The Impact of Stationery Rewards on the Reading Frequency of Grade 4 Students: An Experimental Study

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ABSTRACT: This study investigates whether providing stationery rewards can increase the reading frequency of 4th-grade students at an elementary school in Wonorejo Village, Blitar Regency, East Java. The research adopts an experimental within-subject design, utilizing primary and secondary data sources. Primary data were collected through direct observations and structured interviews, while secondary data were obtained from relevant literature. The research applied a quantitative approach with a repeated-measures technique for analysis. Validity was ensured through controlled experimental conditions, and reliability was achieved through repeated trials over ten days. The results indicate that while the provision of rewards led to a temporary increase in reading frequency, the effect was not sustained once the intervention ceased. The discussion highlights the limitations of extrinsic motivation in sustaining long-term behavioral changes and suggests alternative strategies for improving reading habits. The study concludes that while rewards can serve as an initial motivator, a comprehensive approach integrating intrinsic motivation is necessary for lasting improvements. This research is significant as it provides insights into effective literacy development strategies in elementary education.

Keywords: Awards, Reading Frequency, Children.

INTRODUCTION

The reading frequency of grade 4 students at an Elementary School in Wonorejo Village, Blitar Regency, East Java, was identified as relatively low. This is based on the results of observations conducted by researchers for four months, from August to December 2020. The observations occurred during activities to accompany students studying at home during the implementation of Distance Education (PJJ) due to the COVID-19 pandemic. Researchers found that children showed signs of boredom when asked to read before working on questions. Their expressions reflected dislike, such as changes in facial expressions to sadness. Some students who were willing to read did so in a hurry, without understanding the contents of the reading. As a result, their answers to the reading questions were often incorrect. This observation shows that a planned strategy needs to increase the frequency and quality of students' reading (Fitriyah, Aminah, & Safitri, 2024). For example, creating a more enjoyable reading experience, involving parents as home learning companions, and providing incentives such as rewards to increase students' learning

motivation can help. These efforts can help children get used to reading and understand the contents of the reading well.

(Rahman, S., S.D., & Sakti, 2018) students' reading ability is still relatively low, especially at the elementary school level. Their research shows that students' reading speed only reaches 104 words per minute (wpm), whereas ideally, elementary school students need 150 wpm to read well. This low reading speed impacts the quality of students' reading comprehension. In addition, students' ability to complete reading comprehension questions only reaches 45%, which is also categorized as low. This shows that most students have difficulty understanding the contents of the reading well, which is reflected in the results of the questions they work on. In addition, the ability to listen to reading results, reason, and translate reading content is also low, with only 75% of students at the literal, factual literacy level, leading to a more fundamental and not yet in-depth understanding. This is also in line with the research results of (Basuki, 2011), who explains that the reading comprehension ability of grade IV elementary school students is very low. Students are only able to master 30% of reading materials, both informational and literary.

This is also supported by the results of other studies from (Khaerawati, Nurhasanah, & Oktaviyanti, 2023), which state that students' reading ability is predominantly at the story level, namely 27 out of 29 students in grade IV with a percentage of 93.1%, 21 out of 37 students in grade V with a rate of 56.7% and 42 out of 43 students in grade VI with a rate of 97.7%. This shows that students' reading ability can be said to be very good. The factors that influence students' reading ability are environmental factors, psychological factors, intellectual factors, learning process factors in the classroom, and parental guidance factors (Mediana, Latifah, & Mutaqien, 2022)The results of the reading comprehension ability test based on Ruddell's taxonomy showed that students' abilities were still relatively low in story question material.

According to (Muliawanti, 2022)The reading comprehension ability of grade III students of SDN 1 Sagaranten in its assessment criteria is lacking, with an average score of 59.4. Meanwhile, (Yusuf, 2022) Explained that some children continue to struggle to start reading. Several studies have shown that there are still problems with reading from the start and many other obstacles students face. Starting with letters that are difficult to distinguish, it becomes more challenging to connect them into one word and form a whole phrase.

These facts show that advanced reading skills, namely the ability to understand, analyze, and interpret reading well, are still not mastered by many 4th-grade students. According to (Nurmasari, Subiyantoro, & Fadhilah, 2019), 4th-grade students should have entered the advanced reading stage, namely the process of reading mastery that focuses on recognizing words and obtaining the messages contained in the reading. This level is also known as "reading to learn." At this stage, students are expected to be able to read to understand new concepts, expand knowledge, and develop critical thinking skills. Advanced reading cannot be achieved without mastering basic reading techniques because reading techniques are an essential foundation in developing advanced reading skills.

(Vygotsky, 1978)Explains that advanced reading has many benefits for students' cognitive development. It not only enriches students' knowledge but can also improve their reasoning skills. This ability allows students to understand, interpret, and appreciate the contents of the reading

more deeply, thus supporting critical and reflective thinking skills. Therefore, students must master advanced reading levels early, which will be the key to developing their literacy skills.

The researcher hypothesized that giving rewards can increase the reading frequency of 4th-grade students, improving their reading ability, especially in advanced reading. In the operant conditioning theory proposed by BF Skinner, rewards are defined as positive reinforcement given to strengthen certain behaviors (Priatna, 2012). (Slavin, 2018)explained that individual behavior can be controlled through appropriate reinforcement in a new environment. According to Skinner, every individual who receives a particular stimulus will respond based on the stimulus-response (SR) relationship. The response can be as desired or not, and if the response is as desired, reinforcement needs to be given to repeat the behavior.

In this context, giving rewards is expected to motivate students to read more often and improve the quality of their reading comprehension. This positive reinforcement will encourage students to achieve specific targets in reading activities and gradually improve their reading skills, including advanced reading skills. In line with the opinion of (Deci & Ryan, 2000)Although intrinsic motivation has a vital role in the learning process, extrinsic motivation in the form of rewards can increase student involvement in reading activities, especially when their intrinsic motivation still needs to be developed.

Therefore, this study aims to increase the frequency of reading, which still has a close relationship with reading ability. The researcher will provide treatment to the subject, namely giving a reward if the subject succeeds in meeting the researcher's target. Reward, in BF Skinner's view, is interpreted as reinforcement. According to (Santrock, 2020)Individual behavior can be controlled through appropriate reinforcement treatment in a new environment. Skinner explains that every individual who receives a stimulus will respond based on the SR relationship. The response given can be following what is desired. The appropriate response needs to be reinforced so that the individual wants to do it again.

METHOD

The research method used by researchers is the experimental method. This method is used because it can produce conclusions at the level of explanation and control, not just description and prediction. The experimental method has an experimental design based on the experimental paradigm. Experimental designs based on the experimental paradigm are divided into two, namely, between-subject design and within-subject design. Researchers apply a within-subject design in this study.

Within-subject design is commonly called Small N-Design. The following are the characteristics of this experimental design (Kazdin, 2011):

1. Condition control (variation of treatment sequence)

2. Strict control & supervision of the experimental situation

3. Repeated measurements

The researcher conducted condition control on the rewards given. The rewards were in the form of stationery. Stationery rewards with different amounts were given each time the subject finished reading the literacy skills sub-theme in the class IV thematic book. Control and supervision of the experimental situation were always carried out during the research. The problem was controlled and supervised by giving various questions after the subject had completed the reading. nya. This is done right before the reward is given. The goal is to find out that the subject reads the reading.

Measurements were taken before, during, and after the treatment was given. The unit of measurement was the number of readings completed in one day. The researcher applied a within-subject design for 10 days. On days 1 to 3, the subjects were not given treatment. Then, on days 4 to 7, the subjects were given treatment. Then, on days 8 to 10, the subjects were not given treatment. The researcher continued to take measurements on days 8 to 10 to conclude the effect of the treatment given on the dependent variable. The dependent variable in this study was reading frequency. The subjects were children in grade IV.

During data collection, researchers use instruments. This is to facilitate the data collection process. The instruments used in collecting data for this study are interviews and literature studies. Interviews are a data collection method in which researchers, as interviewers, ask various questions to subjects (Johnson & Christensen, 2004)The purpose of the interview is to gather information about the research focus—another instrument used in literature studies. Literature studies are data collection tools that compare various references, such as personal documents, official documents, physical data, and research archive data.

The final stage after data collection is data analysis. The data analysis used is the analysis of changes in conditions and the analysis of changes between conditions. Analysis of changes in conditions is the analysis of data changes in one condition (Sunanto, Takeuchi, & Nakata, 2005)The conditions in question are conditions with or without intervention. The components to be analyzed include stability, direction tendency, and level of change. Then, we continued with the analysis of changes between conditions. This analysis can only be done if stable data precedes the condition to be analyzed because it aims to see whether intervention affects the dependent variable. The aspects seen are stability, level changes, and the size of the overlap between the two conditions being analyzed.

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RESULT AND DISCUSSION

Table 1. Research result

Day 2-	Action	Results
1	No intervention	Client does not read
2	No intervention	Client read 1 time
3	No intervention	Client read 1 time
4	Intervention by giving rewards	Client read 1 time
5	Intervention by giving rewards	Client read 3 times
6	Intervention by giving rewards	Client does not read
7	Intervention by giving rewards	Client read 1 time
8	No intervention	Client read 1 time
9	No intervention	Client does not read
10	No intervention	Client read 1 time

The table presents data on a student's reading behavior under different conditions over ten observations. It compares instances where no intervention was applied to those where rewards were introduced as a motivational strategy. The results indicate that in the absence of intervention, the student either did not read or read only once. In contrast, the introduction of rewards increased reading frequency, particularly on Day 5, when the student read three times. However, the intervention was not consistently effective, as seen on Day 6, when the student did not read despite a reward.
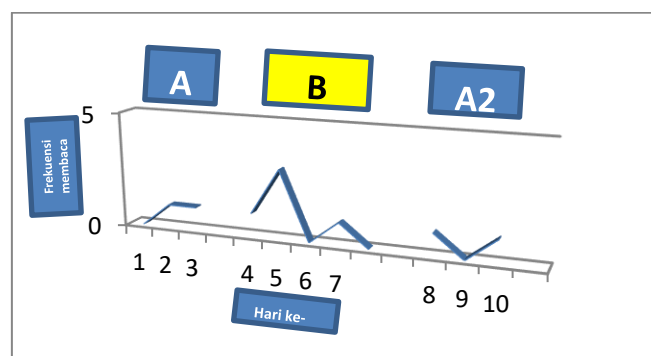
Graph 1. Research result

The graph visually represents these trends, showing a low frequency of reading in the initial phase (A1) before the intervention, a noticeable increase during the intervention phase (B), and a decline in reading behavior in the post-intervention phase (A2). This suggests that while rewards can be an external motivator for reading, their long-term effectiveness is uncertain. The fluctuating pattern observed in the data highlights the need for additional strategies that foster intrinsic motivation, ensuring that reading habits persist beyond external incentives.

Table 2. Summary of Symbol Usage

Symbol	Information
A1	Baseline condition where intervention has not been given
B	Interventions are given
A2	Baseline condition where the intervention was given

According to Nurmasari et al. (2019), children in grade 4 have entered the advanced reading level, which is a stage of reading ability that is not only about recognizing letters and words but also includes the process of understanding the messages contained in the reading. At this stage, students are expected to be able to capture the meaning of the reading in depth to broaden their horizons. In line with that, (Tampubolon, 2015)emphasized that reading at an advanced level not only enriches knowledge but also plays a vital role in developing students' reasoning skills.

However, research by Rahman et al. (2018) shows that students' reading ability is still relatively low. This is demonstrated through several indicators, such as slow reading speed, low ability to solve comprehension questions, lack of listening skills to reading results, weak reasoning skills, and difficulty translating reading content into a more concrete understanding.

This finding is also supported by the observations at an elementary school in Wonorejo Village, Blitar Regency, East Java, which shows that students' reading ability is inadequate. This data illustrates the gap between the ideal advanced reading potential and the reality of students' abilities that still need to be improved.

Therefore, researchers are trying to increase the reading frequency among grade 4 elementary school students. Although reading frequency is not the main factor directly determining students' reading ability, reading habits can be an essential first step in instilling behavioral patterns supporting increased reading ability. In this context, giving rewards is chosen to motivate students to read more often.

According to the operant conditioning theory, individual behavior can be controlled through appropriate reinforcement in a particular environment. Skinner explained that each individual responds based on the stimulus-response (SR) relationship. The resulting response may or may not follow the goals or expectations the stimulus giver desires. In this theory, reward is a form of positive reinforcement to increase the likelihood of certain behaviors being repeated. By providing rewards, it is hoped that students will be more motivated to repeat reading behavior in response to the positive stimuli they receive.

In this study, rewards were given to students on the 4th to 7th day, regardless of whether the students read or not. This approach aims to build a conducive atmosphere and encourage students to feel appreciated so that reading habits can be formed gradually. The researcher refers to Skinner's opinion, which emphasizes that positive reinforcement can effectively create desired behavior by providing consistent and targeted stimuli.

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to feel appreciated so that reading habits can be formed gradually. The researcher refers to Skinner's opinion, which emphasizes that positive reinforcement can create desired behavior by providing consistent and targeted stimuli.

Thus, this strategy aims to increase reading frequency and helps create a fun learning experience for 4th-grade students to build the foundation of sustainable reading habits.

The study results, which can be seen in Table 1, show that the intervention was carried out after the baseline data tended to be stable. The stability of baseline data is an important indicator to ensure that changes that occur after the intervention are the result of the intervention itself, not due to natural fluctuations (Kazdin, 2011). In the graph with the symbol A1, the baseline data has a horizontal trend and a low rate of change. This indicates that the observed variables are relatively stable before the intervention is given.

In contrast, the graphs with symbols B and A2 show unstable data patterns. After the intervention was given, there was a significant change in level, but this change gradually returned to approaching the baseline level. This pattern indicates that the effect of the intervention on the dependent variable is weak or not stable (non-persistent effect). According to (Campbell & Stanley, 1963), changes that do not last long can indicate the presence of external factors that affect the study's results during the intervention session. These factors, such as the environment, the psychological condition of the subject, or other uncontrolled treatments, can obscure the causal relationship between the intervention and the dependent variable.

In addition, the graphs of symbols B and A2 also show an overlap between data in the baseline phase and the intervention phase. This overlap indicates the difficulty in clearly distinguishing the effects of the intervention. Kazdin (2011) stated that overlapping data between the baseline and intervention phases can weaken the study's internal validity. This condition makes the interpretation of the effect of the intervention on the dependent variable unconvincing because the changes that occur cannot be entirely attributed to the intervention.

Furthermore, the instability of the data in the graphs of symbols B and A2 also indicates that the effect of the intervention may be inconsistent or disturbed by external factors. According to (Barlow, Nock, & Hersen, 2009)Fluctuating data often reflects inaccuracy in the implementation of the intervention, inconsistency of the intervention with the characteristics of the subjects, or the presence of poorly controlled confounding variables.

Thus, the data pattern shown in the graphs of symbols B and A2 indicates that the effect of the intervention on the dependent variable cannot be concluded with certainty. This shows the need for further evaluation of the intervention design, implementation, and control of external factors that have the potential to influence the study's results.

CONCLUSION

Based on research findings by Rahman et al. (2018), students' reading ability at the elementary school level, especially in grade 4, still shows low results. This is reflected in the low reading speed, low ability to solve comprehension questions, and weaknesses in listening, reasoning, and

translating the reading contents. Although grade 4 students should be at an advanced reading stage, which allows them to understand more profound messages and meanings in the reading reality, their abilities are still limited. Reading speeds lower than the expected standard (104 wpm compared to 150 wpm) and low comprehension abilities indicate a gap between ideal potential and reality in the field.

To overcome this problem, researchers propose increasing reading frequency as a first step to building habits that support improved reading ability. One strategy used is giving rewards as favorable reinforcement. Providing appropriate reinforcement can strengthen desired behavior, such as the habit of reading. Rewards are expected to motivate students to read more often and, in turn, improve their ability to read further.

However, findings from observations in one of the Elementary Schools in Wonorejo Village, Blitar Regency, showed that reading habits were still low among students, contributing to low quality of their reading comprehension. By implementing reward interventions, researchers hope to create more frequent reading habits and improve students' literacy quality to achieve advanced reading skills needed to develop a deeper understanding of reading.

Therefore, although the study's results indicate slow changes in reading ability, using rewards as positive reinforcement can be an essential step in creating enjoyable learning experiences, increasing student motivation, and building reading habits that can contribute to improving their literacy skills in the future.

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