

IMPACT OF TELESCHOOL TRANSMISSION PROGRAMS IN PAKISTAN ON STUDENTS' ACADEMIC ACHIEVEMENT DURING COVID 19 PANDEMIC

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ABSTRACT

This study aimed to investigate the impact of the tele-school transmission program in Pakistan on students' academic achievement during the 2019 pandemic. The objectives of the study were to analyze the level of tele-school program usage by primary school students in Pakistan during the COVID-19 pandemic and to assess the level of academic achievement of primary school students in different subjects during this challenging period. The study population comprised 360 government girls' primary schools in the Haripur district. The reliability of the measurement scale was assessed using Cronbach's Alpha, and all statements were found to be reliable. Data were collected, scored, tabulated, and analyzed using mean, mode, Spearman correlation, and regression analyses as tests of statistical significance. The findings revealed that the tele-school transmission program significantly improved students' academic achievement across different subjects, including English, Urdu, Math, and Science. Both urban and rural areas experienced the benefits of this program. This research highlights the positive impact of tele-schooling during the pandemic and provides valuable insights for educational policymakers, administrators, and stakeholders to enhance remote learning strategies in similar crisis situations.

Key words: *Impact, Teleschool, Transmission, Programs, Pakistan, Students' Academic Achievement, Covid 19 Pandemic*

BACKGROUND

Pakistan comprises about 197 million citizens with a low to medium economic condition. All the provinces of Pakistan named Khyber Pakhtunkhwa, Punjab, Sindh and Baluchistan including three territories of the country including Islamabad Capital Territory, Azad Jammu Kashmir and Gilgit Baltistan got affected by the Pandemic whereas the intensity of its effects was vivid in Punjab (Salman et al., 2020; Gul, R., Ahmad, I., Tahir, T., Ishfaq, U. (2022). Gul, R., Tahir, T. Ishfaq, U., Batool, S. 2021. Tahir, T, K. Khan, Aurangzeb, W. (2019). According to the study on 26th of February 2020, the first two casualties of COVID-19 were reported in Pakistan which was alarming. 22,582 fatalities and 973,284 confirmed cases were reported nationwide. (Salman et al., 2020; , Gul, R., Ahmad, I., Tahir, T., Ishfaq, U. 2022; Batool, S., Tahir, T., Gul, R., Ishfaq, U. 2021). In addition to the systemic challenges impeding equal access to quality education, students themselves encounter numerous difficulties.

According to the latest data analyzed by UNESCO's global monitoring of school closures due to the Covid-19 pandemic, approximately 900 million students globally have experienced the impact by school closures. In Pakistan alone, the impact has been significant, with 46,803,407

students affected. (Lorente et al., 2020; Abdullah, (2019) Khan,K., Aurangzeb,W,Tahir,T.(2020)& Batool.S. , Tahir. T, Gul .R, Nawaz (2022).

HOME SCHOOLING DURING COVID-19 PANDEMIC:

The inspiration of homeschooling as a response to the COVID-19 pandemic has both advantages and challenges. While it may initially seem plausible and effective, there are various factors to consider that suggest it is unlikely to fully replace attending school.

One significant challenge is the burden it places on parents. Even with sufficient online materials available, parents may struggle to provide comprehensive education to their children while also fulfilling other responsibilities. This burden is particularly pronounced for parents who may have limited resources or educational backgrounds themselves (Burgess & Sievertsen, 2020; Tahir.T., T Khurshed, U Ishfaq, M. Gul (2015). Additionally, working parents may not have the option to be present at home during homeschooling, potentially leaving children alone and vulnerable to risky behavior (Fredriksson & Ihlen, 2020; Tahir.T, U Ishfaq, S Begum, G Shaheen (2021); Gul, N., Tahir, T., Gul, R., Batool, S. (2022)..

Furthermore, the closure of schools has been shown to have a regressive effect on student learning, particularly for young children whose cognitive and motor skills may suffer as a result of the gap in education. Marginalized groups, who may not have access to alternative educational options, are particularly affected by school closures, as it not only deprives them of educational opportunities but also hinders their growth and social development (World Bank, 2020; Schleicher & Reimers, 2020; Tahir.T.; W. Ahmed, S. Batool, U Ishfaq(2021), A Zaman; Gul, R., Tehseen, T., Batool, S., Ishfaq, U., & Nawaz, M. H. (2022).


It is important to recognize that the COVID-19 pandemic and the resulting lockdown measures have exacerbated existing problems and created new challenges in educational training. Predictions suggest that dropout rates may increase as more economically disadvantaged Families feel obliged to prevent their children from attending school so that they can assist in generating income for the household. (Aboagye et al., 2020; Gul, R., Tahir, T., Ishfaq, U. (2020)

While homeschooling may appear as a potential solution during times of crisis, such as the COVID-19 pandemic, there are significant challenges and limitations to consider. The burden on parents, unequal access to resources, and negative impacts on educational, social, and economic outcomes highlight the importance of addressing these issues and finding comprehensive solutions to ensure equitable and quality education for all children.

COVID-19 AND ITS IMPACT ON STUDENTS

The COVID-19 crisis has necessitated a rapid shift towards distance learning methods such as internet, television, and radio for schools and universities. In recent years, information and communication technology has been increasingly integrated into education, particularly in schools, colleges, and universities. The pandemic has brought about a transformation in the education system, replacing traditional classroom instruction with online learning and distance education programs. Attending school not only provides an enjoyable experience but also promotes social interaction and the development of essential skills for everyday life. However, the task of homeschooling has presented significant challenges for parents, who have had to assume the role of educators without the support their children would normally receive in school (Burgess & Sievertsen, 2020).

When a child misses even a single day of school, they often face difficulties in catching up with their peers. Presently, the concern is not just about missing a few days but rather the months of in-person learning that have been lost due to the global impact of the corona virus pandemic. In response to the outbreak, countries worldwide implemented school closures as a preventive measure to curb the spread of the virus. The resulting global lockdown has disrupted education in an unplanned and inconsistent manner, leading to the cancellation or replacement of classroom



learning, exams, and assessments with online alternatives (Tang et al., 2021; Gul, R., Tahir, I. U., & Batool, T. (2021).

COVID19 IMPACT ON HIGHER EDUCATION

Since the 1980s and 1990s, the integration of digital technology into universities has been a gradual and continuous evolution. The initial phase, occurring in the early 2000s, focused on digitizing administrative functions such as student records, exam systems, and financial management. Following that, educational tools such as learning management systems, course websites, and library systems also embraced digitalization as a natural progression (Crawford et al., 2020).

When the Covid-19 crisis emerged, many universities had already implemented digital solutions to address various needs. Research suggests that students were generally prepared for online learning during emergencies. However, evaluating the overall extent of digital transformation in higher education is a complex task. While numerous universities had functional digital solutions in place, achieving full digital transformation has been a gradual and ongoing process (Henderson et al., 2017; Jackson, 2019; Gul, R., Khan, S. S., Mazhar, S., & Tahir, T. (2020). Information and Communication Technology (ICT) has increasingly become a valuable tool in education, offering significant benefits to the education system. However, the Covid-19 pandemic has forced the education system to heavily rely on technology. Students with special needs, in particular, have experienced higher levels of anxiety regarding online learning. (Zhang et al., 2020; Batool, S., Tahir, T., Gul, R., & Ishfaq, U. (2021).

The global outbreak of Covid-19 has resulted in the closure of educational institutions at all levels, necessitating the adoption of alternative methods for teaching and learning. E-learning has emerged as a widely encouraged substitute for traditional classroom-based instruction across primary, secondary, and tertiary education (Liguori & Winkler, 2020; Batool, S., Tahir, T., Habib, M). The disruptive impact of Covid-19 on the education system is still being comprehended, and the transition from face-to-face learning to online learning raises concerns among various stakeholders, including government agencies, academic staff, students, and parents (Bryson & Andres, 2020; Crawford et al., 2020; Bashir S, Ishfaq; Tahir.T,).

Transitioning from traditional classroom teaching to online instruction brings forth apprehensions regarding effective instructional approaches and the allocation of administrative resources to ensure meaningful student engagement (Wingo et al., 2017; Ali,M; Tahir.T, Ishfaq,U). These concerns are influenced by the unique characteristics of the students and the specific discipline being taught. Replicating certain instructional activities, such as hands-on demonstrations, in an online environment poses challenges in achieving similar effectiveness.

To adapt to this change, subject matter experts may need to acquire proficiency in rapidly advancing learning technologies that are not typically utilized for practical activities in their respective fields (Mitchell, 2020; Aurangzeb; Tahir.T; Khan, K).

THE DIVISION OF DIGITAL RESOURCES IN PAKISTAN

Pakistan, being the world's fifth most populous country, confronts considerable hurdles in ensuring equitable access to modern technologies, such as laptops and internet connectivity, for its population. A notable disparity exists, with a small percentage of individuals possessing higher incomes and the means to access technology that facilitates digital education, especially during the ongoing pandemic. The limited reach of technology is evident from the fact that only 15.5% of Pakistan's population had internet access according to 2017 data (Pakistan: Internet Penetration Rate 2017, 2020; Abdullah, Tahir.T; Ishfaq, U (2022); Khan, R; Tahir.T, Ishfaq,U,(2022).

This situation sharply contrasts with a significant portion of the population living in poverty and having minimal exposure to modern technologies. The sudden transition to distance learning has resulted in insufficient support for students with learning disabilities and other impairments, as parents are ill-prepared to take on this role. Furthermore, there is a scarcity of assistive



technology, negatively impacting the progress of children with conditions like Down syndrome, autism, or physical disabilities. Effectively addressing the unique needs of these children necessitates comprehensive planning and dedicated attention (Patel, 2020; Gul, R., Tahir, T., & Ishfaq, U. (2023)). The global outbreak of the Covid-19 pandemic has expedited the adoption of virtual education on a global scale, resulting in significant changes in educational institutions. In response to the situation, the government of Pakistan has mandated the closure of educational institutions until further notice. To ensure continuity in students' education, there has been a widespread shift towards virtual teaching and learning. However, in Pakistan, students hailing from rural areas or economically disadvantaged families, especially those attending government-funded schools, lack access to the necessary technology required for virtual learning.

As a result, the educational progress of more than 47 million students enrolled in public schools is in jeopardy (Bajwa, 2020; Gul, R., Tahir, T., & Ishfaq, U. (2023)). Virtual learning is also acknowledged in Pakistan's national educational policy for 2017-2025 as a tool to provide the majority of the country's youth with the skills required to compete in a growing economy and foster national economic progress.

PAKISTAN: TELESCHOOL AND TALEEM GHAR (EDUCATIONAL TV AT HOME)

The government of Punjab, Pakistan, responded to the COVID-19 crisis by launching Tele-School, a nationally broadcast television channel aimed at providing remote learning opportunities for students in grades 1 to 12. This initiative utilized existing instructional materials produced by the government for teacher training and modified them for television programming. Another program, Taaleem Ghar, also offered broadcast content for grades 1 to 10. Both initiatives aligned their programming with the federal and provincial curricula, ensuring educational continuity for millions of students in Pakistan while schools remained closed.

Television was chosen as an alternative for remote learning due to its widespread reach, with around 95% of the country's population and 90% of the population in Punjab having access to television. Tele-School and Taaleem Ghar aimed to provide educational equity by developing content that was applicable to all schools, age groups, and demographics. The Federal Directorate of Education (FDE) played a key role in creating high-quality educational programming that engaged students and minimized the disruption to their learning.

Tele-School programs were broadcast seven days a week from 8:00 am to 6:00 pm, covering classes from KG to 12th grade. English, Urdu, and Mathematics were taught in lower grades, while all subjects were covered in higher grades. The lessons had duration of 15 minutes for primary classes and 20 minutes for senior classes. In addition to academic content, the programming also included videos on health and hygiene, nutrition, financial literacy, and self-awareness.

Tele-education, such as the initiatives implemented during the COVID-19 crisis, is crucial in developing countries like Pakistan. It offers the potential for synchronized and self-learning approaches, leveraging the internet and digital content to reach a wide audience. However, there are challenges related to demographic disparities, including unequal educational levels, information isolation, regional disparities, and gender issues. Female students, in particular, may face greater educational barriers. Other challenges include student motivation, social isolation, technological compatibility issues, reliance on technology, and increased costs for educational institutions.

In conclusion, the government of Punjab's Tele-School initiative, along with programs like Taaleem Ghar, provided a valuable solution for remote learning during the COVID-19 crisis. Television broadcasting offered a wide reach and aligned programming with the curriculum, ensuring continued educational opportunities for students across different demographics. While tele-education presents challenges, it serves as an important tool in addressing educational disparities and facilitating learning in developing countries during times of crisis.



THE SYMMETRY WITH THE OLD AND NEW TELE-EDUCATION

Tele-education, also known as distance learning or online learning, is a teaching and learning process that utilizes telecommunications and information technology for educational purposes. It encompasses the use of devices, such as computers and mobile devices, along with various resources, including virtual and computer-aided materials, to facilitate learning when a personal teacher is not physically present. The concept of electronic tutoring was first introduced by Arthur Clarke in the 1970s, and over the years, experiments have demonstrated the effectiveness of tele-education in meeting the educational needs of both developed and developing nations.

The advent of information and communication technology (ICT) has revolutionized distance learning, enabling increased classroom interaction and offering new opportunities for remote education. Initially, distance learning predominantly relied on pen-and-paper-based tasks exchanged by postal mail. However, ICT-based distance learning has provided ideal communication channels to facilitate remote interactions between students, learners, and instructors. One pedagogical method that has gained popularity is flipped learning, where direct instruction is shifted from the group to the individual, with the teacher serving as a facilitator and students applying concepts in a creative manner.

The European Commission (EC) refers to tele-education as online and digital learning (DOL), emphasizing the use of ICT tools, desktop and mobile devices, internet connectivity, and web services to support distance learning and create personalized learning experiences. This approach helps overcome constraints related to time and place in education. E-didactics, a field that emerged due to the need for new teaching methods in tele-education, focuses on employing ICT and multimedia to enhance learning experiences. In Romania, teachers utilize MOOC (Massive Open Online Course) platforms like Moodle, Open edX, Canvas, NoVo Ed, Udemy, Mirada Coursera, etc., as part of the e-learning and e-teaching processes.

The research in tele-education can be broadly categorized into two main areas: computer science and engineering, and social sciences and language acquisition. Tele-school, a form of e-learning program, has been studied for its impact on students' academic achievement. The behaviorism theory of e-learning has influenced tele-school transmission, tracing its roots back to the early days of Computer-Assisted Instruction (CAI). The use of computers in CAI focused on measuring learning outcomes, with learners expected to provide a single correct answer.

Programmed instruction emerged as an attempt to guide learners along predetermined paths, progressing only when the correct answer was given. Today, programmed instruction can be seen as a precursor to interactive branching scenarios and adaptive hypermedia systems applied in online education, incorporating behaviorist elements. Despite modern packaging in constructivist approaches, learners' freedom of choice is often limited to the predefined learning paths designed in the instructional design of e-learning courses.

In conclusion, tele-education has evolved over time, leveraging ICT and multimedia tools to provide distance learning opportunities. The field encompasses various pedagogical models and approaches, with a focus on engaging learners, personalizing learning experiences, and measuring learning outcomes.

OBJECTIVES OF THE STUDY

The objectives of the present study are:

1. To find the level of academic achievement of primary school students in different subjects of studies during the COVID-19 pandemic
2. To find the impact of tele school transmission program usage on the academic achievement of primary school students in district Haripur



RESEARCH QUESTIONS

1. What was the level of academic achievement of primary school students in different subjects of studies during COVID-19 pandemic?
2. What is the impact of tele school transmission program usage on the academic achievement of primary school students in district Haripur?

SIGNIFICANCE OF THE STUDY

This study may be significant because of different aspects. There is lots of information about the citizens of Haripur comprising the teachers, students and parents’ community. The effect of Tele School Transmission on the achievement level of students has been tested and reported. This research is conducted to enhance the abilities and characteristics of pupils to learn remotely even in the severe condition of pandemic so that they should not be depriving of education. The thirst of learning can easily be quenched by the help of PTV Transmission in such situation.

This study may help boost up the academic achievements of the young learners by determining another productive platform to inaugurate different projects of distant learning.

RESEARCH DESIGN:

The research design of this study is quantitative. The quantitative research is means for exploring and understanding the meaning individual or group ascribe to a social or human problem. Research design is plan for concluding research. Descriptive survey research will be adopted on the basis of literature review. The study is based on quantitative approach as variables are going to be measured with numbers and analyzed with statistical procedures.

POPULATION:

The number of people with common characteristic in a region or area that the researcher is using to acquire the finding related to particular research problem. Population donates the pool of people or entities to which any scholar is concerned to generalize the finding of particular research (Saldana, 2021).

The population of the study will comprise of four Female Circles of District Haripur. This comprises of 50% of 360 Government Girls Primary schools i.e (180 schools)(Circle Haripurhave60 schools, KotNajibullah39, Khanpur39, and Ghazi 42 schools respectively) and 6000 students of Class-5th.

Comprising of Boys and Girls Students

No. of Schools	Boys	Girls	Total
180	186	189	375

SAMPLE

Sampling out of 360 Government Primary Schools 50% school (180) and out of 6000 (375 students)5 percent of class fifth were selected as sample of the study. Glenn.D.Israel, in his Book “Determining Sample Size (1992)”.Stratified random sampling technique was used for the selection of the circles and Students on the basis of gender and locality.

RESEARCH INSTRUMENTS

One questionnaire was used for students. The results of the diagnostic tests conducted every month during the pandemic period were considered to check the academic achievement of the students. Respondents also have enough time to answer questions and lastly but more importantly respondents feel free to answer sensitive questions as their identity is not going to be disclosed. The questionnaire comprised of 47 items comprises with seven area i.e Accessibility & availability, interest and motivation, parental & teacher support, presentation of learning material at tele

school transmission program, quality of teaching & clarity of concept, follow-up & rehearsal and consistency & regularity.

PILOT TESTING OF THE QUESTIONNAIRE:

The pilot study was conducted for the purpose of reliability of the scale. Tool will be pilot tested among non-sample population of 30 students.

VALIDITY:

In order to check the internal validity of the research instrument, it was reviewed by honorable experts of the related field before conducting the survey. After having the opinions and suggestion by all the experts, necessary changes were made in the Research instrument of the study, which made the instrument valid, clear and useful.

RELIABILITY

The reliability of the tool was checked through Cronbach's alpha which was 0.67.

DATA COLLECTION

The researcher personally visited the sample school of District Haripur. The questionnaire was administered by the researcher to collect data from students to fulfill the study. The data were collected from 375 students out of schools(180) 50% of 360schools; these are from four different circles i-e Haripur, Ghazi, KotNajibullah and Khanpur. The majority of collected data from each school based on one female and one male student.

DATA ANALYSIS

Correlation of Tele School Transmission Program with Academic Achievement of Students of Primary Schools

Table No. 1:

Relationship of scores in the subject of English with different factors related to TSTP

Factors of Tele School Transmission Program	Correlation with Scores in English ®	p
Accessibility and Availability	0.495**	0.000
Interest and Motivation	0.513**	0.000
Parental and Teacher Support	0.570	0.000
Presentation of Learning Material at Tele School Transmission Program	0.509	0.000
Quality of Teaching and Clarity of Concept	0.282**	0.000
Follow-up and Rehearsal on the Part of Students	0.243**	0.000
Consistency and Regularity	0.206	0.000
Total	0.595**	0.000

In Table No.1 correlation of different factors of TSTP with the academic achievement in the subject of English has been observed.



The finding regarding accessibility and availability of facilities for TSTP indicates a significant positive relationship ($r = 0.495$, $p < 0.05$) with the academic scores in English.

The result regarding interest and motivation shows significant positive relationship ($r = 0.513$ and $p < 0.05$) between students interest and motivation with academic scores in English subject.

The finding regarding parental and teachers' support indicate a significant positive relationship ($r = 0.509$, $p < 0.05$) between parents and teachers support for using TSTP with the academic scores in the subject of English.

The analysis regarding presentation of learning material at TSTP indicates a significant positive relationship ($r = 0.509$, $p < 0.05$) between presentation of learning material for TSTP with the academic scores in the subject of English.

The result regarding the quality of teaching and clarity of concept indicates teaching effectiveness and conceptual clarity had a significant positive relationship ($r = 0.282$ and $p < 0.05$) with the academic scores in English.

The table regarding follow-up and rehearsal shows the significant positive relationship ($r = 0.206$ and $p < 0.05$) between follow-up and rehearsal of students to attend the TSTP with the academic score in English subject.

The statistical analysis about consistency and regularity shows the significant positive relationship ($r = 0.206$, $p < 0.05$) between the students consistency and regularity of attendance at TSTP with academic scores in the subject of English.

The finding regarding all factors of TSTP shows a significant positive relationship ($r = 0.595$, $p < 0.05$) between different factors of TSTP with the academic scores in the subject of English.

Table No.2

Relationship of scores in the subject of Urdu with different factors related to TSTP

Factors of Tele School Transmission Program	Correlation with Scores in Urdu ®	P
Accessibility and Availability	0.464**	0.000
Interest and Motivation	0.465**	0.000
Parental and Teacher Support	0.479**	0.000
Presentation of Learning Material at Tele School Transmission Program	0.429**	0.000
Quality of Teaching and Clarity of Concept	0.315	0.000
Follow-up and Rehearsal on the Part of Students	0.237	0.000
Consistency and Regularity	0.163**	0.002
Total	0.544	0.000

In Table No.2, significant positive correlations are observed between scores in Urdu and several factors related to TSTP.

The finding regarding accessibility and availability indicate a significant positive relationship ($r = 0.464$, $p < 0.05$) between accessibility and availability of facilities for TSTP and academic scores in the subject of Urdu.

The finding regarding interest and motivation indicates that students interest and motivation had significant positive relationship ($r = 0.465$ and $p < 0.05$) with academic scores in the subject of Urdu.

The statistical finding regarding parental and teachers' support suggest that the parental and teachers support for students at TSTP have a positive correlation with scores in Urdu ($r = 0.479$, $p < 0.05$).

The analysis regarding presentation of learning material at TSTP indicates a significant positive relationship ($r = 0.429$, $p < 0.05$) between presentation of learning material for TSTP and academic scores in the subject of Urdu.

The result regarding the quality of teaching and clarity of concept indicates teaching effectiveness and conceptual clarity had a significance positive relationship ($r = 0.315$ and $p < 0.05$) with the academic scores in the subject of Urdu.

The statistical analysis shows the significance positive relationship ($r = 0.237$ and $p < 0.05$).between follow-up and rehearsal of students to attend the TSTP with the academic score in the subject of Urdu.

The finding regarding the students consistency and regularity of attendance at TSTP indicates a significant positive relationship ($r = 0.164$, $p < 0.05$) with the academic scores in Urdu subject.

The result regarding the all factors of TSTP indicates the significant positive relationship ($r = 0.544$, $p < 0.05$) between different factors of TSTP with the academic scores in the subject of Urdu.

Table No. 3

Relationship of academic scores in subject of Math with numerous factors related to TSTP

Factors of Tele School Transmission Program	Correlation with Scores in Math	p
	®	
Accessibility and Availability	0.431**	0.000
Interest and Motivation	0.467**	0.000
Parental and Teacher Support	0.438**	0.000
Presentation of Learning Material at Tele School Transmission Program	0.421**	0.000
Quality of Teaching and Clarity of Concept	0.287**	0.000
Follow-up and Rehearsal on the Part of Students	0.243**	0.000
Consistency and Regularity	0.131**	0.011
Total	0.510	0.000

In Table No.3, significant positive correlations have been seen between academic scores in Math and various factors related to TSTP.

The finding regarding accessibility and availability of facilities for TSTP have a significant positive relationship ($r = 0.431$, $p < 0.05$) between the accessibility and availability of facilities with the academic scores in Math subject.

The result regarding interest and motivation indicates that students interest and motivation had significant positive relationship ($r = 0.467$ and $p < 0.05$) with academic scores in Math subject.

The finding regarding parental and teachers' support indicates a significant positive relationship ($r = 0.438$, $p < 0.05$) between parents and teachers support for using TSTP with academic scores in the subject of Math.

The statistical analysis regarding presentation of learning material at TSTP indicate a significant positive relationship ($r = 0.421$, $p < 0.05$) between presentation of learning material for TSTP with academic scores in the subject of Math.

The analysis regarding the quality of teaching and clarity of concept indicates teaching effectiveness and conceptual clarity had a significance positive relationship ($r = 0.287$ and $p < 0.05$) with the academic scores in Math subject.



The table regarding follow-up and rehearsal shows a significance positive relationship ($r = 0.243$ and $p < 0.05$) between follow-up and rehearsal of students to attend the TSTP with the academic score in the subject of Math.

The data regarding consistency and regularity indicates a significant positive relationship ($r = 0.131$, $p < 0.05$) between the students consistency and regularity of attendance at TSTP with the academic scores in Math.

The analysis regarding different factors of TSTP indicates a significant positive relationship ($r = 0.510$, $p < 0.05$) between overall factors of TSTP with academic scores in the subject of Math.

Table No.4

Relationship of scores in the subject of Science with different factors related to TSTP

Factors of Tele School Transmission Program	Correlation with Scores in Science	p
Accessibility and Availability	0.441**	0.000
Interest and Motivation	0.532**	0.000
Parental and Teacher Support	0.537**	0.000
Presentation of Learning Material at Tele School Transmission Program	0.500**	0.000
Quality of Teaching and Clarity of Concept	0.271**	0.000
Follow-up and Rehearsal on the Part of Students	0.234**	0.000
Consistency and Regularity	0.154**	0.003
Total	0.579	0.000

In Table No.4, significant positive correlations had observed between several factors related to TSTP with the academic scores in Science subject.

The finding regarding accessibility and availability indicate a significant positive relationship ($r = 0.441$, $p < 0.05$) between accessibility and availability of facilities for TSTP and academic scores in the subject of Science.

The analysis regarding interest and motivation indicates that students interest and motivation had significant positive relationship ($r = 0.532$ and $p < 0.05$) with academic scores in the subject of Science.

The result regarding the parental and teachers' support had a significant positive relationship ($r = 0.537$, $p < 0.05$) between the parental and teachers support for students with academic scores in Science.

The statistical analysis regarding presentation of learning material at TSTP indicate a significant positive relationship ($r = 0.500$, $p < 0.05$) between presentation of learning material for TSTP with the academic scores in the subject of Science.

The finding regarding the quality of teaching and clarity of concept shows a significant positive relationship ($r = 0.271$ and $p < 0.05$) between teaching effectiveness and conceptual clarity with the academic scores in Science subject.

The table regarding follow-up and rehearsal shows the significance positive relationship ($r = 0.235$ and $p < 0.05$) between follow-up and rehearsal of students to attend the TSTP with the scores in Science subject.

The analysis regarding consistency and regularity shows significant positive relationship ($r = 0.154$, $p < 0.05$) between the students consistency and regularity of attendance at TSTP with academic scores in the subject of Science.



The finding regarding overall TSTP factors shows a significant positive relationship ($r = 0.579$, $p < 0.05$) between different factors of TSTP with the academic scores in the subject of Science.

Table No. 5
Relationship of academic scores in all subject with numerous factors related to TSTP

Factors of Tele School Transmission Program	Correlation with Scores in All Subjects [®]	p
Accessibility and Availability	0.536**	0.000
Interest and Motivation	0.571**	0.000
Parental and Teacher Support	0.595**	0.000
Presentation of Learning Material at Tele School Transmission Program	0.540**	0.000
Quality of Teaching and Clarity of Concept	0.342**	0.000
Follow-up and Rehearsal on the Part of Students	0.274**	0.000
Consistency and Regularity	0.187**	0.000
Total	0.649**	0.000

Table No.5 shows that a significant positive correlation is observed between academic scores in all subjects and different factors related to TSTP.

The analysis reading accessibility and availability shows a significant positive relationship ($r = 0.536$, $p < 0.05$) between the accessibility and availability of facilities for TSTP with academic scores in all subject.

The result regarding interest and motivation indicates a significant positive relationship ($r = 0.471$ and $p < 0.05$) between students interest and motivation with academic scores in all subject taught at TSTP.

The statistical analysis regarding parental and teachers' support indicate a significant positive relationship ($r = 0.595$, $p < 0.05$) between parents and teachers support for using TSTP with the academic scores in all subject of TSTP.

The finding regarding presentation of learning material at TSTP indicate a significant positive relationship ($r = 0.540$, $p < 0.05$) between presentation of learning material for TSTP with the academic scores in all subject of TSTP.

The data regarding the quality of teaching and clarity of concept indicates a significant positive relationship ($r = 0.342$ and $p < 0.05$) between teaching effectiveness and conceptual clarity with the academic scores in all subjects.

The table regarding follow-up and rehearsal shows the significance positive relationship ($r = 0.243$ and $p < 0.05$) between follow-up and rehearsal of students to attend the TSTP with the academic scores in all subjects.

The findings regarding consistency and regularity depicts the significant positive relationship ($r = 0.131$, $p < 0.05$) with the students consistency and regularity of attendance at TSTP with the academic scores in all subjects of TSTP.

The result regarding overall TSTP factors indicates a significant positive relationship ($r = 0.510$, $p < 0.05$) between different factors of TSTP with the academic scores in all subject taught at TSTP.

DISCUSSION

The main objective of the study is to assess the level of Tele School Transmission Program (TSTP) usage by primary school students in Pakistan during the COVID-19 pandemic. Additionally, the study aims to determine the level of academic achievement of primary school students in different



subjects during the pandemic. Furthermore, the impact of TSTP usage on the academic achievement of primary school students in District Haripur was investigated. The study also seeks to compare the impact of TSTP usage on the academic achievement of girls and boys students in District Haripur, as well as the comparative impact on urban and rural students in the same district. During the COVID-19 pandemic, the education system in many countries, including Pakistan, faced significant disruptions. As a result, distance education became crucial in order to ensure continued learning for students. However, there were challenges related to the availability of smart digital devices, internet access, and the competency to use these devices.

To address the learning loss and overcome these challenges, educational governing bodies in various countries collaborated with radio and television stations to broadcast educational content. In Italy, for example, the Ministry of Education partnered with the Italian state television (Rai) to air educational programs (Allegrini and Maltinti, 2020). Similarly, the Ministry of National Education in Turkey strengthened its "Digital Education Portal" and collaborated with the Turkish Radio and Television Corporation (TRT) to support students' learning during school closures (Ozer, 2020). In Turkey, learning materials were broadcasted via TRT, allowing students to benefit from educational content without requiring internet access.

In Pakistan, a similar strategy was adopted to reach a large population with limited resources. The government launched the Tele School Transmission Program (TSTP), which aimed to provide educational content to students through television. The program was designed to supplement school closures and ensure that students could continue their education remotely. TSTP broadcasted lessons and educational material via television, enabling students without internet access to benefit from the content.

The impact of TSTP on the academic achievement of primary school students in District Haripur will be evaluated in the study. The study will also assess the comparative impact of TSTP usage on the academic achievement of girls and boys students in the district, as well as the comparative impact on urban and rural students.

It is important to conduct such research to understand the effectiveness of TSTP and its impact on the academic performance of primary school students during the COVID-19 pandemic. By evaluating the usage of TSTP and its influence on academic achievement, policymakers and educational institutions can make informed decisions regarding the implementation and improvement of distance learning initiatives in the future.

CONCLUSIONS:

The study found a significant positive relationship between the accessibility and availability of facilities for TSTP and students' academic scores in all subjects. This suggests that providing students with easy access to necessary resources and technologies can positively impact their academic achievement. The findings indicate a significant positive relationship between students' interest and motivation and their academic scores in all subjects taught through TSTP. This highlights the importance of creating an engaging and motivating learning environment to enhance students' academic performance. The study reveals a significant positive relationship between parents and teachers' support for using TSTP and students' academic scores in all subjects. This underscores the role of parental and teachers' involvement in supporting students' learning during remote education. The results show a significant positive relationship between the presentation of learning material in TSTP and students' academic scores in all subjects. This implies that well-designed and visually appealing learning materials can contribute to improved academic performance. The study reveals a significant positive relationship between different factors of TSTP and students' academic scores in all subjects. This suggests that a comprehensive approach that considers all aspects of TSTP, including accessibility, support, motivation, teaching quality, and student engagement, is important for improving academic achievement. In conclusion, the study highlights the significance of various factors within Teleschool Transmission Programs in




Pakistan for students' academic achievement during the COVID-19 pandemic. The findings emphasize the importance of providing accessible and engaging learning environments, fostering support from parents and teachers, delivering high-quality teaching, and Promoting consistent attendance and active student participation. These conclusions can inform the development and improvement of future TSTP initiatives to enhance students' academic outcomes in similar contexts.


FUTURE IMPLICATIONS


1. The institutions may ensure that all students have access to the necessary technology, such as computers, laptops, or tablets, and a reliable internet connection. This includes addressing the issue of the digital divide and providing support to students who may not have access to these resources.
2. The teachers may be Provide adequate training and professional development opportunities to teachers to effectively deliver instruction through teleschool programs. This includes training on using online platforms, creating engaging online content, and adapting teaching strategies for virtual environments.
3. Create an engaging and motivating learning environment within TSTP. Incorporate instructional strategies that capture students' interest and boost their motivation to participate actively. This can include using interactive content, real-life examples, and gamified elements.
4. Continue to encourage and strengthen parental and teachers' support for TSTP. Provide resources, training, and guidance to parents and teachers to help them effectively support students' learning experiences. This can include regular communication, monitoring progress, and providing assistance when needed.
5. Focus on improving the quality and presentation of learning materials used in TSTP. Use multimedia resources, interactive activities, and clear instructions to enhance students' understanding and engagement with the content.
6. Invest in professional development opportunities for teachers involved in TSTP to enhance their teaching effectiveness and conceptual clarity. This can involve training in online teaching methodologies, effective communication strategies, and content delivery techniques.
7. Emphasize the importance of follow-up and rehearsal for students attending TSTP. Provide regular opportunities for students to review and reinforce their learning, such as through practice exercises, assessments, and revision sessions.

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