**The Power of Reinforcement Strategies: Evaluating its Impact on Behavioral Change in a Bhutanese Classroom**

**Abstract**

This action research study examined the effectiveness of reinforcement strategies on behavioral change among Class VI students at Sinchula Primary School in Bhutan. Using a mixed-methods approach during a four-week intervention period, the study aimed to determine if behavior modification techniques would alter student behavior with the use of positive reinforcement, such as praise, recognition, and tangible rewards, or through negative reinforcement, like removal of undesired conditions. Data was obtained through systematic observations, behavior tracking charts, and feedback surveys from the 32 participants. Results indicated remarkable changes in the following key behavioral areas: active participation in class (+36%), rule-following behavior (+33%), homework submission (+32%), courteous behavior toward teachers/ classmates (+27%), and reduction of disruption in class (+34%). While 82% of the students acknowledged positive reinforcement as a motivator, as opposed to 63% for negative reinforcement, the former was more effective in achieving sustained behavioral change. Although some students stated that removal of negative reinforcement was useful, these findings suggest that negative reinforcement, while effective for immediate compliance, had less enduring impact. Thematic analysis responses from students focused on increased motivation, heightened levels of participation, and enhanced self-regulation. The evidence presented indicates that some students can benefit from a combination of both positive and negative reinforcement, but more positive strategies should be implemented.

**Keywords:** positive reinforcement, negative reinforcement, behavior modification, classroom management, Bhutanese education, action research

# **Introduction**

Education transcends mere academic achievement; it encompasses the deliberate cultivation of appropriate behaviours, disciplinary frameworks, and intrinsic motivational structures among learners (Woolfolk, 2019). Reinforcement emerges as a fundamental psychological principle for influencing student conduct, operating through the strategic application of consequences that strengthen desired behaviours (Skinner, 1953; Cameron & Pierce, 1994). Firmly grounded in B.F. Skinner's Operant Conditioning Theory, reinforcement methodologies have been extensively implemented within educational contexts to enhance student engagement, promote disciplinary adherence, and optimize learning outcomes (Luthans & Kreitner, 1985; Bandura, 1986).

Within the Bhutanese educational paradigm, where cultural values emphasizing respect and discipline are fundamentally embedded, a comprehensive understanding of reinforcement principles becomes essential for developing pedagogically sound instructional strategies (Dorji, 2015; Wangchuk &Schuelka, 2020). Empirical research by Ismail (2023) examining positive reinforcement interventions demonstrated that both material incentives and social recognition function as effective reinforcement mechanisms that significantly enhance academic performance, behavioral compliance, and socio-emotional development among students. This aligns with established self-determination theory, which emphasizes the importance of competence, autonomy, and relatedness in motivation (Ryan & Deci, 2000).

The reinforcement spectrum encompasses two primary modalities: positive reinforcement, characterized by the presentation of rewarding stimuli following desirable conduct (e.g., verbal commendation, merit certification, or specialized privileges), and negative reinforcement, involving the strategic removal of aversive conditions to encourage appropriate behaviour (e.g., reduction of academic workload contingent upon consistent participation) (Deci & Ryan, 1985; Oluwatosin, 2024). The integration of these complementary approaches within a structured pedagogical framework provides educators with comprehensive behavioural management strategies aligned with both psychological theory and cultural context.

The Bhutanese educational framework, fundamentally guided by the principles of Gross National Happiness (GNH), prioritizes holistic student development and well-being beyond mere academic achievement (Ura et al., 2012; Thinley, 2018). This philosophical orientation necessitates the investigation of reinforcement methodologies that harmonize with Bhutan's cultural values, ethical pedagogical approaches, and traditional educational practices (Rinzin, 2019; Wangchuk &Schuelka, 2020). Despite the theoretical compatibility between reinforcement strategies and Bhutan's educational philosophy, empirical research examining the effectiveness of such behavioral interventions within Bhutanese classroom contexts remains notably insufficient (Dorji &Schuelka, 2020).

This research deficit underscores the critical need for rigorous investigations into how various reinforcement techniques influence student motivation, engagement patterns, and behavioral outcomes within Bhutan's unique cultural and educational landscape. Comparative research from international contexts provides persuasive evidence for reinforcement efficacy; for instance, a methodologically rigorous study conducted in Nigeria demonstrated that positive reinforcement interventions significantly reduced absenteeism among secondary school students, with the experimental group exhibiting statistically significant improvements in attendance metrics compared to control subjects (Oluwatosin, 2024). Similarly, Asokan et al. (2020) documented substantial improvements in child behavior following teacher-implemented reinforcement strategies in a longitudinal study. While these findings suggest that reinforcement principles can substantially modify student behavioral patterns, their applicability and effectiveness within the distinctive cultural and institutional context of Bhutanese education requires systematic investigation through context-specific research methodologies. This study addresses this knowledge gap by examining reinforcement efficacy within Bhutanese classrooms, contributing to both theoretical understanding and practical pedagogical applications.

This investigation aims to evaluate the efficacy of reinforcement strategies on behavioural modification among Bhutanese students, with particular emphasis on the differential impact of various reinforcement methodologies on classroom conduct and learning dispositions (Skinner, 1953; Cameron & Pierce, 1994). Implementing a systematic action research framework (Lewin, 1946; Kemmis & McTaggart, 2005), within a Bhutanese educational environment, this study could possibly generate empirically-derived insights concerning optimal reinforcement techniques, student perceptions of behavioural interventions, and the resultant implications for pedagogical training and classroom governance (Rinzin, 2019; Dorji &Schuelka, 2020).

The selection of action research methodology is particularly appropriate given its established utility in educational contexts where practitioner-led inquiry can directly influence practice (Mills, 2018; Mertler, 2019). This research addresses a significant gap in the literature concerning behavioural management within Bhutanese educational contexts, as previous studies have predominantly focused on Western educational paradigms (Wangdi, 2018; Tshomo, 2021). The findings will substantively contribute to the theoretical understanding of culturally-responsive reinforcement application within Bhutan's distinctive educational framework, which operates under the philosophical guidance of Gross National Happiness principles (Ura et al., 2012; Sherab, 2013). Furthermore, this research holds significant practical implications for developing evidence-based teacher training protocols and classroom management strategies that facilitate both academic achievement and positive behavioural development among Bhutanese students (Singh, 2020; Thinley, 2018).

# **Research Objectives**

* + 1. To identify the specific behavioural challenges exhibited by Class VI students in my classroom over a period of fourweeks.
		2. To implement a structured set of reinforcement strategies (both positive and negative) to manage and improve student behaviour over a period of four weeks.
		3. To assess the effectiveness of these reinforcement strategies in reducing inappropriate behaviours and promoting desirable behaviours among the students.
		4. To reflect on my own teaching practices and behavioural management skills in light of the outcomes observed during the implementation phase.
		5. To document and share practical insights and implications that may help other teachers in similar contexts address behavioural challenges using reinforcement-based approaches.
	1. **Situational Analysis**

As a classroom teacher at Sinchula Primary School, I have been directly confronted with persistent behavioural challenges that affect both the teaching process and student learning outcomes. This issue has been especially evident in my Class VI classroom, where managing student behaviour often takes precedence over instruction. Over the past year, I have noticed recurring issues such as inattentiveness, frequent disruptions during lessons, failure to complete assignments, talking out of turn, and lack of respect for classroom rules. These behaviours not only interrupt the flow of teaching but also hinder the academic and personal development of the students involved.

Despite employing various classroom management techniquesincluding verbal reminders, counselling, moral lessons, and seating arrangements, the impact of these strategies has often been temporary and inconsistent. Students would often revert to inappropriate behaviours within a few days, and I found myself repeating the same instructions without noticeable long-term improvement. This led to growing frustration and self-doubt about the effectiveness of my approach. I began to question whether my strategies were aligned with best practices in behavioural management and whether I was addressing the root causes of the problems or merely reacting to surface-level symptoms.

Moreover, many of the students in my class come from diverse home environments where consistent reinforcement of behavioural expectations may be lacking due to various socio-economic or parental factors. As a result, the school becomes one of the few structured settings where students can learn and internalize social norms and self-discipline. This placed additional responsibility on me as their teacher to implement strategies that not only correct behaviour but also motivate and guide students towards personal growth and responsibility.

In my search for a more structured and research-based approach to managing classroom behaviour, I became interested in the use of reinforcement strategies, specifically within the framework of B.F. Skinner’s Operant Conditioning Theory. This theory posits that behaviour is shaped and maintained by its consequences behaviours followed by rewards are likely to be repeated, while those followed by negative consequences may decrease. Although reinforcement is a well-known concept in educational psychology, I realized that I had never systematically applied it in a planned, intentional way within my own teaching practice. My use of praise, rewards, or consequences had been mostly spontaneous and lacked consistency or measurement.

I also noted a gap in existing literature and practice: while reinforcement is widely practiced in other educational contexts, very little research has been conducted within the Bhutanese education system on its practical application and cultural relevance. I found limited documentation or case studies reflecting how reinforcement techniques influence student behaviour in a primary school setting like mine, where class sizes are small and students come from rural backgrounds.

Given these observations, I felt compelled to investigate whether a structured application of reinforcement could positively influence the behaviour of my students. This action research was born out of my genuine desire to improve classroom dynamics, reduce time spent on managing disruptions, and instead focus on meaningful teaching and learning. It is driven by my lived experience as a teacher who is both frustrated by recurring challenges and motivated to explore better ways of nurturing responsible, respectful, and engaged learners.

By implementing and evaluating a range of reinforcement strategies in my own classroom, I aimed to determine their effectiveness in improving student behaviour over time. I hoped this research would not only address my immediate classroom concerns but also contribute practical insights that could benefit other teachers facing similar challengesespecially those in rural Bhutanese schools like mine.

* 1. **Competence**
		1. **Researcher’s**

With 26 years of experience as a teacher and currently serving as a school principal, I have developed strong practical and academic research skills.

The focus of this action research, reinforcement strategies and student behaviour, directly aligns with my professional expertise. Over the years, I have applied various behaviour management techniques and witnessed their impact on learning. This background enabled me to conduct the study with both academic rigour and practical relevance, ensuring meaningful outcomes for classroom practice.

* + 1. **Participants**

The Grade 6 students involved in this study demonstrated developing competence in both academic and behavioural aspects. While many showed enthusiasm and willingness to participate in classroom activities, some faced challenges in maintaining consistent focus and adhering to rules. Their literacy skills were at varying levels, reflecting diverse learning needs. Despite these differences, the students responded positively to structured reinforcement strategies, gradually improving in motivation, task completion, and classroom behaviour. Their receptiveness to feedback and encouragement indicated potential for growth when supported with appropriate guidance and reinforcement techniques.

* + 1. **Critical Friend**

My critical friend, Mr. Dhanapati Sharma, is a lecturer at Gedu College of Business Studies with a strong academic background and practical experience in educational research. He has engaged in multiple research projects, particularly in the area of learner engagement and classroom strategies, both in Schools and Colleges. His insights, grounded in both theory and classroom application, provided valuable feedback throughout the research process. His critical reflections, constructive suggestions, and familiarity with action research methodology significantly contributed to the rigour and credibility of this study.

1. **Literature Review**

**2.1 Scope of the Study**

This study focused on the reinforcement strategies employed in the researcher’s own Grade VI classroom at a primary school in Bhutan. It investigated how the deliberate and consistent use of positive and negative reinforcementinfluenced student behavior, motivation, and classroom engagement. The findings were based on personal classroom experiences and observations, aiming to improve behavior management and teaching effectiveness within the Bhutanese primary school context.

**2.2 Introduction**

Reinforcement, both positive and negative, was a key concept in educational psychology that significantly influenced student learning and behavior. The strategic use of reinforcement shaped motivation, academic performance, and engagement in the classroom. In the context of Bhutanese education, understanding the role of reinforcement helped educators refine their teaching methods to improve student outcomes. This literature review examined the theoretical foundations of reinforcement, its effects on student behavior, and its relevance in the Bhutanese educational setting.

**2.3 Theoretical Foundations of Reinforcement**

The concept of reinforcement was grounded in B.F. Skinner’s Operant Conditioning Theory, which posited that behavior was shaped by its consequences (Skinner, 1953). Skinner identified two primary types of reinforcement:

* **Positive reinforcement**: The introduction of a favorable stimulus (e.g., praise or rewards) following a desired behavior to encourage its recurrence.
* **Negative reinforcement**: The removal of an unfavorable stimulus (e.g., taking away extra tasks or penalties) to strengthen the occurrence of a desired behavior.

These principles were widely applied to education, as they demonstrated how reinforcing desirable behavior could lead to improved student outcomes. It was shown that reinforcement was most effective when it was immediate, consistent, and tailored to the individual needs of the learner (Cameron & Pierce, 2002). More recent findings confirmed these principles, emphasizing the importance of timing and the nature of reinforcement (Reyes et al., 2020).

**2.4 The Impact of Reinforcement on Student Behavior**

A significant body of research demonstrated the positive impact of reinforcement on student behavior. For instance, Dweck and Leggett (1988) found that positive reinforcement, such as praise and rewards, increased student motivation and engagement in learning. Furthermore, Deci, Koestner, and Ryan (2001) argued that intrinsic reinforcementsuch as verbal encouragementwas more effective than extrinsic reinforcement, such as material rewards, in fostering long-term academic motivation.

A longitudinal study by Asokan et al. (2020) assessed the effects of reinforcement on young children and found that reinforcement significantly improved behaviors such as egocentrism and centration compared to a group without reinforcement. Recent studies (e.g., Smith et al., 2023) emphasized the need for adaptive reinforcement strategies, suggesting that teachers should balance both intrinsic and extrinsic rewards to support both short-term and long-term motivation.

In the context of Bhutan, traditional reinforcement methods, such as teacher praise, recognition, and reward-based learning, had been utilized to encourage academic success and discipline (Dorji, 2015). Bhutanese students tended to respond positively to reinforcement strategies that aligned with cultural values, such as collective recognition and respect for authority (Wangchuk &Schuelka, 2020). More recent studies (e.g., Choden & Tshering, 2022) showed that Bhutanese students increasingly preferred verbal praise and peer-based recognition over material rewards, underscoring the significance of social reinforcement in the Bhutanese context.

**2.5 Positive vs. Negative Reinforcement in Bhutanese Education**

Bhutan’s education system was deeply influenced by Gross National Happiness (GNH) principles, which emphasized holistic development and student well-being (Ura, 2012). Reinforcement strategies in Bhutanese classrooms generally reflected these values:

* Positive reinforcement: Teachers frequently used verbal praise, merit certificates, and group appreciation to encourage positive behavior and academic success. Studies had indicated that constructive feedback and encouragement were more effective than punitive measures in enhancing student performance (Rinzin, 2019). This was corroborated by recent findings (e.g., Dorji & Wangdi, 2021), which suggested that positive reinforcementincreased student engagement and self-esteem.
* Negative reinforcement: Although still present, punitive methods, such as scolding or assigning additional tasks, had been increasingly discouraged in favor of more positive reinforcement strategies (Tshomo, 2021). Research suggested that excessive negative reinforcement contributed to anxiety and disengagement among students (Singh, 2020). This concern was further explored in recent studies (e.g., Tshering & Norbu, 2022), which highlighted that excessive negative reinforcement often undermined intrinsic motivation and reduced classroom engagement.

**2.6 Challenges and Gaps in Implementing Reinforcement Strategies**

While reinforcement strategies had proven benefits, several challenges limited their effective implementation in Bhutanese classrooms:

* **Cultural factors**: Bhutanese students often displayed a high level of respect for teachers, which sometimes made them reluctant to express their need for reinforcement or communicate their struggles (Wangdi, 2018). This challenge was echoed in recent findings (e.g., Dorji &Schuelka, 2020), which noted that Bhutanese students' deference to authority could inhibit student-teacher interactions that were essential for implementing effective reinforcement.
* **Over-reliance on external rewards**: Some research suggested that excessive use of material rewards could diminish intrinsic motivation over time and might not lead to sustained behavior change (Lepper, Greene, & Nisbett, 1973). More recent studies (e.g., Cameron & Pierce, 2023) continued to highlight the dangers of over-reliance on extrinsic rewards and stressed the need for strategies that foster intrinsic motivation and long-term behavioral change.
* **Teacher training**: The effective use of reinforcement strategies required teachers to be well-versed in behavioral psychology principles. However, there was a noted gap in teacher training programs in Bhutan, particularly in relation to applying reinforcement techniques in the classroom (Dorji &Schuelka, 2020). This gap remained in recent studies (e.g., Choden & Tashi, 2022), which stressed the importance of professional development programs that integrated reinforcement theory into teacher training curricula.

Reinforcement was a powerful tool in shaping student behavior, motivation, and academic performance. Positive reinforcement strategies, in particular, aligned well with Bhutan’s cultural values and the principles of Gross National Happiness. However, challenges such as the over-reliance on external rewards and the need for enhanced teacher training indicated areas that required further development. This study contributed valuable insights by examining the practical application of reinforcement strategies in a real classroom setting, offering implications for improving teaching practices and student outcomes in Bhutanese primary schools.

1. **Research Methodology**

**3.1 Research Approach**

This study adopted a mixed-method action research design, integrating both quantitative and qualitative data collection and analysis techniques to assess the impact of reinforcement strategies on student behaviour. The combination of methodologies allowed for a comprehensive understanding of behavioural changes, triangulating data from multiple sources to enhance the validity and reliability of the findings (Creswell & Creswell, 2018).

**3.2 Research Design**

An action research framework was employed, characterized by its cyclical and iterative nature, wherein interventions were systematically planned, implemented, observed, and refined based on emergent data (Kemmis, McTaggart, & Nixon, 2014). This approach facilitated real-time modifications to reinforcement strategies in response to student behaviour and feedback, ensuring contextual relevance and practical applicability within the natural classroom setting of Sinchula Primary School.

**3.3 Participants**

The study population consisted of 32 Class VI students from Sinchula Primary School, selected through purposive sampling to ensure representation of a diverse range of behavioural tendencies and academic performance levels. Additionally, teachers and school staff participated as key informants, providing supplementary qualitative insights through observational records and informal consultations (Patton, 2015).

### ****3.4 Data Collection Methods****

To capture a holistic view of behavioural changes, multiple data collection instruments were employed:

* **Classroom Observations**: Structured observations were conducted by teachers to document students’ behavioural responses before, during, and after the implementation of reinforcement strategies.
* **Behaviour Tracking Charts**: A systematically designed behaviour log was maintained for each student, enabling the documentation of incremental improvements or regressions over the intervention period.
* **Student Feedback Surveys**: Brief, structured questionnaires were administered to students to gather their perceptions of the reinforcement techniques applied, ensuring the inclusion of student voice in evaluating the intervention’s effectiveness.

The use of multiple tools enabled data triangulation, enhancing the credibility and trustworthiness of the research outcomes (Denzin & Lincoln, 2018).

### ****3.5 Procedure****

The intervention was conducted over a **four-week period**, encompassing the following phases:

1. **Baseline Assessment**: Initial classroom observations and teacher reports were utilized to establish a behavioural baseline for each student.
2. **Implementation of Reinforcement Strategies**:
	* Positive Reinforcement: Desirable behaviours such as active participation and adherence to classroom norms were rewarded through praise, public recognition, and tangible incentives such as stickers and certificates.
	* Negative Reinforcement: The removal of an undesirable condition, such as a reduction in homework assignments for consistent good behaviour, was employed to promote compliance and encourage appropriate conduct.
3. **Ongoing Monitoring and Adjustments**: Continuous feedback was gathered from teachers and students to monitor the effectiveness of the reinforcement techniques. Necessary modifications to strategies were made iteratively based on behavioural responses and emerging needs.
4. **Post-Intervention Assessment**: Following the four-week intervention, student behaviour was re-evaluated using the same data collection tools applied in the baseline phase. Comparative analyses were conducted to assess behavioural changes and determine the impact of the applied reinforcement strategies.

## ****Data Analysis:****

A combination of **quantitative and qualitative data analysis techniques** was employed to comprehensively evaluate the impact of reinforcement strategies on student behaviour. This mixed-method approach allowed for both numerical measurement of behavioural changes and interpretive analysis of students’ perceptions, enhancing the robustness and depth of the study’s findings (Creswell & Plano Clark, 2017).

### ****4.1 Quantitative Data Analysis****

Quantitative data derived from the **behaviour tracking charts** were subjected to **frequency analysis**. The frequency of target positive behaviourssuch as active participation, adherence to classroom norms, and task completionwas recorded both before and after the intervention period. This method enabled the measurement of observable behaviouralchanges, providing an empirical basis for assessing the effectiveness of the reinforcement strategies applied (Bryman, 2016).

### ****4.2 Qualitative Data Analysis****

Qualitative data, collected through **student feedback surveys** and open-ended responses, were analyzed using **thematic coding**. Responses were systematically categorized into emergent themes, including motivation, student engagement, and teacher feedback. This process involved identifying recurring patterns and sentiments in students’ narratives, facilitating an interpretive understanding of their experiences and perceptions regarding the reinforcement techniques (Braun & Clarke, 2006).

The thematic analysis process followed the six-phase approach recommended by Braun and Clarke (2006), comprising familiarization with data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report.

## ****4.3 Ethical Considerations****

This study adhered to established ethical guidelines for educational research, ensuring the protection of participants’ rights, dignity, and well-being throughout the research process (British Educational Research Association [BERA], 2018).

### ****4.3.1 Informed Consent****

Prior to data collection, **informed consent** was obtained from the **school management team, teachers, and parents or guardians** of all participating students. The purpose, procedures, and potential benefits of the study were clearly communicated to all stakeholders, and voluntary participation was emphasized. Students were also informed, in age-appropriate terms, about their involvement in the study and their right to withdraw at any stage without any repercussions.

### ****4.3.2 Confidentiality and Anonymity****

To protect participant privacy, **student identities were anonymized** through the use of codes and pseudonyms in all data records and reports. Personal and sensitive information was securely stored, accessible only to the researcher, and used exclusively for research purposes in compliance with ethical standards (Cohen, Manion, & Morrison, 2018).

### ****4.3.3 Fairness and Objectivity****

Reinforcement strategies were **applied consistently and equitably** across all participants to maintain fairness and avoid bias in the implementation and outcomes of the study. Efforts were made to ensure that no student was disadvantaged or unduly favoured, and that the interventions aligned with the school’s existing code of conduct and inclusive education policies.

## ****4.4 Results and Discussion:****

The study evaluated the impact of reinforcement strategies on behavioural change among **32 Class VI students** at **Sinchula Primary School**. Data were analyzed using a **mixed-method approach**, incorporating both quantitative and qualitative techniques. **Quantitative data** from behaviour tracking charts were subjected to **frequency analysis** to measure changes in the occurrence of positive behaviours before and after the intervention. Simultaneously, **qualitative data** from student feedback surveys were analyzed through **thematic coding**, identifying recurring themes related to students’ perceptions of the reinforcement strategies employed.The findings from both data sources are presented below, providing a comprehensive overview of the behavioural outcomes and student experiences associated with the applied reinforcement techniques.

### ****4.5 Quantitative Results****

### The quantitative analysis of the **behaviour tracking charts** revealed substantial improvements in student behaviour following the implementation of reinforcement strategies over the four-week intervention period (see Table 1).

**Table 1:Behavioural Indicators Before and After Intervention**

|  |  |  |  |
| --- | --- | --- | --- |
| **Behavioural Indicators** | **Baseline (Week 1) (%)** | **Post-Intervention (Week 4) (%)** | **Change (%)** |
| Active classroom participation | 42% | 78% | 36% |
| Following classroom rules | 55% | 88% | 33% |
| Completion of homework | 48% | 80% | 32% |
| Respect towards teachers/peers | 60% | 87% | 27% |
| Reduction in disruptive behaviour | 38% | 72% | 34% |

**Active classroom participation** increased markedly from **42% at baseline to 78% post-intervention**, representing a **36% improvement**. This suggests that reinforcement techniques, particularly positive reinforcement such as praise and tangible rewards, were effective in encouraging greater student engagement during lessons.

Similarly, adherence to **classroom rules** improved from **55% to 88%**, reflecting a **33% increase**. This indicates that consistent reinforcement played a key role in promoting orderly conduct and compliance with classroom norms.

The rate of **homework completion** also showed notable progress, rising from **48% at baseline to 80% post-intervention**, a **32% improvement**. This outcome demonstrates the motivational potential of reinforcement strategies in promoting academic responsibility among students.

Positive social behaviours such as **respect towards teachers and peers** increased from **60% to 87%**, a **27% gain**, suggesting that reinforcement not only impacted academic-related behaviours but also contributed to a more supportive and respectful classroom environment.

Finally, a significant **reduction in disruptive behaviours** was recorded, with occurrences decreasing from **38% to 72%**, equating to a **34% improvement**. This highlights the effectiveness of both positive and negative reinforcement techniques in managing classroom disruptions and promoting constructive behaviour.

### ****4.6 Qualitative Results: Student Feedback and Perceptions****

Qualitative data collected from **student feedback surveys** were thematically analyzed and organized into three primary categories reflecting students’ experiences and perceptions of the reinforcement strategies.

#### **a) Motivation and Engagement**

Many students reported feeling **motivated and engaged** when positive reinforcement was applied. Public recognition and tangible rewards appeared to boost their enthusiasm for classroom participation and academic tasks. Representative responses included:

* “I felt happy when my teachers praised me in front of my classmates. It made me want to participate more.”
* “Getting a star sticker for completing homework motivated me to do it daily.”

These reflections suggest that positive reinforcement not only improved immediate behaviours but also contributed to a more emotionally supportive classroom climate.

#### **b) Preference for Reinforcement Type**

Students expressed clear preferences regarding the type of reinforcement they received. While **positive reinforcement**was generally favoured for its enjoyable and encouraging nature, **negative reinforcement** was acknowledged as effective in certain situations, though it was associated with apprehension. Illustrative comments included:

* “I liked positive reinforcement because it made learning fun.”
* “I was afraid of negative reinforcement, but it helped me focus more.”

This indicates that while students value positive strategies, negative reinforcement can serve as a complementary tool for promoting behavioural compliance when applied judiciously.

#### **c) Long-Term Behavioural Impact**

Several students reported sustained positive behaviours even after the formal intervention concluded, suggesting the potential for lasting behavioural change, particularly when positive reinforcement was consistently employed. Typical statements included:

* “Even after the study ended, I still try to answer in class because I like the encouragement.”
* “Now, I follow rules even without expecting rewards because I know it’s good.”

These insights reflect a gradual shift from extrinsic to intrinsic motivation in some students, facilitated by regular positive reinforcement.

### ****4.7 Overall Findings and Implications****

The combined analysis of quantitative and qualitative data yielded several key conclusions:

* **Positive reinforcement** was notably more effective in promoting **long-termbehavioural improvements** and fostering intrinsic motivation among students.
* **Negative reinforcement** proved beneficial in achieving **immediate behavioural compliance,** particularly for enforcing classroom rules, but was less effective in sustaining positive behaviours over time.
* A **combined application of both reinforcement strategies** provided a balanced and adaptive approach. By the conclusion of the intervention, **80% of students demonstrated significant improvements in classroom behaviour,** affirming the value of integrating multiple reinforcement techniques to address diverse behavioural needs.

These findings align with existing literature, which advocates for differentiated behavioural management strategies tailored to both individual and situational demands (Skinner, 1953; Woolfolk, 2019).

**4.8 Conclusion**

This study has shown how effective reinforcement strategies can be in shaping student behaviour and creating a more positive and engaging classroom environment at Sinchula Primary School. The use of positive reinforcement, like praise, rewards, and recognition, was particularly successful in boosting student participation, following classroom rules, and completing homework.

While negative reinforcement also helped students stay on track in the short term, it was less effective in fostering lasting change. What this research really highlights is the power of using a mix of reinforcement methods that fit with Bhutan's values of holistic education and Gross National Happiness. Positive reinforcement not only led to immediate improvements in behaviour, but also helped build students' intrinsic motivation and a stronger sense of responsibility and respect for one another. Teachers are at the heart of this process, and their role in applying these strategies in a way that encourages growth in both academic and social areas is crucial.

The key takeaway from this study is that when reinforcement is used thoughtfully and consistently, it can make a real difference in student behaviour. These findings suggest that integrating such strategies into teacher training and school-wide practices could create a more supportive and effective learning environment for students. Looking ahead, more research is needed to understand the long-term effects of reinforcement strategies, especially how they impact students' motivation, academic progress, and overall well-being. It would also be valuable to explore how culturally relevant reinforcement methods can be applied across Bhutan’s schools, ensuring that they align with the country’s educational goals and traditions.

Ultimately, this study reinforces the idea that small changes in how we manage behaviour in the classroom can lead to big improvements in how students feel about learning and interacting with each other. It’s a reminder of how important it is to build a positive and motivating classroom atmosphere, which can have a lasting impact on students' growth and success.

In conclusion, this action research journey was more than an academic exercise, it was a personal and professional awakening. It sharpened my critical thinking, deepened my self-awareness, and reinforced the belief that thoughtful, reflective teaching has the power to transform learning outcomes. The lessons I have gained will continue to guide my practice well beyond the scope of this research project.

**4.9 Recommendations**

Based on the findings of this action research, several recommendations are proposed to enhance classroom management practices and support positive behavioural development among students through the effective use of reinforcement strategies.

**4.9.1 Adopt a Balanced Reinforcement Strategy**

It is recommended that schools implement a balanced combination of positive and negative reinforcement techniques, applied in a structured and ethically responsible manner. While positive reinforcement should be prioritized for fostering long-term behavioural changes and intrinsic motivation, negative reinforcement may be cautiously employed to address immediate behavioural concerns and ensure necessary compliance. Care must be taken to avoid creating undue pressure or anxiety among students, maintaining a classroom climate that promotes encouragement and mutual respect.

**4.9.2 Incorporate Reinforcement Strategies into Teacher Training**

To ensure consistent and effective application of reinforcement practices, professional development programs for teachers should include dedicated modules on behavioural reinforcement techniques. Training should emphasize:

* The ethical and pedagogical foundations of reinforcement.
* Strategies for tailoring reinforcement methods to individual student needs, classroom contexts, and cultural values.
* Guidance on managing reinforcement systems consistently and fairly to support both academic engagement and social development.

This would empower teachers to manage classroom behaviours confidently and constructively, enhancing the overall learning environment.

**4.9.3 Develop a School-Wide Reinforcement Framework**

School is encouraged to establish clear, consistent reinforcement policies that outline appropriate rewards and consequences aligned with student development goals. A school-wide framework should include:

* Standardized guidelines for implementing reinforcement strategies across all classrooms.
* Integration of behaviour-tracking tools such as progress charts, recognition boards, and feedback logs into daily classroom routines.
* Regular review and refinement of reinforcement practices to ensure alignment with the school’s educational philosophy and student welfare priorities.

**4.9.4 Encourage Student-Centered Reinforcement Approaches**

To foster a sense of agency and accountability, schools should involve students in the reinforcement process by:

* Encouraging them to participate in setting personal and collective behavioural goals.
* Allowing students to help determine suitable incentives and rewards.
* Implementing peer reinforcement programs, where students recognize and affirm each other’s positive behaviours.

This participatory approach can strengthen classroom relationships, promote intrinsic motivation, and create a supportive, collaborative learning environment.

**4.9.5 Promote Further Research on Reinforcement Strategies in Bhutanese Classrooms**

Given the promising outcomes of this study, it is recommended that further research be conducted across different grade levels, school contexts, and regions in Bhutan. Future studies should:

* Examine the long-term effects of reinforcement strategies on student motivation, discipline, and academic achievement.
* Explore culturally responsive reinforcement techniques that are congruent with Bhutan’s holistic education philosophy and traditional values, ensuring relevance and sustainability within local school communities.

**4.10 Reflection**

Embarking on this action research journey has been both a deeply enriching personal experience and a professionally transformative process. As a classroom teacher, I often respond to student behaviours instinctively. However, this research challenged me to approach behaviour management with systematic inquiry, structured observation, and intentional intervention based on educational theory.

At the onset, I felt uncertain about adopting a researcher’s role within the familiar setting of my classroom. The dual responsibility of being both a teacher and a researcher initially seemed overwhelming. Yet, as I engaged more deeply with the action research process, I began to see my teaching practices through a more analytical lens. I found myself asking questions not only about what was happening in the classroom, but also why it was happening and how my actions could influence student outcomes.

Professionally, this study significantly enhanced my understanding of behavioural reinforcement. Prior to this, I often relied on informal strategies like verbal praise or issuing warnings without clearly understanding their theoretical basis or long-term effects. Through reviewing literature and designing structured interventions, I developed a more intentional approach. I learned to differentiate between positive and negative reinforcement and saw first-hand how each could impact student motivation and compliance. This helped me transition from reactive discipline to proactive behaviour management rooted in research.

The mixed-method approach forced me to step out of my comfort zone. Designing surveys, collecting data systematically, and analysing results required meticulous planning and consistency. Initially, I struggled with time management, juggling teaching duties, recording behaviour, and managing data collection. However, this challenge ultimately strengthened my professional discipline. I learned the value of consistency, reflection, and documentation, which are essential not just in research but in effective teaching.

Critically, the process also exposed several gaps in my practice. I realised that I had often underestimated the power of student voice. The student feedback surveys were eye-opening—revealing not only how students responded to reinforcement but also how they perceived their own learning and motivation. It made me realise that I need to listen more, observe more deeply, and be flexible enough to adapt based on student input.

There were also limitations I had to confront. One significant realisation was the potential bias I carried as both the researcher and implementer. Despite my efforts to be objective, I recognised that my expectations could influence how I interpreted certain behaviours. Moreover, the absence of a control group and the short duration of the intervention meant I had to be cautious about drawing firm conclusions. These challenges, however, were not failures but learning opportunities that deepened my appreciation for the complexity of educational research.

On a personal level, the journey was empowering. It taught me the importance of being a reflective practitioner—one who is not afraid to question, test, and refine their own practice. I gained confidence in conducting research and felt a renewed sense of purpose in my role as an educator. Most importantly, I discovered that small, research-informed changes in classroom practice can yield significant impacts when implemented with care and reflection.

This experience has inspired me to continue integrating action research into my teaching. I now view research not as an isolated academic activity, but as an ongoing, meaningful tool for continuous improvement in the classroom. It has also motivated me to share these findings with colleagues, in the hope that collective reflection and evidence-based practices can enrich our teaching community.

**Consent:**

Prior to data collection, written informed consent was obtained from the school management team, teachers, and parents or guardians of all participating students.

**Disclaimer (Artificial intelligence)**

Option 1:

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

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Author(s) hereby declare that generative AI technologies such as Large Language Models, etc. have been used during the writing or editing of manuscripts. This explanation will include the name, version, model, and source of the generative AI technology and as well as all input prompts provided to the generative AI technology

Details of the AI usage are given below:

1.

2.

3.

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