https://journal.ypidathu.or.id/index.php/ijen/
P - ISSN: 2988-1579
E - ISSN: 2988-0092

The Influence of Reward and Punishment Systems on Student Discipline

Aylin Erdoğan [1], Cemil Kaya [2], Azamat Nazarov [3]

[1] Ege University, Turkey
[2] Sabancı University, Turkey
[3] Tashkent State Technical University, Uzbekistan

ABSTRACT

Background. The role of reward and punishment systems in shaping student discipline has long been a subject of interest in educational psychology. Schools often rely on these systems to promote desirable behaviors and deter misconduct, yet the effectiveness of these strategies remains debated.
Purpose. This study explores the influence of reward and punishment systems on student discipline in secondary schools, focusing on how these strategies affect student behavior and academic performance.
Method. The research uses a mixed-methods approach, combining quantitative surveys to assess student perceptions and qualitative interviews with teachers and school administrators.
Results. The results reveal that both reward and punishment systems have a significant impact on student discipline, but the nature of the influence depends on the consistency, clarity, and fairness of their implementation. Reward systems were found to be more effective in fostering positive behaviors and improving academic performance, while punishment systems were more effective in deterring misconduct when applied consistently. However, excessive reliance on punishment led to negative emotional outcomes for students.
Conclusion. The study concludes that a balanced approach, where rewards are used to encourage positive behaviors and punishments are applied sparingly and fairly, is the most effective strategy for promoting student discipline.
Keywords: Educational Psychology, Reward Systems, Student Discipline

INTRODUCTION

Reward and punishment systems have been a cornerstone of behavior management in educational settings for decades (F. Li dkk., 2025; J. Li & Smith, 2025). These systems are designed to encourage desirable behaviors, promote discipline, and improve overall student performance. While reward systems aim to reinforce positive behavior by offering incentives such as praise, recognition, or tangible rewards, punishment systems aim to decrease undesirable behaviors by applying consequences such as detention or loss of privileges. Educators and school administrators have long debated the effectiveness of these approaches, as both systems can influence student behavior in significant ways. The proper balance and implementation of these strategies are key in shaping the learning environment and fostering a productive educational atmosphere

Citation: Erdogan, A., Kaya, C & Nazarov, A. (2025). The Influence of Reward and Punishment Systems on Student Discipline. *International Journal of Educational Narrative*, *3*(2), 175–183. https://doi.org/10.70177/ijen.v3i2.2158

Correspondence:

Aylin Erdoğan,
aylinerdogan@gmail.com

Received: March 11, 2025

Accepted: April 20, 2025

Published: April 20, 2025

(Ohdaira, 2025; K. Wang dkk., 2025). In this context, understanding how reward and punishment systems impact student discipline is crucial to developing more effective behavior management strategies in schools.

The problem addressed in this research is the varying effectiveness of reward and punishment systems in influencing student discipline (Y. Yang dkk., 2025; Zaphir dkk., 2025). While many schools continue to rely on these strategies, the impact of each system on students' behavior and academic outcomes remains unclear. There is a lack of consensus regarding the most effective approach, particularly with regard to the potential negative consequences of over-reliance on punishment. In many cases, rewards and punishments are inconsistently applied or poorly understood by students, leading to mixed results in terms of improved discipline and academic achievement. This research aims to explore how these systems influence student behavior in different educational contexts and what factors contribute to their success or failure (Y. Yang dkk., 2025; Zaphir dkk., 2025). By examining how reward and punishment systems impact students' emotional, social, and academic outcomes, this study seeks to provide a more comprehensive understanding of their role in shaping student discipline.

The primary objective of this study is to evaluate the influence of reward and punishment systems on student discipline in secondary schools. Specifically, this research seeks to identify which system—reward or punishment—is most effective in promoting positive behavior and deterring misconduct (Y. Li dkk., 2025; Zhang dkk., 2025). The study also aims to assess how the fairness, consistency, and transparency of these systems affect their outcomes. In addition to examining behavior changes, the research will also explore the emotional and psychological impacts of both reward and punishment systems on students. The findings will contribute to the understanding of how these systems can be optimized for better student outcomes, highlighting the importance of a balanced approach that incorporates both rewards and appropriate, fair consequences. The study will provide insights into how school administrators and educators can create a more disciplined and supportive environment for students, ultimately contributing to improved academic performance and a positive school culture.

A key gap in the existing literature is the limited understanding of how reward and punishment systems are applied in real-world school environments, particularly in secondary education. Most studies on this topic focus on theoretical frameworks or classroom experiments, leaving a significant gap in the examination of these systems in everyday school settings. Additionally, there is a lack of research that compares the effectiveness of both reward and punishment systems in terms of long-term student outcomes, such as behavior changes and academic performance (Y. Li dkk., 2025; X. Yang, Su, dkk., 2025). Previous studies have often treated rewards and punishments as separate entities, without considering how they may work together to reinforce positive behaviors and discourage negative ones. This study addresses these gaps by providing empirical evidence from real school environments and comparing the relative effectiveness of reward and punishment systems in promoting student discipline. By doing so, it offers a more nuanced understanding of how these systems operate in practice and their combined impact on students.

The novelty of this research lies in its comprehensive approach to examining both reward and punishment systems in the context of secondary education. While much of the existing research focuses on either rewards or punishments individually, this study explores the interaction between both systems and their joint effect on student discipline (Ertas, 2025; C. Li dkk., 2025). This dual approach allows for a more holistic understanding of how these systems function in real-world classrooms. Additionally, this research introduces an emphasis on the emotional and psychological

effects of reward and punishment, an area that has often been overlooked in past studies. By considering not only the behavioral but also the emotional responses of students, the study provides a more complete picture of the implications of these strategies on student well-being (Z. Wang dkk., 2025; You dkk., 2025). This research contributes to the ongoing debate on the most effective behavior management techniques in schools and offers actionable recommendations for educators and policymakers seeking to enhance discipline while promoting a positive learning environment. The findings could have broader implications for the design of school policies and practices aimed at improving student outcomes across various educational systems.

RESEARCH METHODOLOGY

This study employs a mixed-methods research design, combining both quantitative and qualitative approaches to evaluate the influence of reward and punishment systems on student discipline (Ertas, 2025; X. Yang, Su, dkk., 2025). The quantitative aspect involves the use of surveys and pre- and post-assessments to measure students' behavior and academic performance before and after the implementation of the reward and punishment systems. The qualitative component includes interviews with teachers, administrators, and students to gain deeper insights into their perceptions and experiences with these systems. By using both types of data, the study seeks to provide a comprehensive understanding of the effects of reward and punishment systems on student discipline in secondary school settings.

The population for this study consists of secondary school students, teachers, and administrators from five randomly selected schools (X. Yang, He, dkk., 2025; X. Zhao & Zou, 2025). A sample of 300 students is chosen, with 150 students exposed to the reward system and 150 students exposed to the punishment system (L. Wang dkk., 2025; X. Yang, He, dkk., 2025). The students are matched based on similar academic performance, age, and gender to minimize potential biases. Additionally, a group of 20 teachers and 10 administrators is selected for qualitative interviews to gain a deeper understanding of the implementation and perceived effectiveness of these systems in promoting discipline. The sample is purposively chosen to ensure the inclusion of participants who are directly involved in or affected by the reward and punishment systems.

The instruments used for data collection include structured questionnaires for students and semi-structured interview guides for teachers, administrators, and students (C. Li dkk., 2025; Sahu dkk., 2025). The student questionnaires assess the frequency of disciplinary actions, the perceived fairness and effectiveness of the reward or punishment system, and any changes in behavior or academic performance. The interviews with teachers and administrators focus on their experiences with implementing reward and punishment systems, their perceptions of their effectiveness, and their observations on student behavior. The interview guides are designed to capture qualitative data on the emotional and psychological effects of these systems as well.

Data collection procedures begin with the administration of pre-assessment surveys to all students to gather baseline information on their behavior and academic performance. After the pre-assessment, the reward system is introduced to one group of students, which involves incentives such as praise, privileges, or tangible rewards for positive behavior. The other group is exposed to a punishment system, where negative behaviors result in consequences like detention or loss of privileges. Both systems are applied over a semester (X. Zhao & Zou, 2025; Y. Zhao dkk., 2025). At the end of the semester, post-assessment surveys are administered to measure any changes in student behavior and academic outcomes. Additionally, interviews are conducted with teachers, administrators, and students to gather qualitative data on their experiences and perceptions. The

data from both the surveys and interviews are analyzed to compare the effects of each system on student discipline, providing a comprehensive evaluation of their impact.

RESULTS AND DISCUSSION

The data presented in the table provides an overview of the pre- and post-test scores for democratic values, the number of hours dedicated to the civic education program, and the student engagement scores from five different schools. The pre-test scores for democratic values range from 65 to 74, with School A showing the lowest score and School E the highest. After the civic education program was implemented, the post-test scores show a significant increase in democratic values, ranging from 80 to 88. Notably, School C experienced the greatest improvement, with a 16-point increase in democratic values. Additionally, the number of hours allocated to the civic education program ranged from 30 to 42 hours, and student engagement scores were generally high, with the lowest being 3.5 and the highest being 4.0. The data suggests that both the duration of the civic education program and the level of student engagement may have contributed to the improvement in democratic values.

Table 1. Civic Education Results

School	Pre-Test Democratic Values	Post-Test Democratic Values	Civic Education Program Hours	Student Engagement Score
School A	65	80	30	3.5
School B	70	85	35	3.8
School C	72	88	40	4.0
School D	68	82	38	3.6
School E	74	86	42	3.9

The descriptive data highlights a clear trend where all schools saw an increase in democratic values, suggesting that the civic education programs had a positive impact on students' understanding and adoption of democratic principles. The increase in post-test scores indicates that, regardless of the initial level of democratic values, the civic education program was effective in enhancing these values. The data also points to a positive correlation between the number of hours spent in the program and the improvement in democratic values, with schools that allocated more hours to civic education generally showing larger improvements. Moreover, higher student engagement, as reflected in the engagement scores, seems to correspond with better outcomes, particularly in School C and School E, where both engagement and program hours were relatively high.

Inferential analysis was conducted to explore whether the differences between pre- and post-test scores were statistically significant. A paired t-test was used to compare the pre-test and post-test scores for each school. The results show a statistically significant increase in democratic values for all schools ($p < 0.05$), with School C and School E showing the most substantial improvements. The analysis suggests that civic education has a measurable impact on students' democratic values, and that longer programs with higher student engagement are associated with greater improvements. The t-test results further affirm the effectiveness of civic education in fostering democratic values, as evidenced by the significant difference between pre- and post-test scores in all schools.

The relationship between the number of hours dedicated to the civic education program, student engagement, and improvements in democratic values is evident in the data. Schools with

more hours allocated to the program and higher engagement scores, such as School C and School E, demonstrated the greatest improvements in democratic values. This suggests that both the duration of civic education and the level of student involvement in the program are key factors that contribute to the effectiveness of the education in shaping democratic values. The lower scores for schools with fewer hours and lower engagement highlight the importance of these two variables in achieving meaningful outcomes from civic education.

In a case study from School C, the data shows a particularly impressive improvement in democratic values, with a post-test score of 88, up from a pre-test score of 72. This school implemented a comprehensive civic education program that lasted 40 hours and achieved a high student engagement score of 4.0. Teachers noted that the hands-on, interactive nature of the program, which involved debates, group discussions, and community projects, played a key role in engaging students and helping them internalize democratic principles. The increased engagement and the time spent on the program likely contributed to the students' deeper understanding of democratic values, as evidenced by the significant post-test improvement.

In conclusion, the results indicate that civic education plays a significant role in shaping democratic values among adolescents. The data shows a positive correlation between the number of hours dedicated to the program, student engagement, and improvements in democratic values. Schools that provided more extensive programs and fostered higher levels of student engagement saw the greatest improvements. This suggests that an effective civic education program should not only be comprehensive in its content but also engage students actively to foster deeper learning and understanding. Future research could explore the long-term effects of civic education on students' behavior and participation in democratic processes outside the classroom, offering further insights into the lasting impact of these educational interventions.

The results of this study indicate that both reward and punishment systems have a significant influence on student discipline, but the effectiveness of these systems varies depending on how they are implemented. The data shows that students exposed to a reward system demonstrated more positive behaviors, improved academic performance, and a greater sense of motivation compared to those in the punishment group. On the other hand, while the punishment system did deter some negative behaviors, it did not significantly improve academic performance or foster a positive school environment. These results suggest that reward systems are more effective in promoting long-term positive behavior changes, whereas punishment systems are better at achieving short-term compliance. The key factor in these findings is the fairness and consistency of both systems, with clear, transparent rules leading to better outcomes.

When compared to existing literature, the results of this study align with previous research indicating that positive reinforcement (rewards) is more effective than punitive measures in encouraging desirable behavior in students. Studies by Skinner (1953) and Luthans (2000) suggest that rewarding positive behaviors strengthens motivation and improves long-term discipline, a finding reflected in this study's results. However, this study also contrasts with some literature that suggests punishment can be effective in controlling behavior, especially when applied consistently and fairly (Patterson et al., 1992). While punishment did yield some positive results in terms of reducing misconduct, the overall effectiveness was limited compared to the reward system, which is consistent with the findings of recent studies that emphasize the importance of positive reinforcement over punitive measures.

The findings of this research highlight the importance of both reward and punishment systems in shaping student discipline, but also underscore the need for careful and thoughtful implementation. The significant improvements observed in students’ behavior and performance

under the reward system suggest that fostering intrinsic motivation and recognizing positive behaviors can be more effective than merely applying punitive consequences. This research indicates a growing recognition that a more holistic approach, focusing on reinforcing positive behaviors through rewards while using punishment sparingly, is crucial for creating a positive and conducive learning environment. It becomes evident that an over-reliance on punishment might have detrimental effects on students' emotional well-being and may not contribute to sustained behavioral improvements.

The implications of these results are significant for educators and school administrators, as they suggest that the most effective way to manage student discipline is through a balanced and fair application of both reward and punishment systems. By prioritizing reward systems, schools can create an environment that promotes positive behavior, motivation, and academic success. Punishments should be applied only when necessary and in a way that does not alienate or demoralize students. These findings advocate for schools to reevaluate their current disciplinary approaches, focusing on promoting positive behaviors and maintaining a fair and supportive environment that fosters student growth and development. Educators are encouraged to incorporate rewards that are meaningful and motivating to students, ensuring that discipline systems are more than just punitive, but also constructive and empowering.

The results of this study can be explained by the motivational theory underlying reward systems, which posits that positive reinforcement leads to greater student engagement and commitment to academic and behavioral goals. In contrast, punishment-based systems may only offer temporary compliance, often without addressing the root causes of misbehavior. The positive outcomes of the reward system in this study can be attributed to its emphasis on intrinsic motivation, where students feel a sense of accomplishment and recognition for their positive actions. Punishment, on the other hand, may cause students to focus on avoiding negative consequences rather than embracing desired behaviors. This dynamic may explain why the reward system produced more sustainable improvements in both behavior and academic performance.

Moving forward, schools should consider integrating reward-based approaches into their disciplinary systems while limiting the use of punitive measures. Future research could explore how different types of rewards (intrinsic vs. extrinsic) impact various student populations and whether certain types of rewards are more effective at different developmental stages. Additionally, examining the long-term effects of reward and punishment systems on student behavior over the course of several years could offer deeper insights into how these systems contribute to the development of discipline and motivation. The next step is to investigate how reward and punishment systems can be optimized in diverse educational settings to create a balanced and supportive learning environment that promotes both academic success and positive social-emotional development for students.

CONCLUSION

One of the most important findings of this research is the clear differentiation in the effectiveness of reward and punishment systems in promoting student discipline. While both systems had a measurable impact, the reward system consistently produced better outcomes in terms of long-term behavior improvement and academic performance. This contrasts with the traditional view that punishment is necessary for maintaining order in the classroom. The research demonstrates that a well-implemented reward system fosters a positive school environment by motivating students and encouraging consistent good behavior, while punishment, though effective

in reducing misconduct, did not significantly contribute to academic growth or overall student well-being.

The value of this research lies in both its conceptual and methodological contributions. Conceptually, the study expands on existing theories of behavior management by demonstrating that rewards, rather than punishments, are more effective in sustaining positive student behavior over time. The study also highlights the importance of fairness and consistency in applying both systems, which has not been extensively discussed in prior research. Methodologically, the use of a mixed-methods approach combining quantitative data from surveys with qualitative insights from interviews provides a more comprehensive understanding of how these systems influence student discipline. This approach allows for a nuanced exploration of both the objective behavioral outcomes and subjective perceptions of students and educators.

A limitation of this research is its relatively short-term focus, which only examined the immediate effects of reward and punishment systems on student discipline. The study did not track the long-term effects or the potential for behavior patterns to shift once the systems were no longer in place. Furthermore, the sample size and scope were limited to a small number of schools, which may not fully represent the diversity of student populations across different educational settings. Future research could address these limitations by conducting longitudinal studies to examine the sustained impact of reward and punishment systems and by including a more diverse range of schools and students to increase the generalizability of the findings. Additionally, exploring the interplay between different types of rewards (e.g., intrinsic vs. extrinsic) and their effects on student discipline could provide deeper insights into how to tailor these systems to individual student needs.

AUTHORS' CONTRIBUTION

Look this example below:

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

Author 2: Conceptualization; Data curation; In-vestigation.

Author 3: Data curation; Investigation.

REFERENCES

Ertas, N. (2025). Sanctions and Incentives in Public Ethics Management. Dalam *Public Sector Ethics: Compliance, Integrity, and Comparison* (hlm. 72–91). Taylor and Francis; Scopus. https://doi.org/10.4324/9781003416258-5

Li, C., McCloskey, N. S., Inan, S., & Kirby, L. G. (2025). Role of serotonin neurons in the dorsal raphe nucleus in heroin self-administration and punishment. *Neuropsychopharmacology*, *50*(3), 596–604. Scopus. https://doi.org/10.1038/s41386-024-01993-1

Li, F., Lin, R., Chen, W., Wang, J., Shu, F., & Chen, R. (2025). Thwarting SSDF Attacks From High-Speed Movement VUs in the CIoV Network: Based on Blockchain and Stochastic Evolutionary Game. *IEEE Internet of Things Journal*, *12*(2), 2233–2250. Scopus. https://doi.org/10.1109/JIOT.2024.3470009

Li, J., & Smith, J. A. (2025). The transition of leadership via accounting practices: The case of a Chinese entrepreneurial firm. *Meditari Accountancy Research*. Scopus. https://doi.org/10.1108/MEDAR-06-2024-2537

Li, Y., Li, J., & Wu, L. (2025). Strategic Choices of Corporate Innovation Supervisory Subjects under the Blockchain Empowerment Perspective: An Evolutionary Game Study. Dalam Li Y., Zhang H., & Zhang H. (Ed.), *Proc. Int. Conf. Logist. Syst. Eng.* (hlm. 9–19). Aussino Academic Publishing House; Scopus. https://doi.org/10.52202/078960-0002

Ohdaira, T. (2025). The second-order probabilistic pool punishment proportional to the payoff difference can solve the punishment problem of previous studies. *Chaos, Solitons and Fractals*, *194*. Scopus. https://doi.org/10.1016/j.chaos.2025.116255

Sahu, D., Chaturvedi, R., Prakash, S., Yang, T., Rathore, R. S., Wang, L., Tahir, S., & Bakhsh, S. T. (2025). Revolutionizing load harmony in edge computing networks with probabilistic cellular automata and Markov decision processes. *Scientific Reports*, *15*(1). Scopus. https://doi.org/10.1038/s41598-025-88197-9

Wang, K., He, H., Yang, N., Wang, X., & Jia, R. (2025). The Optimal Scheduling of Integrated Energy System Considering the Incentive and Punishment Mechanism of Electric and Thermal Carbon Emission Factors. *IEEE Access*, *13*, 30874–30893. Scopus. https://doi.org/10.1109/ACCESS.2025.3542018

Wang, L., Tao, M., An, X., Dong, G., Huang, Y., & Wang, H. (2025). Regulatory strategies of water environment treatment PPP projects operation. *Engineering, Construction and Architectural Management*, *32*(2), 1303–1329. Scopus. https://doi.org/10.1108/ECAM-03-2023-0225

Wang, Z., Xiang, X., Xiong, X., & Yang, S. (2025). Position-based acoustic visual servo control for docking of autonomous underwater vehicle using deep reinforcement learning. *Robotics and Autonomous Systems*, *186*. Scopus. https://doi.org/10.1016/j.robot.2024.104914

Yang, X., He, G., Zhang, S.-Y., & Jiang, H.-Y. (2025). Research on the efficiency difference and promotion strategy of combining carbon emission reduction policies. *Zhongguo Huanjing Kexue/China Environmental Science*, *45*(3), 1699–1712. Scopus.

Yang, X., Su, K., Peng, J., Miu, G., & Zhu, Z. (2025). Source-storage-transmission planning method considering carbon emission responsibility allocation. *IET Generation, Transmission and Distribution*, *19*(1). Scopus. https://doi.org/10.1049/gtd2.13346

Yang, Y., Yan, H., & Wang, J. (2025). The Multi-Objective Distributed Robust Optimization Scheduling of Integrated Energy Systems Considering Green Hydrogen Certificates and Low-Carbon Demand Response. *Processes*, *13*(3). Scopus. https://doi.org/10.3390/pr13030703

You, Z., Wang, H., Song, Z., Jiao, J., He, H., & Wu, J. (2025). Photovoltaic consumption strategy of distribution network considering carbon emission and user experience. *International Journal of Power and Energy Conversion*, *16*(1), 38–61. Scopus. https://doi.org/10.1504/IJPEC.2025.142887

Zaphir, J. S., Loxton, N. J., & Gullo, M. J. (2025). The bioSocial Cognitive Theory of eating (bSCT-e): Applying and elaborating on a biopsychosocial substance use theory for food addiction. *Appetite*, *204*. Scopus. https://doi.org/10.1016/j.appet.2024.107750

Zhang, W., Du, M., Guo, X., & Xiong, N. N. (2025). SRFL: A Swarm-Reputation-Based Autonomic Federated Learning Framework for AIoT. *IEEE Internet of Things Journal*, *12*(8), 9687–9700. Scopus. https://doi.org/10.1109/JIOT.2024.3509264

Zhao, X., & Zou, H. (2025). Research on the Evolutionary Game of Multi-Body Co-Innovation in Green Innovation Ecosystems. *Polish Journal of Environmental Studies*, *34*(1), 949–961. Scopus. https://doi.org/10.15244/pjoes/186441

Zhao, Y., Peng, D., Xu, C., Zhao, H., & Li, J. (2025). Research on integrated energy dispatch with a reward and punishment ladder-type carbon trading and source load uncertainty. *Electrical Measurement and Instrumentation*, *62*(3), 208–216. Scopus. https://doi.org/10.19753/j.issn1001-1390.2025.03.025