

Project Report

On

**A STUDY ON THE USAGE OF OTT  
PLATFORMS AMONG THE PEOPLE OF  
AGEGROUP OF 15-45 YEARS**

*Submitted*

*in partial fulfilment of the requirements for the degree of*

**BACHELOR OF SCIENCE**

*in*

**MATHEMATICS**

*by*

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**ST. TERESA'S COLLEGE (AUTONOMOUS), ERNAKULAM**



**CERTIFICATE**

This is to certify that the dissertation entitled, **A STUDY ON THE USAGE OF OTT PLATFORMS AMONG THE PEOPLE OF AGE GROUP OF 15-45 YEARS** is a bonafide record of the work done by Ms. **DRISHYA K** under my guidance in partial fulfillment of the award of the degree of **Bachelor of Science in Mathematics** at St. Teresa's College (Autonomous), Ernakulam affiliated to Mahatma Gandhi University, Kottayam. No part of this work has been submitted for any other degree elsewhere.

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# DECLARATION

I hereby declare that the work presented in this project is based on the original work done by me under the guidance of Smt.NEENU SUSAN PAUL , Assistant Professor, Department of Mathematics, St. Teresa's College(Autonomous), Ernakulam and has not been included in any other project submitted previously for the award of any degree.

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Ernakulam.

Date:25/02/2023

DRISHYA K

**AB20BMAT003**

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# Chapter 1

## INTRODUCTION

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### 1.1 INTRODUCTION

The outbreak of the COVID-19 pandemic across the world has profoundly altered almost all aspects of life. In India, large-scale social restrictions were adopted in March 2020 due to an increase in the number of people infected with COVID-19. The COVID-19 epidemic and the national lockdown have not only slowed business growth and financial outcomes but also have further driven a change in the use of products and services, including digital-based consumption. As the COVID-19 has made people stay in their homes, people started to stream web series and movies digitally, which has caused binge-watching to become the new norm in recent times and a part of the routine mostly during the lockdown period.

As there were only limited means of entertainment, people began to rely on OTT platforms for entertainment which started off an increase in the usage of OTT platforms. Digital content consumption is rapidly growing because of the increase in the number of smartphones and smart devices that are capable of supporting digital media. Improved networks and better access to the internet have also provided consumers with the option to access the media content of their choice, be it information, entertainment, or social activity, anytime, anywhere.

Previously, cinema theaters were the major source to watch films, but during the times of the pandemic, when people were confined to their homes, OTT platforms were the major source of entertainment. With their diverse content, OTT platforms soon gained acceptance and popularity. OTT (over-the-top) platforms stream video and audio services through the internet. There are more than 30 OTT platforms in India, including Netflix, Amazon Prime Video, Disney + Hotstar, etc. BIGFlix is the first independent OTT platform in India, launched by Reliance Entertainment in 2008.

Consumers can easily watch OTT content on smartphones and other devices. OTT platforms are cost-friendly. It helps us access our favorite content whenever and wherever we want. OTT Platforms did help in reducing or overcoming the stress created during the lockdown. Watching anywhere between 2 and 6 episodes of a TV series in one sitting is a behavior called binge-watching , which has extremely influenced the lifestyle of people. Not only youth, but all age groups have increased their usage of OTT platforms.

So here we are conducting a statistical survey on the usage of OTT platforms among people belonging to the age category of 15–45 years. Through this survey, we aim to study the different factors that affect the usage of OTT platforms. It will be analyzed using the Friedman Rank Method and the Chi-Square Method.

## 1.2 STATISTICS

Statistics is a branch of science that deals with the collection, organisation, analysis of data and drawing of inferences from the samples to the whole population. This requires a proper design of the study, an appropriate selection of the study sample and choice of a suitable statistical test. An adequate knowledge of statistics is necessary for proper designing of a study or a clinical trial. Improper statistical methods may result in erroneous conclusions which may lead to unethical practice.



### 1.3 VARIABLES

A variable is any characteristic that can take on different values, such as height, age, temperature, or test scores. It simply refers to a person, place, thing, or phenomenon that is tested to measure in some way. There are dependent and independent variables in a study. The value of independent variable is independent of other variables whereas the value of dependent variable depends on changes in the independent variable.

Variable is a characteristic in a population that varies from one individual member to another individual. Variables such as height and weight are measured by some type of scale, that conveys quantitative information and are called as quantitative variables. Sex and gender give qualitative information and are called as qualitative variables.

### 1.4 STATISTICS : DESCRIPTIVE AND INFERENCEAL

Descriptive statistics try to describe the relationship between variables in a sample or population. Descriptive statistics provide a summary of data in the form of mean, median and mode. Inferential statistics use a random sample of data taken from a population to describe and make inferences about the whole population. It is valuable when it is not possible to examine each member of an entire population.

### 1.5 INFERENCEAL STATISTICS

In inferential statistics, data are analysed from a sample to make inferences in the larger collection of the population. The by purpose is to answer or test the hypotheses. A hypothesis (plural hypotheses) is a proposed explanation for a phenomenon. Hypothesis tests are thus procedures for making rational decisions about the reality of observed effects. In inferential statistics, the term 'null hypothesis'  $H_0$  denotes that there is no relationship (difference) between the population variables in question.

Alternative hypothesis  $H_1$  denotes that a statement between the variables is expected to be true. The p value (or the calculated probability) is the probability of the event occurring by chance if the null hypothesis is true. The p value is a numerical value between 0 and 1 and is interpreted by researchers in deciding whether to reject or retain the null hypothesis. If p value is less than the arbitrarily chosen value (known as the significance level), the null hypothesis  $H_0$  is rejected.

## 1.6 STATISTICAL SURVEY

A survey is an investigation about the characteristics of a given population by means of collecting data from a sample of that population and estimating their characteristics through the systematic use of statistical methodology. There are different stages in conducting a statistical survey. Some important steps concerning a statistical survey:

1. Defining the problem
2. Determining the objective
3. Preliminaries to the collection of data.
3. Collection and Editing of data.
4. Classification and Tabulation of data
5. Analysis and Interpretation of data
6. Preparation of the report

## 1.7 COLLECTION OF DATA

The process of gathering, measuring, and analysing precise data from a range of pertinent sources in order to address issues in research, provide responses to queries, assess results, and predict future trends and probabilities is known as data collection. The two methods are:

**PRIMARY DATA** : This is authentic, first-hand data that the data researchers gather, as the name suggests. Prior to conducting any additional or connected study, this procedure is the first step in gathering information. Results from primary data are very precise as long as the researcher gathers the data. However, there is a drawback because in-person study may be costly and time-consuming.

**SECONDARY DATA** : Secondary data is information that has already received statistical analysis and has been obtained from other sources. This material is either the information the researcher has looked up or information the researcher has asked others to gather. It's second-hand knowledge, to put it simply. Although secondary information is more accessible and less expensive than main information, its authenticity and accuracy are questioned. The bulk of secondary data is composed of numerical information.

## 1.8 OBJECTIVES

1. To study the factors which influence the usage of OTT Platforms among the people of age group 15 to 45 years
2. To compare the usage of OTT platforms based on gender, age and locale.
3. To compare the usage of OTT Platforms before, after and during lockdown.
4. To understand how the the increase in screentime by binge watching content in OTT platforms has affected the sleep cycle.
5. To understand the likely preference regarding OTT platforms or theaters among the people of age group 15-45 years.

## 1.9 LITERATURE REVIEW

Many researchers and authors have studied various segments regarding the impact of OTT platforms and such media; few among them are used for this Research paper's finding. In 2020, in the journal report written by Navsangeet Sain in PalArch Journal of

Archeology of Egypt/Egyptology, the study of urban youth aimed to examine the trends in content consumption during the lockdown, and understand its reasons and implications. The study found that the use of OTT content platforms such as Netflix, Amazon Prime, Voot, Hotstar (now Disney Hotstar), etc. has seen a rise, especially among the younger age cohorts of the population. During the unfortunate times of an unprecedented global pandemic such as COVID-19, these video-on-demand platforms have seen a surge in their viewership. Owing to lockdown and statutory social distancing norms adopted by most countries affected by the pandemic, people registered a higher presence on these platforms. In the wake of these trends and statistics of increasing preference and dependence on OTT platforms for entertainment, information, and engagement among viewers that this study has been conducted

In 2020, Rohit Jacob Jose, in the International Journal of Advanced Science and Technology pointed out that content streaming on online platforms has much fewer breaks and advertisements compared to television. They have given the Indians better access to international content. They also have special algorithms which help in suggesting other movies or series based on the likes and past search history of their customer. The platforms themselves are producing their shows apart from just playing TV content online and on demand. This research paper aims to understand the OTT sector better and identify the various factors that influence the shift of consumers from traditional television to over-the-top media platforms in India.

In 2020, Garima Sharma Nijhawan et. al. - Amity School of Communication, in their paper “Journal of Content, Community and Communication” pointed out that they studied the evolution of OTT space in India and reviewed the dynamic OTT space and evaluated some firsts like big banner movie releases on platforms like Amazon and Netflix and the return of old content like Mythological programs from the DD era on Hotstar, etc. To complete the study, they evaluated the impact of growing content consumption on psychographics across generations

(children, adults, and elderly) as there is limited censorship in the OTT space. With this background, the researchers worked on the objectives and tried to evaluate the role played by the pandemic in evolving OTT media consumption trends; a qualitative mapping of increase in OTT adoption in Pre and Post-COVID-19 India. The study analyzed the underlying trends around increasing consumer appetite for the medium and analyzed the psychographic impact on children, adults, and elderly – listing the pros and cons of freely available content with minimal censorship. A survey was also conducted to do audience mapping and analysis. In addition to primary data, content from news articles, industry research reports, and international journals for the accumulation of key trends was analyzed.

In February 2020, Reshma et. al. pointed out through one of their papers published in the International Journal of Research and Analytical Reviews(IJRAR) that the entire study was based on the device level search volume and users for OTT apps. India is the second-largest and fastest-growing market for smartphones. Overall, OTT TV's competitive superiority surpasses that of traditional TV in all dimensions. Finally, in light of program types, news, movies, and sports effectively predict users' gratification with cable TV, whereas dramas and movies are predictive of users' gratification with OTT TV. The methodology adopted was based on the study that originated from the need to explain the rapid rise in OTT apps and to find out how it has an impact on teenagers, as they are constantly being exposed to digital media in the world of the internet. Participants in this experiment were from varied educational backgrounds and belonged to different age groups between (16-21). The findings showed that streaming movies and shows online have become a culture among students. And all these aspects are based on the services that are provided to the customers and are gaining more and more subscribers day by day as the competition has increased by understanding the psychology of the people to attract their attention towards their streaming apps.

## 1.10 SIGNIFICANCE OF STUDY

India provides a huge opportunity for online video providers. Apart from the traditional Over-the-Top (OTT) players in the market, major broadcasters in the country have also invested in this segment and launched their own OTT platforms. The main hindrance to the OTT market in the country is the average price for cable and satellite subscriptions, which limits subscription revenues for OTT players. Across the landscape, India is home to around 40 providers of over-the-top media streaming providers, including Eros Now, Voot, JioCinema, JioTV, MX Player, and Asianet Mobile TV. In light of the above information, we can understand that there has been a boom in the emergence of OTT platforms and similarly in the usage of OTT platforms, especially among the age group of 15-45 years, which signifies the reason for our study.

## 1.11 LIMITATIONS OF STUDY

The present study is an attempt to understand the usage of OTT Platforms among people belonging to the age group of 15-45 years. Even though the study yielded major findings, there were a few limitations in our survey. The survey was restricted to people between the age group 15-45.years. People from other age groups were not taken into consideration. We know that as the sample size increases the margin of error decreases. But due to time and other restrictions, the survey was limited to only 301 participants. Since the responses received were the personal choices of the respondents there is a chance that the data may or may not be biased.

# Chapter 2

## METHODOLOGY

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### 2.1 STATISTICAL TOOLS USED FOR STUDY

#### 2.1.1 Microsoft Excel

Microsoft Excel is a spreadsheet program used to record and analyze numerical and statistical data. Microsoft Excel provides multiple features to perform various operations like calculations, pivot tables, graph tools, macro programming, etc. It is used for data entry and management, charts and graphs, and project management. Microsoft excels helps to format, organize, visualize, and calculate data with this tool.

#### 2.1.2 SPSS

SPSS (Statistical Package for the Social Sciences ) is used by various kinds of researchers for complex statistical data analysis. The SPSS software package was created for the management and statistical analysis of social science data. It provides data analysis for descriptive statistics, numeral outcome predictions, and identifying groups. This software also gives data transformation, graphing and direct marketing features to manage data smoothly. SPSS's statistics program gives a large amount of basic statistical functionality; some include frequencies, cross-tabulation, bivariate statistics, etc.

### 2.1.3 P Value

The value expresses the probability of type I error. A p-value, or probability value, is a number describing how likely it is that your data would have occurred by random chance. The level of statistical significance is often expressed as a p-value between 0 and 1. The smaller the p-value, the stronger the evidence that you should reject the null hypothesis.

## 2.2 CHI SQUARE TEST OF INDEPENDENCE

The Chi-Square Test is an important test among the several tests of significance. It was developed by Karl Pearson in 1900. In general, the test that is used to measure the difference between what is observed and what is expected according to an assumed hypothesis is called ChiSquare Test.

The Chi-square test of independence determines whether there is a significant relationship between categorical variables. There is a null hypothesis and an alternative hypothesis in the Chi-square test.  $H_0$  that is the null hypothesis represents that there is no relation between two variables.  $H_1$  that is the alternative hypothesis indicates that there exist a significant relation between two variables. The significant level is the probability of rejecting the null hypothesis, when it is true. In most of the cases, we use significant level as 0.05. First we create the table of observed frequency from obtained data. Then expected frequency values are calculated using the following equation:-

$$(Row\ total \times column\ total) \div Grand\ total$$

Then, we create the table of expected frequency, we can calculate the Chi-square value using the equation:-

$$\sum \frac{(Observed\ Value - Expected\ Value)^2}{(Observed\ Value)^2}$$
$$\chi^2 = \sum \frac{(O_i - I_i)^2}{(E_i)^2}$$

The tabular Chi-Square value can be obtained by using degrees of freedom and significance level. Degrees of freedom refers to the maximum



number of logically independent values, which are values that have the freedom to vary, in the data sample.

$$\text{Degrees of freedom} = (\text{Columns} - 1) \times (\text{Rows} - 1)$$

If the calculated Chi-Square is greater than tabular Chi-Square, then we reject the null hypothesis and will accept alternate hypothesis.

A p value is a measure of the probability that an observed difference could have occurred just by random chance. The lower the p value the greater the statistical significance of the observed difference. In MS excel, we calculate the p value. Then we compare the p value with significance level.

If p value is greater than the significance level, we accept  $H_0$ . Hence we can say that there is no relation between two variables

## 2.3 FRIEDMAN RANK TEST

The Friedman test is a non-parametric statistical test developed by Milton Friedman. The Friedman test is the non-parametric alternative to the one-way ANOVA with repeated measures. It is used to test for differences between groups when the dependent variable being measured is ordinal. The procedure involves ranking each row (or block) together, then considering the values of ranks by columns. It can also be used for continuous data that has violated the assumptions necessary to run the one-way ANOVA with repeated measures (e.g., data that has marked deviations from normality) This Friedman's test is an ideal statistic to use for a repeated measures type of experiment to determine if a particular factor has an effect.

### STEPS OF FRIEDMAN TEST

#### 1. Specify the null and alternative hypothesis

*The null hypothesis is the statement that there is no difference between the three conditions. The alternative hypothesis is the statement that there is a difference between the three conditions.*

#### 2. Specify the level of significance

*The significance level is generally set at 0.05, this means that there is a 5 percentage chance to reject the null hypothesis.*

#### 3. Specify the rank

*Rank each row (block) together and independently of the other rows. When there are ties, the average ranks of the observations are considered. Sum the ranks for each column and then sum the squared columns total.*

#### 4. Calculate the Friedman statistic

$$F = \frac{12}{nk(k+1)} \sum R^2 - 3n(k+1)$$

where ,

n=number of rows

k=number of columns

R=sum of ranks

#### 5. Find the corresponding p value.

#### 6. Draw a conclusion

*If the p value is numerically less than the significance level, we reject the null hypothesis. Otherwise we say, we fail to reject the null hypothesis.*

## Chapter 3

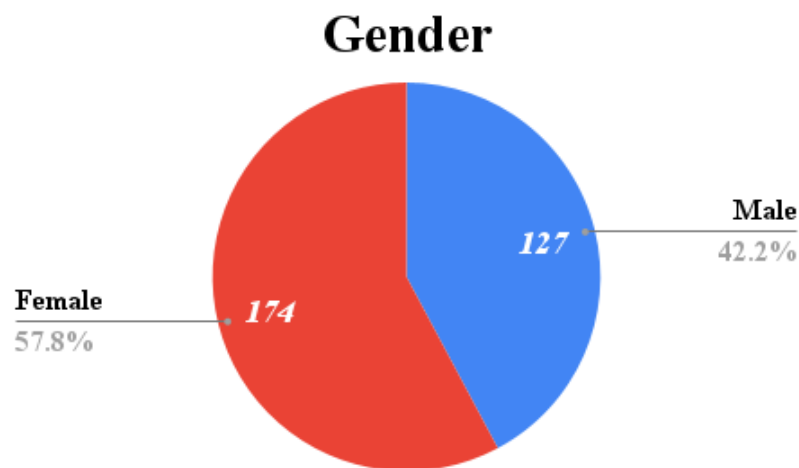
# DATA ANALYSIS AND REPRESENTATION OF DATA

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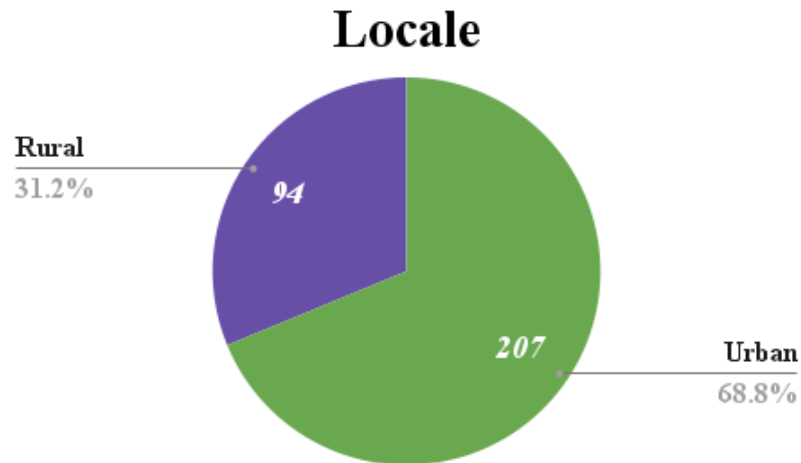
### 3.1 GRAPHICAL REPRESENTATION

Graphical representation of data is a method of showcasing numerical data that help in analyzing and representing quantitative data visually using graphs, plots, and charts etc.

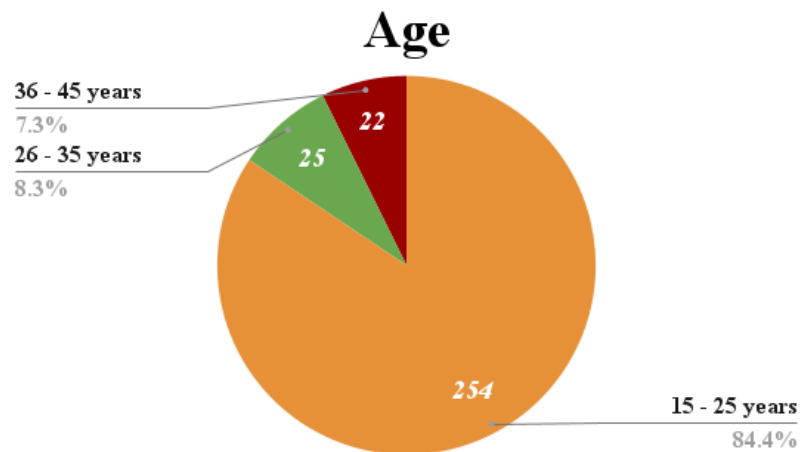
#### 3.1.1 Graphical Representation of Gender, Age and Locale



In the survey conducted we have a sample consisting of 174 females (57.8%) and 127 males (42.2%).

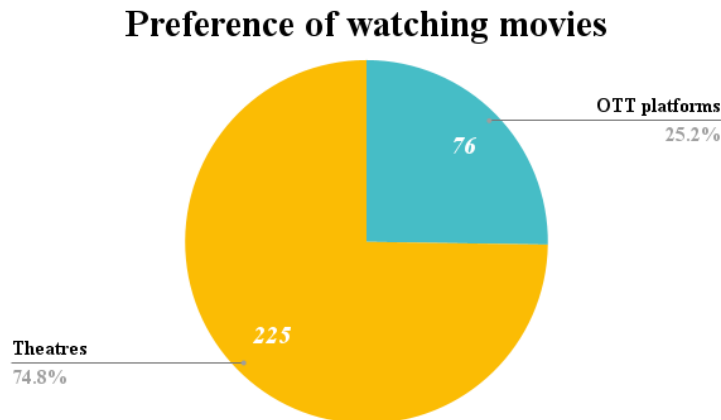


In the survey conducted we have a sample consisting of 207 respondents residing in urban locale (68.8%) and 94 respondents residing in rural locale(31.2%).



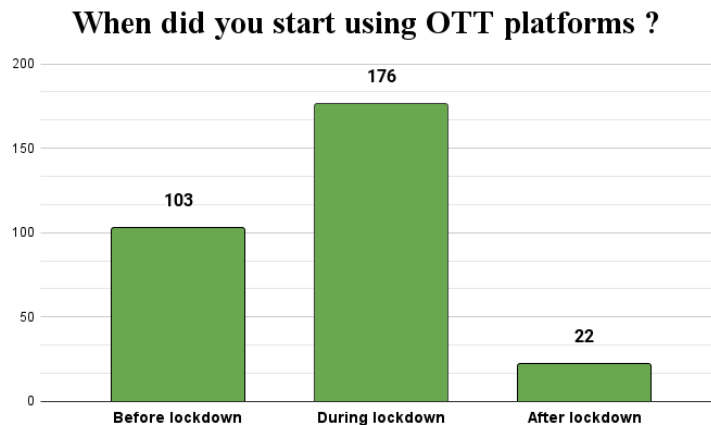
In the survey conducted we have a sample consisting of 254 respondents in the age group of 15-25 years (84.4%) ,25 respondents residing in the age group of 26-35 years (8.3%) and 22 respondents residing in the age group of 36-45 years(7.3%).

### 3.1.2 Preference of watching movies in OTT platforms / Theaters



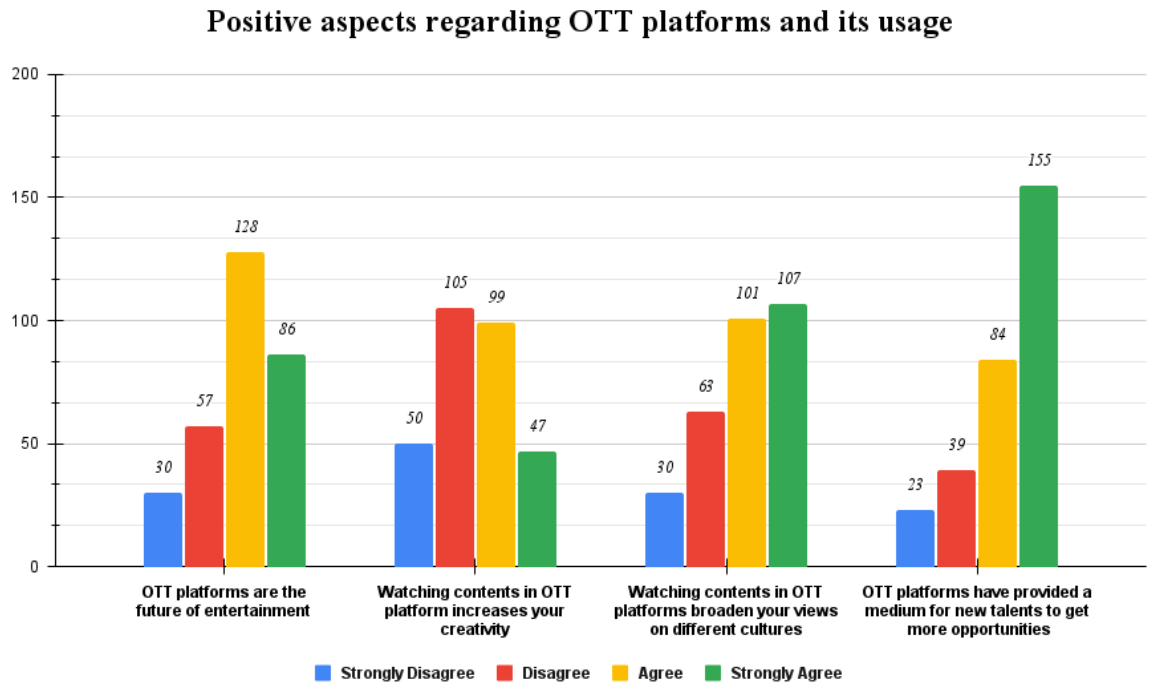
We found out that among the 301 respondents, 225 respondents (74.8%) of them prefer to watch movies in theaters , whereas 76 respondents (25.2%) of them prefer to watch movies in OTT platforms . Hence we can conclude that respondents started still prefer to watch movies in theaters .

### 3.1.3 Period when respondents started using OTT platforms



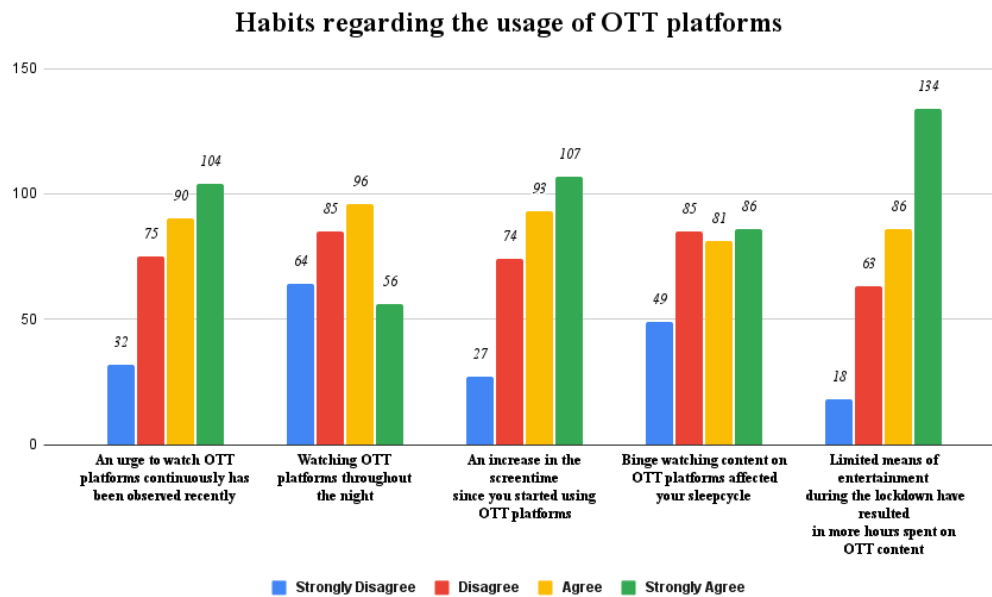
We found out that among the 301 respondents, 103 respondents of them started using OTT platforms before lockdown , 176 respondents of them started using OTT platforms during lockdown , whereas 22 of them started using OTT platforms during lockdown . Hence we can conclude that respondents started to use platforms majorly during the period of lockdown.

## 3.1.4 Positive aspects regarding OTT platforms and its usage



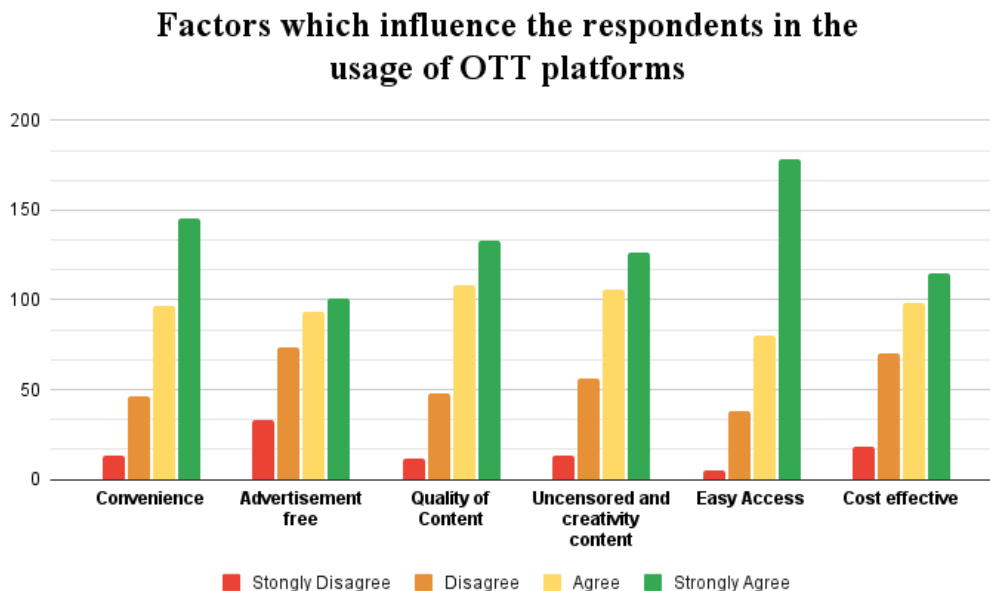
From the data we understand that 42.52% of the respondents being the majority *agree* that “OTT platforms are the future of the entertainment”, 34.88% of the respondents being the majority *disagree* that “Watching content in OTT platforms increases your creativity”, 35.55% of the respondents being the majority *strongly agree* that “Watching content in OTT platforms broaden your views on different cultures” and also 51.49% of the respondents being the majority *strongly agree* that “OTT platforms have provided a medium for new talents to get more opportunities”

## 3.1.5 Habits regarding the usage of OTT platforms



From the data we understand that 34.55% of the respondents being the majority *strongly agree* that “An urge to watch OTT platforms has been observed recently” ,31.89% of the respondents being the majority *agree* that “OTT platforms are being watched throughout the night” ,35.5% of the respondents being the majority *strongly agree* that “An increase in screentime has been observed since they started using OTT platforms” , 28.57% of the respondents being the majority *strongly agree* that “Binge watching content on OTT platforms affected your sleepcycle” and 44.5% of the respondents being the majority *strongly agree* that “Limited means of entertainment during the lockdown have resulted in more hours on spent on OTT content”.

### 3.1.6 Factors which influence the respondents in the usage of OTT platforms



Here we understand that a majority of the respondents consider *Easy Access* as a factor which attracts them to the usage of OTT platforms and *Advertisement Free* as a factor which influences the respondents the least regarding the usage of OTT platforms.

## 3.2 CHI SQUARE TEST

### 3.2.1 To compare the usage of OTT platforms based on gender, age and locale

#### 1. GENDER

$H_0$  : There is no relationship between the usage of OTT platforms and gender.

$H_1$  : There is a relationship between the usage of OTT platforms and gender.



OBSERVED VALUE (O)				
<b>Gender</b>	Less than 1 hour	2 - 4 hrs	More than 4 hours	Grand Total
<b>Female</b>	48	107	19	174
<b>Male</b>	41	71	15	127
<b>Grand Total</b>	89	178	34	301

EXPECTED VALUE (E)			
<b>Gender</b>	Less than 1 hour	2 - 4 hrs	More than 4 hours
<b>Female</b>	51.44850498	102.89701	19.65448505
<b>Male</b>	37.55149502	75.10299003	14.34551495

(O-E) <sup>2</sup> / E			
<b>Gender</b>	Less than 1 hour	2 - 4 hrs	More than 4 hours
<b>Female</b>	0.23114737	0.163605602	0.021794042
<b>Male</b>	0.316690098	0.224152556	0.029859554

<b>X<sup>2</sup> VALUE</b>	0.987249222
<b>DF</b>	2
<b>P VALUE</b>	0.610409881
	0.610409881

Since p value is greater than 0.05 we will accept the null hypothesis.

Hence, we can conclude that there exists no relation between the usage of OTT platforms and gender.

## 2. AGE GROUP

$H_0$  : There is no relationship between the usage of OTT platforms and age group.

$H_1$  : There is a relationship between the usage of OTT platforms and age group.

### 3.2. CHI SQUARE TEST

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OBSERVED VALUE (O)				
Age	Less than 1 hour	2 - 4 hrs	More than 4 hours	Grand Total
15 - 25 yrs	77	151	26	254
26 - 35 yrs	2	21	2	25
36 - 45 yrs	10	6	6	22
Grand Total	89	178	34	301

EXPECTED VALUE (E)			
Age	Less than 1 hour	2 - 4 hrs	More than 4 hours
15 - 25 yrs	75.1030	150.2060	28.6910
26 - 35 yrs	7.3920	14.7841	2.8239
36 - 45 yrs	6.5050	13.0100	2.4850

$(O-E)^2 / E$			
Age	Less than 1 hour	2 - 4 hrs	More than 4 hours
15 - 25 yrs	0.0479	0.0042	0.2524
26 - 35 yrs	3.9332	2.6135	0.2404
36 - 45 yrs	1.8778	3.7771	4.9717

<b>X<sup>2</sup> VALUE</b>	17.71811653
<b>DF</b>	4
<b>P VALUE</b>	0.001400862
	0.001400862

Since p value is lesser than 0.05 we will reject the null hypothesis.

Hence, we can conclude that there exists a relation between the usage of OTT platforms and age group

### 3. LOCALE

$H_0$  : There is no relationship between the usage of OTT platforms and locale.

$H_1$  : There is a relationship between the usage of OTT platforms and locale.

OBSERVED VALUE (O)				
Locality	Less than 1 hour	2 - 4 hrs	More than 4 hours	Grand Total
Rural	29	52	13	94
Urban	60	126	21	207
Grand Total	89	178	34	301

EXPECTED VALUE (E)			
Locality	Less than 1 hour	2 - 4 hrs	More than 4 hours
Rural	27.79401993	55.58803987	10.6179402
Urban	61.20598007	122.4119601	23.3820598

$(O-E)^2 / E$			
Locality	Less than 1 hour	2 - 4 hrs	More than 4 hours
Rural	0.052327368	0.231597123	0.534398272
Urban	0.023762187	0.105169708	0.242673611

<b>X<sup>2</sup> VALUE</b>	1.189928269
<b>DF</b>	2
<b>P VALUE</b>	0.551582348
	0.551582348

Since p value is greater than 0.05 we will accept the null hypothesis.

Hence, we can conclude that there exists no relation between the usage of OTT platforms and locale

**3.2.2** To understand how the the increase in screentime by binge watching content in OTT platforms has affected the sleep cycle..

$H_0$  : There is no relationship between the increase in screentime by binge watching content in OTT platforms and sleepcycle .

$H_1$  : There is relationship between the increase in screentime by binge watching content in OTT platforms and sleepcycle .

OBSERVED VALUE(O)					
	Binge watching content on OTT platforms affected your sleepcycle				
Increase in the screentime	Strongly Disagree	Disagree	Agree	Strongly Agree	Total
Strongly Disagree	18	2	2	5	27
Disagree	15	38	12	9	74
Agree	6	27	38	22	93
Strongly Agree	10	18	29	50	107
Grand Total	49	85	81	86	<b>301</b>

EXPECTED VALUE (E)				
	Binge watching content on OTT platforms affected your sleepcycle			
Increase in the screentime	Strongly Disagree	Disagree	Agree	Strongly Agree
Strongly Disagree	4.3953	7.6246	7.2658	7.7143
Disagree	12.0465	20.8970	19.9136	21.1429
Agree	15.1395	26.2625	25.0266	26.5714
Strongly Agree	17.4186	30.2159	28.7940	30.5714

(O-E) <sup>2</sup> / E				
	Binge watching content on OTT platforms affected your sleepcycle			
Increase in the screentime	Strongly Disagree	Disagree	Agree	Strongly Agree
Strongly Disagree	42.1096	4.1492	3.8163	0.9550
Disagree	0.7241	13.9978	3.1449	6.9739
Agree	5.5174	0.0207	6.7252	0.7865
Strongly Agree	3.1596	4.9388	0.0015	12.3471

X <sup>2</sup> VALUE	109.3676891
DF	9
P VALUE	1.9776E-19
	1.9776E-19

Since p value is lesser than 0.05 we will reject the null hypothesis.

Hence, we can conclude that there exists a relation between the increase in screen-time by binge watching content in OTT platforms and its affect on sleep cycle

### 3.3 FRIEDMAN TEST

$H_0$  : There is no significant difference between the factors such as convenience , advertisement free , quality of content , uncensored and creativity of content , easy access and cost effectiveness.

$H_1$  : There is significant difference between the factors such as convenience , advertisement free , quality of content , uncensored and creativity of content , easy access and cost effectiveness.

#### Test Statistics<sup>a</sup>

N	301
Chi-Square	101.727
df	5
Asymp. Sig.	<.001

a. Friedman Test

Here the p-value is less than 0.05.

**Ranks**

	Mean Rank
Costeffective	3.27
EasyAccess	4.09
Uncensoredandcreativity content	3.45
QualityofContent	3.55
Advertisementfree	2.99
Convenience	3.65

We can hereby rank the factors as follows :

- 1.Easy access
- 2.Convenience
- 3.Quality of content
- 4.Uncensored and creativity content
- 5.Cost effective
- 6.Advertisement free

We can hereby understand that among the six factors it is "Easy Access" that attracts most of the respondents to the usage of OTT platforms.

## Chapter 4

# RESULT AND CONCLUSION

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### 4.1 RESULT

1. From the data we understand that *Easy Access* is the factor that mostly attracts the respondents in the usage of OTT platforms and *Advertisement free* is the factor that least attracts the respondents in the usage of OTT platforms

2. We also understand that age is related and gender and locale are not related regarding the usage of OTT platforms among the people of age-group of 15-45 years.

3. From the above survey we were also able to identify that 34.2% of people started using OTT platforms before lockdown, 58.4% during lockdown and 7.3% after lockdown.

4. We also understand the increase in screentime by binge watching content in OTT platforms is related to the sleep cycle among the people of agegroup of 15-45 years.

5. We were able to find out that among the 301 respondents, 225 respondents still prefer to watch movies in theaters, that is 74.9% whereas 76 of them which is 26.2% prefers to watch movies in OTT platforms

## 4.2 CONCLUSION

From our survey , we found out that majority of people believes that OTT is the future of entertainment while most of the respondents disagrees that watching contents in OTT platforms increases your creativity. Similarly a major amount of people agrees that watching contents in OTT platforms broadens your views in different culture and more than 150 respondents strongly agrees that OTT platforms have provided a new platform for emerging talents to showcase their creativity and get more opportunities. According to the study, factors which influence the respondents in the usage of OTT platforms are majorly convenience, quality of content, lack of advertisement, easy access and cost effective. From our analysis we were able to figure out that out of the 301 respondents a major amount of people are under the age group of 15-25 years uses OTT platforms regularly. Hence we can conclude that a relationship exists between the usage of OTT platforms and gender. We found no relation between OTT platforms and gender, locale .



### 4.3 SUGGESTION

1. Try to reduce the screen time. Initiating healthy conversation with family and loved ones can be of great help.
2. Try to create and maintain a balanced sleep cycle since sleep is one of the key factors for a healthy mind and fit body.
3. Schedule an offline life for yourself which includes outdoor and off-screen activities.
4. Schedule a screen time with a maximum limit above which one may try to avoid it.
5. Make sure that only your TV room/drawing room has a screen and that your bedroom doesn't have one. Having a theater setting in your bedroom can be a bad influence for you to break your schedule.

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# Appendix A

## ANNEXURE

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### ***A Study on the usage of OTT Platforms***

We, the students of third year B.Sc Mathematics, St. Teresa's College (Autonomous) Ernakulam, are conducting a statistical survey on the usage of OTT platforms between people belonging to the age category of 15 - 45 years. We all know that there has been an outsurge in the usage of OTT platforms very recently and is being affected in our daily lives in different ways .Through this survey we aim at studying the different factors that affect the usage of OTT platforms

drishyakrm@gmail.com [Switch account](#) 

*\* Required*

**Email \***

Your email

**Gender \***

Male

Female

**Locality \***

Urban

Rural

Age \*

- 15 - 25 yrs
- 26 - 35 yrs
- 36 - 45 yrs

When did you start using OTT platforms ? \*

- Before Lockdown
- During Lockdown
- After Lockdown

Which of these do you usually watch on OTT platforms ? \*

- Movies
- Webseries
- Webshows
- News
- Originals

Which type of content would you prefer to watch in OTT platforms ? \*

- National Content
- International Content

How many OTT channels have you currently subscribed to ? \*

- 0 - 1 channels
- 1-3 channels
- More than 3 channels

How many hours on an average do you spend daily watching content from OTT platforms ? \*

- Less than 1 hour
- 2 - 4 hrs
- More than 4 hours

Do you prefer watching movies in theatres or OTT platforms ? \*

- Theatres
- OTT platforms

**Which of these would you think are the positive aspects regarding OTT platforms and its usage ?**

**OTT platforms are the future of entertainment \***

	0	1	2	3	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

**Watching contents in OTT platform increases your creativity \***

	0	1	2	3	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

**Watching contents in OTT platforms broaden your views on different cultures \***

	0	1	2	3	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

**OTT platforms have provided a medium for new talents to get more opportunities \***

	0	1	2	3	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

**Which of the following practices/habits do you follow regarding the usage of OTT platforms ?**

**An urge to watch OTT platforms continuously has been observed recently \***

	0	1	2	3	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

**Watching OTT platforms throughout the night \***

	0	1	2	3	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

**An increase in the screentime since you started using OTT platforms \***

	0	1	2	3	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

**Binge watching content on OTT platforms affected your sleepcycle \***

	0	1	2	3	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

**Limited means of entertainment during the lockdown have resulted in more hours spent on OTT content \***

	0	1	2	3	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

Which of these factors do you think is the one which attracts you the most towards the OTT services ?

**Convenience \***

	0	1	2	3	
Most Unlikely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Most Likely

**Advertisement free \***

	0	1	2	3	
Most Unlikely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Most Likely

**Quality of Content \***

	0	1	2	3	
Most Unlikely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Most Likely

**Uncensored and creativity content \***

	0	1	2	3	
Most Unlikely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Most Likely

**Easy Access \***

	0	1	2	3	
Most Unlikely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Most Likely

**Cost effective \***

	0	1	2	3	
Most Unlikely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Most Likely