

## Comparison of Internal and External Monitoring Systems in Term of Students' Attendance, Enrollment and Retention in Punjab Education Department-Pakistan

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### ABSTRACT

The present study was conducted to evaluate and compare the effectiveness of Internal and External Monitoring Systems in Punjab education department regarding students' attendance, enrollment, retention and dropout. The study was delimited to secondary schools of the Punjab government. Multistage sampling technique was applied to take appropriate sample. All 16 DEOs (District Education Officers) and 16 DMOs (District Monitoring Officers) of selected sample districts were included in sample. Twenty head teachers and 40 teachers from twenty high schools ensuring equal representation of male and female, urban and rural areas were selected randomly from each district. 20 (MEAs) Monitoring and Evaluation Assistants (10 from urban area and 10 from rural area) were randomly selected from every selected district. Data were collected through five self-structured questionnaires from five stakeholders. Collected data were analyzed by using Means, Standard Deviations, Percentages, Z-tests, ANOVAs and Post-hocks test as statistical instruments and analyzed data were presented with the help of 18 tables. It was found that both Internal and External Monitoring Systems are effective. By comparing the effectiveness of both monitoring systems, it was found that Internal Monitoring System was more effective than External Monitoring System. It was recommended that for more fruitful results, a separate wing for monitoring may be established consisting on fresh appointment or retired educational officers. DEO monitoring may be appointed in each district of Punjab assisted with field staff to visit schools and maintain record.

**KEYWORDS:** education monitoring, enrollment, Punjab, Pakistan, PMIU

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### INTRODUCTION

Education is considered the most important changing agent for the development of country in the whole world [1]. Education is the vital investment for human and economic development [2]. Education is given due importance in all education policies of Pakistan. Almost all the past educational policies talk about the role of education as a tool for the social reforms and social development [2].

Monitoring is the essential component of management for the effective implementation of any program or project. Monitoring is essential ingredient of proper evaluation [3]. No organization can achieve its objectives in true sense without proper monitoring. That is why, there is a systematic monitoring system in all the organization of developed countries of the world.

Monitoring is the observing or checking of activities and their inputs, process and results. It also involves communication of these results to the appropriate level of management and storage of information for future evaluation [4]. Monitoring is observing the implementation of program vigilantly and continuously.

Educational monitoring involves all the steps, formulating objectives, setting tools, and attaining aims, of education. It observes the educational program vigilantly either it is in accordance with the set schedule or not. Like other department, all the countries of the world have their Monitoring System of education. Either it is internal or external or both.

In the education history of Pakistan, there is only Internal Monitoring System. It is also called departmental Monitoring System. According to this system, headmaster is immediate boss of school and responsible to monitor the school program. Beside this Executive District Officers (EDOs), District Education Officers (DEOs), and Deputy District Education Officers (Dy. DEOs) are responsible for management planning monitoring, and evolution.

In the province of Punjab, education was reformed under the Punjab Education Sector Reforms Program (PESRP). According to PERSP the focus of Punjab Government was to increase students' attendance, enrolment, and retention by ensuring 100 % enrolment of school going children under the programme "No Child left out of School" and zero dropout rate under the programme "Education for All" (Millennium Development Goal) by 2015, minimizing teacher absenteeism, and improving quality of education [5].

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These three are basically identified areas of our education in which we must have to work through proper monitoring and accountability to strengthen our education. Therefore, External Monitoring System was introduced in 2001 under the act the devolution of power. A department namely Program Monitoring and Implementation Unit (MPIU) was established for External Monitoring. It sub department named monitoring cell was established to monitor the education program. Both the departments (Internal and External Monitoring Systems) are working under the same head named District Coordinating Officer (DCO) at district level.

The tasks of both monitoring systems are common. Low attendance, low enrolment and high dropout rate of students are some major problems in our education system. Enrolment in elementary, secondary and higher education level is very low as compared to other countries of the world. The goal of education remains elusive in Pakistan because of low enrolment and high dropout rate [6].

Although the position of Punjab is better than other provinces of Pakistan but it is very weak when it is compared to other developing countries of the world. According to report “A Good News from Pakistan” prepared by Sir Michael Barber [7] Punjab is the most important in Pakistan as it covers almost half of the population besides this it is trend setter in Pakistan. It has achieved targets. Out of 36 districts, 32 were found above trajectory. Students’ Attendance is now above 90 %, 1.5 million new enrolments in just three years, and more than 90 % retention rate are some optimistic signs of progressing [7].

There are many factors responsible for these gains like media campaign, government effort and commitment, Internal and External Monitoring and devolution of power. Due to function of both the parallel Monitoring Systems, it is not clear which Monitoring System is more effective. To know the answer of this question, the researcher decided to study both the Monitoring Systems of Punjab Education Department. Secondly no any work is done on the Monitoring System in Punjab, so to fill the gap, this research work was conducted.

### OBJECTIVES OF THE STUDY

1. To obtain the view of stakeholders about performance of Internal Monitoring System in increasing students’ attendance, enrollment and retention at elementary level in Punjab Education Department.
2. To obtain the view of stakeholders about performance of External Monitoring System in increasing students’ attendance, enrollment and retention at elementary level in Punjab Education Department.
3. To compare the performance of Internal and External Monitoring Systems in increasing students’ attendance, enrollment and retention at elementary level in Punjab Education Department.

### SIGNIFICANCE OF THE STUDY

This study is significant for donor agencies like world bank, British council, etc. to know the exact position of education under PESRP and to make future strategy for Pakistan especially Punjab.

This research work is very important for central government and provincial government. It will provide guide lines to take corrective measure in education department in Punjab as well as other provinces of Pakistan and ICT. It is beneficial for the policy makers and planner to formulate plane and policies in future under the finding of the study.

Finding of this study are helpful for the district government to take necessary action and strengthen the monitoring and implementation system in education under the PESRP.

It has filled the gap of the researches in respect of Monitoring System in Punjab. It has also opened new side of researches for new researchers.

### DELIMITATION

Due to limited time and resources this research was delimited to government secondary schools for boys only.

### METHODOLOGY

This study was descriptive by purpose and survey by method. Following procedure was adopted to conduct the research.

#### Population

The population of the study consisted of five stakeholders (two from Internal Monitoring System, two from External Monitoring System and one is object of both the monitoring system). The information about the population size was taken from the official website of the Government of Punjab [8]. The detail of the five stakeholders is as follows:

1. **District Monitoring Officer (DMO):** DMO is overall head of External Monitoring System at district level. Entire thirty six (36) District Monitoring Officers (DMOs) working in Punjab were included in population.
2. **District Education Officers-Secondary (DEOs-Sec):** DEO-Sec is major part of Internal Monitoring System of secondary schools at district level. All 36 DEOs-Secondary were included in population.
3. **Head of Secondary School:** Head teacher is immediate boss at school level. He/she is considered the

hub of the school. All 4,498 head-teachers performing their duties in 4498 government secondary schools in Punjab were included in population.

4. **Secondary School Teacher:** Teacher is the most important person to implement the educational policy because he directly relates to the students. They are witness of the performance of both the monitoring systems. So all 25,145 secondary school teachers working in government secondary schools in the province of Punjab were included in population.
5. **Monitoring and Evaluation Assistant (MEA):** MEAs are a field worker of External Monitoring System. Hence all 1,078 MEAs working in Punjab were included in the population.

In this way the total population size was 30,792 (36 DMOs, 36 DEOs\_sec., 4498 head teachers, 25145 secondary school teachers and 1078 MEAs) individuals of the Punjab education department.

### **Sample**

According to Easton and McColl [9] multistage sampling technique is suitable for studying the big and heterogeneous population. Due to different category of respondents multistage sampling technique was applied and total 1312 (16 DMOs, 16 DEOs, 320 MEAs, 320 Head Teachers, and 640 Teachers) respondents were selected from the whole Punjab. The detail of sampling is as under;

1. In 1<sup>st</sup> stage 16 districts were selected randomly.
2. In 2<sup>nd</sup> stage, 20 (10 boy, 10 girls) secondary schools were taken randomly from every area (rural and urban) of every sample district.
3. In 3<sup>rd</sup> stage, two (2) secondary school teachers from each sample school were selected randomly while head-teacher of each selected school was also included in sample. So 640 secondary school teachers and 320 head teachers were taken as a sample from whole Punjab.
4. In next stage, twenty (20) Monitoring and Evaluation Assistants were selected randomly from each sample district by taking 10 MEAs from urban area and 10 MEAs from rural area of each district. Thus total sample of MEAs was 320.
5. District Monitoring Officer of each selected District was also taken as sample. Hence Sample size of DMO was sixteen (16).
6. District Education Officer (Secondary) of each selected district was also included in sample. Total sample of DEO was 16.

### **Research Instruments**

Five self-developed questionnaires consisting of two equal parts were used. In Part A of each questionnaire, 10 statements were included about the effectiveness of Internal Monitoring. Similar 10 statements were developed to assess the effectiveness of External Monitoring in Part B of each questionnaire. These 20 statements were close ended beside these; one open ended question was also included in the end of each questionnaire to take suggestions from stakeholders to improve monitoring mechanism.

### **Validity of Instrument**

The validity of the questionnaire was adjudged by the panel of experts consisting of educationists.

### **Pilot Testing**

For pilot testing, 4 DMOs, 4 DEOs, 40 MEAs, 80 head-teachers and 160 teachers were selected from 4 districts of the Punjab which were not included in sample. The data was collected personally so the response rate for pilot testing was 93 %. To find the reliability of the questionnaire, Cronbach's coefficient Alpha formula was applied by using SPSS Version 16 to estimate the internal consistency of items. The obtained Cronbach's Alpha was 0.84. Hence, no any item was dropped from the questionnaire. The questionnaire with slight modifications was used to collect the data from all stakeholders (DMO, DEO, Head teacher, Teacher and MEA).

### **Data Collection**

Data were collected through the questionnaires which were sent and received through Pakistan postal mail so the data were analyzed through 76 % response rate.

### **Analysis and Interpretation of Data**

The collected data were analyzed by using, mean, percentage, Mann Witney U-test, and ANOVA as statistical tool. Percentage was used to analyse the open ended statement.

### **FINDINGS**

Following were the finding of the study.

**Table 1: Overall performance of Internal Monitoring System in Punjab Education Department**

Serial No.	N	Mean	Percentage
Enrolment	990	4.41	88
Attendance	990	3.82	76
Retention	990	4.20	84
Drop out	990	3.91	78
Total Mean		4.08	

The above table 1 shows that the total mean =4.08 lies in the category 3.51 to 5.00 (Total mean was calculated by adding all the values of means and dividing it with 4) which shows that overall performance of Internal Monitoring was above average. Mean Values 4.41, 3.82 and 4.20 for increasing students' enrolment, attendance, and retentions respectively indicate that Internal Monitoring is effective in these three areas. Mean value 3.91 for controlling dropout rate is also in favour of internal monitoring.

Internal monitoring is effective in increasing students' enrolment, attendance, and retention as 88 %, 76 % and 84 % respondents are in favour of this. 78 % respondents think that Internal Monitoring is effective in controlling dropout rate. It means that performance of Internal Monitoring System as perceived by stakeholders was positive. Same results were found by Sajjad, M and Shah S.M.H [9].

**Table 2: Comparison of stakeholders by designation about the performance of Internal Monitoring System**

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	356.850	4	89.212	10.974	0.0001
Within Groups	8007.150	985	8.129		
Total	8364.000	989			

Note. The result is significant if probability of occurrence (p-value) is equal or less than 0.01.

The above table 2 shows that  $F(4, 985) = 10.97$  since  $p = 0.0001 < \alpha = 0.05$ , reveals that there is significant difference among the views of all stakeholders about performance of Internal Monitoring System in respect of students' enrolment, attendance, retention and dropout. This means that stakeholder with different designation have different views about the performance of Internal Monitoring System in Punjab Education Department. It might be due to different responsibilities and interests of stakeholders.

**Table 3: Multiple comparisons of the views of stakeholders by designation about the performance of Internal Monitoring System**

(I) Designation	(J) Designation	Mean Difference (I-J)	Std. Error	Sig.
<b>DMO</b>	2 DEO	0.18095	.96387	1.00
	3 Head Teacher	1.04090	.75901	.646
	4 Teacher	2.23551*	.74536	.023*
	5 MEA	1.64594	.78119	.218
<b>2 DEO</b>	1 DMO	-0.18095	.96387	1.00
	3 Head Teacher	0.85994	.64904	.676
	4 Teacher	2.05456*	.63302	.011*
	5 MEA	1.46499	.67484	.192
<b>3 Head Teacher</b>	1 DMO	-1.04090	.75901	.646
	2 DEO	-.85994	.64904	.676
	4 Teacher	1.19461*	.21857	.000*
	5 MEA	.60504	.32011	.323
<b>4 Teacher</b>	1 DMO	-2.23551*	.74536	.023*
	2 DEO	-2.05456*	.63302	.011*
	3 Head Teacher	-1.19461*	.21857	.000*
	5 MEA	-.58957	.28623	.239
<b>5 MEA</b>	1 DMO	-1.64594	.78119	.218
	2 DEO	-1.46499	.67484	.192
	3 Head Teacher	-.60504	.32011	.323
	4 Teacher	.58957	.28623	.239
*. The mean difference is significant at the 0.05 level.				

The above table 3 shows that there is no significant difference among the views of four stakeholders (DMOs, DEOs, Head Teachers, and MEAs) as p values indicating significance differences are greater than 0.05).

Point 4 of table 3 compares the teachers' opinions with other stakeholders. The p values less than 0.05 indicate there is significant difference between the views of teachers with all the other stakeholders except MEAs about

the performance of Internal Monitoring System in respect of students' attendance, enrolment, retention, and dropout. The table indicates that the teachers consider the Internal Monitoring System less effective as compared to others in respect of students' attendance and enrolment.

**Table 4: Comparison of the views of male and female respondents about the performance of Internal Monitoring**

Respondents	N	Mean Rank	Sum of Ranks	U	Z	Sig
Male	672	489.19	328734.00	102606	-1.020	0.308
Female	318	508.84	161811.00			

The table 4 explains the comparison of views of male and female respondents about the effectiveness of Internal Monitoring (monitoring of the education department) in term of students' attendance, enrolment, retention, and dropout. Mean Ranks 508.84 of female is greater than Mean Rank 489.19 of male. But this is not significant difference because the p value shows something else. The value of  $p = 0.308$  is greater than the 0.05 which indicates that there is no significant difference between the opinions of male and female respondents about the performance of Internal Monitoring System operating in Punjab Education Department.

**Table 5: Overall performance of External Monitoring System in Punjab Education Department**

Statements	N	Mean	Percentage
Enrolment	990	4.16	83
Attendance	990	3.53	70
Retention	990	3.60	72
Drop out	990	3.51	70
Total		3.53	

The table 5 shows that the total mean = 3.53 lies in the category 3.51 to 5.00 (Total mean is calculated by adding means and dividing it with 4) which shows that overall performance of External Monitoring is above average. It means that performance of External Monitoring System as perceived by stakeholders is positive. Percentage values (83 % for increasing students' enrolment, 70 % for increasing students' attendance, 72 % for increasing retention rate of students and 70 % for decreasing students' dropout rate) also indicates that External monitoring is effective as perceived by respondent. It was found by Muneer, M.K.; Naseem, B; Anisa, K. & Shazia, N. [10] in their research paper.

**Table 6: Comparison of views of stakeholders about the External Monitoring System**

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	250.066	4	62.516	5.340	.0001
Within Groups	11532.334	985	11.708		
Total	11782.400	989			

The above table shows that  $F(4, 985) = 5.34$  since  $p = 0.000 < \alpha = 0.05$ , shows that there is significant difference among the views of all stakeholders about performance of External Monitoring System in respect of students' attendance, enrolment, retention, and dropout. This shows that respondents with different designation have different views about the performance of External Monitoring System in respect of monitoring of students' enrolment, retention, and dropout. It might be due to different interest and responsibilities of stakeholders of monitoring in Punjab Education Department.

**Table 7: Multiple comparison of the views of stakeholders by designation about the performance of External Monitoring System**

(I) Designation	(J) Designation	Mean Difference (I-J)	Std. Error	Sig.
<b>DMO</b>	DEO	2.58095	1.15674	.169
	Head Teacher	1.23361	.91089	.657
	Teacher	1.67571	.89451	.332
	MEA	.31765	.93751	.997
<b>DEO</b>	DMO	-2.58095	1.15674	.169
	Head Teacher	-1.34734	.77892	.416
	Teacher	-.90524	.75969	.756
	MEA	-2.26331*	.80988	.042*
<b>Head Teacher</b>	DMO	-1.23361	.91089	.657
	DEO	1.34734	.77892	.416
	Teacher	.44210	.26231	.443
	MEA	-.91597	.38416	.120
<b>Teacher</b>	DMO	-1.67571	.89451	.332
	DEO	.90524	.75969	.756
	Head Teacher	-.44210	.26231	.443
	MEA	-1.35806*	.34351	.001*
<b>MEA</b>	DMO	-.31765	.93751	.997
	DEO	2.26331*	.80988	.042*
	Head Teacher	.91597	.38416	.120
	Teacher	1.35806*	.34351	.001*

\*. The mean difference is significant at the 0.05 level.

The table 7 indicates that there is significant difference among the views of stakeholders. There is significant difference between the views of Teachers and MEAs, as well as between the MEAs and DEOs. The mean difference shows that MEAs ranks the External Monitoring higher than teachers and DEOs in order to monitor the students' attendance enrolment, retention, and dropout

The possible reason of this result might be personal affiliation of the MEAs, as MEAs are part of External Monitoring therefore their opinion is in favour of External Monitoring System.

**Table 8: Comparison of the views of male and female respondents about the performance of External Monitoring System**

Respondents	N	Mean Rank	Sum of Ranks	U	Z	Sig
<b>Male</b>	672	496.15	333412.00	106412	0.105	0.917
<b>Female</b>	318	494.13	157133.00			

The table 8 indicates that the value of  $p = 0.917$  which is greater than .05 level. It shows that there is no significant difference between the opinions of male and female respondents about the effectiveness of External Monitoring System in respect of students' attendance enrolment, retention, and dropout. The mean rank of male (496.15) and female (494.13) indicate that the opinions of these two respondents are not different about the performance of External Monitoring in term of monitoring the students' attendance, enrolment, retention, and dropout in secondary schools of the Punjab.

It might be equal performance of External Monitoring in both gender schools of Punjab Education Department.

**Table 9: Comparison of performance of External Monitoring System in urban and rural areas**

Respondents	N	Mean Rank	Sum of Ranks	U	Z	Sig
<b>Urban</b>	488	493.50	240826.00	121510	0.219	0.827
<b>Rural</b>	502	497.45	249719.00			

The table 9 indicates that the value of  $p = 0.827$  is greater than 0.05 level. It shows that there is no significant difference between the opinion of urban and rural area respondents about the effectiveness of External Monitoring System in respect of students' attendance, enrolment, retention, and dropout. The mean rank of urban area and rural area indicate that the opinions of these two respondents are not different in term of performance of External Monitoring. Hence it is concluded that the performance of Monitoring Cell (External Monitoring) is same in urban areas as well as rural areas of Punjab in term of monitoring of students' attendance, enrolment, retention, and dropout in secondary Schools of Punjab Education Department.

**Table 10: Comparison between the effectiveness of Internal and External Monitoring Systems**

Monitoring	N	Mean Rank	Sum of Ranks	U	Z	Sig
Internal	990	1126.61	1115341.00	355304	10.667	0.000
External	990	854.39	845849.00			

Note. The result is significant if probability of occurrence ( $p$ -value) is equal to or less than 0.05 level

The table 10 shows the significant difference between the performance of Internal and External Monitoring Systems to increase the students' attendance, enrolment, and retention in secondary schools. Since  $p = 0.0001$  means that there is significance difference between the performance of Internal and External Monitoring System to increase students' attendance, enrolment, retention, and decreasing dropout in government secondary schools of Punjab. It means that the stakeholders have different views about the performance of Internal and External Monitoring Systems regarding students' attendance, enrolment, retention, and dropout. The mean rank values (1126.61 of Internal Monitoring 853.39 of External Monitoring) show that performance of Internal Monitoring System is comparatively more effective than External Monitoring System.

**Table 11: Comparison of District Monitoring Officers' views about the effectiveness of Internal and External Monitoring**

Monitoring	N	Mean Rank	Sum of Ranks	U	Z	Sig
Internal	15	17.60	264.00			
External	15	13.40	201.00	81	1.392	0.164

The table 11 indicates that the value of  $p$  is 0.164 is greater than 0.05 level of significance. It means that there is no significant difference between the effectiveness of Internal and External Monitoring in term of students' attendance, enrolment, retention, and dropout. It shows that District Monitoring Officers consider the Internal and External Monitoring equal affective to monitor and increase the students' attendance, enrolment, and retention in Punjab Education Department.

**Table 12: Comparison of District Education Officers' views about the effectiveness of Internal and External Monitoring**

Monitoring	N	Mean Rank	Sum of Ranks	U	Z	Sig
Internal	18	24.92	448.50			
External	19	13.39	254.50	64.5	3.32	0.001

Note. The result is significant if probability of occurrence ( $p$ -value) is equal to or less than 0.05 level

Table 12 reveals that the value of  $p = 0.001$  is less than 0.05 level. It shows that there is significant difference between the mean ranks of Internal Monitoring and mean of External Monitoring. The mean rank value 24.92 of Internal Monitoring is much higher than mean rank value 13.39 of External Monitoring. It shows that according to views of District Education Officers, Internal Monitoring is more effective than External Monitoring in term of monitoring of students' attendance, enrolment, retention, and dropout. It means that monitoring of educational officers (Internal Monitoring) is playing better role to monitor the students' attendance, enrolment, retention, and dropout than that of External Monitoring.

**Table13: Comparison of teachers' views about the effectiveness of Internal and External Monitoring**

Monitoring	N	Mean Rank	Sum of Ranks	U	Z	Sig
Internal	597	673.99	402369.50			
External	597	521.01	311045.50	132542.5	7.724	0.000

Note. The result is significant if probability of occurrence ( $p$ -value) is equal to or less than 0.01 level.

Table 13 is the comparison of the effectiveness of Internal and External Monitoring in the opinion of teachers. The value of  $p = 0.0001$  is less than 0.05 which indicates that there is significant difference between the means ranks of Internal Monitoring and of External Monitoring. It indicates that there is significant difference between the effectiveness of Internal and External Monitoring, in term of monitoring of students' attendance enrolment, retention, and dropout. Teachers consider that the Internal Monitoring is more effective than External Monitoring in term of monitoring of students' attendance as the obtained values of mean ranks (673.99 and 521.01) are in favour of first means. It means that monitoring of educational officers (Internal Monitoring) is playing more positive role to monitor the students' attendance, enrolment, retention, and dropout than that of External Monitoring).

**Table 14: Comparison of Monitoring and Evaluation Assistants' views about the effectiveness of Internal and External Monitoring**

Monitoring	N	Mean Rank	Sum of Ranks	U	Z	Sig
Internal	118	124.45	14685.00			
External	118	112.55	13281.00	6260	1.361	0.173

Note. The result is significant if probability of occurrence ( $p$ -value) is equal to or less than 0.05 level



The above table 14 is comparison of the effectiveness of Internal and External Monitoring in the opinions of Monitoring and Evaluation Assistant (MEAs). The value of  $p=0.173$  is greater than 0.05 which indicates that there is no significant difference between the means of Internal Monitoring and mean of External Monitoring. It indicates that there is no significant difference between the effectiveness of Internal and External Monitoring, in term of monitoring of students' attendance, enrolment, retention, and dropout.

**Table 15: Comparison between the effectiveness of Internal and External Monitoring Systems (male)**

Monitoring	N	Mean Rank	Sum of Ranks	U	Z	Sig
Internal	672	761.36	511636.00	166076	8.461	0.000
External	672	583.64	392204.00			

The table 15 is about comparative effectiveness of Internal and External Monitoring regarding to students' attendance, enrolment, retention, and dropout as per the views of male respondents. The obtained value of  $p=0.001 < 0.05$  and the obtained value of  $Z= 8.461$  indicate that there is significant difference between the effectiveness of Internal and External Monitoring System. The mean rank of Internal Monitoring 761.36 is significantly higher than the mean rank of External Monitoring 583.64. Hence, it is found that Internal Monitoring is more effective than External Monitoring in term of students' attendance, enrolment, retention, and dropout in Punjab Education Department.

**Table 16: Comparison between the effectiveness of Internal and External Monitoring Systems (female)**

Monitoring	N	Mean Rank	Sum of Ranks	U	Z	Sig
Internal	318	365.81	116327.00	35518	6.544	0.000
External	318	271.19	86239.00			

The table 16 is about comparative effectiveness of Internal and External Monitoring as per the views of female respondents. The obtained value of  $p=0.0001$  is less than 0.05 which indicates that there is significant difference between the effectiveness of Internal and External Monitoring System. The obtained value of  $Z= 6.544$  also proves it. The calculated value of the mean rank of Internal Monitoring (365.81) is significantly higher than the mean rank of External Monitoring (271.19). Hence, it is found that Internal Monitoring is more effective than External Monitoring regarding to students' attendance, enrolment, retention, and dropout, in Punjab Education Department.

**Table 17: Comparison between the effectiveness of Internal and External Monitoring in urban areas**

Monitoring	N	Mean Rank	Sum of Ranks	U	Z	Sig
Internal	488	552.84	269786	87674	7.198	0.000
External	488	424.16	206990			

The table 17 is to comparative the effectiveness of Internal and External Monitoring regarding to students' attendance, enrolment, retention, and dropout in urban areas of Punjab. The obtained value of  $p=0.000$  is less than 0.05 which indicates that there is significant difference between the effectiveness of Internal and External Monitoring System. The obtained value of  $Z= 7.198$  shows that the mean of Internal Monitoring is significantly higher than the mean of External Monitoring. Hence it is found that the performance of Internal Monitoring is better than External Monitoring in term of students' attendance, enrolment, retention, and dropout, in urban areas of Punjab.

**Table 18: Comparison between the effectiveness of Internal and External Monitoring in rural areas**

Monitoring	N	Mean Rank	Sum of Ranks	U	Z	Sig
Internal	502	575.04	288669	89588	7.985	0.000
External	502	429.96	215841			

The table 18 is the comparison of effectiveness of Internal and External Monitoring in term of monitoring of students' attendance, enrolment, and retention in rural areas of Punjab. The obtained value of  $p=0.0001$  is less than 0.05 which indicates that there is significant difference between the effectiveness of Internal and External Monitoring Systems. The obtained value of  $Z= 7.985$  shows that the mean of Internal Monitoring is significantly higher than the mean of External Monitoring. Hence it is found that Internal Monitoring is more effective than External Monitoring in term of monitoring of students' attendance, enrolment, retention, and dropout, in rural areas of Punjab.

These findings are in the line with the results of research paper conducted by [10]

## RESULTS AND DISCUSSION

1. Performance of Internal Monitoring was satisfactory. Internal Monitor was effective to increase students' attendance, enrolment and retention, and to decrease dropout rate in the province of Punjab. Teachers and MEAs



considered the Internal Monitoring less effective as compared to other stakeholders. There is no significant difference between the opinions of male and female as well as urban and rural areas' respondents in this regard. These findings are in the line with the findings of research conducted by [11]. According to their findings about enrolment and attendance of students fifty nine (59 %) of respondents' view is that departmental monitoring (Internal Monitoring) has enhanced enrolment rate in school (p 71).

2. It was found that the opinions of male and female respondents about the effectiveness of Internal Monitoring in term of students' attendance, enrolment, retention, and dropout. It is normal that education officers visit the schools equally. Whenever the officers left the office to visit schools, they visit all the schools of that area without any discrimination.

3. External Monitoring was found moderate effective in increasing students' attendance and enrolment. DMOs and MEAs considered it very positive while teachers and head teachers consider it less effective as compared to other stakeholders. These two stakeholders thought it, an extra thing and interruption in their matters. Male and female respondents considered it positive, for monitoring the schools in Punjab Education Department. It was equally effective in rural areas as well as urban areas in respect of monitoring of students' attendance.

4. It was found that overall performance of External Monitoring is above average. External Monitoring is found effective in term of increasing the students' attendance and enrolment. These findings are in the line with the results of research paper conducted by [10].

5. According to MEAs the External Monitoring is better in order to monitor the students' attendance, enrolment, retention and dropout.

It might be due to personal biasness of the stakeholder as DMO and MEA are stakeholders of External Monitoring System. And it is natural that average persons like their own system or department. Therefore opinions of DMOs and MEAs are found in favour of their own system.

6. Internal Monitoring was more effective than External Monitoring. Almost the situation was same in male and female schools, and in urban and rural areas schools in Punjab.

7. Overall performance of Internal Monitoring System is better than that of External Monitoring System in Punjab Education Department.

8. It is found that performance of Internal Monitoring System is comparatively more effective than External Monitoring System in five variables which are students' attendance, utilization of fund, educational facilities, school council and general administration. It was cross checked by the opinion of stakeholders (DEOs, DMOs, head teachers, teachers and MEAs) and respondents (male and female, urban and rural, very backward to very advanced districts). But the results are almost same which indicates that comparatively Internal Monitoring System is more effective in term of monitoring of all five variables except one in which is External Monitoring System is more effective and that variable is monitoring of teachers' attendance.

There might be many reasons of this weakness of Internal Monitoring like, lack of time, lack of transport facilities to officers, lack of fund for visiting schools, work load in the office, extra duties of officers, bad health and lack of commitment. It might be the effect of personal interaction with teachers, social relation of teachers and political involvement in the system. This finding is very alarming for the education officers at school level, at district level especially for DEOs and EDOs and at provincial level specially director schools and secretary education. It is needed to find out the causes of this weakness of Internal Monitoring and possible reason might be addressed and strengthen the Internal Monitoring to control teachers' absenteeism.

Findings of many researches support these results. Results of researches conducted in different part of the world like [10, 12, 13] are in the line with the present research. Hence it can be concluded that External Monitoring is not as much effective as it was expected.

## **RECOMMENDATIONS**

Following are the recommendations of the study:

1. Government of Punjab may strengthen the Monitoring System by providing more facilities to the educational monitoring officers like car, petrol and travel allowance. So that they may easily visit to schools.

2. Government should ensure separate secondary schools for boys and girls for population of 1000 to 2000 in urban, semi urban and rural areas. In rural areas where population is between 500 and 1000, government should ensure secondary schools for boys and girls within two kilometres. In case of very small village where population is less than 500 and absence of secondary schools within 2 kilometres, the government should provide transport facility to those students, So that target of 100 % enrolment can be met.

3. The provincial government should form law to bound the parents to send their children in schools otherwise there should be physical or financial punishment for parents who break the law.

4. The list of school age children of area may be provided to schools, and head teachers may have to guide the concerned parents about importance of education as well as enforcement of law.

5. The government should prepare online data bank of school age children in which record of every child may be saved so that head teachers can trace the record of every child to ensure his/ her enrolment in any public or private school.
6. There is dire need of transforming the present dull and boring environment of public schools to child friendly environment so that children feel comfort and pleasure in schools. In this way the attendance of students can be improved.
7. A separate wing for monitoring may be established consisting on fresh appointment or retired educational officers. DEO monitoring may be appointed in each district of Punjab assisted with field staff to visit schools and maintain record. As the present External Monitoring in Punjab is working by the name of PMIU. They have many other departments to monitor like hospitals besides this they are irrelevant person and not much effective in education department. As they are not able to monitor the scheme of study, lesson planning and classroom management etc. Therefore, they cannot perform well except paper work. Hence it is recommended that education monitoring may be excluded from PMIU.
8. This research was delimited to secondary schools of Punjab only. Other researches on new dimension/such topics may be conducted at elementary, and collage level in Punjab as well as other provinces, AJK and Islamabad Capital Territory. Some other indicators of successful monitoring like schools results, learning ability, and skills like reading and writing may also be studied. Effectiveness of 3<sup>rd</sup> party monitoring may also be studied. In the same way, effects of stipend program, free distribution of books, and emergency campaign for increasing enrolment may also be studied.

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