thinking are believed to tend to have higher final grades because they can understand instructions more quickly, process information more effectively, and produce more precise and creative answers. Creative thinking allows students to respond spontaneously to questions with clear, relevant, and interesting answers.

The problem above, show that even though indicate creative thinking is theoretically important, its contribution to English learning achievement remains uncertain, particularly at the Madrasah Tsanawiyah (MTs) level, which has unique learning characteristics and student backgrounds. The religious nature of the school environment, differences in background, and school facilities may be variables that influence student learning achievement. Based on the problems above, researchers are interested in exploring the relationship between creative thinking and student English achievement. The reason for choosing because although creative thinking is important theoretically, its contribution to English learning achievement cannot be confirmed empirically, especially at Madrasah Tsanawiyah level.



Theoretical Framework

A. Creative thinking

Creative thinking is the ability to generate new ideas to solve problems or create something different from the usual. This ability includes aspects such as thinking by generating solutions and connecting the problem to find answers. In education and work, creative thinking is essential for innovation, problem-solving, and developing critical thinking skills. This ability can help students find innovative and effective strategies with more flexible and solution-based thinking when facing challenges.

In creative characteristics, there are two main characteristics, namely aptitude and non-aptitude. Creative thinking (aptitude) is the ability to think creatively, including various characteristics that allow someone to generate new ideas and solve problems innovatively. Non-aptitude is a person's attitude and behavior in dealing with a problem. The following are the main characteristics of aptitude in creative thinking according to Torrance (TTCT):

1. Fluency

According to Torrance (1988), fluency is the ability to produce many ideas that focus on quantity rather than quality. Although not all ideas produced can be realized directly, the number of ideas that emerge reflects a person's thinking. This ability is greatly influenced by individual insight and knowledge, one of which can be obtained through reading activities. The more reading, the richer the references and information you have, thus increasing the possibility of various ideas emerging in various contexts.

2. Originality

Original thinking is the ability to produce ideas or solutions that are new and different from existing ones. According to Torrance in Kim (2006), originality is the ability to produce ideas that are unusual, unique, and different from those that already exist or are commonly used. Ideas that emerge generally emerge spontaneously without conscious thought.

3. Elaborations.

Elaborative thinking is the ability to develop an idea or idea in detail, depth, and structure so that it becomes clearer and more complete. According to Torrance (1993), this ability is useful for improving the quality and effectiveness of the solutions produced, along with the consequences of the idea or action. At this stage, a person only focuses on one idea to be developed in depth. Ideas that were initially rejected and considered useless will be explored, expanded, and modified to become a mature idea or decision.

B. English Subject

The English subject is a fundamental component of the curriculum designed to equip students with the four basic skills of language learning, namely listening, speaking, reading, and writing. Mastery of English also involves grammar, vocabulary, pronunciation, and an understanding of the cultural aspects of English-speaking communities. Beyond its communicative purpose, English learning plays an essential role in fostering higher-order thinking, including creative thinking, which allows students to generate new ideas and explore language innovatively. According to Ayu et.al (2023), English serves as a tool for international communication, access to scientific knowledge, career opportunities, and digital engagement. Thus, English achievement is not only a reflection of language mastery but also an indicator of students' ability to adapt in global contexts.

Teaching English methods such as the Grammar Translation Method, Audio-Lingual Method, Silent Way, and Total Physical Response provide varied approaches to language learning. Each method emphasizes different aspects, such as grammar mastery, oral drills, self-discovery, or physical response to commands, allowing students to engage with the language in multiple ways. The effectiveness of these methods influences students' language achievement and may also stimulate creative thinking. For example, the Silent Way encourages learners' independence and problem-solving skills, while TPR connects cognitive and kinesthetic learning, potentially sparking creativity in language use. Thus, English teaching methods form an essential pedagogical basis for both academic achievement and creative skill development.

C. Students' English Achievement.

Student achievement refers to the outcomes of the learning process, which can be measured through exams, assignments, and teacher evaluations (Mager, 1962; Sardiman, 2011). Achievement is influenced by internal factors (motivation, health, talent) and external factors (family support, school environment, learning media). Creative thinking can catalyze student achievement in English. When students can think creatively, they may approach tasks with flexibility, develop original solutions in speaking or writing, and engage more deeply in learning activities. Conversely, higher achievement in English can reinforce creative thinking by exposing students to rich language input, cultural knowledge, and opportunities for innovative expression. Therefore, although the correlation may vary in strength, theoretically, creative thinking and English achievement are interrelated and mutually supportive in shaping students' academic growth.

Method

The researchers used a quantitative method, with a correlational study, to investigate the relationship between creative thinking and student achievement at MTS Al Falah. In this study, the researcher employed a retrospective approach. According to Creswell (2012), a retrospective approach is the study of phenomena or events that have occurred in the past using existing data. This method involves collecting data that has occurred in the past.

The population of this study was 224 eighth-grade students from classes A-G. Meanwhile, the sample was calculated using Slovin's formula in Soesena 2020. By using the Slovin formula, the sample size was obtained as 69.1, rounded up to 70. The researcher asks students to draw a random lottery to obtain the sample. The lottery consists of 32 small sheets of paper, 10 of which contain numbers. The numbers are 1-10, and the rest of the paper is left blank. By doing this, ten students in each class will get a paper containing numbers, and the students who get the numbers will be the samples.

To measure students' creative thinking, researchers used a questionnaire from Dr. Khumar and Dr. Holman (Sahfira 2019). It consists of 30 items and deals with respondents' opinions, in answering the options as follows: score 5 for strongly agree, 4 for agree, 3 for unsure, 2 for disagree, 1 for strongly disagree. After calculating the total score for each respondent, the next step taken by researchers was to process the data by determining the mean or average, coding, and categories as follows;

Table 1 Percentage of students' creative thinking

Code	Range	Category
1	76-100	High
2	50-75	Mediocre
3	0-49	Low

Student achievement is obtained from first-semester students' English report scores. This final score will later be used to measure student abilities.

Table 2 Assessment Rubric

Code	Range	Category
1	76-100	High
2	50-75	Mediocre
3	0-49	Low

After calculating all the data, the next step is correlation testing with SPSS 24. Coding was done with the aim of changing categories into numbers so that they could be processed with the SPSS application. In calculating the correlation, researchers use the Spearman rank test. The test is used to measure the correlation between ordinal variables (Dahlan, 2014, p. 22). If the significance value (p-value)

is less than 0.05 or 0.01, it means there is a statistically significant relationship, which implies that H_0 is rejected and H_a is accepted. However, if the significance value (p-value) is greater than 0.05 or 0.01, it means there is no significant relationship, which implies that H_0 is not rejected. To measure the strength of the relationship between variables, researchers use the Spearman correlation guidelines with the following classifications: 0.00–0.199 (very weak), 0.20–0.39 (weak), 0.40–0.59 (moderate), 0.60–0.79 (strong), and 0.80–1.00 (very strong).

Findings and Discussion

A. Finding

From the data processed by the researchers, it was found that creative thinking was in the mediocre category with a score of 67. Meanwhile, the average students' English achievement score was in the good category with a score of 83.8. Then, the researchers conducted a Spearman rank correlation test with the following results:

Table 3 Correlational Test with SPSS 24

			Creative Thinking	Achievement
Spearman's rho	Creative thinking	Correlation Coefficient	1.000	.103
		Sig. (2-tailed)	.	.395
		N	70	70
	Achievement	Correlation Coefficient	.103	1.000
		Sig. (2-tailed)	.395	.
		N	70	70

Spearman's correlation was conducted to evaluate the relationship between student's creative thinking and their learning achievement for English subject. The results showed a very weak and statistically insignificant positive correlation between these variables $rs (68) = 0.10$, $p = 0.395$. A very weak correlation means that changes in one variable do not consistently predict changes in the other. A very weak relationship does not imply that there is no relationship at all. It indicates that the relationship is not reliable enough to meet expectations. This may indicate that other variables influence the results.

Spearman's rank sum test was conducted to examine the relationship between creative thinking and student achievement in English. The results were not statistically significant $rs(68) = 0.10, p = 0.395$, indicating that the researcher failed to reject the null hypothesis (H_0). This indicates that there is insufficient evidence to support the relationship between the variables.

B. Discussions.

The results of the statistical test indicate that the relationship between creative thinking and Students' English achievement of eighth-grade students of MTs Al Falah Toroh is very weak and not significant. This data finding shows that students who have high creative thinking scores cannot always be predicted to have better English achievement than students with low creative thinking scores. The data also shows this inconsistency, for example, SDA students who obtained a creative thinking score of 70 and an English score of 77, turned out to have lower English achievement than LS, who only had a creative thinking score of 64 but achieved an English score of 97. Similarly, MHD students with a creative thinking score of 73 and an English score of 83, had lower English achievement than DT who only obtained a creative thinking score of 57 but achieved an English score of 87. This fact confirms that the level of creative thinking is not always directly proportional to students' academic achievement in English subjects.

The findings of this study align with several previous studies. Palaniappan (2009), in his research, explained that creativity is not significantly related to academic achievement, even more, creative student groups do not always excel compared to less creative student groups. Similarly, Olatoye and Ogunsanya (2010) found an insignificant negative relationship between creativity and student GPA, which means that higher creativity does not necessarily lead to higher academic achievement. Ai (1999), also stated that the relationship between creativity and academic achievement is complex, influenced by gender and the creativity measurement instrument used. From these various studies, it can be understood that creative thinking is not the sole determining factor for learning success, but rather, other variables also influence student achievement.

The data analysis in this study also supports this view, stating that the weak relationship between variables indicates the presence of other factors influencing student achievement. Interviews with English teachers revealed that. Besides creative thinking, the learning environment and school facilities play a significant role in determining student success. The learning environment, as explained by Havidz and Mukajiyah (2022), encompasses school culture, interpersonal interactions, and the academic climate, all of which can influence student motivation. For example, school culture in MTS

Al Falah Toroh is reciting the Asmaul Husna or verses from the Quran before learning activities. This activity believed can foster integrity and increase student motivation to learn. From interviews with several students, they described as having a fun teaching style, open to criticism, and being patient in helping, thus enhancing learning motivation which has positive impact with their English achievement. This is in line with research by Quirin et al. (2022), which found that highly motivated students tend to achieve better grades and demonstrate greater persistence in facing academic challenges.

In addition to the learning environment, school facilities have also been shown to be a significant factor influencing student achievement. According to Aisy et al. (2023), adequate learning facilities can support the effectiveness of the learning process, while limited facilities can hinder academic achievement. From the Interview, student RR, who has high creative thinking scores but low English scores. He assumed that his low score in English achievement was due to a lack of interest and limited literacy resources at school. Students admitted to having difficulty accessing English-language reading material in the library, while internet use was also hampered by network and internet data limitations. This finding aligns with the findings of Hardiana et al. (2023), who stated that adequate facilities, such as language laboratories and the availability of dictionaries and textbooks, can increase student learning motivation and achievement. Thus, English learning achievement is influenced not only by creativity but also by motivation, the learning environment, and the completeness of the available educational facilities.

Conclusion

This study aimed to explore the relationship between creative thinking abilities and their English achievement among 70 eighth-grade students at MTs Al-Falah Toroh. The findings showed that the average level of creative thinking was in the mediocre category (mean score: 67), while the average student achievement in English was in the good category (mean score: 83.8). The Spearman correlation test shows a very weak and not significant relationship ($rs = .10$, $p = .395$). This means that students with higher creative *thinking* scores do not always have better English achievement than students with lower creative thinking scores. This finding supports the results of previous research from Ai, 1999; Palaniappan, 2009; Olatoye & Ogunsanya, 2010, which also stated that creative thinking is not a major determining factor in academic achievement.

In more depth, this research reveals that other factors outside creative *thinking* actually have a greater influence on student achievement. The observations and interviews reveal that the learning environment, teacher roles, and school facilities are key determining factors. A conducive learning environment, teacher who are open to criticism, and the recitation of the Asmaul Husna (the Beautiful Names of Allah) and certain Qur'an verses before starting lessons are believed to increase



learning motivation, thereby significantly boosting student achievement. Conversely, limited facilities, such as a lack of reading materials, limited internet access, and limited learning resources, pose obstacles for students, even those with high creative thinking skills.

Based on these results, this study has both theoretical and practical implications. Theoretically, these findings challenge the common assumption that creative thinking significantly influences academic achievement. The study also emphasizes that external factors, such as facilities and teacher support, play a crucial role. Practically, teachers are expected to continue to create a pleasant learning environment, be open to criticism, and be ready to assist students when they encounter difficulties. Schools are advised to improve educational facilities by providing adequate books and learning resources, especially for English. For further research, it is recommended to highlight other non-academic factors, such as the influence of the learning environment or school facilities, to provide a more comprehensive picture of the factors influencing student learning success.

References

Ai, X. (1999). Creativity and academic achievement: An investigation of gender differences. *Creativity Research Journal*, 12(4), 329–337.

Alabbasi, A. M. A., Paek, S. H., Kim, D., & Cramond, B. (2022). What do educators need to know about the Torrance Tests of Creative Thinking: A comprehensive review, *Frontiers in psychology*, 13, 1000385.

Ayu, C., Asilestari, P., Zalismann, Z., Rifyanti, H., Mahmud, S., Rosadi, A., ... & Rumalean, E. L. B. (2023). *Buku Ajar Bahasa Inggris*. Litrus.

Dahlan, M. Sopiyudin. (2014). *Statistik untuk Kedokteran dan Kesehatan: Deskriptif, Bivariat, dan Multivariat, dilengkapi Aplikasi dengan Menggunakan SPSS*, edisi 6. Epidemiologi Indonesia.

Fatmawati, B., Jannah, B. M., & Sasmita, M. (2022). Students' Creative Thinking Ability through Creative Problem Solving Based Learning. *Jurnal Penelitian Pendidikan IPA*, 8(4), 2090-2094.

Hardiana, N. D., Aisyah, N., Harahap, N. H., & Dara, E. S. (2023). The Effect of School Facilities on Students' Learning Motivation on English. *Sinar Dunia: Jurnal Riset Sosial Humaniora Dan Ilmu Pendidikan*, 2(1), 01-09.

Havidz, H. B. H., & Mujakiah, N. (2023). The effect of learning environment on student motivation and student achievement (Literature Review Study). *International Journal of Psychology and Health Science*, 1(1), 30-39



Kim, K. H. (2006). Can we trust creativity tests? A review of the Torrance Tests of Creative Thinking (TTCT). *Creativity research journal*, 18(1), 3-14.

Kumar, V. K., Kemmler, D., & Holman, E. R. (1997). The creativity styles questionnaire-revised. *Creativity Research Journal* (Vol. 10, Issue 1, pp. 51–58). https://doi.org/10.1207/s15326934crj1001_6.

Masuwd, M. (2024). Investigating The Relationship between Teacher Self-Efficacy and student Achievement. *Andragogi: Jurnal Pendidikan dan Pembelajaran*, 4(2), 94-108.

Olatoye, R. A., & Ogunsanya, S. A. (2010). Relationship between creativity and academic achievement of business administration students in South Western Polytechnics, Nigeria. *African Research Review*, 4(3), 134–149.

Palaniappan, A. K. (2008). Influence of Intelligence on the Relationship between Creativity and Academic Achievement. *The International Journal of Learning: Annual Review*, 15(7), 267–278.

Parveen, P., & Rauf, M. (2022). Investigating the Relationship between Student Engagement and Academic Achievement at Intermediate Level in District Peshawar, Pakistan. *Journal of Positive School Psychology*, 2551-2562.

Rachmawati, Y. Kurniati, E (2012). *Strategi pengembangan kreativitas pada anak*. Kencana.

Sahfira, W. O. (n.d.). *An Analysis of Sudents' Learning Creativity in English Learning At State Vocational Hight School 6 Pekanbaru.*(Skripsi sarjana, Universitas Sultan Syarif kasim Riau).

Suherman, S., & Vidákovich, T. (2022). Assessment of mathematical creative thinking: A systematic review. *Thinking Skills and Creativity*, 44, 10101.

Torrance, E. P., & Ball, O. E. (1998). Effectiveness of New Materials Developed for Training the Streamlined Scoring of The TTCT, Figural A and B Forms. *The Journal of Creative Behavior*, 14(3), 199-203. doi:10.1002/j.2162-6057.1980.tb00243.x.

Torrance, E. P. (1993). Understanding Creativity: Where to Start? Psychological Inquiry. *American Psychological Association Journals*, 232-234.