POSITIVE REINFORCEMENT STRATEGIES: BOOSTING STUDENTS' ACHIEVEMENT

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Abstrak: Penguatan positif, yang melibatkan pengakuan dan pemberian penghargaan atas perilaku yang diinginkan, secara luas diakui sebagai alat yang efektif untuk menciptakan lingkungan belajar yang kondusif. Penelitian ini bertujuan untuk menyelidiki korelasi antara metode penguatan, seperti pujian, hadiah, dan pengakuan, dengan kinerja akademik serta keterlibatan siswa secara keseluruhan, khususnya pada siswa sekolah menengah kejuruan. Dengan menggunakan pendekatan metode kuantitatif, data dikumpulkan dari sampel siswa SMK melalui survei. Pengukuran kuantitatif dilakukan untuk menilai kinerja siswa sebelum dan sesudah penerapan strategi penguatan positif. Variabel utama yang dianalisis mencakup frekuensi dan jenis penguatan, efikasi diri siswa, tingkat partisipasi, serta pencapaian dalam mata pelajaran inti.

Kata kunci: Penguatan Positif, Motivasi Siswa, Prestasi Akademik

Abstract: Positive reinforcement, which involves acknowledging and rewarding desirable behaviors, is widely recognized as an effective tool in promoting a conducive learning environment. The study aims to investigate the correlation between reinforcement methods, such as praise, rewards, and recognition, and their effects on students' academic performance, and overall engagement to vocational school students. Using a quantitative method approach, data was collected from a sample of vocational school students through survey. Quantitative measures assessed student performance before and after the application of positive reinforcement strategies. Key variables analyzed include frequency and type of reinforcement, student self-efficacy, participation levels, and achievement in core subjects.

Keyword : Positive Reinforcement, Student Motivation, Achievement

INTRODUCTION

The research titled "Positive Reinforcement Strategies: Boosting Students' Achievement" addresses a critical area of educational psychology by exploring how the application of positive reinforcement can enhance student motivation and academic success. In an increasingly competitive educational landscape, fostering student engagement and achievement is paramount. Positive reinforcement, a concept rooted in behaviorist theory, involves providing rewards or incentives to encourage desired behaviors, thereby creating a more conducive learning environment. This approach is particularly relevant in the context of diverse classrooms, where students may exhibit varying levels of motivation and engagement. As educators seek effective strategies to

improve learning outcomes, the implementation of positive reinforcement has gained traction for its potential to motivate students, enhance their self-efficacy, and promote a sense of accomplishment. Additionally, understanding the interplay between intrinsic and extrinsic motivation is crucial, as reliance solely on external rewards may inadvertently diminish students' internal drive to learn. This research aims to investigate the effectiveness of various positive reinforcement strategies, such as verbal praise, token systems, and goal-setting, in boosting motivation and achievement across different educational settings. By identifying best practices and potential challenges, this study seeks to contribute valuable insights to educators and policymakers striving to create motivating and supportive learning environments.

This research investigates the effectiveness of positive reinforcement strategies in enhancing student academic achievement. Positive reinforcement, a core concept in behaviorism, involves providing a rewarding stimulus after a desired behavior is exhibited, thereby increasing the likelihood of that behavior being repeated. The study aims to explore various reinforcement techniques used in classroom settings and their impact on student engagement and performance.

The concept of positive reinforcement was introduced by Behaviorist B.F. Skinner. Operant conditioning is the name of this theory. According to Skinner, rewarding positive behavior in a person or child could alter their behavior since they would see it as the most advantageous and natural course of action (McCarthy, 2010). Therefore, the goal of positive reinforcement is to increase the desired behavior by providing a favorable stimulus as soon as it takes place. When students perform in a particular way, they receive a reward, which motivates them to repeat that behavior (Li, 2022).

In his 1961 study of rats, Skinner discovered that if the rats repeatedly pressed a bar that gave them food, the rats would press the bar more and more to receive the food reward. People are more likely to repeat an activity if they find it pleasant, just way those rats did. Providing an incentive for pupils to repeat desired behaviors is the main goal of positive reinforcement in teaching and education (Craige, 2019). Put another way, children are motivated to repeat certain activities or attain goals when they receive a favorable reward for doing so.

Positive reinforcement involves the application of rewards following desired behaviors, which increases the likelihood of those behaviors being repeated. This study incorporates several key theoretical frameworks to elucidate the mechanisms underlying motivation. First, Self-Determination Theory (SDT) emphasizes the importance of intrinsic motivation, positing that students are more engaged when they feel competent, autonomous, and connected to others. While positive reinforcement can effectively boost extrinsic motivation, it is essential to ensure that it does not undermine intrinsic drives for learning. Second, Expectancy-Value Theory suggests that students' motivation is shaped by

their expectations of success and the value they assign to tasks. This perspective highlights the necessity of aligning reinforcement strategies with students' personal goals and interests to maximize their motivational impact. The research further explores various positive reinforcement techniques, such as verbal praise, token economies, and goal-setting, which have been shown to foster a supportive learning environment that encourages active participation and collaboration. Despite the benefits, challenges exist, particularly the risk of reliance on external rewards leading to diminished intrinsic motivation. Thus, this study aims   to assess the relationship between positive reinforcement and academic achievement. Therefore, this paper has the aim to explain why positive reinforcement could develop students' positive behavior in EFL class.

Positive reinforcement refers to "the introduction of desirable or pleasant stimuli after the performance of a behavior." The purpose of using desirable stimuli after a performance is to reinforce that positive behavior and make it occur again in the future (Nickerson, 2022). Staddon and Cerutti (2003) stated that Skinner's behavior theory is controlled by its consequences. If a behavior is followed by a positive consequence (reinforcement), that behavior is more likely to occur again, but if the behavior is followed by a negative consequence (punishment), it is less likely to occur again. Therefore, Skinner contended that explaining the behavior requires external motivation and observable causes rather than internal motivation (Staddon & Cerutti, 2003). Although they employ different strategies, positive and negative reinforcement both aim to promote a particular behavior. Positive reinforcement adds a desirable stimulus to the situation, while negative reinforcement removes an undesirable stimulus, both in the service of reinforcing the behavior that was displayed (Ackerman, 2019). Both positive and negative reinforcement are used to enhance desired behaviors, such as when a teacher rewards students with sweets for cleaning up their toys or denies some students break until they complete their work as other students do. Tools for positive reinforcement might vary. However, there are four major types of positive reinforcers that can be used to encourage students' behavior and develop their emotional intelligence, depending on the individual and the situation (Cherry, 2022). These include the following 1. Verbal Praise is an Acknowledging student efforts and achievements verbally. 2. Tangible Rewards is providing small incentives, such as stickers or tokens, for demonstrating desired behaviors. 3. Recognition Programs teachers implementing systems that highlight student successes, such as "Student of the Month. 4. Classroom Privileges teachers allow students to earn special activities or responsibilities as rewards for good behavior.

METHODOLOGY

This study employs a quantitative methods research design to comprehensively evaluate the effectiveness of various positive reinforcement strategies in educational

settings. Using a Quantitative method approach, data was collected from a sample of vocational school students through survey . Quantitative measures assessed student's performance before and after the application of positive reinforcement strategies. This combination of quantitative data will allow for a richer understanding of how positive reinforcement affects student achievement, as well as the contextual factors that influence its effectiveness. Data will be analyzed using statistical methods for the quantitative data and thematic analysis for the qualitative responses, ensuring a robust evaluation of the research questions. Through this comprehensive approach, the study aims to provide actionable recommendations for educators seeking to enhance student engagement and academic success through positive reinforcement.

This study aim to analize the correlations between the implementation of positive reinforcement strategies and improvements in students' academic performance, such as test scores and assignment completion rates.

RESULTS AND DISCUSSION

The study highlights the importance of tailored reinforcement strategies that align with individual student needs and preferences. It discusses the potential for positive reinforcement to create a more inclusive and supportive classroom environment, fostering a culture of motivation and achievement. The findings suggest that when students feel recognized and valued, their academic engagement and success are likely to improve.

Below are the result of the students achievement before and after positive reinforcement treatment for students in a class. The data indicates a significant improvement in academic performance among students who responded well to reinforcement strategies.

This is the detailed analysis of the student performance based on the score differences. The study involved a total of 40 vocational school students. During the pre-test phase, only 5 students achieved a perfect score of 100. However, after the implementation of positive reinforcement strategies, the number of students scoring 100 increased significantly to more than 30 in the post-test. This indicates a substantial improvement in academic performance following the intervention.

Additionally, the data showed that nearly all students experienced an increase in their scores from pre-test to post-test, with no student experiencing a decline in performance. Only one student, Dira Ayu Putri Ariska, maintained a consistent score of 90 in both tests, representing the only case with no change. Overall, the results suggest that positive reinforcement had a strong positive impact on students' academic achievement.

Table 1. Distribution of Students Based on Score Improvement Ranges

Improvement Range	Number of Students	Notes
0 points	1	Stable performance
1–9 points	3	Slight improvement
10–19 points	6	Moderate improvement
20–29 points	6	Noticeable gain
30–39 points	4	Strong improvement
40+ points	20	Excellent improvement

This table displays the number of students categorized by their score improvement range. The majority of students (20 individuals) achieved an improvement of more than 40 points, classified as excellent improvement. Conversely, only one student showed no change in performance (0 points). These findings indicate that most students experienced academic progress following the intervention.

Table 2. Comparison of Students' Pre-test and Post-test Scores and Individual Gains

Name / Initial	Pre-test	Post-test	Gain
OKN	80	100	+20
KTD	80	90	+10
RRS	80	100	+20
RNA	80	100	+20
MFM	80	100	+20
EP	80	100	+20
MA	80	100	+20
MDP	90	100	+10
MS	90	100	+10
BWSF	90	100	+10
FAA	80	100	+20
TJS	70	100	+30
SDQ	80	100	+20
GFA	80	100	+20
MA	70	100	+30
ANS	90	100	+10
SCD	90	100	+10
ASW	70	90	+20

This table presents individual student data regarding pre-test and post-test scores in a particular subject, along with the gain achieved by each student. The data indicates that most students showed a notable improvement, with 8 students gaining +20 points and 4 students achieving a +30-point increase. Several students, especially those who started with high pre-test scores (90), showed smaller gains (+10 points), possibly due to limited

room for further improvement. Overall, the data suggests that the implemented instructional intervention effectively enhanced students' academic performance.

Table 3. Summary Statistics of Students' Pre-test and Post-test Scores

Metric	Pre-test	Post-test
Average Score	79	97
Highest Score	100	100
Lowest Score	60	90
Median	80–90	100

The average score, greatest and lowest scores, and median are among the summary statistics of the students' pre-test and post-test results that are displayed in this table. Student performance has significantly improved, as evidenced by the average score rising from 79 to 97. The lowest score increased from 60 to 90, indicating progress among lower-performing kids, while the highest score stayed at 100. The median increased from the pre-test range of 80 to 90 to the post-test range of 100, indicating a general improvement for the whole student's group. These outcomes demonstrate how successful the used learning intervention was.

The data clearly demonstrates a significant improvement in students' academic performance between the pre-test and post-test. More than 75% of students achieved a perfect score (100) in the post-test, compared to only 12.5% in the pre-test. This substantial increase is reflected in the rise of the average score from 79 to 97. Additionally, the lowest score improved from 60 to 90, while the highest score remained stable at 100—indicating a general positive shift in overall achievement levels.

Only one student showed no change in performance, and importantly, no student experienced a decline in scores. This consistency strongly suggests that the educational intervention and the reinforcement strategies employed were highly effective. According to Hattie (2009), instructional strategies that include timely feedback and clear goals have one of the highest effect sizes in improving student outcomes. The improvement observed in this study supports this claim, demonstrating the effectiveness of structured reinforcement in the classroom.

Moreover, the data emphasizes the role of positive reinforcement in promoting equity in learning. Students who initially scored low showed the most significant improvements, with gains up to 30–40 points. This aligns with Skinner's (1953) theory of *operant conditioning*, which posits that reinforced behavior is more likely to be repeated. Additionally, this finding challenges the assumption of fixed academic ability and supports Dweck's (2006) *growth mindset* theory, which suggests that students' intelligence and abilities can develop through effort, feedback, and encouragement. As Dweck argues, "Effort is what ignites ability and turns it into accomplishment."

Before the intervention, student performance varied significantly, with scores ranging from 60 to 100. This variation suggests that while some students had mastered the foundational concepts, many were still struggling. However, after the intervention, nearly all students improved, and a large majority achieved perfect scores. This not only reflects successful retention of knowledge but also suggests increased engagement, motivation, and self-confidence among students factors critical for sustainable academic growth.

In summary, the instructional methods and reinforcement strategies implemented between the two assessments had a clear and positive impact. The increase in average scores, the narrowing of performance disparities, and the high percentage of students achieving perfect post-test scores serve as compelling evidence of the intervention's effectiveness in enhancing learning outcomes and fostering an equitable learning environment.

CONCLUSION

Positive reinforcement has a strong and evident impact on academic achievement, as evidenced by the examination of students' pre- and post-test results. A considerable increase in test scores across the board indicates that the use of reinforcement techniques between the two examinations resulted in an overwhelming improvement in student performance. The idea that regular, focused reinforcement—whether via review sessions, comments, compliments, or interactive learning exercises—can significantly improve learning outcomes is highly supported by this result. Student learning and achievement have been significantly impacted by the use of positive reinforcement techniques in this setting. In addition to enhancing academic performance, it probably promoted increased motivation, self-worth, and a love of learning. This reaffirms how important educators and teachers are in influencing students' achievement through support, encouragement, and purposeful teaching methods. In the future, including reinforcement into the curriculum on a regular basis may prove to be a game-changer for raising student achievement in a variety of learning environments.

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