# An Impact on Productivity of WFH in the Educational Sector (An Analysis of Opportunities and Challenges During and After COVID-19)

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#### Abstract

The pandemic, Covid-19, sweeping the world has rendered a large number of educationists, unable to commute their work, to cope with the lockdown policies of the Indian Government. This has resulted in online classes from home as well as new learning opportunities in terms of webinars, econferences, E-FDPs, and other virtual teaching & learning methods. The new ways of learning& teaching have caused a direct impact on their productivity as most of the educationists are new to the work from home environment. While some, if not all coming from the classroom environment had to face difficulties in doing work from home, the others have learned and adopted the new patterns of the online environment. Covid-19 has specially made quite a challenging task for educationists having experience in teaching in a classroom environment earlier to the pandemic. This study examines their experience using the data of 50-100 samples through questionnaires and interviews. It investigates the question of whether working from home improves productivity and created new opportunities in the educational sector. This study also analyses the changes in productivity due to experience, age, gender, and family background. This research provides insight to understand how can work from home be designed and blended with the conventional working system. It helps to revamp the present structure of teaching and learning as well as working hours and flexibility.

Keywords - Work from home, Productivity, Educationists, Covid-19 Pandemic, Lockdown

#### Introduction

The outbreak of a covid-19 disease affecting the world has created social and economic losses for people, specifically in the educational sector will reshape the way of teaching and learning. As of December 8, 2020, more than 67 million confirmed cases had been registered worldwide, with more than 1.5 million deaths (BBC News, 2020). To prevent the spread of this hazardous disease, governments have ordered the lockdown of whole nations. This has resulted in a change in the working patterns of people in every sector of an economy. The major change that has been observed in the working patterns is telecommuting or the Work from the Home system. Telecommuting has been proposed by the World Health Organization to be enacted by governments and organizations throughout the globe as a present-day work innovation to avert the escalation of the virus along with providing a solution to continue the work as usual without any hurdles. In comparison to the working from home system, WFH has the potential to turn down the commute time, furnish more pliable

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working hours and ameliorate work-life balance.

In this study, the researcher has examined the impact of WFH on the productivity levels of the educationists as it is the major transition in the educational sector for both the teachers and the learners. It is speculated that this work arrangement will remain to continue even after the pandemic ends not in the form of a complete WFH system but the blended form. As technology advances where everyone is having their mobile phones or computers, it has become urgent to evolve with this change. Educationists are making use of technology to be able to teach better to the students.

The researcher has analyzed whether the possibility of working from home in the educational sector is to be considered as a means of work-life balance because it provides the time to spend with the family members. However, there can be the possibilities of risks also at the same time that must be considered while doing work from home. Working from home is effective to improve the quality of life (Azarbouyeh and Jalali Naini 2014), employee happiness, work satisfaction (Kazekami 2020), and openness to creativity that will lead to innovation (Ellis and Webster 1998).

The side effects and risks that need to be considered when introducing telecommuting work such as social isolation can be a serious problem that causes workers to be detached and leads to reduced motivation and performance (Martin and MacDonnell 2012). The purpose of this study is to find out the major predictors impacting the productivity of the educationists while doing work from home. It also investigates whether online education is more convenient to the teachers in comparison to classroom teaching, whether it gives more scope for work-life balance and whether online education adds to the quality of content delivery. The study investigates the psychological aspect of the teachers regarding the work from home setup.

### **Review of Literature**

A review of literature is done to comprehend the areas of formerly undertaken work which throws a light on the potential areas that are yet to be discovered. An effort has been made to make a brief review of past work concerning the work from home environment. It is essential to make a review of this field to develop an understanding of the relationship between productivity and work from home.

Rahman and Arif (2020) have conducted a study on "Working from Home during the COVID-19 Pandemic: Satisfaction, Challenges, and Productivity of Employees". This study has investigated how professionals have collaborated online while working from home during a covid-19 pandemic in Bangladesh. The researcher has used both primary and secondary data to conduct the research. The findings of the study state that the participants of the research are fairly satisfied with the workfrom-home environment.

Irawanto, Novianti, and Roz (2021) researched on "Work from Home: Measuring Satisfaction between Work-Life Balance and Work Stress during the COVID-19 Pandemic in Indonesia". The purpose of the study was to fill the gaps in the literature by finding out the various predictors of job satisfaction during working from home. The researchers used a quantitative approach and the

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responses were analyzed using Smart-PLS software. The study points out that working from home, work-life balance, and work stress have a significant effect, both directly and indirectly, on job satisfaction.

Gibbs, Mengel, and Siemroth (2021) conducted a study on "Work from Home & Productivity: Evidence from Personnel & Analytics Data on IT Professionals". The study aimed to investigate the productivity of working from home during and before the pandemic period at an Asian IT services company. The researchers have presented various factors that are affecting the employee's productivity from working from a home environment. They have investigated the challenges that employees are facing while doing work from home.

Abi Adams-Prassl et al., (2020) have conducted a study on "work tasks that can be done from home: evidence on the variation within and across occupations and industries". The researchers have presented the models to determine the possibility of working from home including models that are used to analyze the impact of the pandemic policies pointed at reopening the economy.

Erik Brynjolfsson et al., and Von Gaudecker et al., (2020) have done a study on "Covid-19 and remote work: an early look at US data". In this study, the researchers have concluded that professionals, managers, knowledge workers, young employees, and those with other related occupations make more use of work from home system.

Barrero et al. (2020) have done a study on "60 Million Fewer Commuting Hours Per Day: How Americans Use Time Saved by Working from Home". The researchers found out that the people of the USA have saved time by more than 60 million hours per work day from WFH.

Bloom et at., (2015) conducted a study on "Does working from home work?: Evidence from a Chinese experiment". The researchers have done a study on call center employees in the Chinese firms. The findings suggest that the output of those employees rose who have assigned to work from home partly because they have worked more hours and partly because their productivity has increased.

## **Research Objectives**

This study's general objective was to analyse the productivity level of educationists while working from home during the pandemic period. To get a clear understanding of the overall aim of the study, certain specific objectives were set out as follows:

- To determine the scope of work-life balance in online education
- 2. To know the challenges involved in telecommuting
- 3. To know the psychological aspect of educationists related to telecommuting.
- To determine the perceived level of ease of use of e-learning tools.

## Research Methodology

Research methodology is a structured approach to describing the problem of research scientifically. It

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provides a clear thought of how the research has been done. In this paper, the exploratory research design has been employed. Both primary and secondary data are being used to gather the information for the conduct of the study. Primary data was gathered through an online survey conducted by designing the Google forms. While secondary data was collected from reviewing previous research literature, published articles, journals, books, websites, etc. The sample consisting of 50 educationists as respondents working remotely during the Covid-19 pandemic in Jaipur city of Rajasthan has been taken.

Due to the strict measures of lockdown during the pandemic period and busy WFH schedule of educationists and due to the non-availability of a sampling frame or the database, probability sampling was not possible to employ. A convenient sampling method was adopted which is otherwise called a non-random sampling. In this non-random sampling, data collection is done conveniently by well-suited members of the education sector.

## **Data Analysis and Interpretation**

For the study, primary data has been gathered from 50 educationists who were remotely working during the pandemic period. An online questionnaire created on the Google forms has been filled by the candidates and their responses are depicted below.

Microsoft Excel has been used to analyze the data which involves various quantitative aspects viz. percentage, mean, standard deviation, etc.

The following tables will show the information furnished by the participants for the study.

Table 1 depicts the positions of the educationists who have taken participation in the successful conduct of the study. In this assistant Professor (44%), Lecturer (20%), and Teacher (18%) have made up most of the sample.

Table 1: Job Positions of Educationists		
Job Title	No. of Respondents	Percentage of Respondents
Teacher	9	18%
Lecturer	10	20%
Assistant Professor	22	44%
Associate Professor	7	14%
Professor	2	4%
Total No. of Respondents	50	100%

## Working hours in WFH

Table 2 shows the online working hours of Educationists during the Covid-19 pandemic. The respondents on average work for about 26.58 hours per week. Subsequently, there are four weeks in a month which amounts to 106.3 hours per month on an average.

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Table 2: Online Working hours of Educationists		
Duration of work (Per Week)	Percentage of Respondents	Mean of work hours
Less than 20 hours	35.9%	Mean = 26.58 hours/week
20-30 hours	23.1%	
30-40 hours	30.8%	
More than 40 hours	10.3%	

## Demographic factors affecting the efficiency level of educationists in the WFH system

Some of the demographic factors also affect the efficiency level of educationists. An online survey reveals that younger age group participants were more satisfied with the WFH system rather than old age group participants as they were more technology savvy. Similarly, male faculties were more satisfied than women as the woman faculty find it difficult to balance both home and work. They got more distractions at home while doing work from home. In addition, marital status also affects the efficiency level of educationists. The efficiency of married participants with dependents at home has reduced considerably to unmarried participants with no dependents.

Table 3: Demographic factors affecting the efficiency of educationists		
Demographic factors	No. of Respondents	Percentage of respondents
Age	Below 35 years - 23	46%
	Above 35 years - 27	54%
Gender	Male -15	30%
	Female- 35	70%
Marital Status	Married – 36	72%
	Unmarried - 14	28%
Family background	Less than 5 members - 40	80%
	More than 5 members - 10	20%

#### Satisfaction level of educationists while WFH

42% of respondents have expressed that they "disagree" with the statement that online education is more convenient for teachers while 15% of respondents "strongly disagree" with the statement. This shows that the satisfaction level of educationists concerning online education is fairly very low in comparison to physical setup.

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Table 4 shows the factors that are somewhat positively contributing to the satisfaction level of educationists from WFH. 'Comfortable in using E-teaching tools' seems to be the most significant factor (70%), followed by 'E-learning platform is user-friendly (56%).

This strongly shows that educationists are more prone toward blended teaching in place of just working from home system.

Table 4: Factors contributing to the satisfaction level of educationists from WFH		
Factors contributing satisfaction levels	No. of Respondents	Percentage of Respondents
Scope for work life balance	16	32%
Quality of Content Delivery	22	44%
E-learning platform is user friendly	28	56%
Comfortable in using E-teaching tools	35	70%
Online learning platforms help simplify teaching skills	26	52%
*There were multiple responses present		

## Challenges faced by educationists while working from home

Challenges are always present in any work environment. *Table 5* shows some of the major challenges faced by educators while working from home are 'distractions at home' (50%), 'social isolation' (44%), and 'internet connectivity' (40%). Usually, educationists have 6 hours per day working but in the WFH setup, they were facing the difficulty in keeping a regular schedule. Educationists were also facing a challenge in having proper access to the equipment needed for working from home.

Some previous pieces of literature also have some similar results. According to Werber (2020), 25% of the respondents believe that the most challenging factor of working from home is social isolation. 13% of the respondents have also mentioned the distractions caused by children at home.

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Table 5: Challenges faced by educators while working from home			
Challenges	No. of Respondents	Percentage of Respondents	
Access to necessary tools/equipment	11	22%	
Social Isolation	22	44%	
Difficulty in coordinating with coworkers	10	20%	
Internet Connectivity	20	40%	
Distractions at home	25	50%	
Physical workspace	12	24%	
Other reasons	20	40%	

## \*There were multiple responses present

Source: Online Survey

## The psychological aspect of Educationists toward WFH

Table 6 shows the psychological aspect of educationists toward the work-from-home system. The most significant factor which is essential in the educational sector is the interaction of the teachers and their students which is missing in the WFH system. 76% of the respondents believe that 'inconsistent or poor contact with students' (76%) and 'personal attention is less in WFH' (74%) are the most significant factor which is lacking in the WFH system. Moreover, 70% of the respondents believe that there are continuous distractions both teachers and learners are facing while taking online education. This clearly indicates that educationists are not convenient in taking classes online more often.

#### Perceived level of productivity

The level of productivity of educationists can be measured by the number of students present in the class and their understanding level. Only 26% of the respondents believe that there was a satisfactory level of attendance of the students while only 22% of the respondents believe that online education is helping the students in understanding their subjects.

The productivity of educationists can also be measured by the knowledge they have gained by attending seminars or workshops. Due to the restrictions on the gatherings during the pandemic period, educationists were able to attend the seminars at home with the help of the internet. Table 7

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Table 6: Psychological aspect of educationists towards WFH			
Psychological aspect	No. of Respondents	Percentage of Respondents	
Personal attention to students is less in WFH	37	74	
Possibility of distractions at both ends	35	70	
Difficulty in coordinating with colleagues	22	44	
Inconsistent or poor contact with students	38	76	
*There were multiple responses present			

clearly indicates that 86% of the respondents accept that E-webinars, FDPs, and E-conferences are more convenient to attend at WFH than to participate physically. This indicates that the WFH system in the education sector can be both productive and unproductive in different aspects.

Table 7: Perceived level of Productivity			
The productivity level of educationists	No. of Respondents	Percentage of Respondents	
Satisfactory attendance of the students	13	26%	
Student's understanding level	11	22%	
More than 4 webinars attended during pandemic	30	60%	
E-webinars and FDPs are more convenient to attend	43	86%	

### Conclusion

Research results make it evident that the work from a home system in the educational sector has not proved to be the best option for the educationists of Jaipur city of Rajasthan. This study brings light to the changed scenario of working patterns in the educational sector during the Covid- 19 outbreak. The findings of the study advocate that the respondents did not find the working from home system convenient relative to the physical setup. In addition, some of the factors are contributing to the satisfaction level of educationists like the quality of content delivery, e-learning platforms being userfriendly, etc. Moreover, some of the challenges like social isolation, internet connectivity, the physical work environment at home, distractions at home, etc. have also been highlighted. The study also highlighted the productivity level of educationists which is both also low and high in different aspects. Specifically, the study has concluded that for the successful implementation of the WFH system, there should be access to tools/equipment required at both ends.

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