ISSN (Print): 2959-4391 ISSN (Online): 2959-4405

JOURNAL OF SOCIAL SCIENCES DEVELOPMENT

www.jssd.org.pk editor@jssd.org.pk

TEACHERS' AWARENESS AND IMPLEMENTATION OF BLOOM'S TAXONOMY: REWARD STRATEGIES FOR STUDENTS' ATTENDANCE AND COGNITIVE OUTCOMES IN PRIMARY CLASSROOMS

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KEYWORDS

Teachers awareness, Bloom taxonomy, Reward Strategies, Cognitive outcome

ARTICLE HISTORY

Date of Submission: 22-04-2026
Date of Acceptance: 26-05-2026
Date of Publication: 29-05-2026

ABSTRACT

This study examined teachers' awareness and implementation of Bloom's Taxonomy and their use of reward strategies in relation to students' attendance and cognitive development in primary classrooms. The nature of the study is quantitative and descriptive design included 120 primary school teachers (60 male and 60 female) selected from 25 government primary schools in Lower Chitral through random sampling techniques. Data were collected using a self-developed questionnaire based on a five-point Likert scale and analyzed using SPSS version 24. Findings indicated that 63.8% respondents agreed with statements related to teachers' awareness of Bloom's Taxonomy. Teachers also reported implementing Bloom's Taxonomy in classroom practices, with mean scores ranging from 3.66 to 4.03. Regarding reward strategies, most respondents expressed agreement that rewards support student attendance and reduce absenteeism. Reward strategies related to cognitive development also received positive responses, with mean scores ranging from 4.02 to 4.20. The findings suggest that teachers perceive Bloom's Taxonomy-aligned reward strategies positively in relation to students' attendance, interest, engagement, and cognitive development. The study recommends professional training and practical guidance for teachers on integrating Bloom's Taxonomy and appropriate reward strategies in primary classroom practices.

2026 Journal of Social Sciences Development

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DOI https://doi.org/10.59075/jssd.v5i3.466

Volume/Issue 5(3), 2026, 248-260

Introduction

Primary education is the foundation of lifelong learning. The earliest stage of education, particularly in primary school, is vital for influencing a child's study habits, attendance, behaviours, and cognitive development. At this point, students acquire not only foundational education and numeracy competencies but also enhance critical thinking skills that lead them on subsequent academic paths. Students cannot succeed academically or acquire higher-order cognitive skills without consistent attendance, which is still extremely low (Sekiwake et al., 2020).

Thus, establishing a solid educational foundation requires raising pupils' daily attendance and cognitive performance in elementary school. In the Global North, school absenteeism is still a problem because studies have shown a link between academic success and prospects (Mills et al., 2024). Therefore, student absenteeism is a major problem worldwide. Poor social development, academic challenges, and a high chance of school dropout are all consequences of irregular attendance. For students to succeed, it is crucial to address attendance issues at the primary level (Marco et al., 2025).

The student's brain is poor at organizing and comprehending new information when they miss school. As a result, their cognitive development is also impacted. However, Bloom's Taxonomy offers a helpful framework for making things better. Benjamin Bloom created this taxonomy in 1956, which divides learning goals into six cognitive levels: recall, comprehension, application, analysis, evaluation, and creation. Bloom's taxonomy is essential to the development of learning objectives, curriculum design, and student achievement evaluation (Petrenko et al., 2026).

The promotion of basic education in Pakistan is restricted by two main issues, the most important of which is the low attendance rate and the physical presence of students rather than mental activity. Two important challenges impede the promotion of primary education in Pakistan, the most prominent of which are the low rate of student attendance and irregular presence. Regular absences cause kids to miss crucial lessons and lag behind their colleagues, which has a detrimental impact on their academic achievement and general learning. Poor cognitive outcomes are the second problem. The main focus of instructional strategies in many primary schools is memorization without comprehension. Because of this, students are able to recall information but struggle to understand concepts, apply knowledge in new situations, solve problems, or come up with fresh ideas. Primary students' learning outcomes will improve if we create activities based on Bloom's Taxonomy's six levels (Adijaya et al., 2023).

According to earlier research, learning outcomes are improved when instructional activities are in line with Bloom's Taxonomy. However, combining reward strategies with Bloom's Taxonomy may enhance students' attendance at school, especially in primary school, as well as their cognitive outcomes. Their ability to think critically and solve real-world problems is hampered by this. Using incentives and positive reinforcement is one very successful strategy. When used properly, rewards can increase students' enthusiasm to participate fully in class activities and attend school regularly. However, simple tasks like finishing homework or upholding discipline are frequently rewarded with traditional systems. These incentives do not always promote critical thinking or intellectual development. Reward schemes that are in line with these six levels motivate students to think more critically and go beyond memorization. For instance, a student can get a "Creator Award" for coming up with an original story, and a "Thinker Badge" for analyzing two characters. These incentives encourage intellectual growth in all primary grades while also acknowledging effort. Recalling, comprehending, applying, analyzing, evaluating, and creating are Bloom's six levels. In this aids Instructor in creating exercises and questions that assess each child's cognitive development (Huseynov, 2026).

Deeper comprehension and critical thinking are not captured by traditional primary school assessments, which only measure surface recall. Bloom's Taxonomy offers a framework for creating tasks that capture the entire range of cognitive development. However, Bloom's Taxonomy has primarily been applied to curriculum and assessment in previous research. This study attempts to address the paucity of research on the use of Bloom's Taxonomy-aligned reward strategies to concurrently improve attendance and cognitive outcomes in primary classrooms. Research on the application of reward strategies aligned with Bloom's Taxonomy is scarce in Pakistan, particularly in public primary schools. The majority of earlier research focuses either on academic performance or attendance independently.

Research on whether reward strategies directly related to cognitive levels can concurrently improve daily attendance and cognitive outcomes among primary school students is conspicuously lacking. Thus, the purpose of this study is to examine how reward strategies that are in line with Bloom's Taxonomy can improve attendance and cognitive outcomes in elementary school settings. Research on whether reward strategies directly related to cognitive levels can concurrently improve daily attendance and cognitive outcomes among primary school students is conspicuously lacking. Thus, the purpose of this study is to examine how reward strategies that are in line with Bloom's Taxonomy can improve attendance and cognitive outcomes in elementary school settings. The results of this study could aid educators, school administrators, and legislators in creating more successful motivational initiatives that promote student attendance and high-quality instruction in Primary school.

Research Objectives

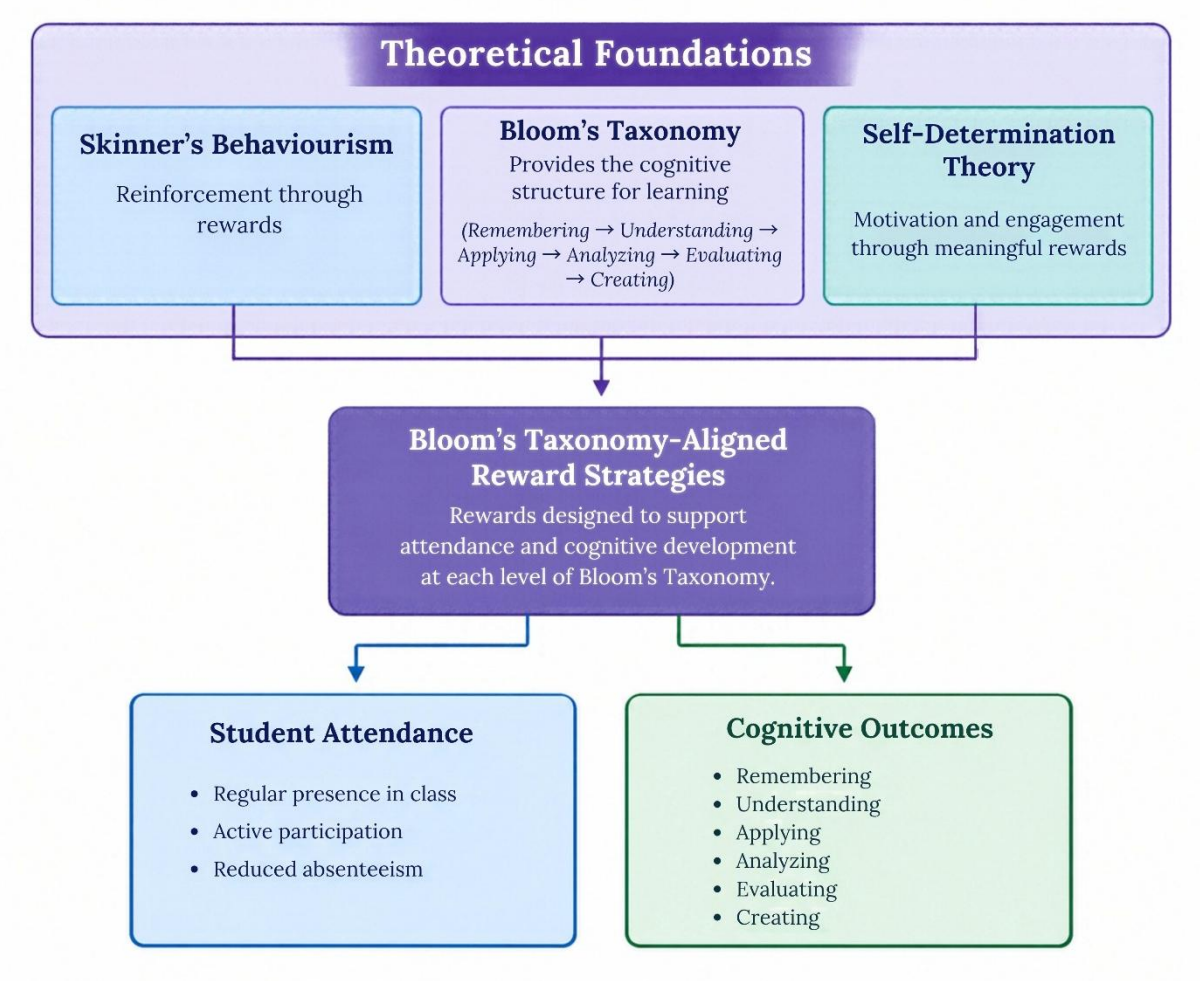
- To investigate teachers' awareness regarding Bloom's taxonomy in primary schools.
- To identify how teachers implement bloom's taxonomy in their classroom.
- To investigate whether the teacher currently uses reward strategies to improve students' attendance
- Research Hypothesis
- Primary school teachers have a significant level of awareness regarding Bloom's Taxonomy.
- Teachers widely use Bloom's Taxonomy in their classrooms.
- To improve students' attendance and learning outcomes, teachers currently use reward strategies.

Material and Method

The nature of the research is quantitative with a descriptive research design. A quantitative method is used because the study aims to collect numerical data from primary school teachers through a questionnaire. The mean, standard deviation, and percentages were used to describe the data, while the Chi-square test was used to examine the relationship between the teachers and

their responses to the statements. A descriptive design is suitable for this study; it helps to explore the current perceptions, practices, and challenges regarding bloom's taxonomy-aligned reward strategies for improving attendance and cognitive outcomes in primary schools.

Theoretical Framework of the study



This framework provides a theoretical basis for investigating teachers' knowledge and use of Bloom's Taxonomy, their use of reward techniques to promote student attendance, and cognitive development.

Population

The population of the study consists of all government and private primary schools in Lower District Chitral, including both male and female teachers.

Sample

From the population, 120 primary school teachers were chosen as a sample. To ensure gender equality, 60 males and 60 females' primary school were selected through random sampling. The sample was selected using random sampling. In this process, 25 government primary schools were randomly picked from various tehsils in District Chitral, including Chitral town.

Research Tool

A self-developed questionnaire was used as a data collection tool for the present study. The questionnaire was designed on a five-point Likert scale, and the five-point Likert scale was categorized as (Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree). All the statements were related to the objectives of the study.

Data Collection Procedure

The data for the present study were collected through an online Solow data collection technique. The Google Form link was shared with all the relevant participants, and the purpose of the study was fully explained to them. No personal information was collected from the participants, and their participation was entirely based on voluntary consent.

Validity of the Tools

The questionnaire was developed based on the research purpose and relevant literature on Bloom's Taxonomy. To ensure validity, the research supervisor and other relevant experts in the educational field reviewed the statements; important changes were made based on their feedback.

Data Analysis

The collected data were analyzed using Statistical Package for the Social Sciences (SPSS), Version 24 and converted it into frequency and percentage.

Table 1: Teachers' Awareness regarding Bloom's Taxonomy

Statement	SD	D	N	A	SA	P-value
Teachers are aware of the cognitive domain.	13.4%	21.8%	21.0%	27.7%	16.0%	.004
Teachers understand LO thinking and HO thinking	5.0%	16.8%	16.8%	35.3 %	26.1%	.000
Bloom's Taxonomy is essential for students	6.7%	5.0%	4.2%	22.7%	61.3%	.003
Teacher attends training on Bloom's taxonomy	5.9%	7.6%	14.3%	26.9 %	45.4%	.001
Bloom's Taxonomy can help to develop a lesson plan.	5.0%	2.5%	7.6%	33.6 %	51.3%	.000

Note: SD: strongly disagree, D: Disagree, N: Neutral, A: Agree, SA: Strongly Agree

Graph 1

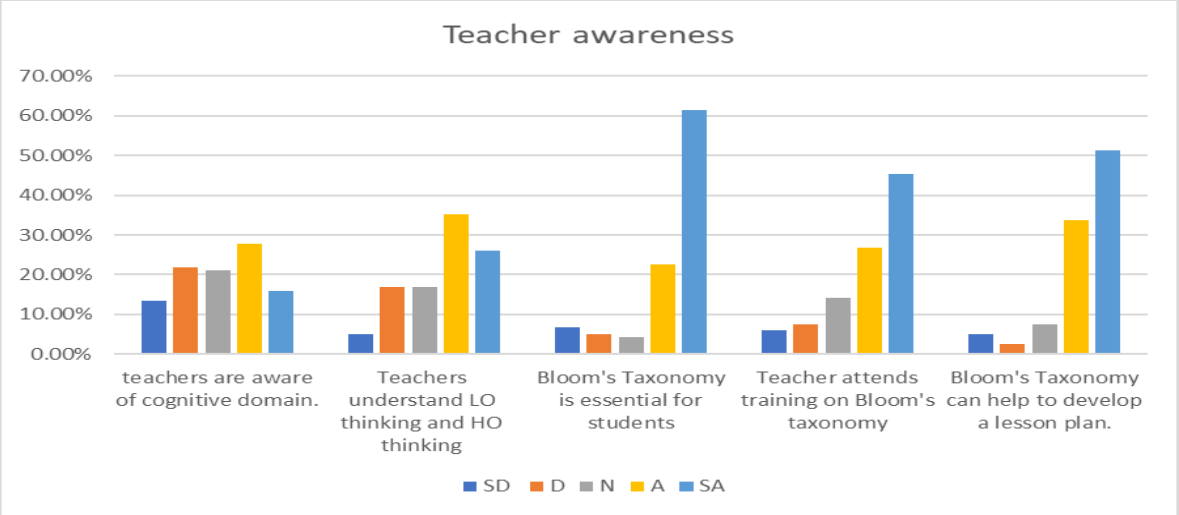


Table 1 shows the responses of the participants regarding the statement that primary school teachers are fully aware of Bloom's Taxonomy of the cognitive domain. The analysis shows that 43.7% of the respondents agreed with the statement, while 35.2% disagreed. However, 21.0% of the respondents remained unclear. The P-value of .004 indicates that there is a statistically significant relationship between the respondents and the statements.

Statement 2 illustrates the participants' responses to the statement that teachers understand the difference between lower-order thinking and higher-order thinking. The results show that 61.4% of the respondents agreed with the statement, while 21.8% disagreed. Still, 16.8% of the respondents stayed undecided. The p-value of .000 is less than the significance level of .05, indicating a statistically significant relationship between the variables.

Statement 3 shows responses to the statement that Bloom's taxonomy is essential for the student's cognitive development. The outcomes reveal that 84.0% of the respondents agreed with the statement, although 11.7% opposed it. But 4.2% of the respondents remained in doubt. The p-value of .003 indicates a statistically significant difference in respondents' responses to the statements ($p < .05$).

Statement 4 describes the responses of the participants to the statement that Knowledge about Bloom's Taxonomy is provided during teacher training programs. The data analysis finds that 45.4% of the respondents agree with the statement and 7.6% disagree, while 14.3% of respondents remained undecided. The p-value of .001 shows that there is a significant correlation between the respondents' responses to the statements.

Statement 5 proves that responses to the statement " Better lesson plans can be developed with the help of Bloom's Taxonomy; 84.9% of participants are fully aware of the statement; on the

other hand, 7.5% are not aware, while 7.6% of respondents are unsure. The p-value less than .005 describes the statistical relation found between the teachers and their responses.

Table 2: Implementation of Bloom's Taxonomy

Statement	Mean	Std.
Daily lesson plans are aligned with Bloom's taxonomy.	3.78	1.14
Questions on Bloom's Taxonomy are asked regularly.	3.72	1.03
Students have the opportunity to participate.	4.03	1.08
Students are engaged in different activities.	3.88	1.15
Bloom's Taxonomy is used for assessment.	3.66	1.16

Graph 2

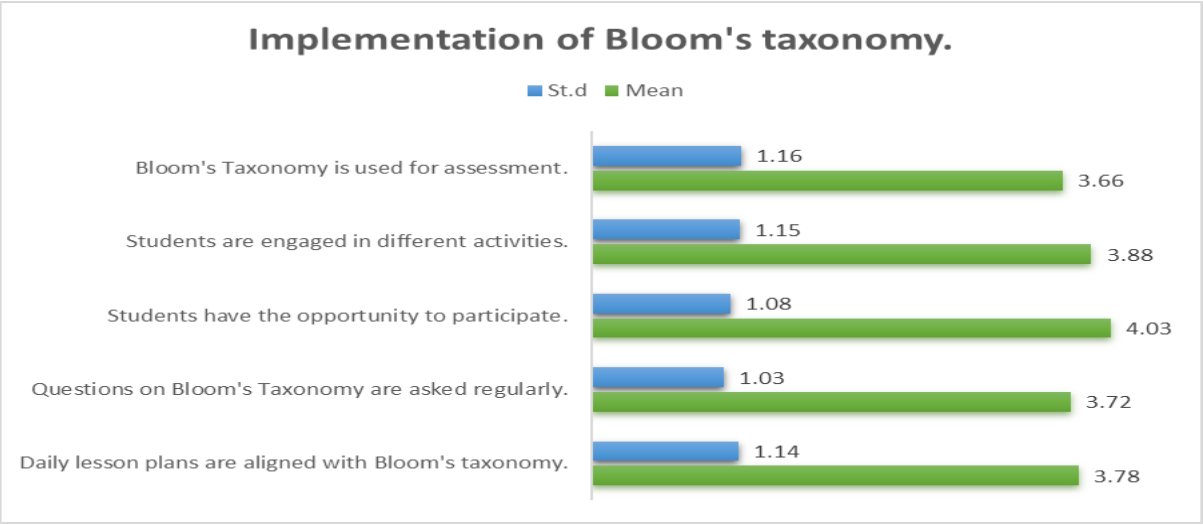


Table 2 shows that the mean value of 3.78 indicates that teacher responses were beyond the central point and leaned towards agreement. The standard deviation of 1.4 shows noticeable differences in perception, meaning that the responses of the teachers vary in how closely they use bloom's taxonomy when preparing daily lesson plans.

Statement 2 reveals a mean value of 3.72, explaining that teachers' responses were above the midpoint and tended toward agreement. The standard deviation of 1.03 indicates an appreciable variability in the responses, meaning that instructors varied in their views regarding how consistently teachers utilize questions based on different levels of Bloom's Taxonomy in the classroom.

Statement 3 describes a mean value of 4.03, illustrating that schoolteachers' responses were higher than the middle point and showed concurrence. The standard deviation of 1.08 demonstrates a considerable dispersion, suggesting that respondents agreed that teachers provide

students with opportunities to answer according to their own understanding and to apply knowledge practically.

Statement 4 displays a mean value of 3.88, indicating that respondents' perceptions were above the average and showed understanding. The standard deviation of 1.15 signifies a considerable variation in concepts, suggesting that teachers engage students in classroom activities such as critical thinking, comparing, and creating something new.

Statement 5 establishes that the mean value of 3.66 indicates that instructors' responses were above the medium and reflected agreement. The standard deviation of 1.16 reveals a prominent variation, indicating that respondents assessed students according to the levels of Bloom's Taxonomy.

Table 3: Reward strategies to improve students' attendance

Statement	SD	D	N	A	SA	P-value
Reward strategies are used to improve attendance.	10.1%	2.5%	11.8%	26.9 %	48.7%	.003
Giving rewards can reduce absenteeism.	4.2%	6.7%	6.7%	27.7%	54.6 %	.002
Current reward strategies are effective.	2.5%	6.7%	14.3%	35.3 %	41.2%	.000
Students are motivated to receive rewards.	5%	10.1%	10.1%	31.9%	42.9 %	.000
Attendance rate improves due to the rewards system.	4.2%	5.9%	6.7%	34.5 %	48.7%	.006

Graph 3

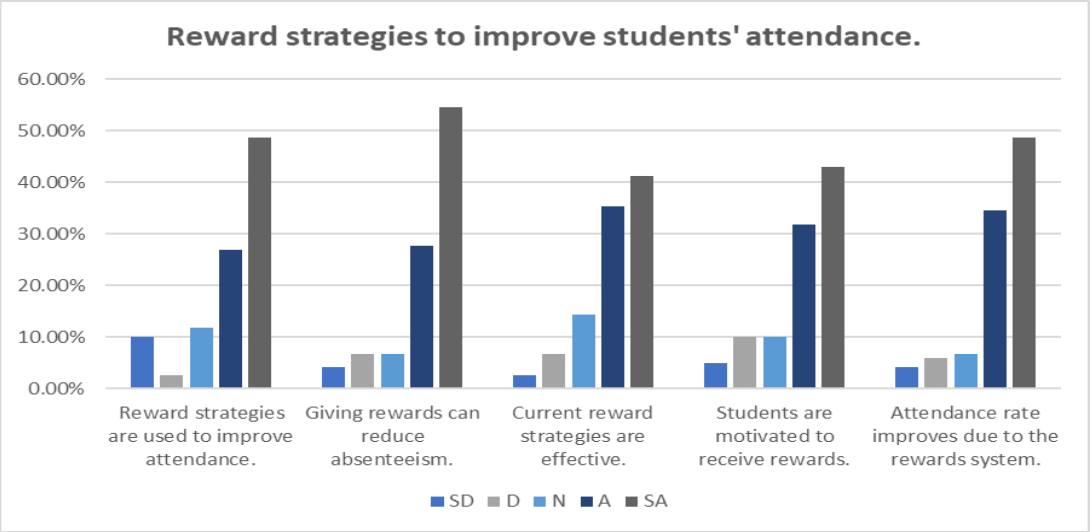


Table 3 responses of the participants regarding the statement that Reward strategies such as praise, stars, and positive reinforcement are used to improve students' daily attendance. The analysis shows that 75.6 % of the respondents agree with the statement, while 12.6% oppose. However, 11.8% of the respondents remain undecided. The p-value of .003 indicates a statistically significant difference in respondents' responses to the statements ($p < .05$).

Statement 2 illustrates the participants' responses to the statement that teachers giving rewards for regular attendance reduces absenteeism among students. The results show that 82.3% of the respondents agreed with the statement, while 10.9% disagreed, and 6.7% of the respondents remained undecided. The p-value of .002 shows that there is a significant correlation between the respondents' responses to the statements.

Statement 3 shows responses to the statement that current reward strategies are effective in increasing students' attendance. The data analysis finds that 76.5% of the respondents agree with the statement, 9.2% disagree, while 14.3% are doubtful. The p-value less than .000 describes the statistical relationship found between the teachers and their responses.

Statement 4 describes the responses of the participants to the statement that students are motivated to attend school regularly to receive rewards. The outcomes reveal that 74.8% of the respondents agree with the statement and 15.1% disagree, while 10.1% of respondents remained undecided. The p-value of .000 is less than the significance level of .005, indicating a statistically significant relationship between the variables.

Statement 5 shows responses to the statement that the use of reward strategies improves the overall attendance rate in the class. The primary school teacher: 83.2% use reward strategies; on the other hand, 10.1% of primary teachers do not use them, while 6.7% of teachers are unsure about the statement. The p-value of .006 is greater than the significance level of .005, indicating that there is no statistically significant relationship between the respondents and the statements.

Table 4: Reward strategies to improve cognitive development

Statement	Mean	S.td
Rewards are given for students' good academic performance.	4.07	1.18
Rewards increase students' interest in learning.	4.06	1.08
Rewards aligned with Bloom's taxonomy sustain students' attention.	4.06	0.98
Reward strategies enhance students' creativity.	4.2	0.99
Bloom's Taxonomy-aligned rewards improve attendance.	4.02	1.04

Graph 4

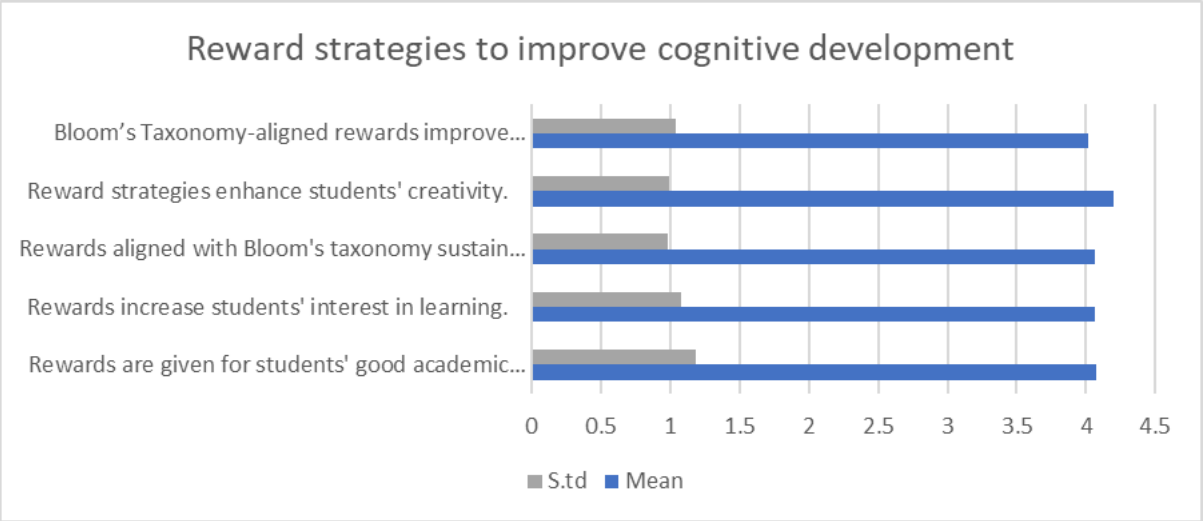


Table 4 shows that the mean value of 4.07 indicates that teacher' responses are beyond the central point and lean towards agreement. The standard deviation of 1.18 shows prominent differences in perception, meaning that the responses of the teachers vary in how frequently rewards are given for students' good academic performance and cognitive outcomes.

Statement 2 demonstrates a mean value of 4.06, which shows a high level of agreement in the participants' responses. The standard deviation of 1.08 displays low variation, meaning that level-wise rewards according to Bloom's Taxonomy increase students' interest in learning.

Statement 3 displays that the mean value is 4.06, which signifies high consistency in responses. The standard deviation of 0.98 reveals that such rewards aligned with Bloom's Taxonomy ensure that students are mentally present, not just physically present in the class.

Statement 4 describes a mean value of 4.20, explaining that respondents' perception falls in the high agree to strongly agree category. The standard deviation of 0.99 signifies stability in responses. Such reward strategies enhance students' critical thinking and creativity.

Statement 5 substantiates that the mean value is 4.02, which indicates that instructors' responses showed high consensus. The standard deviation of 1.04 reveals normal variation. Bloom's Taxonomy-aligned reward strategies are more effective than traditional rewards in improving both attendance and cognitive outcomes at the same time.

Findings and Discussion

An average of 63.8% of the respondents agree with the statements: primary school teachers are fully aware of Bloom's Taxonomy of the cognitive domain; teachers understand the difference between lower-order thinking (Remembering, Understanding) and higher-order thinking

(Analyzing, Creating); Bloom's Taxonomy is essential for students' cognitive development; and knowledge about Bloom's Taxonomy is provided during teacher training programs. Knowledge about Bloom's Taxonomy is provided during teacher training programs, and better lesson plans can be developed with the help of Bloom's Taxonomy. However, 12.6% of the respondents disagreed with the statements. Moreover, the p-value below .005 in all the statements shows that there is a significant statistical relationship between the instructors and their responses. These results closely align with Nurmatova & Altun's study (Nurmatova & Altun, 2023). Therefore, the hypothesis that primary school teachers have a significant level of awareness regarding Bloom's Taxonomy is approved, as the maximum numbers of respondents agree that teachers have awareness of Bloom's Taxonomy.

An average of 78.4% of the teachers agree with the statements that rewards are given for students' good academic performance and cognitive outcomes; giving level-wise rewards according to Bloom's Taxonomy (from Remembering to Creating) increases students' interest in learning; rewards aligned with Bloom's Taxonomy ensure that students are mentally present, not just physically present, in the class; such reward strategies enhance students' critical thinking and creativity; and Bloom's Taxonomy-aligned reward strategies are more effective than traditional rewards in improving both attendance and cognitive outcomes at the same time. However, 9.8% of teachers disagree with the statements; while the p-value is less than the highest level (.005) indicates that a statistically significant relationship exists between all of the statements and the respondents' responses. These findings closely align with the Enhancing computational thinking in early childhood study (Wang & Liu, 2026). However, the hypothesis that teachers widely use Bloom's Taxonomy in their classrooms is accepted, as the maximum number of teachers endorsed the idea.

A mean value of 3.81 indicates that the majority of teachers show a positive attitude towards agreement with the statements. The principles of Bloom's Taxonomy are used while making daily lesson plans; questions based on different levels of Bloom's Taxonomy are asked in the classroom; students are given opportunities to answer in their own understanding and to apply knowledge practically; students are engaged in classroom activities like critical thinking, comparing, and creating something new; students are assessed according to the levels of Bloom's Taxonomy. The low standard deviation of 1.11 shows consistency in teachers' responses. The outcomes of the study closely aligned with research on critical thinking and formative assessments: Increasing the rigor in your classroom (Stanley & Moore, 2013). It is proven that, to improve students' attendance and learning outcomes, teachers currently use reward strategies, as the participant shows a positive response regarding the statement. Therefore, the hypothesis is supported.

The mean value of 4.08 among the respondents was the highest, indicating the highest level of agreement with the statements. Rewards are given for students' good academic performance and cognitive outcomes. Giving level-wise rewards according to Bloom's Taxonomy (from Remembering to Creating) increases students' interest in learning. Rewards aligned with Bloom's Taxonomy ensure that students are mentally present, not just physically present, in the class. Such reward strategies enhance students' critical thinking and creativity; Bloom's Taxonomy-aligned

reward strategies are more effective than traditional rewards in improving both attendance and cognitive outcomes at the same time. The minimal standard deviation of 1.05 indicates low deviation, which displays consistency in the contestants' replies. Based on the highest level of agreement by the teacher, the hypothesis that both attendance and cognitive outcomes in primary school are greatly enhanced by Bloom's Taxonomy-aligned reward strategies is supported.

According to the research hypothesis, primary school teachers have a significant level of awareness regarding Bloom's Taxonomy. And the questions: How do Bloom's Taxonomy-aligned reward strategies affect primary school students' daily attendance? Moreover, how much do Bloom's Taxonomy; aligned reward strategies enhance primary school pupils' cognitive performance at each of the six levels? To what extent do Bloom's Taxonomy-aligned reward strategies improve attendance and cognitive outcomes in elementary school classrooms at the same time? The findings reveal that teachers were aware about the bloom's taxonomy. Also reveal that aligned reward strategies the levels of bloom taxonomy improve students' attendance and cognitive outcomes. Although the current study was from lower Chitral by 120 primary teachers. The study scope and outcomes significantly were improved by expanding the data collection from primary teachers of upper Chitral. This study describes aligned reward strategies to the level of blooms taxonomy that improves students both attendance and cognitive outcomes.

Moreover, provide more training, workshops, and lesson-plan making on Bloom's Taxonomy to fully prepare them, especially primary school teachers, so that they can properly use it practically in their classroom. Recommended that primary school teachers use reward strategies in their class to enhance cognitive outcomes. Reward strategies should be given according to the levels of Bloom's Taxonomy (remembers, understand, apply, analyze, evaluate, and create). These level-wise rewards will improve students' cognitive outcomes and attendance. It is recommended that education sectors and school organizations provide essential resources and instruction to help primary teachers enhance critical thinking, creativity, and problem-solving through remuneration schemes. To improve student attendance, a reward system for students' attendance should be included in the curriculum to ensure that students with top monthly attendance are recognized.

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