Analysis of Kinesthetic Intelligence and Self-Confidence on The Success of Playing Egrang

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Abstract

Egrang is a traditional Indonesian game that is important to preserve, where this game involves motor skills, balance, concentration, and social interaction. This study aims to analyze the contribution of kinesthetic intelligence and self-confidence to the success of playing egrang. This study uses a quantitative method with a regression correlation design. The sample used in this study were 51 elementary school students in Semarang Regency who had filled out inform consent as a willingness to participate in the study. The data in this study were obtained using several test instruments, namely physical tests to measure kinesthetic intelligence, concentration tests using concentration exercise grids, questionnaire tests to measure self-confidence levels, and egrang playing skills tests which then the data were processed using SPSS software version 25.0. The results showed that kinesthetic intelligence and self-confidence had a significant contribution to the success of playing egrang, with a total contribution of 49.5%. Kinesthetic intelligence and self-confidence have a close relationship in supporting the success of playing egrang. Kinesthetic intelligence provides technical ability, and self-confidence strengthens the mental courage to implement it. Future research is expected to be able to analyze and identify other factors that can contribute to the success of egrang.

How to Cite

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INTRODUCTION

The development of technology has brought many changes in people's lives, including in children's play patterns (Asmawi et al., 2022) . Traditional games that used to be one of the ways children socialize and learn cultural values are now starting to be replaced by modern technology-based games (Irawan, Fajar, et al., 2023). This change has led to a decrease in physical activity and socialization skills in children of the current generation (Rahesti et al., 2023). One form of practical method to introduce cultural values is through traditional games (Triwardani & Rochayanti, 2014) . The games played by children in the past are traditional games inherited from ancestors which are a reflection of local cultural traditions (Irawan, Permana, et al., 2023)

Traditional games are traditional sports native to Indonesia that have strong cultural characteristics (Rahesti et al., 2024) (Priyono et al., 2024). Traditional games that exist in each region have different rules and concepts according to the origin of the region and also the development of the times (Rahesti & Irawan, 2024). Some may have undergone changes in the rules or equipment used. Traditional games have positive values that provide attractiveness such as teaching about how the value of unity, mutual cooperation, tolerance, justice, honesty, sportsmanship, and discipline while playing (Irawan, Fajar, et al., 2023).Traditional games are closely related to the cultural heritage of a society because they teach life values in social life (Irawan, Junaidi, et al., 2023). Traditional games, including egrang have high educational value because they are able to train motor skills, balance, concentration, and social interaction (Permana & Irawan, 2019) (Priyono et al., 2024). Traditional games are applied in learning to add interest and fun as well as strengthen understanding and retention of the material. Therefore, the traditional game approach becomes one of the valuable ways to facilitate and strengthen the understanding of the material in the learning process (Amrullah et al., 2023). Egrang is one of the traditional games made from two bamboo sticks whose size is adjusted to the user's height (Ariyanto et al., 2020) . According to Gulo et al., (2023) egrang egrang consists of two pieces of bamboo with a length of 1.5 cm for children aged 6 to 12 years and 2.5 for ages 13 years and over.

According to Wahyono et al., (2021) egrang is effective in training body balance and strengthening children's leg muscles. Children with good kinesthetic intelligence have superior motor skills, making it easier to organize body movements and maintain balance (Khusnul Laely, 2015) . Self-confidence also plays a big role in helping children overcome fear when they first try this game. According to Munir (2019) , self-confidence can motivate children to continue practicing and improving their abilities.

A number of previous studies have shown the relationship between kinesthetic intelligence and balance in various physical activities, including traditional games. For example, Masub Bakhtiar & Nugroho, (2017) state that traditional games such as egrang can improve children's kinesthetic intelligence and social skills, as they involve educational values such as courage, and cooperation. However, despite its many benefits, not many studies have specifically examined the contribution of kinesthetic intelligence, and self-confidence to the ability to play egrang.

Based on initial observations conducted in several elementary schools in Semarang Regency, it was found that most students were familiar with the game egrang, but only a few were able to play it well. Many students complained of difficulty in maintaining balance, fear of falling, lack of focus during play, and lack of confidence and fear of playing egrang. This shows the need to understand the factors that influence the success of playing egrang, especially kinesthetic intelligence and self-confidence. The purpose of this study is to analyze how kinesthetic intelligence and self-confidence contribute to the success of playing egrang.

METHODS

This research uses quantitative methods with a descriptive analysis approach and correlational research type. The purpose of this study was to determine the contribution of kinesthetic intelligence, concentration, and self-confidence to the success of playing egrang. The population in this study which was used as a sample amounted to 51 with 17 female students and 34 male students from 3 elementary schools in Semarang Regency who could play the traditional game of egrang. The research design used is a regression correlation design SPSS 25.0 which describes contributions, estimates and tests based on existing theory. The data collection method is by using 4 types of tests, namely (1) kinesthetic intelligence test, (2) grid concentration exercise test, (3) questionnaire test (4) success test of playing egrang. The success test of playing egrang uses the practice of playing egrang with a distance of 20 meters. In this study, the kinesthetic intel-

ligence variable used a 5-indicator test instrument (coordination, balance, agility, and strength), then the concentration test used the grid concentration exercise test, and the self-confidence test used 21 questions with Likert Scale assessment.

RESULTS AND DISCUSSION

Table 1. Data Description

| N=51	Mean	Standar Deviation	Min	Max
Kinesthetic Intelligence	22.84	1.880	19	26
Self-Confidence	64.90	4.134	54	72

Based on **Table 1**, it explains that the research sample involved 51 students with an age range of 9 to 12 years. Of the total sample, 34 students were male, while the remaining 17 were female. The overall picture of the research results is the kinesetic intelligence variable with an average score of 22.84, and the self-confidence variable of 64.90.

Tabel 2. Regression Test Results of Kinesthetic Intelligence and Self-Confidence Variables on Success in Playing Egrang

| Description	Value
Deviation from Linearity	0,364
R Square	0,495
Adjusted R Square	0,474
Significance (p-value)	0,000
Variable Contribution (Kinesthetic Intelligence and Concentration)	49,5%

Referring to **Tabel 2**, the regression analysis results show that the (R Square) value of 0.495 indicates that 49.5% of the variation in the success of playing egrang can be explained by these two variables. The ANOVA test results show that the overall regression model is significant with a significance value of 0.000 ($p < 0.05$). This shows that kinesthetic intelligence and self-confidence together have a significant influence on the success of playing egrang.

The description of kinesthetic intelligence variable data is obtained through the calculation of the percentage of test instrument scores that refer to the main indicators, namely coordination, balance, speed, agility, strength, and motion control.
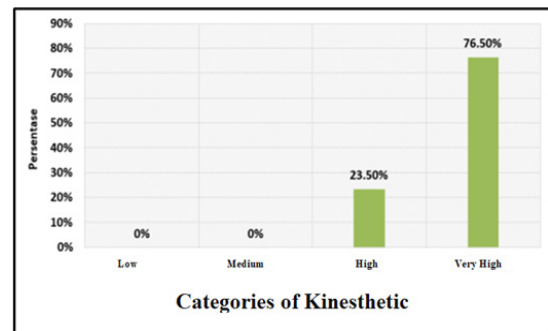
Figure 1. Graph of kinesthetic intelligence level categories

The test results showed that the majority of students, 39 (76.5%), had very high kinesthetic intelligence category scores and 12 (23.5%) students had high scores. The test results show that most respondents have a fairly good level of kinesthetic intelligence, which is closely related to their success in playing egrang. According to Anggreini & Rosyadi, (2024) kinesthetic intelligence which includes the ability to coordinate body movements, maintain balance, agility, and physical strength is very instrumental in games such as egrang which requires good control of body movements.
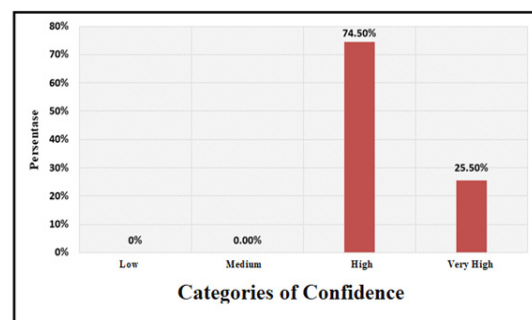

Figure 2: Graph of confidence level categories

Figure 2 shows that most students have a high level of confidence (38 students or 74.5%) and have very high confidence (13 students or 25.5%). This pattern indicates that self-confidence plays an important role in supporting the mental readiness and courage required in the egrang game. The results suggest that self-confidence is one of the psychological factors that support optimal performance in physical activities that demand courage, focus and perseverance.

According to Rustika, (2016) , high self-confidence allows a person to face challenges optimistically, take risks, and overcome failure. In the egrang game the ability to stay focused, control body movements, and balance the body

on a narrow egrang foothold requires strong self-confidence so that players are not easily affected by the fear of falling or failing.
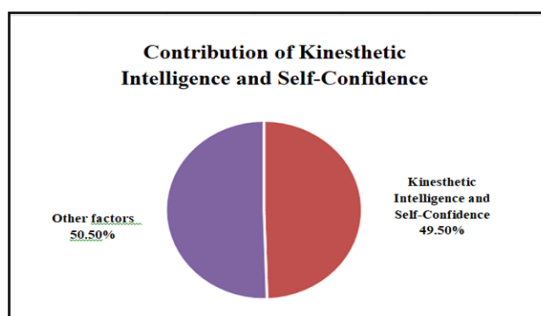
Figure 3. Diagram of Kinesthetic Intelligence and Self-Confidence to Success in Playing Egrang

The diagram above shows the combined contribution of kinesthetic intelligence and self-confidence to the success of playing egrang. The results of the data analysis confirm that these two variables significantly influence success, with a total contribution of 49.5%. The higher the kinesthetic intelligence and self-confidence, the result of the success of playing egrang also increases. Kinesthetic intelligence and self-confidence together have a significant influence on the success of playing egrang. The R Square value of 49.5% confirms that almost half of the variation in the success of playing egrang can be explained by these two variables. In addition, the Adjusted R Square value of 0.474 reflects the stability of the model in explaining the relationship of these variables in various samples. The results of the linearity test with a Deviation from Linearity value of 0.364 (>0.05) reinforce that this relationship is linear. That is, as kinesthetic intelligence and self-confidence increase, success in playing egrang also increases in a predictable pattern.

Success in the egrang game depends not only on physical ability (kinesthetic intelligence), but also on psychological factors that support this ability, namely self-confidence. These two variables complement each other, where kinesthetic intelligence provides the technical skills needed, while self-confidence provides the mental strength to optimally apply them. For example, a student who has good balance skills but lacks self-confidence may struggle to maintain a position on the egrang when faced with challenges or failure. Conversely, a student who is confident but lacks skill in body coordination may find it difficult to perform precise movements.

The synergy between the two results in better performance because students not only have adequate physical skills, but also have a mental-

ity that supports them to keep trying despite obstacles. The importance of interaction between physical abilities, cognitive, and environmental factors to achieve success in various situations (Lubis & Surtika Dewi, 2021). The results of this study indicate that the synergy between kinesthetic intelligence and self-confidence is not only complementary, but also integrative, which means that an increase in one variable can positively affect the other variable. Kinesthetic intelligence and self-confidence have a close relationship in supporting the success of playing egrang. These two variables work synergistically, where kinesthetic intelligence provides technical ability, and self-confidence strengthens the mental courage to implement it.

CONCLUSION

The contribution of kinesthetic intelligence and self-confidence significantly influenced the success of playing egrang, with a contribution of 49.5%. These two variables work synergistically, where kinesthetic intelligence provides the basis of technical skills needed to maintain balance and body coordination, while self-confidence serves as a mental strength that supports the optimal application of these skills, even under pressure or in the face of challenges. Future research is expected to be able to analyze and identify other factors that can contribute to the success of egrang.

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