

## The Contribution of Education Monitoring Authority in Improving Students' Regularity and Basic Physical Facilities in Government Primary Schools

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| Keywords                                                                                                                 | Abstract                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| Education Monitoring Authority, Monitoring, Student Regularity, Enrollment, Dropout, Absenteeism, Basic Facilities, IMU. | <i>This study aims to ascertain how well the Education Monitoring Authority (EMA) is able to increase enrollment in government primary schools, reduce absenteeism, and improve basic physical facilities. The study was quantitative in nature, and data was gathered using a survey research technique. The study's population was the head teachers of government primary schools for boys in district Charsadda. Through the Yamane Sampling Formula, 224 head teachers made the sample. Through a simple random sampling technique, 224 head teachers were sent the five-point Likert scale questionnaire through an online Google Form link. To examine the data, inferential (linear regression) for hypotheses testing and descriptive (percentages and frequencies) statistics were used. The results of the study demonstrated that most of the respondents disagreed with every statement regarding EMA's effectiveness in increasing students' attendance and regularity in government sector primary schools. Some suggestions were made to increase the students' regularity. According to the report, EMA staff members should focus more on student academic performance as measured by attendance, enrollment, dropout rates, and the total number of students enrolled, rather than just on the instructors' attendance records. The results also demonstrated that monitoring compliance was generally high, its ability to produce observable improvements in school resources and facilities seemed questionable, with a sizable percentage of respondents expressing either indifferent or unconvinced opinions regarding its effects. This suggests a possible discrepancy between monitoring initiatives and their practical effects, which may necessitate more open reporting, focused interventions, or changes to policies to improve outcomes and confidence.</i> |

### INTRODUCTION

The educational system of any country has a major impact on its progress. For this reason, education is valued globally. Because Pakistan devotes roughly two-thirds of its GDP to education, the country's current educational situation is subpar when compared to wealthy nations (Khan et al., 2021). According to Din et al. (2021), education is the best investment for both national and individual growth. Primary education is the cornerstone of the entire educational system. While educationists perceive this point as the foundation or cornerstone of the entire educational system, sociologists see it as a useful tool for social reform (Akkuş & Çinkir, 2022).

As a special inspectorate and accountability mechanism, the Khyber Pakhtunkhwa government established the Education Monitoring Authority (EMA), formerly known as the Independent Monitoring Unit (IMU), established in 2014 to try to raise the standard of instruction in government schools. Enhancing basic physical facilities, teaching and non-teaching staff, student enrollment, and dropout rates in government schools are all part of the EMA's mission to improve educational quality (Ali & Hussain, 2020; Ullah et al., 2024; Kanwal & Ahmad, 2023; Hafeez et al., 2021; Munawar et al., 2019; Smith et al., 2011; Porres, 2016). Attendance in school is frequently thought of as just showing up to class. However, studies show a strong correlation between a student's overall development and attendance. There are serious repercussions for chronic absenteeism, which is defined as missing 10% or more of school days, that go well beyond just missing classes (Akkuş & Çinkir, 2022; Jain & Jain, 2023).

Researchers have found a strong correlation between the physical environment and students' learning. School structure has a significant impact on students' academic performance and learning. They add that other studies have found a connection between school structure and student accomplishment (Khan et al., 2018). The majority of the respondents (principals, teachers, and students) agreed that before the monitoring unit, there were meager basic facilities at the schools, like water, electricity, toilets, and boundary wall. After EMA (IMU) basic facilities have been improved. So there is a significant impact of EMA (IMU) on the basic facilities of schools (Ali, 2020).

A review of the literature on the various components of the EMA shows that little to no study has been done on the opinions of head teachers of government primary schools (boys) regarding the effectiveness of the EMA with respect to improving regularity of students and enhancement of basic physical facilities. This approach ignores the head teachers' grievances and deprives the authorities of insightful input from these establishments. Given these findings, a study is necessary to find out how primary school head teachers in the Charsadda district feel about EMA's oversight of the improvement of students' regularity and development of basic physical facilities in primary schools for boys.

The study's goal is to examine how the Education Monitoring Authority (EMA) contributes to raising educational standards by raising student attendance and upgrading the fundamental physical infrastructure of government primary schools for boys in District Charsadda.

### **Objectives of the Study**

1. To analyze the effectiveness of EMA in improving the regularity of students in primary schools.
2. To determine the effectiveness of EMA in enhancing basic physical facilities in primary schools.

### **LITERATURE REVIEW**

Monitoring is a vital part of management for any new program in any company to be finished successfully. The monitoring system is aware of and shows the performance of any system since monitoring is a routine and recurrent process for any business. Monitoring is the process of closely examining each activity that occurs within an organization (Khan et al., 2021). Around the world, pre-primary education has become more and more popular as a means of retaining children in formal schooling. Early childhood development (ECD) and pre-primary education are widely recognized to have a substantial influence on children's performance in basic education classes. Pre-primary education would facilitate pupils'

transition to primary school and lay the foundation for lifetime learning, claim Haque et al. (2013). One of the most promising strategies for eradicating poverty in the medium to long term is to increase the availability and quality of compulsory education for children (Ferrão, 2022). The belief that education is the only effective way to change society has led to a lot of interest in high-quality education in Pakistan. An unbiased, independent inspection system that visits schools and collects data is necessary to enable decision-making (Ali & Hussain, 2020).

The majority of responders and head teachers concurred that EMA (IMU) had improved student attendance, reduced cultural absenteeism, and increased student enrollment (Ali and Hussain, 2020). The studies' findings unequivocally demonstrated that, at the district level, the Education Monitoring Authority had raised the teacher-student attendance ratio in high and upper secondary schools; nonetheless, neither the overall quality of the educational system nor the performance of the teachers had improved (Khan et al., 2022). According to the study's findings and discussion, only the Internal Monitoring System (IMS) more effectively and favourably emphasised the need for school staff to give regular students the recognition they deserve, even though the officials of the External Monitoring System (EMS) outperformed those of the Internal Monitoring System (IMS) in terms of monitoring students' attendance in a variety of ways, including checking students on a priority basis during routine visits, pointing out students who were absent during their visit hours, and monitoring students' attendance in general (Khan et al., 2021). Extrinsic motivators, such as attendance, may have unanticipated behavioural effects. Strict attendance monitoring methods, such as registers or swipe cards, could incentivise students to arrive but not take fully. Furthermore, people who are forced to attend might not learn as much as they could, avoid the classroom, or, worse, disrupt the learning of others (Grey & Gordon, 2018). Overall, it is clear that there is a weak correlation between grades and attendance. However, the clear vertical bars for a specific attendance % show that a high mark in a module is not guaranteed by attendance alone (Grey & Gordon, 2018).

The results of the study showed that most PSHTs agreed with the primary school's independent monitoring unit (IMU) that EMA (IMU) raised student enrollment, teacher and student attendance, and learning interest. Additionally, it made teachers answerable to parents, improved physical facilities, enabled community participation in school activities, and aided in strengthening security measures (Ali et al., 2020). Teachers may not agree with this statement, but most management assistants agree that EMA (IMU) prioritises student enrollment rates at the DC & MA primary school level. There are several management assistants who also support the idea that EMA (IMU) welcomes the community to enroll their children in the school. Furthermore, a large number of educators agree that EMA (IMU) pushes head teachers to enroll pupils in the school. Most educators agree that EMA (IMU) organised awareness programmes to increase enrollment in primary schools (Khan et al., 2017). The findings unequivocally demonstrate that most principals agreed that the student enrollment ratio has improved (Samad, 2016).

The phrase "dropout" refers to leaving school before completing any given educational cycle, such as elementary, middle, or high school. Students who leave school for any cause other than death before completing their studies and without transferring to another institution are referred to as dropouts. Literature and national education policies make it clear that dropout is a significant policy problem that needs to be resolved in order to meet Pakistan's constitutional and international commitments to universal primary education. Every industrialised and developing nation on the globe struggles with the issue of dropout, especially at the primary level (Chhachhar, 2024). UNICEF estimates that more than 258

million children worldwide did not attend school in 2018, accounting for around 17% of all school-age children (6–17 years old). The situation is even more concerning in Pakistan, where 22.8 million children between the ages of 5 and 16—nearly 44% of all children of school age—remained unrolled in school in 2018, ranking as the nation with the second-highest number of out-of-school children worldwide. Dropping out of school before finishing the programme is common, much like the high percentage of out-of-school children. Recent estimates indicate that 18.31% of kids worldwide dropped out of school before finishing their primary education in 2017. In Pakistan, 10.35% of the students dropped out before completing their lower secondary education in 2017 (Din et al., 2021). Given the sharp divisions in the gender roles in Pakistan, it is plausible to think that the risk factors for dropping out of school are not the same for male and female students. Similarly, the dynamics of educational life are diverse at different educational levels. As an illustration, students at the elementary educational levels, such as preprimary and primary levels, are not expected to independently decide to drop out of school (Din et al., 2021). The primary school dropout rate in Pakistan was 68% in 2014 and 65% in 2015, which is quite high when compared to developed nations, meaning that student attendance is still very low at this level (Khan et al., 2021). It is clear that EMA has a major impact on Peshawar's higher secondary female student dropout rate (Kanwal & Ahmad, 2023). EMA (IMU) simply keeps track of students' attendance at school; it doesn't keep track of dropout rates, according to the findings (Khan et al., 2017). The results make it clear that the majority of principals agreed with the idea that the Independent Monitoring Unit was responsible for the dropout rate's decline (Samad, 2016).

The majority of responders (principals, teachers, and students) concurred that the schools had very few basic amenities prior to the monitoring unit, including water, electricity, restrooms, and boundary walls. Thus, EMA (IMU) has a big influence on improving schools' basic infrastructure (Ali, 2020). The findings also showed that 50% of government schools in Chitral district had water and electricity, 85% had toilets, and 74% had the basic amenities of a boundary wall (Khan & Butt, 2021). According to the study's findings, administrators, faculty, and support personnel have rather different opinions about how often Bulacan State University's physical facilities are monitored and assessed (Panotes, 2015). It has been discovered that putting strong M&E procedures in place improved infrastructure, resulting in the building of more classrooms, the supply of furniture, and the installation of sanitary facilities in secondary schools throughout Punjab. Monitoring plays an important role in enhancing educational facilities, and monitoring will serve the purpose of educational facilities in schools. Monitoring plays a critical role in raising school performance, and the monitoring team implements corrective actions to raise school performance (Aziz et al., 2021). The quality of education, including student outcomes, instruction, and the learning process, is thought to be enhanced by school monitoring and inspection, according to numerous studies on the subject (Samad et al., 2023). It is clear that the monitoring unit keeps an eye on the state of the school, both major and minor constructions, and ensures that boundary walls are available for school protection. It also ensures that teachers and students have access to adequate electricity, drinking water, and restroom facilities (Khan et al., 2018; Saleem & Naureen, 2017).

According to the study, the government's monitoring system does not adequately reflect the real needs of schools for improved infrastructure, despite regularly updating the state of basic facilities (Naz et al., 2024). It is clear that in certain areas the majority of participants believed that the monitoring unit was unsure about the appropriate availability of A.V. aids and other teaching resources in the school, such as the library, books, setting arrangements, academic calendars, etc. (Khan et al., 2018). The results make it clear that the EMA (IMU)

failed to provide the necessary facilities for schools to enhance teaching-learning strategies (Khan et al., 2022).

The efficiency of the Education Monitoring Authority (previously known as the Independent Monitoring Unit) has been extensively studied, as evidenced by the literature. At the elementary or secondary level, the majority of the research has been conducted. The basis of the educational system is primary education. Therefore, it was necessary to evaluate the monitoring body's efficacy at the primary level, where little to no work has been done in the field.

## Research Hypotheses

1. **Ho<sub>1</sub>:** The Education Monitoring Authority has no significant effect in improving the regularity of students on primary schools.
2. **Ho<sub>2</sub>:** The Education Monitoring Authority has no significant effect in enhancing basic physical facilities on primary schools.

## RESEARCH METHOD

The current research was quantitative in nature. The survey research design was incorporated to collect the data. Descriptive statistics were utilised to analyze the data. The population included 483 male head teachers in the government primary schools (boys) in the Charsadda district. A sample of 224 male head teachers was selected through the Yamane Sampling Formula. A simple random sampling technique was employed to collect the data from the population. A self-constructed five-point Likert questionnaire was utilised to collect data and answers on the research variable. The validity was checked by the experts, and the reliability of the questionnaire was checked through SPSS version 21, and the value of Cronbach's Coefficient Alpha for the current research's tool was 0.861, which was not only an acceptable value but also a good one. Responses to the questionnaire were gathered after it was sent to participants through an online Google Forms link. The data were analyzed through SPSS and were displayed in tabular form with frequencies and numbers. Similarly, the regression analysis was carried out to test the hypotheses.

## RESULTS

There are two primary sections, the descriptive analysis of every variable employed in this study made up the first section. The goal was to provide a thorough understanding of the nature of data. Testing hypotheses made up the second section. The null hypotheses were used to test the research hypotheses. The contribution to increasing student enrollment and decreasing student absenteeism and enhancement in basic physical facilities in government primary schools was examined through statistical analysis of the hypotheses using linear regression. For hypotheses, the alpha threshold was fixed at 0.05.

## Descriptive Statistics

The table below shows the numbers and frequencies of the variables of the study.

**Table 1: Descriptive Results Regarding Students' Attendance and Enrollment**

| Item No. | Statement                         |         | SD    | D     | N     | A     | SA   |
|----------|-----------------------------------|---------|-------|-------|-------|-------|------|
| 1        | Students' attendance has improved | Row N % | 11.16 | 38.39 | 19.20 | 21.43 | 9.82 |

|   |                                                             |         |       |       |       |       |      |
|---|-------------------------------------------------------------|---------|-------|-------|-------|-------|------|
|   | after monitoring of EMA                                     | Count   | 25    | 86    | 43    | 48    | 22   |
| 2 | Students' enrollment has increased due to monitoring of EMA | Row N % | 12.05 | 38.84 | 17.86 | 25.00 | 6.25 |
|   |                                                             | Count   | 27    | 87    | 40    | 56    | 14   |
| 3 | Students' dropout rate has decreased with monitoring of EMA | Row N % | 12.05 | 41.96 | 22.77 | 17.41 | 5.80 |
|   |                                                             | Count   | 27    | 94    | 51    | 39    | 13   |
| 4 | Proxy students have been reported by the monitoring of EMA  | Row N % | 11.61 | 36.61 | 23.21 | 20.09 | 8.48 |
|   |                                                             | Count   | 26    | 82    | 52    | 45    | 19   |

SD: Strongly Disagree, DA: Disagree, N: Neutral, A: Agree, SA: Strongly Agree

Table No. 1, item 1 shows that 31% of respondents agreed with the statement that "student's attendance has improved after monitoring of EMA", whilst 19% were unsure and 50% disagreed. 31% of participants agreed with the statement, "Students' enrolment has increased due to monitoring of EMA," whereas 51% disagreed and 18% were unsure about item 2. 54% of respondents disagreed with the assertion that the "student dropout rate has decreased with the monitoring of EMA," while 23% were undecided. This is in accordance with item 3. As for question 4, 29% of respondents agreed, 48% disagreed, and 23% were unsure that "Proxy students have been reported by the monitoring of EMA."

**Table 2: Descriptive Results Regarding Basic Physical Facilities**

| Item No | Statements                                                                  |       | SD    | D     | N     | A     | SA    |
|---------|-----------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|
| 5       | Monitors check availability of basic facilities of schools regularly        | Count | 8     | 25    | 18    | 123   | 50    |
|         |                                                                             | N %   | 3.57  | 11.16 | 8.04  | 54.91 | 22.32 |
| 6       | Before monitoring, there were a meager number of basic facilities in school | Count | 8     | 56    | 68    | 74    | 18    |
|         |                                                                             | N %   | 3.57  | 25.00 | 30.36 | 33.04 | 8.04  |
| 7       | Due to monitoring, the basic facilities of school have improved             | Count | 25    | 62    | 57    | 58    | 22    |
|         |                                                                             | N %   | 11.16 | 27.68 | 25.45 | 25.89 | 9.82  |
| 8       | Free books are available to all students because of monitoring              | Count | 32    | 83    | 38    | 57    | 14    |
|         |                                                                             | N %   | 14.29 | 37.05 | 16.96 | 25.45 | 6.25  |

SD: Strongly Disagree, DA: Disagree, N: Neutral, A: Agree, SA: Strongly Agree

According to table No.2 item 5 although a significant majority (77%) concur that monitors often check on the availability of essential school amenities, opinions on the effectiveness of these efforts vary. Response to item 6 shows that just 36% of respondents think that monitoring has resulted in noticeable changes, compared to 41% who think that schools used to have inadequate facilities. Results for item no.7 show that 39% disagree, and 25% are neutral. Results for item no.8 show that only 32% of respondents say that monitoring is responsible for the availability of free book distribution, while 51% disagree, indicating that other variables might be more important.

### Inferential Statistics

A statistical method for creating a model and examining the relationship between the independent (DV) and dependent variables (IV) is regression analysis. Its goal is to ascertain how closely two or more variables are related. Hypothesis testing is used to help with this (Saunders et al., 2023).

**Table 3: Regression Analysis**

| Hypotheses | R     | R Square | F (1,222) | B (Constt+EMA) | Std. Error (Constt+EMA) | Sig |
|------------|-------|----------|-----------|----------------|-------------------------|-----|
| <b>Ho1</b> | 0.635 | 0.403    | 150.308   | -4.95          | 2.976                   | 0   |
| <b>Ho2</b> | 0.773 | 0.598    | 329.943   | -3.542         | 0.927                   | 0   |

Table No.3 shows the results for testing hypotheses, which are as under;

Ho1 investigates the null hypothesis that EMA monitoring has no significant effect on pupils' increased regularity. The dependent variable, pupils' regularity, was regressed on the predictive variable, monitoring, in order to test hypothesis Ho1. Ho's R value of 0.635, which is greater than 0.4, is shown in the following table, indicating the positive impacts of EMA and monitoring on pupils' increased regularity. With a R Square score of 0.403, 40.3% of the variation in pupils' regularity can be attributed to monitoring. The findings, which were statistically significant ( $F(1,222) = 329.943$ ,  $p$  value = 0.000, which is less than 0.05), refute the null hypothesis, Ho.

Regarding Ho2, the hypothesis investigates the notion that EMA monitoring has no significant effect on upgrading basic services. The dependent variable, the augmentation of basic amenities, was regressed on the predictive variable, monitoring, in order to test hypothesis Ho. The next table shows that Ho has a R value of 0.773, which is greater than 0.4 and indicates the positive impact of KPEMA and monitoring on the enhancement of fundamental school facilities. The variance in teaching staff regularity attributable to monitoring is represented by 59.8%, with a R Square value of 0.598. The results, which were statistically significant ( $F(1,222) = 329.943$ ,  $p$  value = 0.000, which is less than 0.05), reject the null hypothesis, Ho.

### Findings

The findings clearly show that EMA significantly affects students' regularity ( $p < 0.001$ ). EMA accounts for 40.4% of the regularity variance. Regularity and greater EMA scores are positively correlated. Regularity may also be affected by other unmeasured factors, even when the model fits well.

The results of the study also show a significant agreement between the real impact of school monitoring on enhancing resources and facilities and its implementation. Although the vast majority (77%) affirms that monitoring takes place on a regular basis, just almost one-third (36%) believe that there have been quantifiable advances, with a sizable fraction remaining indifferent or skeptical.

### DISCUSSION

This study examined how the Education Monitoring Authority (EMA) helped to improve the regularity of primary school pupils. According to the findings, the respondents, who were head teachers of government sector primary schools for boys, disapproved of EMA's effectiveness in raising student enrollment, lowering student dropout rates, and reporting proxy students in government sector primary schools.

The current study's findings contradict those of earlier researches, like Samad, 2016, and Khan et al. 2022, that demonstrated that EMA, formerly known as the Independent Monitoring Unit, enhanced students' enrollment and attendance while lowering the dropout rate. However, there is no literature available that demonstrates whether or not EMA has

reported the proxy students. According to the current study, the majority of respondents disagreed that EMA has made a greater contribution in reporting proxy students in government primary schools in district Charsadda. A statistically significant result was indicated by the p-value being less than 0.05, which led to the rejection of the null hypothesis. It demonstrated that pupils' regularity was significantly affected by EMA.

Similarly, the efficacy of the Khyber Pakhtunkhwa Education Monitoring Authority in improving the basic physical facilities in government primary schools for boys in the Charsadda district was the main area of the current study. The results of the current study indicate that, although monitoring compliance is generally high, its ability to produce observable improvements in school resources and facilities seems questionable, with a sizable percentage of respondents expressing either indifferent or unconvinced opinions regarding its effects. The results were consistent with those of earlier findings of Saleem & Naureen (2017), Khan et al. (2018), and Naz et al. (2024). While the findings of the current study were in contrast to the findings of Samad et al. (2023), Aziz et al. (2021), Khan et al. (2018), and Saleem & Naureen (2017). A statistically significant result was indicated by the p-value being less than 0.05, which led to the rejection of the null hypothesis. It is shown that the improvement of the basic physical facilities in government primary schools for boys in the Charsadda district was significantly impacted by EMA.

In order to improve trust and outcomes, this suggests a possible disconnect between monitoring initiatives and their practical effects, which may necessitate more open reporting, focused interventions, or changes to policy.

## **CONCLUSIONS**

Despite this, the majority of respondents did not agree that EMA had a beneficial impact on student enrollment and regularity, students' dropout rates, or proxy student reporting. Even so, the model fits well, but regularity might potentially be impacted by other unmeasured factors.

Similarly, the monitoring department, EMA, has achieved great success in several areas of improving basic physical facilities; it is still ineffectual in others. The results of the current study show that EMA has not been more successful in improving the basic physical facilities in government primary schools (boys), and more work is needed in this sector.

## **Implications and Recommendations**

The current study included a detailed analysis of the EMA currently used for monitoring government schools. The study is useful for tracking administrators and head teachers in government-run primary schools. The study's findings provide insight into how head teachers of government primary schools perceive emerging difficulties related to supervision and monitoring. Stakeholders can improve the current educational monitoring system with the help of this study's trustworthy information. Future research on how the government evaluates power in primary schools for females may benefit from the study's conclusions.

The District Monitoring Officer (DMO) and the Data Collecting and Monitoring Assistant (DCMA) should conduct three random school visits each month to assess the overall caliber of the teaching and learning process. Additionally, they need to focus on student academic performance as measured by enrollment, attendance, dropout rates, and the total number of students, not just the teachers' attendance records. The results show that in order to achieve a



higher level of educated citizens, the regularity of the students and improvement of basic physical facilities must be given the proper weightage.

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