# Digital Divide among the Teachers of Rural Secondary Level Schools of South 24 Parganas

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***Abstract:*** Digital Divide is one of the most important concerns of the present education system. It is the need of time to educate the teachers digitally so that they can use the knowledge in teaching learning process. The researchers wanted to know the basic differences in the physical barriers, Motivational barriers, skill related and usage barriers in between various variables of rural secondary schools of South 24 Parganas. 100 teachers from10 rural secondary schools of South 24 Parganas were taken as samples by stratified random sampling. A questionnaire based on digital divide was used. Its content validity was checked and reliability was checked by Cronbach alpha (0.73) method. In this quantitative study, descriptive survey was used. As statistical method t test and ANOVA were used. The result revealed that in the case of physical barriers there were no significant differences based on gender and educational level. But in the case of age and subjects there were significant differences. In the case of motivational barriers there were no significant differences based on gender, educational level and age but in the case of subjects there was significant difference. In the case of skill related barriers there were no significant difference based on gender and educational level but in the case age and subjects there were significant differences. In the case of usage level related barriers there were no significant differences on educational level and subjects. Significant differences were observed in the case of gender and age-related issues in the area of usage level related issues.

***Keywords:*** Digital Divide, Teachers, Rural Secondary Level Schools, South 24 Parganas

## INTRODUCTION

Digital divide refers to the unequal access to technology in teaching learning process. There exist various reasons for developing digital divide. With the advent of covid 19, technology and digital media have become inseparable parts of teaching learning process. From admission to passing out, a student has to go through various stages of his/her education which without any technological knowledge can not be possible. “High speed internet is a tool people rely upon to conduct the daily business of their life and interact with each other, the economy and the government”. (Sanders & Scanlon 2021). In 21$^{st}$ century from this grassroot level a student has to be knowledgeable enough to access the internet and various technological equipment. Technology holds a special place in society, rather many critical and complex processes can be done with the help of it within a fraction of the time. (R., R. & Nagasubramani 2018). To educate the students with the knowledge of technology it is the need of the hour to measure how much knowledgeable the teachers are. In most of the cases there are the problems of access to technology and thus comes the problem of digital divide. So, it is important to measure gender, educational qualification, age and subject centricity have any special role in the case

of digital divide. Once it is identified the probable measures can be taken to eradicate the problem as well.

**STATEMENT OF THE PROBLEM**

Numerous research were done in India and abroad to understand the importance of technology and digital media in educational arena. The researchers here wanted to identify if the gender, educational qualification, age and subject specificity have any significant difference in the case of digital divide or inequal technological access to education among the teachers at secondary schools.

The statement of the following problem stated below-

Digital Divide among the Teachers of Rural Secondary Level Schools of South 24 Parganas.

**OBJECTIVES**

To find out the difference in physical barriers of digital divide in between male and female secondary level rural school teachers.

To identify the difference in physical barriers of digital divide in between graduate and post-graduate secondary level rural school teachers.

To find out the difference in physical barriers of digital divide among the secondary level rural school teachers based on their age.

To find out the difference in physical barriers of digital divide among the secondary level rural school teachers based of their subjects.

To find out the difference in motivational barriers of digital divide in between male and female secondary level rural school teachers.

To identify the difference in motivational barriers of digital divide in between graduate and post-graduate secondary level rural school teachers.

To find out the difference in motivational barriers of digital divide among the secondary level rural school teachers based on their age.

To find out the difference in motivational barriers of digital divide among the secondary level rural school teachers based of their subjects.

To find out the difference in skill related barriers of digital divide in between male and female secondary level rural school teachers.

To identify the difference in skill related barriers of digital divide in between graduate and post-graduate secondary level rural school teachers.

To find out the difference in skill related barriers of digital divide among the secondary level rural school teachers based on their age.

To find out the difference in skill related barriers of digital divide among the secondary level rural school teachers based of their subjects.

To find out the difference in the usage level related barriers of digital divide in between male and female secondary level rural school teachers.

To identify the difference in the usage level related barriers of digital divide in between graduate and post-graduate secondary level rural school teachers.

To find out the difference in the usage level related barriers of digital divide among the secondary level rural school teachers based on their age.

To find out the difference in usage level related barriers of digital divide among the secondary level rural school teachers based of their subjects.

**HYPOTHESES**

There is no significant difference in physical barriers of digital divide in between male and female secondary level rural school teachers.

No significant difference is observed in physical barriers of digital divide in between graduate and post-graduate secondary level rural school teachers.

There is no significant difference in physical barriers of digital divide among the secondary level rural school teachers based on their age.

There is no significant difference in physical barriers of digital divide among the secondary level rural school teachers based on their subjects.

No significant difference is observed in motivational barriers of digital divide in between male and female secondary level rural school teachers.

There is no significant difference in motivational barriers of digital divide in between graduate and post-graduate secondary level rural school teachers.

No significant difference is observed in motivational barriers of digital divide among the secondary level rural school teachers based on their age.

There is no significant difference in motivational barriers of digital divide among the secondary level rural school teachers based on their subjects.

There is no significant difference in skill related barriers of digital divide in between male and female secondary level rural school teachers.

No significant difference is observed in skill related barriers of digital divide in between graduate and post-graduate secondary level rural school teachers.

There is no significant difference in skill related barriers of digital divide among the secondary level rural school teachers based on their age.

There is no significant difference in skill related barriers of digital divide among the secondary level rural school teachers based on their subjects.

No significant difference is observed in the usage level related barriers of digital divide in between male and female secondary level rural school teachers.

There is no significant difference in the usage level related barriers of digital divide in between graduate and post-graduate secondary level rural school teachers.

No significant difference is observed in the usage level related barriers of digital divide among the secondary level rural school teachers based on their age.

There is no significant difference in usage level related barriers of digital divide among the secondary level rural school teachers based on their subjects.

## DEFINITON OF THE OPERATIONAL TERMS

**Digital Divide-**

Digital divide refers to the unequal and inconsistent access to various digital technologies such as tablets, laptops, internet, smartphones etc. It can lead to educational, social and economic inequities.

**Teachers-**

Teachers are the academicians who are to impart knowledge to the students in the school. Here by teachers only secondary level teachers till class X were taken as samples.

**Rural Secondary Level Schools-**

Secondary level schools mean schools till class X. Here the secondary level schools of rural areas of South 24 Parganas were taken.

**South 24 Parganas-**

It is a district of West Bengal in India. In the case of area, it is the largest district of West Bengal and in the case of population, it has second largest population. The samples were taken from the rural secondary schools of South 24 Parganas.

**Subjects-**

Subjects refer to the field of education, area of knowledge or field of study which is taught and researched at school, college or university levels. Here in this study subjects referred to Science, Social Science and Language.

## DELIMITATIONS OF THE STUDY

1. The study was delimited to secondary schools of South 24 Parganas only.
2. Only rural secondary schools of South 24 Parganas were taken here.
3. Only 100 secondary level teachers were taken as samples.
4. No correctional measure was given in teaching learning process was discussed in this study.
5. The study was done with the variables like gender, educational qualification, age and stream of the teachers.

## SIGNIFICANCE OF THE STUDY

The significance of the present study was discussed below-

i. The study can be helpful to understand the measurement of digital divide from various perspectives among the teachers of secondary level rural schools.
ii. New techniques can be developed to eradicate digital divide in future teaching learning process.

iii. Curriculum planners can develop the curriculum keeping in mind the problem of technological awareness among the teachers.
iv. Technological advancements and distance education can gain improvement from this process.

**REVIEWS OF RELATED LITERATURE**

Riggins & Dewan (2005) conducted a study to find out the effects of digital divide on people who don't have equal opportunities to technology. In this study the analysis was done on three levels such as organizational, individual and global level. Systematic Review Design was used in this study. Based on the findings from various conducted researches, the researchers provided some suggestions and recommendations for future trends and researches. Singh (2010) conducted a study to find out various dimensions of digital divide and more particularly the division between urban and rural areas of India. Systematic Review Design was followed as the methodology of the study. The result revealed that there were various obstacles such as lack of skills, investment, infrastructure, illiteracy etc. in diminishing the issues of digital divide. Soormo., et al. (2020) conducted a study to find out the level of digital divide in the areas of motivation, skills, physical access and proper usage among the higher education faculties in the district of Pakistan and the relationship in between the instructional usage of faculty and other directions. The result revealed significant differences in technological access at four levels in respect of their positional and personal categories. Sanders & Scanlon (2021) conducted a study to find out the possible or probable solution of digital divide of various districts of USA. Working on the human rights approach, the United Nations General Assembly declared access to the internet as human right in 2016. After analyzing various policy perspectives, the result revealed the engagement of the community practitioners at local and state levels to close the digital divide. Vassilakopoulou & Hustad (2021) conducted a study to find out the basic digital gaps and socio-economic and technological issues related to digital divide. The result found certain areas of future studies including better linking for digital divide research, critical examination of the effect of interventions of digital divide and developing models for digital inequalities with new variables and theory. Lythreatis., et al. (2022) conducted to find out various forms of digital divide and how they had been reflected in various literatures and also the future implications of different types of digital divide. This systematic review design was done with 50 past studies in digital divide section done from 2017-2021. The major findings revealed that there were nine major factors of digital divide and they were as follows- personal elements, types of technology, human rights, large-scale events, infrastructure, digital training, social support, socio-demographic and socio-economic events. Morris., et al. (2022) conducted a research study to find out the effects of digital divide on the SMEs of rural areas. The result revealed the effect of high-speed internet connectivity on the businesses in urban and rural areas. Due to the development of infrastructure the business in rural areas has improved a lot. This paper also found out that due to the coronavirus pandemic the less technology dependent business sectors were constrained due to its lack of online presence. Barik (2023) conducted a study to find out the major literature studies done between 2001 to 2020 and also to measure the quantitative and qualitative enquiry. A total of 5,518 publications were analyzed by systematic literature review design. The result came out as there was 38.43% growth in publication. There was healthy collaborative research with a mean of 0.70. USA is topper in the term of yearly publication and Netherland was the highest contributor in the list of authors. Jongebloed., et al. (2024) conducted a study to find out and

evaluate the engagement of people and digital health literacy from various regional and rural communities for identifying barriers and facilitators of using technology. Some barriers were reported in this case. Opportunities were provided to the community members to get the access of digital literacy. Sindakis & Showkat (2024) conducted a study to find out the factors that influenced the adoption of digital technology in rural India. The result strikingly revealed that women were at par in digital literacy with their male counterparts highlighting the diminishing of gender disparity.

## METHODOLOGY

In this quantitative research study t test and ANOVA were used in data analysis process because the data was parametric in nature.

## VARIABLES

### Independent Variables-

The secondary level school teachers were regarded as independent variables.

### Dependent Variables-

Awareness towards digital divide was regarded as dependent variable.

### Categorical Variables-

Gender (Male and Female), Educational levels (Graduate and Post-graduate) and Age (less than 10 years teaching experience and more than 10 years teaching experience).

## POPULATION

All the teachers of rural secondary level schools were taken here as population of the study.

## SAMPLES

Probability sampling technique was used in this study to collect 100 rural secondary school teachers. Total 10 secondary schools were taken for collecting the samples by simple random sampling and lottery method and 10 teacher trainees from each college were selected by simple stratified random sampling.

| Category of Samples | Number of Samples |
|---|---|
| Male Rural Secondary Level Teachers | 42 |
| Female Rural Secondary Level Teachers | 58 |
| Graduate Rural Secondary Level Teachers | 51 |
| Post-graduate Rural Secondary Level Teachers | 49 |
| Less than 45 years | 62 |
| More than 45 Years | 38 |
| Rural Secondary Level Language Teachers | 30 |
| Rural Secondary Level Social Science Teachers | 40 |
| Rural Secondary Level Science Teachers | 30 |

## DATA COLLECTION PROCEDURE

The researcher here divided the concept of Digital Divide into four problem areas like Physical Barriers, motivational barriers, skill related barriers and usage level related barriers. A questionnaire was developed consisting of 40 questions with 10 questions indicating the four problem areas each. The questionnaire was given to 100 teachers from 10 rural secondary level schools of South 24 Parganas. The content validity of the questionnaire was checked by content analysis from three subject experts and reliability was checked by Cronbach Alpha Method (0.73).

**HYPOTHESIS-1**

**There is no significant difference in physical barriers of digital divide in between male and female secondary level rural school teachers.**

**TABLE-1**

| SAMPLES | NUMBER OF SAMPLES | MEAN | SD | T TEST |
|---|---|---|---|---|
| Male | 42 | 23.43 | 3.39 | 1.2737 |
| Female | 58 | 24.36 | 3.75 | |

**Table-1** described that the mean gained score of the male rural secondary level school teachers was a little lower than the mean gained score of the female rural secondary level school teachers. The table t value 1.98 was higher than the calculated t value 1.2737 at 0.05 level of significance at 98 degrees of freedom. The hypothesis is accepted. Henceforth it is proved that there is no significant difference in physical barriers of digital divide in between male and female secondary level rural school teachers.

**HYPOTHESIS-2**

**No significant difference is observed in physical barriers of digital divide in between graduate and post-graduate secondary level rural school teachers.**

**TABLE-2**

| SAMPLES | NUMBER OF SAMPLES | MEAN | SD | T TEST |
|---|---|---|---|---|
| Graduate | 51 | 27.85 | 3.55 | 1.9517 |
| Post-graduate | 49 | 26.54 | 3.14 | |

**Table-2** described that the mean gained score of the graduate rural secondary level school teachers was a little higher than the mean gained score of the post-graduate rural secondary level school teachers. The table t value 1.98 was higher than the calculated t value 1.9517 at 0.05 level of significance at 98 degrees of freedom. The hypothesis is accepted. Henceforth it is proved that there was no significant difference in physical barriers of digital divide in between graduate and post-graduate secondary level rural school teachers.

**HYPOTHESIS-3**

**There is no significant difference in physical barriers of digital divide among the secondary level rural school teachers based on their age.**

**Table-3**

| SAMPLES | NUMBER OF SAMPLES | MEAN | SD | T TEST |
|---|---|---|---|---|
| Less than 45 years | 62 | 30.54 | 4.94 | 6.3364 |
| More than 45 years | 38 | 24.87 | 3.12 | |

**Table-3** described that the mean gained score of the rural secondary level school teachers aged below 45 was higher than the mean gained score of the rural secondary level school teachers aged above 45. The table t value 1.98 was lower than the calculated t value 6.3364 at 0.05 level of significance at 98 degrees of freedom. The hypothesis is rejected. Henceforth it is proved that there is significant difference in physical barriers of digital divide in between the secondary level rural school teachers based on their age.

**HYPOTHESIS-4**

**There is no significant difference in physical barriers of digital divide among the secondary level rural school teachers based on their subjects.**

**TABLE-4**

| Source of Variation | SS | df | MS | F value | P value |
|---|---|---|---|---|---|
| Between Groups | 10551.9 | 2 | 5,275.95 | 42.91 | 0.001 |
| Within Groups | 12109.9 | 97 | 123.11 | | |
| Corrected Total | 22661.8 | 99 | | | |

**Table-4** showed that the computed F value was 42.91 which was significant at $p< 0.001$. Henceforth, the null hypothesis was rejected and the means were not equal. This indicated that there is a significant difference in the means between the three groups. There is significant difference in physical barriers of digital divide among the secondary level rural school teachers based on their subjects.

**HYPOTHESIS-5**

**No significant difference is observed in motivational barriers of digital divide in between male and female secondary level rural school teachers.**

**Table-5**

| SAMPLES | NUMBER OF SAMPLES | MEAN | SD | T TEST |
|---|---|---|---|---|
| Male | 42 | 29.45 | 3.12 | 0.6906 |
| Female | 58 | 28.94 | 3.98 | |

**Table-5** described that the mean gained score of the male rural secondary level school teachers was a little higher than the mean gained score of female rural secondary level school teachers. The table t value 1.98 was higher than the calculated t value 0.6906 at 0.05 level of significance at 98 degrees of freedom. The hypothesis is accepted. Henceforth it is proved that there is no

significant difference in motivational barriers of digital divide in between male and female secondary level rural school teachers.

**HYPOTHESIS-6**

**There is no significant difference in motivational barriers of digital divide between graduate and post-graduate secondary level rural school teachers.**

**TABLE-6**

| SAMPLES | NUMBER OF SAMPLES | MEAN | SD | T TEST |
|---|---|---|---|---|
| Graduate | 51 | 30.49 | 4.15 | 1.6591 |
| Post-graduate | 49 | 29.14 | 3.98 | |

**Table-6** described that the mean gained score of graduate rural secondary level school teachers was a little higher than the mean gained score of post-graduate rural secondary level school teachers. The table t value 1.98 was higher than the calculated t value 1.6591 at 0.05 level of significance at 98 degrees of freedom. The hypothesis is accepted. Henceforth it is proved that there is no significant difference in physical barriers of digital divide in between graduate and post-graduate secondary level rural school teachers.

**HYPOTHESIS-7**

**No significant difference is observed in motivational barriers of digital divide among the secondary level rural school teachers based on their age.**

**TABLE-7**

| SAMPLES | NUMBER OF SAMPLES | MEAN | SD | T TEST |
|---|---|---|---|---|
| Less than 45 years | 62 | 28.94 | 3.84 | 1.4920 |
| More than 45 years | 38 | 27.84 | 3.10 | |

**Table-7** described that the mean gained score of the rural secondary level school teachers aged below 45 was a little higher than the rural secondary level school teachers aged above 45. The table t value 1.98 was higher than the calculated t value 1.4920 at 0.05 level of significance at 98 degrees of freedom. The hypothesis is accepted. Henceforth no significant difference is observed in motivational barriers of digital divide among the secondary level rural school teachers based on their age.

**HYPOTHESIS-8**

**There is no significant difference in motivational barriers of digital divide among the secondary level rural school teachers based on their subjects.**

**TABLE-8**

| Source of Variation | SS | df | MS | F value | P value |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| Between Groups | 2411.19 | 2 | 1205.59 | 12.51 | 0.001 |
| Within Groups | 9431.11 | 97 | 96.33 | | |
| Corrected Total | 11842.30 | 99 | | | |

**Table-8** showed that the computed F value was 12.51 which was significant at p< 0.001. Henceforth, the null hypothesis was rejected and the means were not equal. This indicated that there was a significant difference in the means between the three groups. There is significant difference in motivational barriers of digital divide among the secondary level rural school teachers based on their subjects.

**HYPOTHESIS-9**

**There is no significant difference in skill related barriers of digital divide in between male and female secondary level rural school teachers.**

**TABLE-9**

| SAMPLES | NUMBER OF SAMPLES | MEAN | SD | T TEST |
|---|---|---|---|---|
| Male | 42 | 28.54 | 3.54 | 0.8348 |
| Female | 58 | 29.18 | 3.95 | |

**Table-9** described that the mean gained score of the male rural secondary level school teachers was a little lower than the mean gained score of the female rural secondary level school teachers. The table t value 1.98 was higher than the calculated t value 0.8348 at 0.05 level of significance at 98 degrees of freedom. The hypothesis is accepted. Henceforth it is proved that there is no significant difference in skill related barriers of digital divide in between male and female secondary level rural school teachers.

**HYPOTHESIS-10**

**No significant difference is observed in skill related barriers of digital divide in between graduate and post-graduate secondary level rural school teachers.**

**TABLE-10**

| SAMPLES | NUMBER OF SAMPLES | MEAN | SD | T TEST |
|---|---|---|---|---|
| Graduate | 51 | 29.41 | 3.91 | 0.9379 |
| Post-graduate | 49 | 28.74 | 3.18 | |

**Table-10** described that the mean gained score of graduate rural secondary level school teachers was a little higher than the mean gained score of post-graduate rural secondary level school teachers. The table t value 1.98 was higher than the calculated t value 0.9379 at 0.05 level of significance at 98 degrees of freedom. The hypothesis is accepted. Henceforth it is proved that there is no significant difference in skill related barriers of digital divide in between graduate and post-graduate secondary level rural school teachers.

**HYPOTHESIS-11**

**There is no significant difference in skill related barriers of digital divide among the secondary level rural school teachers based on their age.**

**TABLE-11**

| SAMPLES | NUMBER OF SAMPLES | MEAN | SD | T TEST |
|---|---|---|---|---|
| Less than 45 years | 62 | 36.41 | 4.79 | 6.7589 |
| More than 45 years | 38 | 30.54 | 3.04 | |

**Table-11** described that the mean gained score of the rural secondary level school teachers aged below 45 was higher than the rural secondary level school teachers aged above 45. The table t value 1.98 was lower than the calculated t value 6.7589 at 0.05 level of significance at 98 degrees of freedom. The hypothesis is rejected. Henceforth significant difference is observed in motivational barriers of digital divide among the secondary level rural school teachers based on their age.

**HYPOTHESIS-12**

**There is no significant difference in skill related barriers of digital divide among the secondary level rural school teachers based on their subjects.**

**TABLE-12**

| Source of Variation | SS | df | MS | F value | P value |
|---|---|---|---|---|---|
| Between Groups | 2015.19 | 2 | 1007.59 | 9.06 | 0.001 |
| Within Groups | 10911.11 | 97 | 111.13 | | |
| Corrected Total | 12926.30 | 99 | | | |

**Table-12** showed that the computed F value was 9.06 which was significant at $p< 0.001$. Henceforth, the null hypothesis was rejected and the means were not equal. This indicated that there was a significant difference in the means between the three groups. There is significant difference in skill related barriers of digital divide among the secondary level rural school teachers based on their subjects.

**HYPOTHESIS-13**

**No significant difference is observed in the usage level related barriers of digital divide in between male and female secondary level rural school teachers.**

**TABLE-13**

| SAMPLES | NUMBER OF SAMPLES | MEAN | SD | T TEST |
|---|---|---|---|---|
| Male | 42 | 32.45 | 3.91 | 3.3118 |
| Female | 58 | 30.12 | 3.12 | |

**Table-13** described that the mean gained score of the male rural secondary level school teachers was a little higher than the mean gained score of the female rural secondary level school teachers. The table t value 1.98 was lower than the calculated t value 3.3118 at 0.05 level of significance at 98 degrees of freedom. The hypothesis is not accepted. Henceforth it is proved that there is significant difference in the usage level related barriers of digital divide in between male and female secondary level rural school teachers.

**HYPOTHESIS-14**

**There is no significant difference in the usage level related barriers of digital divide in between graduate and post-graduate secondary level rural school teachers.**

**TABLE-14**

| SAMPLES | NUMBER OF SAMPLES | MEAN | SD | T TEST |
|---|---|---|---|---|
| Graduate | 51 | 34.15 | 3.85 | 0.5176 |
| Post-graduate | 49 | 33.78 | 3.26 | |

**Table-14** described that the mean gained score of graduate rural secondary level school teachers was a little higher than the mean gained score of post-graduate rural secondary level school teachers. The table t value 1.98 was higher than the calculated t value 0.5176 at 0.05 level of significance at 98 degrees of freedom. The hypothesis is accepted. Henceforth it is proved that there is no significant difference in the usage level related barriers of digital divide in between graduate and post-graduate secondary level rural school teachers.

**HYPOTHESIS-15**

**TABLE-15**

**No significant difference is observed in the usage level related barriers of digital divide among the secondary level rural school teachers based on their age.**

| SAMPLES | NUMBER OF SAMPLES | MEAN | SD | T TEST |
|---|---|---|---|---|
| Less than 45 years | 62 | 28.45 | 4.90 | 3.8172 |
| More than 45 years | 38 | 24.85 | 3.99 | |

**Table-15** described that the mean gained score of the rural secondary level school teachers aged below 45 was a little higher than the rural secondary level school teachers aged above 45. The table t value 1.98 was lower than the calculated t value 3.8172 at 0.05 level of significance at 98 degrees of freedom. The hypothesis is rejected. Henceforth significant difference is observed in the usage level related barriers of digital divide among the secondary level rural school teachers based on their age.

**HYPOTHESIS-16**

**There is no significant difference in usage level related barriers of digital divide among the secondary level rural school teachers based on their subjects.**

**TABLE-16**

| Source of Variation | SS | df | MS | F value | P value |
|---|---|---|---|---|---|
| Between Groups | 241.51 | 2 | 120.75 | 1.10 | 0.001 |
| Within Groups | 10813.19 | 97 | 110.13 | | |
| Corrected Total | 11054.70 | 99 | | | |

**Table-16** showed that the computed F value was 1.10 which was not significant at p> 0.05. Henceforth, the null hypothesis was accepted. This indicated that there is no significant difference in the means between the three groups. There is no significant difference in usage level related barriers of digital divide among the secondary level rural school teachers based on their subjects.

**FINDINGS OF THE STUDY**

1. There was no significant difference in physical barriers of digital divide in between male and female secondary level rural school teachers.
2. No significant difference was observed in physical barriers of digital divide in between graduate and post-graduate secondary level rural school teachers.
3. There was significant difference in physical barriers of digital divide among the secondary level rural school teachers based on their age.
4. There was significant difference in physical barriers of digital divide among the secondary level rural school teachers based on their subjects.
5. Language teachers of rural secondary schools faced more physical barriers related to digital divide than Science and Social Science teachers.
6. Aged secondary level rural school teachers faced difficulty in using technology in their teaching learning process as they could not get appropriate access to technology and they were also not habituated in using technology.
7. No significant difference was observed in motivational barriers of digital divide in between male and female secondary level rural school teachers.
8. There was no significant difference in motivational barriers of digital divide in between graduate and post-graduate secondary level rural school teachers.
9. No significant difference was observed in motivational barriers of digital divide among the secondary level rural school teachers based on their age.
10. In the case of motivation, age is no barrier. All the secondary level teachers of rural schools have same level of motivation whatever their ages are.
11. There was significant difference in motivational barriers of digital divide among the secondary level rural school teachers based on their subjects.
12. Science teachers of rural secondary schools faced least motivational barriers related to digital divide.
13. There was no significant difference in skill related barriers of digital divide in between male and female secondary level rural school teachers.
14. No significant difference was observed in skill related barriers of digital divide in between graduate and post-graduate secondary level rural school teachers.

15. There was significant difference in skill related barriers of digital divide among the secondary level rural school teachers based on their age.
16. Secondary level rural school teachers who were aged need some basic technology-based school training as they had not got technology in their basic education.
17. There was significant difference in skill related barriers of digital divide among the secondary level rural school teachers based on their subjects.
18. Social Science rural secondary school teachers faced least motivational barriers related to digital divide.
19. Significant difference was observed in the usage level related barriers of digital divide in between male and female secondary level rural school teachers.
20. Male secondary level rural school teachers seemed to use digital platform and technology in teaching learning process more than the female secondary level rural school teachers.
21. There was no significant difference in the usage level related barriers of digital divide in between graduate and post-graduate secondary level rural school teachers.
22. Significant difference was observed in the usage level related barriers of digital divide among the secondary level rural school teachers based on their age.
23. Lack of skill in technology or digital field the secondary level teachers of rural schools faced barriers in the usage of digital platform in regular teaching learning process.
24. There was no significant difference in usage level related barriers of digital divide among the secondary level rural school teachers based on their subjects.
25. In the case of usage level related barrier of digital divide subject centricity did not play any crucial role to develop significant difference.

## EDUCATIONAL IMPLICATIONS

1. The study will be helpful for the stakeholders to understand the basic changes in the society and educational field needed to remove digital divide.
2. The study will be helpful to understand the probable causes of digital divide so that measures can be taken to remove the issues.
3. The government and private organizations can develop various workshops, programs, short term courses for the secondary level teachers to eradicate the problem.

## CONCLUSION

As technology holds one of the most important positions of the education system, it is the need of the hour to understand if all the teachers from whatever level he/she belongs to, can have the proper access to education and also it is important to know if this access has any adverse effect on the students. So, the researcher here identified that in the case of physical motivational, usage related and skill related barriers in most of the cases age has become a problem in the case of secondary level teachers. They have motivation or they want to eradicate the digital divide but their lack of skill and physical barriers it can not be possible. In most of the cases it was observed that Science secondary level teachers are more concerned about using technology. So, the researcher here identified digital divide in various categorical variables of the secondary level rural school teachers, so that identified issues can be diagnosed with proper care and utmost dedication.

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