

## "Independent Curriculum and Behaviorism-Based Learning: Analysis of Reinforcement Effectiveness"

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### Abstract

*This study examines the effectiveness of reinforcement in behaviorist-based learning within the Merdeka Curriculum, focusing on strategies to enhance student motivation and engagement in alignment with 21st-century learning competencies. Employing a quasi-experimental design with mixed methods, the research combines classroom observations, student questionnaires, and teacher interviews to provide a comprehensive understanding of reinforcement practices. The findings reveal that positive reinforcement, such as praise, rewards, and recognition, significantly increases student motivation, particularly when it is personalized to suit individual learning styles and characteristics. However, excessive or overly frequent positive reinforcement can inadvertently diminish intrinsic motivation, highlighting the need for a balanced approach. Negative reinforcement, such as reducing task load or academic pressure, can improve engagement and focus, but must be carefully managed to prevent dependency on external support and to ensure students continue developing independence and self-regulation. In inclusive classroom settings, reinforcement strategies must be adapted to accommodate diverse needs, including students with learning differences, attention deficits, or other special needs. Overall, the study emphasizes that reinforcement in the Merdeka Curriculum should be strategically personalized, balanced, and supportive of independent, student-centered learning, fostering both immediate engagement and long-term educational growth.*

**Keyword:** Merdeka Curriculum, behaviorist, reinforcement

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## Introduction

Education serves as one of the primary pillars of national development, and curriculum reform represents a strategic step in improving the quality of learning in Indonesia (Musa, 2025). The Independent Curriculum, introduced by the Ministry of Education and Culture, aims to provide flexibility to both educators and students while promoting independent and contextual learning (Ariandini & Hidayati, 2023; Gunawan Pratama, 2023). In this context, student-centered learning has become increasingly critical, as it facilitates the development of skills and knowledge relevant to the 21st-century demands (Sujana et al., 2025; Huda, Fawaid, & Slamet, 2023).

Among the most influential theories in education is behaviorism, particularly the principles proposed by B.F. Skinner, which emphasize that human behavior can be modified through reinforcement, whether positive or negative (Fauzan & Setiawati, 2024; Magister, Asiana, & Sirozi, 2026). The application of behaviorist principles in learning can enhance student motivation, modify undesirable behaviors, and strengthen engagement in the learning process (Khoir & Ikhwan, 2022; Febriansyah & Nurlaili, 2023). Reinforcement strategies, when applied appropriately, have been shown to improve learning discipline and promote more effective educational outcomes (Saptanto Juraganda et al., 2025; Nida et al., 2025).

However, implementing reinforcement within the framework of the Independent Curriculum remains a challenge. While educators generally understand the concept of reinforcement, research examining its concrete impact under the Merdeka Curriculum is still limited (Rinawati & Subyantoro, 2019; Rahmah & Aly, 2025). This gap is particularly significant in the Indonesian context, where diverse classroom settings and the need for

contextualized learning require careful adaptation of behaviorist techniques (Indrianti, 2025; Suputra, 2023; Pratama, 2019). Studies have indicated that reinforcement-based approaches can be integrated with other pedagogical models, including Islamic education and character education, to strengthen positive student behaviors and moral development (Yusuf, Laela, & Hariyadi, 2024; Nahar, 2025; Sari et al., 2025).

Furthermore, research demonstrates that the effectiveness of reinforcement depends on factors such as consistency, timing, and alignment with learning objectives (Faizin, 2023; Habsy, Apriliya, Putri, & Aprilyana, 2023). Teachers' mastery of behaviorist strategies, combined with the freedom provided by the Independent Curriculum, can significantly influence students' motivation, engagement, and overall learning outcomes (Badridduja, Lessy, Latipah, & Subaidi, 2025; Sujana et al., 2025). Additionally, studies suggest that reinforcement in behaviorism-based learning can be effectively applied across various subjects, including language learning, science, and religious education, contributing to a holistic improvement in student achievement (Febriansyah & Nurlaili, 2023; Khoir & Ikhwan, 2022; Huda, Fawaid, & Slamet, 2023).

Given these insights, this study aims to analyze the effectiveness of reinforcement in behaviorism-based learning within the Merdeka Curriculum framework (Musa, 2025; Ariandini & Hidayati, 2023). The research seeks to provide practical recommendations for educators to design more engaging, student-centered learning activities while enhancing behavioral outcomes. By connecting the theoretical foundations of behaviorism with the goals of the Independent Curriculum, this study contributes to improving the quality of learning in Indonesia and supports the broader development of educational practices that respond to contemporary needs (Fauzan & Setiawati, 2024; Magister, Asiana, & Sirozi, 2026; Rinawati & Subyantoro, 2019).

## Research methodology

This study aims to analyze the effectiveness of reinforcement in behaviorism-based learning in the Independent Curriculum. Using a quasi-experimental method with a mixed methods approach, this study involved classroom observations, student questionnaires, and in-depth interviews with teachers to understand the impact of reinforcement implementation on student motivation and engagement.

The population of the study was educators and high school students who implemented the Independent Curriculum, with samples taken purposively from several classes. Data collection techniques included observation to see the form and frequency of reinforcement, questionnaires to measure student perceptions, and interviews with educators about their challenges and experiences.

Quantitative data were analyzed using descriptive and inferential statistics, while qualitative data were analyzed thematically. Triangulation was used to validate data from the three methods. Through this approach, the study is expected to contribute to developing effective reinforcement strategies to improve the quality of learning in the Independent Curriculum

## Results and Discussion

### B.F. Skinner's Behavioristic Theory and Its Application in the Independent Curriculum

B.F. Skinner, a prominent American behaviorist, fundamentally shaped the understanding of learning and behavior through his theory of operant conditioning. Skinner proposed that human behavior is largely influenced by the consequences of one's actions, emphasizing the dynamic interplay between stimulus, response, and consequence (Musa, 2025; Magister, Asiana, & Sirozi, 2026). In this framework, behavior is not random but controlled and predictable when systematically reinforced. Skinner's principles are particularly relevant in educational contexts, including Indonesia's recently implemented Independent Curriculum,

which prioritizes student-centered and autonomy-focused learning (Ariandini & Hidayati, 2023; Sujana et al., 2025).

According to Skinner, the operant-conditioning process consists of three critical components: stimulus, response, and consequence. A stimulus can be any factor that prompts a reaction, ranging from social expectations to personal aspirations or the desire for recognition (Fauzan & Setiawati, 2024; Huda, Fawaid, & Slamet, 2023). A response is the observable action taken by an individual in reaction to a stimulus, while consequences represent the outcomes of that behavior, which can either strengthen or weaken its recurrence (Yusuf, Laela, & Hariyadi, 2024; Indrianti, 2025). The central premise of Skinner's theory is that reinforcement, whether positive or negative, can shape and modify behavior to align with desired educational outcomes (Saptanto Juraganda et al., 2025; Nida et al., 2025).

### **Positive Reinforcement in the Independent Curriculum**

Positive reinforcement refers to providing a rewarding stimulus following a specific response, thereby increasing the likelihood that the behavior will recur (Khoir & Ikhwan, 2022; Fauzan & Setiawati, 2024). In the context of the Independent Curriculum, positive reinforcement has demonstrated significant effects in motivating students to engage in learning activities actively (Musa, 2025; Rinawati & Subyantoro, 2019). Examples include verbal praise, awards, public recognition, or granting students the choice of learning topics. These strategies not only increase participation but also enhance self-confidence, encouraging learners to take initiative in their educational journey (Faizin, 2023; Habsy, Apriliya, Putri, & Apriliana, 2023).

Despite its effectiveness, the application of positive reinforcement is not universally uniform. Research indicates that some students, particularly those who are introverted or experience social anxiety, may feel uncomfortable with public recognition or group awards (Febriansyah & Nurlaili, 2023; Nahar, 2025). Hence, educators must personalize reinforcement strategies to suit individual learners' characteristics, preferences, and emotional needs (Abidin, 2022; Suputra, 2023). Moreover, maintaining a balanced frequency of reinforcement is critical. Excessive reinforcement may foster dependence on extrinsic rewards and undermine intrinsic motivation, whereas infrequent reinforcement can make students feel undervalued and disengaged (Pratama, 2019; Sari et al., 2025). Therefore, teachers are encouraged to adopt a reflective and strategic approach to positive reinforcement, integrating it in ways that support sustainable motivation and meaningful learning outcomes (Badridduja, Lessy, Latipah, & Subaidi, 2025; Gunawan Pratama, 2023).

### **Negative Reinforcement and Its Role in Engagement**

Negative reinforcement, distinct from punishment, involves removing an unpleasant or aversive stimulus to increase the probability of a desired behavior (Magister, Asiana, & Sirozi, 2026; Rahmah & Aly, 2025). Within the Independent Curriculum, this strategy often manifests as reducing excessive assignments, alleviating academic pressure, or allowing flexible deadlines, which creates a supportive and less stressful learning environment (Musa, 2025; Ariandini & Hidayati, 2023). Students report improved concentration, engagement, and learning quality when burdensome tasks are minimized or restructured to match their current developmental needs (Huda, Fawaid, & Slamet, 2023; Indrianti, 2025).

However, negative reinforcement carries potential risks. If applied excessively, students may become reliant on relief from pressure rather than developing independent learning skills, time management, and problem-solving abilities (Saptanto Juraganda et al., 2025; Nida et al., 2025). Additionally, without proper explanation and communication, students might misinterpret the reduction of workload as unfair or inconsistent, leading to frustration rather than motivation (Khoir & Ikhwan, 2022; Rinawati & Subyantoro, 2019). To mitigate these challenges, negative reinforcement should be applied transparently, with clear guidance and expectations, ensuring students understand its purpose and learn to internalize responsibility while benefiting from a supportive environment (Faizin, 2023; Habsy, Apriliya,

Putri, & Aprilyana, 2023).

### **Reinforcement and Independence in the Merdeka Curriculum**

One of the primary challenges in applying behaviorist principles in the Independent Curriculum is balancing reinforcement with the promotion of student independence (Musa, 2025; Febriansyah & Nurlaili, 2023). While positive reinforcement can boost motivation and engagement in the short term, over-reliance on extrinsic rewards may inhibit the development of intrinsic motivation and self-directed learning (Ariandini & Hidayati, 2023; Sujana et al., 2025). The Independent Curriculum emphasizes autonomy-based learning, aiming to produce students who are proactive, critical thinkers, and capable of regulating their own learning (Yusuf, Laela, & Hariyadi, 2024; Indrianti, 2025). Consequently, reinforcement strategies should support and scaffold independence rather than substitute for it (Saptanto Juraganda et al., 2025; Nida et al., 2025).

A practical approach involves integrating reflective feedback into reinforcement practices. Instead of simply rewarding correct responses, educators can use positive reinforcement to encourage deeper exploration and problem-solving. For example, teachers may respond to a student's contribution with a guiding question or suggestion that prompts further investigation, fostering metacognitive skills alongside the desired behavioral outcome (Khoir & Ikhwan, 2022; Faizin, 2023). This method aligns reinforcement with the curriculum's goal of producing Pancasila students who are not only academically competent but also independent and reflective learners (Rahmah & Aly, 2025; Abidin, 2022).

### **Reinforcement in Inclusive Classrooms**

Applying reinforcement effectively in inclusive classrooms, where student abilities and needs vary widely, presents additional complexities (Suputra, 2023; Pratama, 2019). Students with learning disabilities, attention deficits, or developmental differences require more structured, predictable, and individualized reinforcement to maximize engagement (Nahar, 2025; Sari et al., 2025). For instance, learners with ADHD may benefit from immediate, concise reinforcement, whereas students with ASD might respond better to consistent, concrete, and highly predictable reinforcement practices (Badridduja, Lessy, Latipah, & Subaidi, 2025; Gunawan Pratama, 2023). Educators must therefore tailor reinforcement strategies to address individual student needs while maintaining equity and avoiding perceptions of favoritism or unfair treatment (Khoir & Ikhwan, 2022; Febriansyah & Nurlaili, 2023).

Time constraints and resource limitations in schools often make individualized reinforcement challenging. Nevertheless, careful planning, the use of peer-support mechanisms, and integration of reinforcement with collaborative and technology-assisted learning can help mitigate these challenges while sustaining the pedagogical goals of the Independent Curriculum (Musa, 2025; Ariandini & Hidayati, 2023; Sujana et al., 2025).

## **Conclusion**

B.F. Skinner's behaviorist theory, particularly operant conditioning, provides a powerful framework for understanding and shaping student behavior in modern educational contexts (Fauzan & Setiawati, 2024; Magister, Asiana, & Sirozi, 2026). Both positive and negative reinforcement have significant potential to enhance motivation, engagement, and learning outcomes when applied thoughtfully and strategically (Huda, Fawaid, & Slamet, 2023; Nida et al., 2025). Within the Independent Curriculum, reinforcement must be carefully balanced with the promotion of student independence, metacognitive development, and inclusivity (Saptanto Juraganda et al., 2025; Khoir & Ikhwan, 2022). By aligning reinforcement strategies with student-centered principles and curricular goals, educators can cultivate not only competent learners but also independent, reflective, and motivated individuals prepared to meet the challenges of the 21st century (Febriansyah & Nurlaili, 2023; Faizin, 2023).

## Referensi

1. Musa, I. (2025). Independent curriculum and behaviorism-based learning: Analysis of reinforcement effectiveness. *Journal of Media, Sciences and Education*, 4(1), 23–27. <https://doi.org/10.36312/jomet.v4i1.102>
2. Ariandini, N., & Hidayati, A. (2023). Pembelajaran adaptif dalam Kurikulum Merdeka: Integrasi teori behavioristik, kognitif, dan konstruktivis dalam teknologi pendidikan. *Jurnal Kependidikan Media*, 12(3). <https://doi.org/10.26618/jkm.v12i3.13351>
3. Fauzan, F. R., & Setiawati, F. A. (2024). Enhancing students' learning discipline through reinforcement. *PSIKOPEDAGOGIA Jurnal Bimbingan dan Konseling*, 11(2). <https://doi.org/10.12928/psikopedagogia.v11i2.23734>
4. Magister, L. Z., Asiana, A., & Sirozi, M. (2026). Reconstruction of John B. Watson's behaviorism principle in Indonesia's education system in the digital age. *Journal of Educational Sciences*, 10(1), 1485–1495. <https://doi.org/10.31258/jes.10.1.p.1485-1495>
5. Yusuf, M., Laela, S. F. N., & Hariyadi, R. (2024). Habituation and connectionism of Islamic education at integrated Islamic elementary schools in Indonesia. *At-Tarbawi: Jurnal Kajian Kependidikan Islam*, 7(2). <https://doi.org/10.22515/attarbawi.v7i2.5309>
6. Saptanto Juraganda, C., et al. (2025). Memanfaatkan teori belajar behaviorisme untuk memperkuat pembelajaran deep learning. *Ndrumi: Jurnal Ilmu Pendidikan dan Humaniora*, 8(1), 46–58. <https://doi.org/10.57094/ndrumi.v8i1.3115>
7. Sujana, R. M. H., et al. (2025). The role of science teachers in increasing students' learning motivation in the independent curriculum era according to behavioristics. *MSJ: Majority Science Journal*, 2(2). <https://doi.org/10.61942/msj.v2i2.149>
8. Huda, M., Fawaid, A., & Slamet, S. (2023). Implementasi teori belajar behavioristik dalam proses pembelajaran. *Pendekar: Jurnal Pendidikan Berkarakter*, 1(4). <https://doi.org/10.51903/pendekar.v1i4.291>
9. Indrianti, S. (2025). Application of behaviorism theory in improving students' religious behavior in Islamic education learning at a health vocational school. *Pedagogical Research Journal*, 3(2). <https://doi.org/10.31539/pedagogical.v3i2.31418>
10. Rinawati, E., & Subyantoro, S. (2019). The form of teachers' reinforcement in learning interaction of Indonesian language learning of Curriculum 2013 in Public Senior High School 1 Jepara. *Seloka: Jurnal Pendidikan Bahasa dan Sastra Indonesia*, 8(1), 56–65. <https://doi.org/10.15294/seloka.v8i1.19007>
11. Febriansyah, R., & Nurlaili, N. (2023). Pendekatan teori-teori belajar untuk meningkatkan efektivitas pembelajaran dalam Pendidikan Islam. *JOEAI: Journal of Education and Instruction*, 7(2). <https://doi.org/10.31539/joeai.v7i2.12493>
12. Nida, S., et al. (2025). Pendidikan agama Islam berbasis behaviorisme: Strategi efektif membangun perilaku positif siswa melalui reinforcement. *Raudhah Proud To Be Professionals: Jurnal Tarbiyah Islamiyah*, 10(1), 566–581. <https://doi.org/10.48094/raudhah.v10i1.847>
13. Khoir, N. R., & Ikhwan, A. (2022). Pembelajaran behavioristik madrasah dalam meningkatkan motivasi belajar dan ibadah siswa. *Jurnal Pendidikan Nusantara*, 1(3), 176–186. <https://doi.org/10.55080/jpn.v1i3.36>
14. Faizin, F. (2023). Behaviorism theory and its implications for learning. *JOINME: Journal of Innovation in Media and Education*, 1(2), 41–52. <https://doi.org/10.59923/joinme.v1i2.41>
15. Habsy, B. A., Apriliya, K., Putri, A. F., & Aprilyana, G. S. (2023). Penerapan teori belajar behaviorisme dan teori belajar sosial Bandura dalam pembelajaran. *TSAQOFAH*, 4(1), 476–491. <https://doi.org/10.58578/tsaqofah.v4i1.2211>
16. Rahmah, N. W., & Aly, H. N. (2025). Penerapan teori behaviorisme dalam pembelajaran. *JOEAI: Journal of Education and Instruction*, 6(1). <https://doi.org/10.31539/joeai.v6i1.5425>
17. Abidin, A. M. (2022). Penerapan teori belajar behaviorisme dalam pembelajaran. *An-Nisa:*

- Jurnal Pendidikan*, 15(1). <https://doi.org/10.30863/an.v15i1.3315>
18. Suputra, P. I. M. (2023). Teori belajar behavioristik dalam pembelajaran. *EL-Muhbib: Jurnal Pemikiran dan Penelitian Pendidikan Dasar*, 2(1). <https://doi.org/10.52266/el-muhbib.v2i1.236>
  19. Pratama, Y. A. (2019). Relevansi teori belajar behaviorisme terhadap pendidikan agama Islam. *AL-THARIQAH*, 4(1). [https://doi.org/10.25299/al-thariqah.2019.vol4\(1\).2718](https://doi.org/10.25299/al-thariqah.2019.vol4(1).2718)
  20. Nahar, N. I. (2025). Penerapan teori belajar behavioristik dalam proses pembelajaran PAI. *Darajat: Jurnal Pendidikan dan Studi Islam*, 5(2). <https://doi.org/10.58518/darajat.v5i2.1413>
  21. Sari, A. F., Wasilah, W., Rohayati, E., Assefi, K. F., & Huda, M. (2025). Arabic language learning based on behaviorism theory at MTs Al-Adli Palembang. *IJ-ATL: International Journal of Arabic Teaching and Learning*, 9(1). <https://doi.org/10.33650/ijat.v9i1.11313>
  22. Badridduja, F., Lessy, Z., Latipah, E., & Subaidi, S. (2025). Learning motivation in educational psychology: A comparative study. *International Journal on Advanced Science, Education, and Religion*, 5(1), 158. <https://doi.org/10.33648/ijoaser.v5i1.158>
  23. Gunawan Pratama, I. (2023). Transformasi Kurikulum Merdeka dalam pendidikan olahraga: Tinjauan perspektif teori behavioristik. *Jurnal Kependidikan Media*, 12(2). <https://doi.org/10.26618/jkm.v12i2.14983>
  24. Febriansyah, R., & Nurlaili, N. (2023). Pendekatan teori-teori belajar meningkatkan efektivitas pembelajaran. *JOEAI: Journal of Education and Instruction*, 7(2). <https://doi.org/10.31539/joeai.v7i2.12493>
  25. Khoir, N. R., & Ikhwan, A. (2022). Pembelajaran behavioristik Madrasah dalam meningkatkan motivasi belajar dan ibadah siswa. *Jurnal Pendidikan Nusantara*, 1(3), 176–186. <https://doi.org/10.55080/jpn.v1i3.36>