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Editorial

The NEP-2020 and academic revolution has brought with it a host of challenges: providing students with the latest knowledge, meeting stringent quality and accreditation standards, offering state-of-the-art infrastructure, and ensuring seamless integration into the industry. Many top B-Schools in India have forged international partnerships, indicating a global perspective in their educational endeavors. Yet, amidst this progress, a concerning trend has emerged. Despite the surge in the number of B-Schools, a significant portion of management graduates finds themselves without job prospects. This raises pertinent questions about the quality of education provided by these institutions.

Research stands as an essential and inseparable component of today's education system. It facilitates learning, discovery, information analysis, behavioral adaptation, and alignment with modern demands. The term "research-based" holds utmost importance, often used in daily marketing endeavors. Similarly, for B-School students to effectively showcase their skills in the competitive market, they must demonstrate that their knowledge is grounded in robust research.

It is with this imperative in mind that "PRAYAS – A Student's Research Journal" has been conceived. This initiative seeks to instill a culture of research-based learning among our students. By encouraging them to delve into real-world problems, analyze data, and propose innovative solutions, we aim to equip our graduates with the skills and mindset needed to thrive in today's dynamic business environment.

In conclusion, as B-Schools grapple with the challenges of the modern era, "PRAYAS" serves as a beacon of our commitment to nurturing inquisitive minds and producing industry-ready professionals. Through this journal, we embark on a journey to foster a generation of thinkers, innovators, and leaders who will shape the future of business with their research-driven insights.

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SIMPLE APPROACH TO DETERMINE STOCK PRICE VOLATILITY USING DASHBOARDS IN MS EXCEL

Prajwal Nitin Wakhare*

I. ABSTRACT

There are many ways existed to measure and model the stock price volatility. This paper discusses a new method to distinguish between High and Low volatility of stock price. Investors and Speculators believe in price behavior, optimally learn from past price observations. The model quantitatively accounts for the volatility of stock price with the understanding of price expansion and contraction concept. It passes through MS Excel dashboard function which changes the appearance of figures on specified conditions. The method tested on 3 scrips of Indian stock market to get significant results for forecasting the change in volatility. The method further converted in to the pine script format to plot the values on a chart with the live stock price data for continuous analysis purpose.

Keywords - Volatility, Stock Price, Price Expansion and Contraction, PEC Range, Wyckoff Cycle, etc.

II. INTRODUCTION

Definition of volatility is stated as “A measure of a stock’s tendency to move up and down at price, based on its daily price history over the latest defined period.”^[1] The volatility of the stock is depends on the price of the stock, there is a relationship between price and volatility where the relationship is how volatility changes with price. A market may become more volatile as the price increases and large price swings occur. Other times a market may become more volatile after a decline in prices. Many options traders base their volatility estimates on price levels in a market, raising the volatility for pricing if markets rise and lowering it if markets drop.^[2] This relationship is indirectly stating the Wyckoff theory and its cycle.

This approach to determining volatility is based on tranquil volatility which is replaced by VIX in the current stock markets. This is a raw method of measuring the volatility of the stock price. This paper considers the price movement of stock according to the Wyckoff Market Cycle which has four phases – Accumulation,

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Markup, Distribution, and Markdown.^[3] They represent trading behavior and price action. Once the final markdown phase of the Wyckoff cycle is complete, a new accumulation phase will kick off a new cycle. As Fig 1.1 shows the Accumulation and distribution phases are the consolidations of stock price where the volatility of the price is observed less. The markup and markdown phases are impulse moves that have high volatility in price. So, the price is divided into 2 phases of volatility where the impulse moves are considered price expansion, and the consolidation or minor movement of price is referred to as price contraction.

Every time the cycle runs in the same wave format where price contraction is followed by price expansion and vice-versa connecting with the transition phase which is more crucial for decision making from the investors or speculator's point of view.

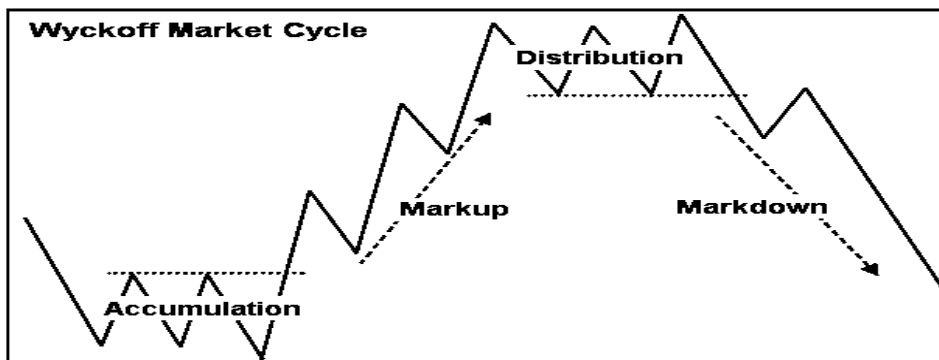


Fig 1.1 Wyckoff Market Cycle

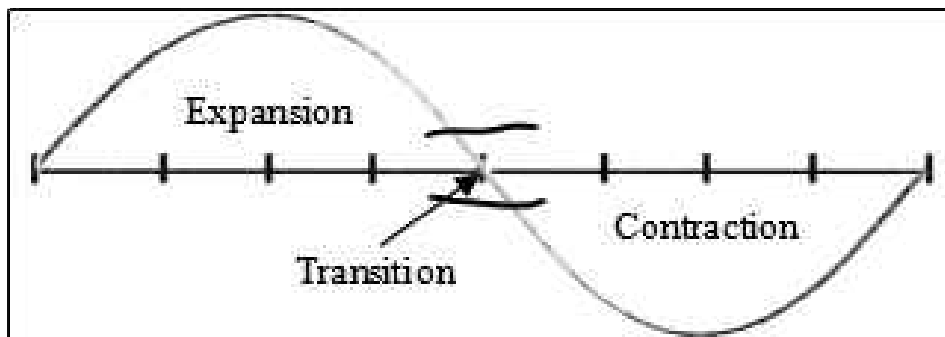


Fig 1.2 Price Expansion and Contraction Phases

Further, the approach is performed in Microsoft Excel with the OHLC (Open, High, Low, Close) data of stock price where simple mathematics, average, and most important conditional formatting are made to get the desired results. Additionally, for the live analysis purpose, the system is converted into a pine script format and put up a graph along with the live stock price.

Types of Volatility

Historical Volatility: The actual volatility that the market has traded in its history. This is the easiest to determine, although the history can vary greatly depending on the time frame used.

Seasonal Volatility: Many goods occasionally exhibit seasonal tendencies, getting more predictable at certain times and less predictable at other times of the year.

Implied Volatility: The volatility is derived from the option price and the Black Scholes or equivalent model. This is the actual market volatility of the option. Some speculators consider the implied volatility to be a good estimate of coming market volatility or the best estimate of the current volatility.

Predicted Volatility: The volatility the trader believes the market will trade in the future. This isn't the same as the implied but is the volatility a trader will use in the options evaluation model.

Future Volatility: This is the volatility the market will actually trade at in the future and isn't only the most important, but also the hardest to know.

III. LITERATURE REVIEW

For measuring the volatility of prices many methods have already existed in the market. CBOE Global Markets provides the CBOE volatility index Which is one of the most widely watched gauges of market volatility. Updated throughout the trading day and known by its ticker symbol, VIX, the index is computed using an option-pricing model and reflects the current implied or expected volatility that is priced into a strip of short-term S&P 500 Index options.^[4] While VIX measures S&P 500 volatility and in India for Nifty 50 index India VIX is introduced by NSE India. The Average True Range (ATR) is a derivation of the average range, which is just the average of the difference between each bar high and low over some past period. The ATR is calculated using a special formula devised by Wilder himself to reduce the effects of older data. The ATR is an average of the true range of each bar (Wilder, 1978). It

includes whatever effect a price gap between bars might have on the security's volatility. As mentioned earlier, there are different ways to measure price volatility. One is the standard deviation about a mean or moving average, and the other is the ATR. Bollinger Bands use the standard deviation calculation.^[5] ARCH and GARCH models have applied to study the behavior of stock market volatility. The study showed that GARCH (1, 1) model is more satisfactorily explains volatility clustering and its high persistence for better decision for making purpose. Although ARCH and GARCH models are used for evaluating volatility those are complex to understand for retail investors.^[8]

IV. RESEARCH OBJECTIVES

The first and main objective of research is to calculate the volatility of stock to understand the future behavior of stock price. Further objectives are:

- To know the accumulation-distribution and impulse phases of price,
- To determine price expansion or price contraction,
- To take decision for trading in F&O segment,
- To decide whether to buy or write options,
- To create a simple method to determine volatility in price.

V. METHODOLOGY

The research designed by using experimental research design method where two different variables are stock price and volatility of stock price. By the definition stock price is an independent variable and volatility is a dependent variable. Now here in model we are determining the volatility and by its behavior we try to forecast the price range or expansion-contraction of price. The whole research is performed by using secondary data which is stock price of scrips. The source of this secondary data is from the website of Indian Stock Exchanges. The data collected for performing research is dated from 3rd March 2022 to 31st May 2022 of three scrips named Tata Steel Ltd, Coal India Ltd and National Thermal Power Corporation India Ltd. Some mathematical methods and software tools are used in this research. Those are

I. Microsoft Excel 2019

- i. Subtraction in MS Excel

- ii. Average formula in MS Excel
- iii. Conditional Formatting

II. Tradingview

- i. Chart
- ii. Pine Script for coding

To begin with the model OHLC (Open, High, Low, Close) data of scrip is extracted from the website of National Stock Exchange, India.^[6]

A. Data Collection

OHLC data for the last 3 months is downloaded from the NSE website, where OHLC stands for Open-High-Low-Close price of the scrip on daily basis. The data extracted in csv. or xlsx. format. All additional data was deleted from the sheet except OHLC values. The purpose of selecting data for 3 months is to get smooth results over the short term as well as the long-term period.

Date	Open Price	High Price	Low Price	Close Price
28-Feb-22	1682.2	1728.05	1665	1715.6
02-Mar-22	1710	1714.4	1691	1702.8
03-Mar-22	1720.2	1733.9	1705.55	1720.85
04-Mar-22	1695.25	1736	1681	1723.3
07-Mar-22	1697	1751	1696	1739.85
08-Mar-22	1718.45	1800	1718.45	1778.2
...
...
...
26-May-22	1418	1430	1407.05	1423.95
27-May-22	1443.95	1467	1437.4	1461.35

Table 2.1 Data Collection

B. Calculation

1. Daily range is to be calculated by using the High and Low price. High-Low = High Price – Low Price
(for all days)
2. Average of last 5 Days range using AVERAGE formula of MS Excel
Average = Day1 + Day2 + Day3 + Day4 + Day5
5MS Excel Formula: =AVERAGE (num1, num1,)

6

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(For all days)

3. Apply Conditional Formatting to the Average column - color scale - Green Yellow Red

Date	Open Price	High Price	Low Price	Close Price	High - Low	Average
28-Feb-22	1682.2	1728.05	1665	1715.6	63.05	
02-Mar-22	1710	1714.4	1691	1702.8	23.4	
03-Mar-22	1720.2	1733.9	1705.55	1720.85	28.35	
04-Mar-22	1695.25	1736	1681	1723.3	55	
07-Mar-22	1697	1751	1696	1739.85	55	44.96
08-Mar-22	1718.45	1800	1718.45	1778.2	81.55	48.66
09-Mar-22	1791	1831.6	1791	1813.35	40.6	52.1
10-Mar-22	1844.75	1844.75	1810.2	1825.9	34.55	53.34
11-Mar-22	1814	1831.4	1811	1822	20.4	46.42
14-Mar-22	1831.55	1895	1831.55	1890.7	63.45	48.11
15-Mar-22	1888.35	1888.35	1830	1839.3	58.35	43.47
16-Mar-22	1865	1893.95	1849	1889.4	44.95	44.34
17-Mar-22	1923.3	1923.3	1833.05	1854.6	90.25	55.48
21-Mar-22	1861	1886.9	1841.1	1853.05	45.8	60.56
22-Mar-22	1850	1890	1839	1887.4	51	58.07
23-Mar-22	1897	1900	1857	1872.4	43	55
24-Mar-22	1856.15	1894.6	1856.15	1886.7	38.45	53.7
25-Mar-22	1892	1894	1858	1876.55	36	42.85
28-Mar-22	1866	1880.9	1852.65	1873.9	28.25	39.34
29-Mar-22	1873.9	1889.4	1860.55	1886	28.85	34.91
30-Mar-22	1910	1919	1895	1903.95	24	31.11
31-Mar-22	1900	1913	1894.2	1906.85	18.8	27.18
01-Apr-22	1886.85	1910.3	1878.3	1903.55	32	26.38
04-Apr-22	1889.75	1893	1873	1882.95	20	24.73
05-Apr-22	1883.8	1889.6	1857.15	1861.1	32.45	25.45
06-Apr-22	1855	1857.5	1822.15	1828.85	35.35	27.72
07-Apr-22	1821.05	1828.15	1807.55	1811	20.6	28.08
08-Apr-22	1823	1838	1808	1814.6	30	27.68
11-Apr-22	1814	1814	1762.55	1766.55	51.45	33.97
12-Apr-22	1757.5	1757.5	1727.75	1742.45	29.75	33.43
13-Apr-22	1754.95	1757.5	1732	1748.55	25.5	31.46
18-Apr-22	1605.5	1650	1590	1621.4	60	39.34
19-Apr-22	1636.65	1636.65	1550	1562	86.65	50.67
20-Apr-22	1575	1596.3	1563	1587.7	33.3	47.04
21-Apr-22	1595	1627.2	1589.25	1618.8	37.95	48.68
22-Apr-22	1604.35	1610.7	1582.4	1585.45	28.3	49.24
25-Apr-22	1572.8	1572.8	1554.1	1561.1	18.7	40.98
26-Apr-22	1577.2	1592	1566.55	1581	25.45	28.74

27-Apr-22	1572.75	1572.75	1550.35	1552.8	22.4	26.56
28-Apr-22	1570	1601.8	1557.45	1582.6	44.35	27.84
29-Apr-22	1590	1597.3	1560.8	1567.55	36.5	29.48
02-May-22	1550.9	1552.75	1531	1541	21.75	30.09
04-May-22	1547.25	1570	1530.15	1535.55	39.85	32.97
05-May-22	1560.05	1589.4	1557.45	1585.15	31.95	34.88
06-May-22	1550	1561.85	1535.05	1542.85	26.8	31.37
09-May-22	1540	1586.8	1522.15	1570.35	64.65	37
10-May-22	1558	1569.15	1546.05	1553	23.1	37.27
11-May-22	1549.95	1549.95	1511.6	1526.75	38.35	36.97
12-May-22	1514	1527.5	1504.3	1508.8	23.2	35.22
13-May-22	1519.3	1529.25	1498.1	1504.4	31.15	36.09
16-May-22	1510	1511.85	1478.65	1489.1	33.2	29.8
17-May-22	1494.9	1525	1480.9	1518.45	44.1	34
18-May-22	1522	1549.7	1505.3	1509.2	44.4	35.21
19-May-22	1481	1484.7	1417.65	1427.15	67.05	43.98
20-May-22	1453	1466.75	1446.7	1455.15	20.05	41.76
23-May-22	1455.1	1488	1450.05	1468.4	37.95	42.71
24-May-22	1468.6	1469.55	1435.25	1441	34.3	40.75
25-May-22	1435	1442.5	1399.25	1410.45	43.25	40.52
26-May-22	1418	1430	1407.05	1423.95	22.95	31.7
27-May-22	1443.95	1467	1437.4	1461.35	29.6	33.61

Table 2.2 Calculations

C. Pine Scripting and Plotting with price chart

Pine scripting is done through an online trading terminal called Trading View where live stock price can be analyzed over chart. Fig 2.3 shows the program of Price Expansion and Contraction Range and Fig 2.4 shows the plotted graph of PEC Range or blue line. Further Red line plotted on the blue line is 3 months moving average to locate the transition phase of stock price volatility.^[7]



```

1 // This source code is subject to the terms of the Mozilla Public License 2.0 at https://mozilla.org/MPL/2.0/
2 // © PrajwalWaks
3
4 //@version=4
5 study(title="Price Expansion & Contraction", shorttitle="PEC Range Intraday")
6 open_pos = high*1
7 close_pos = low*1
8
9 diff = abs(close_pos - open_pos)
10 pec = sma(diff, 5)
11 plot(pec)

```

Fig 2.3 Price Expansion and Contraction pine script

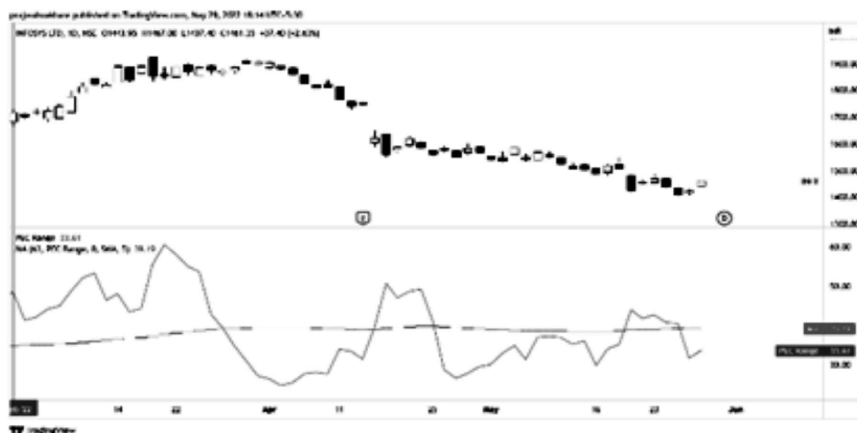


Fig 2.4 Price Expansion and Contraction on the chart

D. Interpreting the Information

As mentioned earlier the price is in continuous phases of expansion and contraction and the same is reflected by the price action of the stock. For determining the volatility, the color of the formatting must be taken into the consideration. When the average is in the green formatting it referred as an expansion phase of volatility or the price range where the average is in red formatting shows the contraction phase of volatility. When there is a situation where price expansion transforms into price contraction or price contraction transforms into price expansion the formatting color changes to yellow which is a sign of the transition phase of volatility or price range. While interpreting from the chart the 3 months average is used to locate the transition phase. When the price expansion and contraction line is above the average it signals the expansion phase whereas below the average is concluded as the contraction phase.

PEC Range < 3 Month's Average Price Expansion

PEC Range = 3 Month's Average Transition Phase

PEC Range > 3 Month's Average Price Contraction

E. Forecasting the Volatility

Since the cycle of expansion and contraction is infinity, the ranges keep fluctuating by changing the phases. So, it becomes easy to predict the market or stock price volatility in the coming time. As if the expansion phase peaks it's obvious

that now volatility is highly likely to get contract through a transition phase where transition phase plays a crucial role in confirming the end of the expansion phase. This happens with the contraction phase in which the contraction phase bottoms it's obvious that now volatility is highly likely to get expand through the transition phase where transition confirms the end of the contraction phase.

VI. DATA ANALYSIS

To analyze the method 3 scrips are randomly selected from the NSE Benchmark Index Nifty 50. OHLC data extracted from the NSE website for the scrips – 1) Tata Steel Ltd, 2) Coal India, 3) National Thermal Power Corporation India

a. Excel Calculation for all three scrips

Date	Average		
	TATASTEEL	COALINDIA	NTPC
03-Mar-22			
04-Mar-22			
07-Mar-22			
08-Mar-22			
09-Mar-22	39.57	8.36	3.71
10-Mar-22	47.13	7.57	3.68
11-Mar-22	46.5	6.12	3.34
14-Mar-22	45.74	4.92	3.05
15-Mar-22	48.74	5.6	2.45
16-Mar-22	49.3	5.58	2.17
17-Mar-22	44.08	5.09	2.04
21-Mar-22	43.24	6.21	2
22-Mar-22	44.83	6.41	2.05
23-Mar-22	42.92	5.7	1.9
24-Mar-22	43.43	5.76	2.08
25-Mar-22	40.58	5.72	1.99
28-Mar-22	38.16	5.59	1.99
29-Mar-22	33.6	5.87	1.79
30-Mar-22	29.62	6.07	1.98
31-Mar-22	26.98	5.68	1.77
01-Apr-22	27.58	5.61	2.71
04-Apr-22	30.01	4.85	3.27
05-Apr-22	31.93	3.93	4.16
06-Apr-22	32.8	4.48	5.06
07-Apr-22	36.73	5.26	5.96
08-Apr-22	34.38	5.76	5.37
11-Apr-22	32.67	5.81	5.02
12-Apr-22	39.69	7.68	4.4
13-Apr-22	37.91	7.06	3.69
18-Apr-22	35.75	6.89	4.38
19-Apr-22	42.54	8.12	5.01
20-Apr-22	43.02	8.88	5.3
21-Apr-22	37.63	7.97	5.36
22-Apr-22	38.99	8.4	5.3
25-Apr-22	43.18	10.23	4.55
26-Apr-22	34.99	8.48	3.67

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27-Apr-22	37.23	7.83	3.71
28-Apr-22	34.98	7.52	4.07
29-Apr-22	32.63	8.19	4.5
02-May-22	33.4	7.11	4.47
04-May-22	45.16	7.18	4.9
05-May-22	43.94	7.59	4.77
06-May-22	48.21	7.7	4.66
09-May-22	49.04	6.36	4.37
10-May-22	57.46	7.36	4.65
11-May-22	55.86	8.21	5.11
12-May-22	60.04	7.87	5.36
13-May-22	62.6	7.82	5.8
16-May-22	64.72	7.93	6.48
17-May-22	61.87	7.29	6.02
18-May-22	55.17	6.74	5.38
19-May-22	51.23	6.19	4.94
20-May-22	46.71	5.72	4.3
23-May-22	57.64	5.6	4.24
24-May-22	48.85	4.34	4.46
25-May-22	47.36	4.3	4.87
26-May-22	53.88	5.39	5.21
27-May-22	53.57	6.36	5.65
30-May-22	38.54	6.56	5
31-May-22	37.94	7.46	5.42

Table 3.1

a. Chart of the scrips

1) Tata Steel Ltd. (TATASTEEL)



Fig 3.2

2) *Coal India Ltd. (COALINDIA)*



Fig 3.3

3) *National Thermal Power Corporation India Ltd. (NTPC)*



Fig 3.4

VII. RESULT AND INTERPRETATION

As per the analysis the excel calculation as well as data signal for -

Tata Steel Ltd. (TATASTEEL) – In the middle of March, the light green colour indicates medium-high volatility, whereas the dark red colour at the end of March indicates low volatility. In the middle of May, volatility peaked. According to cyclical nature, this indicates that the volatility for the stock TATASTEEL will soon touch the lowest and bottom out. As per the chart, the same signals are reflected. The PEC Range is currently crossing the PEC 3-month average, indicating low volatility in the near future.

Coal India Ltd. (COALINDIA) – The volatility in this stock clearly transformed expansion to contraction from 9 March to 5 April, and contraction to expansion from 5 April to 24th May. This was a very precise cycle formed by this particular scrip, which shows the validity of the method followed. Also visible on the chart is the crossover of the PEC Range and the 3-month average, which indicates a very precise level of accuracy in forecasting volatility as it rises in the coming months if the PEC Range sustains over the 3-month average.

National Thermal Power Corporation India Ltd. (NTPC) – The NTPC stock price is taking a very long time to complete its price expansion and contraction cycle due to the behavior of that particular stock price. As it took 3 months to complete the journey from price contraction to price expansion, the next phase is the transition phase, which eventually converts into price expansion.

VIII. CONCLUSION :

The research paper discussed volatility, volatility and price relationship, and the new approach to determining volatility. With the use of this model and the chart indicator, it is seen that how investors or speculators can analyze the stock or market price to find out the nature of volatility and the different phases in the market which was mentioned by the Wyckoff Cycle. The stocks analyzed in this paper are following the right path which is as per the method and interpretation so, we can say that this new approach to determine the volatility of stock price using excel function conditional formatting is giving true results and can be used for further analysis of market price by investors, traders, scalpers or for any commodity price to know historical and current volatility. The forecast of the volatility is also possible. Another aspect in the research is for the options trader because while trading options volatility plays a major role. If it is known that volatility is going to increase in the coming time it is better to think about options buying rather than writing and one can also use volatility strategies. During the period of low volatility, options writing can be preferred, or rangebound strategies and vertical spread strategies can be used.

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$D_1 P_0$



A STUDY ON RESTAURANT SELECTION PREFERENCE IN MIDC AREA, AHMEDNAGAR

Krushna Dnyaneshwar Jadhav *, Deepali Jethanand Thawani**

I. ABSTRACT

Nowadays, restaurant's main purpose is not only to satisfy customer's needs for nutrition but also to provide the necessities such as having good time, relaxation and socialization. Business that wants to outrun their competition should primarily understand the changing demand and best meet those requirements in order to survive in an intense competitive environment. The present study explores the restaurant selection preferences of individuals in the MIDC area of Ahmednagar. The MIDC area in Ahmednagar is known for its industrial significance, hosting a diverse workforce that includes professionals, employees, and entrepreneurs. As the industrial landscape evolves, so do the dining preferences of the people working and residing in this area. Understanding the factors that influences restaurant selection in the MIDC area is crucial for restaurateurs and policymakers. The objective of the research was to study consumer behaviour of customer visiting restaurant in MIDC region. This study also dealt with the expectation of the people from MIDC Ahmednagar regarding the restaurant. The study was based on both primary and secondary data .Questionnaire was used as a research instrument. Total 55 responses were collected from MIDC area. The study conclude that he parking space , taste, cleanliness , hygiene and privacy are the considerable factor while choosing restaurant in MIDC area.

Keywords-

Consumer Behaviour, Preference, Restaurant, MIDC areamo

II. INTRODUCTION

“Marketing is an organizational function and a set of processes for creating communication, and delivering value to customers and for managing customer relationships in ways that benefit the organization and its stakeholders.”

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In today's business world a strong relationship with customers creates basics for competitive and successful business conditions for suppliers. One of the most important factors in the relationship between suppliers and customers is the quality of relationship, which determines the probability of their future interchange.

Nowadays, restaurant's main purpose is not only to satisfy customers needs for nutrition but also to reply on the necessities such as having good time, relaxation and socialization. Business that wants to outrun this competition should primarily understand the changing demand and best meet those requirements in order to survive in an intense competitive environment.

Today, the main point of marketing activities of restaurants is the customer. Large numbers of business for similar purposes are in operation and it is important to have competitive advantage in the environment. Business that wants to increase their profitability and get more shares from the market must try to understand the desire and needs of their customers.

The five most important factors, influencing restaurant choice, as it has been compromised on the researches and different studies are food quality, variety of food, price atmosphere and location.

According to these factors, the consumer is creating a restaurant set consisting of several restaurants with almost equal levels of food quality and service among the many alternative restaurants. Since there is not much difference between these restaurants in terms of food quality, variety of food and price, the consumers make the selection according other factors as image and atmosphere. Thus, the choice of restaurant is influenced by food quality, variety of food and price as well as atmosphere.

Consumer's preferences and demand for alternative foods, such as local products, are starting to recognize the multiple benefits of adopting responsible eating habits. These reasons are leading to the rise of searching variety of different initiatives, with the aim to shorten food supply chains and to provide possibilities for consumers to create new alliances with local farmers. It is obvious, that there are multiple and a different reason which creates difficulties in the bridge between consumers and farmers, such as inconvenience of the farmers location, missing clear information about the location, difficulties in reaching the distance etc. Restaurants that offer

local products can respond to the expectations of the customers.

In recent years, the dining landscape has witnessed a significant transformation, with people increasingly seeking unique culinary experiences. The selection of a restaurant is no longer solely based on the quality of food; instead, it is influenced by a myriad of factors ranging from ambiance and service to location and overall dining experience. This study aims to delve into the preferences of people when it comes to selecting a restaurant in the MIDC (Maharashtra Industrial Development Corporation) area in Ahmednagar.

The study explores the restaurant selection preferences of individuals in the MIDC area of Ahmednagar. Investigating factors such as cuisine, ambiance, pricing, and service, the research aims to provide insights into the dining choices within this industrial zone. Understanding these preferences can contribute to enhancing local dining experiences and supporting the growth of the restaurant industry in the region.

The MIDC area in Ahmednagar is known for its industrial significance, hosting a diverse workforce that includes professionals, employees, and entrepreneurs. As the industrial landscape evolves, so do the dining preferences of the people working and residing in this area. Understanding the factors that influences restaurant selection in the MIDC area is crucial for restaurateurs and policymakers alike.

III. REVIEW OF LITERATURE:

1) **Sayali Pachpute** (2023) conducted research on “**A Study Of Consumer Behaviour Towards Food Ordering And Delivery Platform**” The main objective of study was to understand the consumer preferences for online food ordering services and identify the factors which influence the consumer decision to order food online. After conducting research, the researcher found that people are highly satisfied with online food delivery platform . Out of food tracking, verity of payment option, food coupons and offers only people are satisfied with easy and convenient quality of food, price of food, etc. This study concludes that out of all online food delivery platform only Zomato and swiggy are mostly prefer and also respondents are satisfied with their service. This research has based on bother primary and secondary data. The primary data was collected through a questionnaire form and Secondary data was taken from Research papers, journals,

magazines, and websites. In this research Google form was reach out 129 respondents who use food delivery platform, which constituted sample size for the study.

2) PurviMunot, GirishMude (2021) conducted research on “**Challenges in Restaurant Industry: A Literature Review**” The main objective of the study was to identify the key challenges present in the restaurant industry in India. After conducting research, the researcher concluded that, In a rapidly expanding market with high food rising costs, the restaurant's performance was decided by its profitability without sacrificing quality or taste. The research on new issues, novel contexts in examining restaurant industry would substantially contribute towards the growing academic literature on restaurant industry in India. This research has mainly base on secondary data. The researcher collected the data with help of Google,EBSCOhost and Web of Science.

3) SaunakPala , Guru BasavaAradhya(2019) conducted research on “**A Study on Challenges Faced by Restaurants to Maintain Quality Food with Competitive Pricing**” The main objective of study was to identify and critically analyse the factors affecting the pricing strategies presently being employed by restaurants in Pun, and Lavasa. For this research, PUNE AND LAVASA city has selected as research area.After conducting research, the researcher concluded that Prices of raw materials are regularly kept in check by an intrinsic network comprising of suppliers and other middlemen who never fail to deliver quality raw materials at optimum costs at the right time. Competition among restaurants plays a pivotal role in formulation of pricing strategies. Pricing strategies need to comply with non-compromisation of safety and hygiene standards, quality and best value. Restaurant owners and managers have to work dedicatedly day and night in spite of short-term loss of workforce, consumers and profits. This research has mainly base on primary data. The researcher takes 60 days to collect the data through the primary source.

4) HafizeFidan, Stankostankov ,evadimitdrova(2018) carried out the research on “**Consumers Behavior of Restaurant Selection.**” The objective of this research was to study consumer’s attitude for choice of a restaurant. This research conducted at Plovdiv region, Bulgaria. To conduct this research the researcher collected primary data from respondents. 250 questionnaires were distributed to the

randomly selected respondents, who were requested to complete the survey. The research concluded that it is important for restaurants to gain information about the factors that affect customers' preferences for restaurants as they understand consumers' needs and strive to provide satisfaction in order to develop successful marketing strategies. Restaurants have to meet not only the nutritional needs but also the necessity of entertainment, relaxation and socialization in an intensive competitive environment, in order to maintain their assets and to be permanent.

5) Alciaizquierdoyusta, Jorge pelegrin Borondo, Mariapilar Martinez-Ruiz. (2018) carried out the research on **“Consumers’ behaviour in fast food restaurant: a food value perspective from Spain”** The purpose of this paper is to understand consumers' behaviour in fast-food restaurants in Spain. To this end, the authors conducted a survey that combined a classification of food values, as proposed in the relevant literature, with a related model that links personal values to behaviour.

For this research, Burgos (Spain) selected as research area. The survey mainly based on primary data. The required data collected through the questionnaire. In order to keep the sampling error below 5 per cent, we conducted 400 personal surveys at the exit of different McDonald's and Telepizza establishments located in the city of Burgos (Spain). – The results indicate that consumers can be clustered into three groups based their food values assessments: the “mainly utilitarian” group, the “mainly hedonic” group and the “ethical values” group. These groups not only demonstrate diverse habits, but also differ on key variables such as satisfaction, trust and loyalty.

6) MreduGoyal (2016) conducted research on **“A STUDY OF IMPACT OF SOCIAL MEDIA ON CONSUMER BEHAVIOR IN RESTAURANT INDUSTRY OF JAIPUR CITY”**. This research paper aims to study the impact of social media on consumer behavior in restaurant industry of jaipur city. The research area for the study was Jaipur city. The data has been collected both by primary as well as secondary data. The primary data collected through the questionnaire which was distributed among the different age group and secondary data has been collected with the help of Books, Websites, Journals & Publication. The research concluded that the social media though not much popular in consumers of jaipur for restaurant selection is now a strong driving force. Online visibility through social media marketing is

gradually becoming a secret weapon of restaurant owners in having a strong customer base. Consumer buying behavior is changing very speedily & marketers have to change their strategies according to the scenario. Therefore now the restaurant marketers have to focus on their promotional strategies.

7) KirtiDatta, H.G Parsa, Rahul A. Parsa, Milos Bujisic(2012) conducted research on “Change in Consumer Patronage and Willingness to Pay at Different Levels of Service Attributes in Restaurants”

The main objective of study was his study focuses on the restaurant sector of India and investigates how restaurant attributes are changing in a growing economy with reference to consumers' willingness to pay (WTP) and intentions to patronize. This study mainly based on primary data. Total 308 response collected from New Delhi for the research. The current research found that customer decision making is very complex and there are various trade offs that are made when deciding between these different types of restaurants. Current results indicate that, in cases of high-end, fine dining restaurants, quality of food is the most preferred service attribute with reference to consumer WTP and patronage. It is followed by other service attributes, service and ambiance, in that order. Similar results were also obtained for casual dining restaurants assessing consumer patronage and WTP.

IV. OBJECTIVES:

- 1) To study consumer behaviour of customer visiting restaurant in MIDC area.
- 2) To study consumer expectation while choosing restaurant.
- 3) To understand which type of restaurant is suitable for the consumer of MIDC area, Ahmednagar.

V. RESEARCH METHODOLOGY:

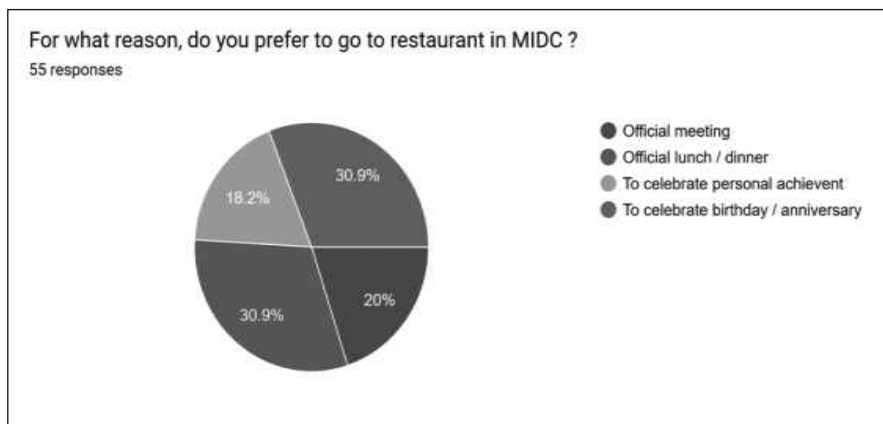
- 1) **Scope of the project :**
 - Research was carried out in MIDC area of Ahmednagar city.
 - Research was carried out for consumers regarding selection of Restaurant in MIDC area.
- 2) **Type of Data used:**
 - Primary Data

- Secondary Data
- 3) **Sources of Data:**
- Primary Data: Primary data was collected from consumers who highly prefer restaurants in MIDC area.
 - Secondary Data: Secondary data was collected from nearby restaurants like Chintamani hotel, Suvidha hotel, Parth hotel, Galaxy hotel.
- 4) **Data collection method :**
- Survey method was used for primary data.
- 5) **Research instrument:**
- Questionnaire was used as a research instrument. Questionnaire contains 10 questions.
- 6) **Sampling plan:**
- **Population:** Consumers who prefer restaurants in MIDC area of Ahmednagar.
 - **Sample size:** Total sample size is 55.
 - **Sampling Method:** Convenience sampling method.
- 7) **Research territory:**
- Research is carried out in MIDC area of Ahmednagar city.
- 8) **Statistical tools:**
- Percentage.
 - Graphical representation.
- 9) **Limitations:**
- The major drawback of the research is limited to geographical coverage; the study was carried out in MIDC area of Ahmednagar city only.
 - The sample size is limited due to constraint, so it may not represent the complete universe.
 - Sometimes the consumers were not ready to reveal the true facts.

VI. DATA ANALYSIS & INTERPRETATION

1) For what reason, do you prefer to go to restaurant in MIDC?

PREFERENCE	NO. OF RESPONDENTS	PERCENTAGE
Official Meeting	12	20%
Official Lunch/Dinner	16	30.9%
To celebrate personal achievement	11	18.2%
To celebrate birthday/ Anniversary	16	30.9%
Total no. of respondent	55	100%

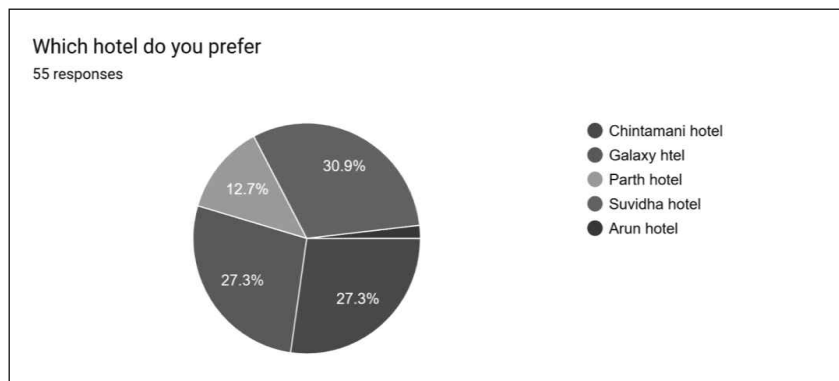


The geographical representation of the table shows that out of 55 respondents 20% prefer to go to restaurant in MIDC for official meeting, 30.9% prefer to go to restaurant for official lunch/dinner, 18.2% prefer restaurant to celebrate personal achievement and 30.9% prefer to go to restaurant to celebrate birthday/anniversary.

A STUDY ON RESTAURANT SELECTION
PREFERENCE IN MIDC AREA, AHMEDNAGAR

2) Which Hotel do you prefer the most in MIDC area?

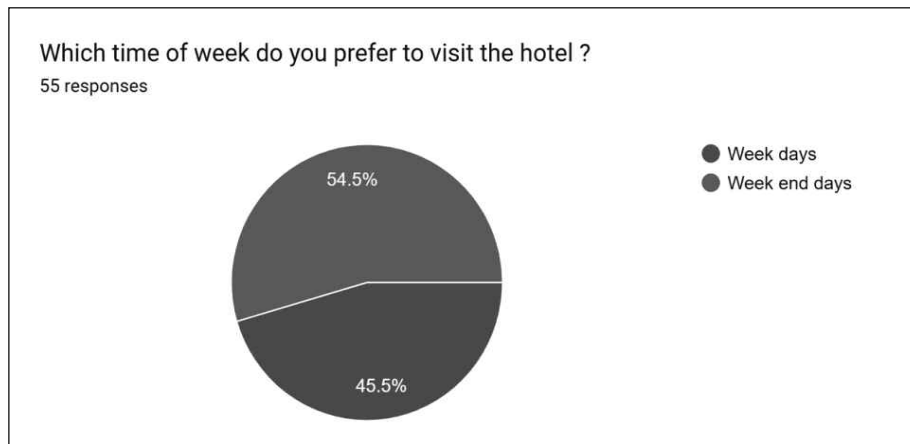
NAME OF THE HOTEL	NO. OF RESPONDENTS	PERCENTAGE
Chintamani Hotel	16	27.3%
Galaxy Hotel	16	27.3%
Parth Hotel	5	12.7%
Suvidha Hotel	17	30.9%
Arun Hotel	1	1.8%
Total no. of respondent	55	100%



The graphical representation of the table shows that out of 55 respondents 27.3% prefer Chintamani Hotel, 27.3% prefer Galaxy Hotel, 12.7% prefer Suvidha Hotel, 1.8% prefer Arun Hotel.

3) Which time of week do you prefer to visit the hotel?

DAYS	NO. OF RESPONDENTS	PERCENTAGE
Week Days	26	45.5%
Week end days	29	54.5%
Total no. of respondent	55	100%

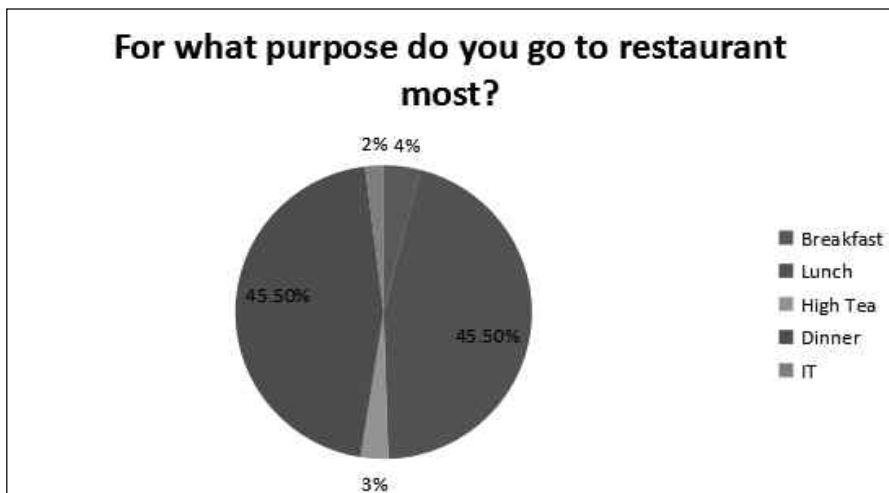


The graphical representation of the table shows that out of 55 respondents 54.5% of consumers prefer to visit the restaurant in week days and 45.5% consumers prefer to visit the restaurant in week end days.

A STUDY ON RESTAURANT SELECTION
PREFERENCE IN MIDC AREA, AHMEDNAGAR

4) For what purpose do you go to restaurant most?

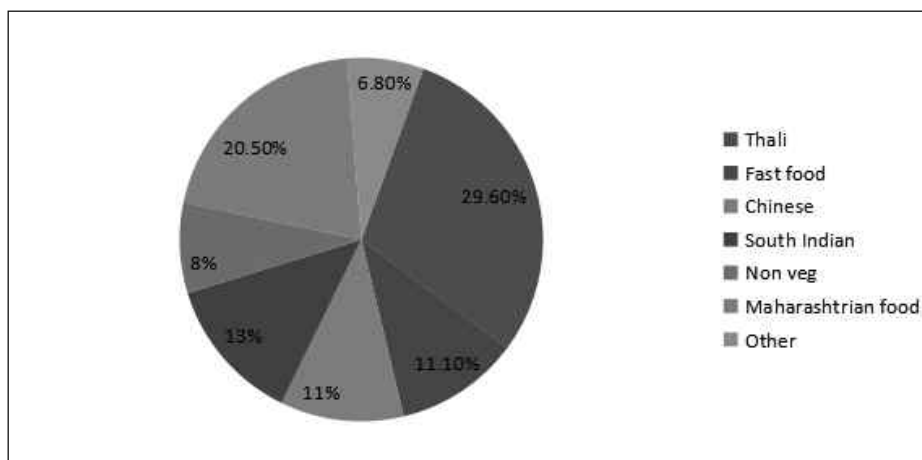
PURPOSE	NO.OF RESPONDENT	PERCENTAGE
Breakfast	2	4%
Lunch	25	45.5%
High Tea	1	3%
Dinner	25	45.5%
IT	2	2%
Total no. of respondent	55	100%



The graphical representation of the table shows the out of 55 respondents 4% prefer breakfast in the restaurant in MIDC area, 45.5% prefer Lunch, 3% prefer High tea, 45.5% prefer Dinner and 2% respondent prefer IT.

5) Which type of food do you prefer the most?

PREFERENCE	NO. OF RESPONDENT	PERCENTAGE
Thali	16	29.6%
Fast Food	6	11.10%
Chinese	6	11%
South Indian	7	13%
Non veg	5	8%
Maharashtrian Food	12	20.50%
Other	3	6.8%
Total No. of Respondent	55	100%



The graphical representation of the table shows that out of 55 respondent 30% prefer Thali, 11% prefer fast food, 11% prefer Chinese, 13% prefer South Indian, 8% prefer Non veg, 20% prefer Maharashtrian food and 7% respondent prefer other.

6) Rate the importance of following factors, which helps to choose restaurant?

Factors	Highly Important	Important	Neutral	Less Important	Not Actually Important	Total
Proximity to Restaurant	15	18	10	9	3	55
Discount	21	19	15	0	0	55
Taste	29	19	7	0	0	55
Quick Service	27	17	5	2	4	55
Varieties	32	9	7	7	0	55
Parking Space	29	11	5	6	4	55
Hygiene	45	9	1	0	0	55

The above graphical representation states that there are maximum rate is for taste, cleanliness and for hygiene .Bar, privacy and parking is given less rates than others.

VII. FINDINGS:

- 1) Out of 54 respondents 92.6% prefer to visit restaurant and remaining 7.4% prefer to visit another places.
- 2) 27.3% prefer Chintamani Hotel, 27.3% prefer Galaxy Hotel, 12.7% prefer Suvidha Hotel, 1.8% prefer Arun Hotel.
- 3) 54.5% of consumers prefer to visit the restaurant in week days and 45.5% consumers prefer to visit the restaurant in week end days.
- 4) 4% prefer breakfast in the restaurant in MIDC area, 45.5% prefer Lunch, 3% prefer High tea, 45.5% prefer Dinner and 2% respondent prefer IT.
- 5) 30% prefer Thali, 11% prefer fast food, 11% prefer Chinese, 13% prefer South Indian, 8% prefer Non veg, 20% prefer Maharashtrian food and 7% respondent prefer other.
- 6) There are maximum rate is for taste, cleanliness and for hygiene .Bar, privacy and parking are given less rates then other.

VIII. REFERENCES:

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- <https://www.taylorfrancis.com/chapters/edit>
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- https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3643790
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- <https://www.kiams.ac.in/assets/img/library/A-Study-on-Impact-of-Online-Food-Delivery-Systems>



EFFECTS OF ONLINE GAMING

Dange Kanchan Kanhu*

I. ABSTRACT

In this modern era, technology plays an important role in every walk of human life. People are using the latest technologies for information and entertainment, providing a wide range of benefits to the human community. For infotainment, people are depending on social media and online gaming in an advanced model. In this virtual world, online gaming touches its highest level. An online game is a video game that is played with the help of the internet or any other computer network available. Some people consider online gaming as a mode of entertainment. In this generation, the development of the mobile industry and network industries has helped grow the gaming industry. Online Gaming is also used as a tool to escape from stress in life. As everything has an opposite side online gaming also has one. Due to excessive usage of online gaming people get addicted to it which will cause many health issues like vision problems, headaches, neck pain, etc, and also mental issues which lead to many gaming disorders. So our study is done to check whether there is any impact of online gaming and its addiction among youth.

II. INTRODUCTION

Nowadays Online gaming is a major trend all over the world. One can play games if he/she has internet access. There are games which give us the opportunity to compete with people that we haven't met yet and also it is very possible to develop talent. Through online gaming, we can also keep in touch with our friends. Online games are splendid because there are games that we can earn from. Even though online gaming is a very pleasurable experience for many but it may also have pros and cons. online gaming is constructive because it can evade people, especially youths from getting involved in dangerous behaviour such as drugs and joining youth gangs. Online gaming exhilarates people and galvanizes them for competing with others. And also players layer mentally vigorous and sharper too. At the same time online gaming may have more harmful effects than good. New generations

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may face lots of health issues mainly due to a lack of physical movement. Online gaming may cause addiction and can consume time that is meant for other activities. Online games may lead to online abuse. Mainly children playing are cornered in this. They may also download games from sites that may contaminate computers with a virus.

Positive effects of Online Gaming:

- Concentration
- Quick thinking and decision making
- Improving problem-solving skills
- Development of teamwork and cooperation skills
- Bringing up accuracy, and logic
- Experimenting with aspects of individual identity

Negative effects of Online Gaming:

- Addiction
- Aggressive behaviour
- Detrimental influence on health
- Lack of time for more important activities like studying

III. OBJECTIVES

- To study the impact of online gaming among youth.
- To know the addiction level of online games among youth.
- To know the different types of online gaming disorders among youth.

IV. RESEARCH DESIGN, DATA ANALYSIS, AND INTERPRETATION

This study is an empirical study and used both primary and secondary data. Primary data had been collected from the sample respondents by administering the questionnaire. Secondary data had been collected from the internet to understand the effects of online gaming. A questionnaire had been constructed bearing in mind the objectives of the study. The same was pretested and after which the data was collected. A sample of 52 respondents was selected at random for the purpose of collecting data. The collected questionnaire was checked to validate the responses of the sample

respondents, entered in XLSTAT for further analysis, and results were drawn. The study had also been put to reliability analysis and proved reliable.

Population:

Research was carried out in Institute of management studies career development and research, Ahmednagar. Data was collected from management students.

Sample:

Data was collected from around 52 students of 8th to 12th, UG and PG.

Method of sampling:

We have used convenience method of sampling.

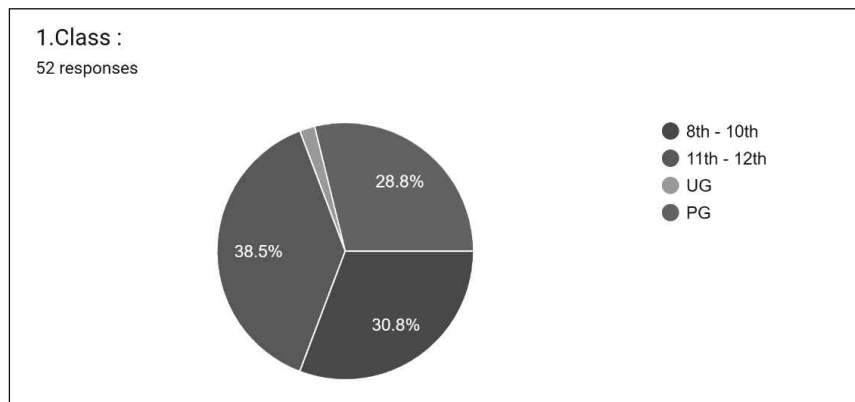
Research instruments:

Questionnaire method.

Limitations of study:

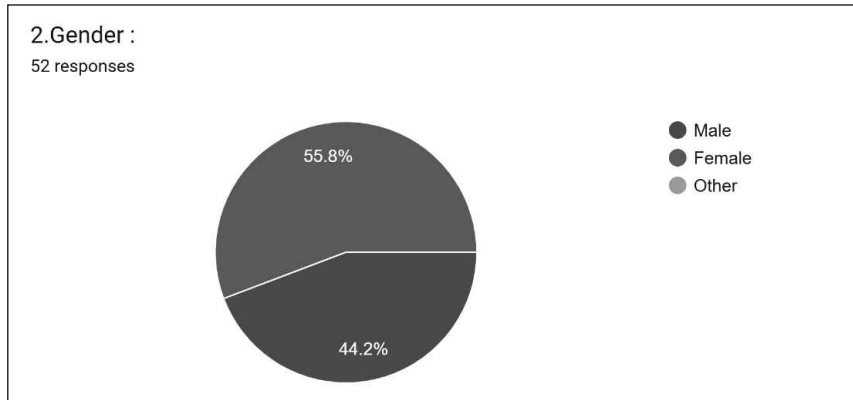
- Time constraint for data collection.
- Less sample size.

The results of the analysis and appropriate interpretations cum inferences are presented below:



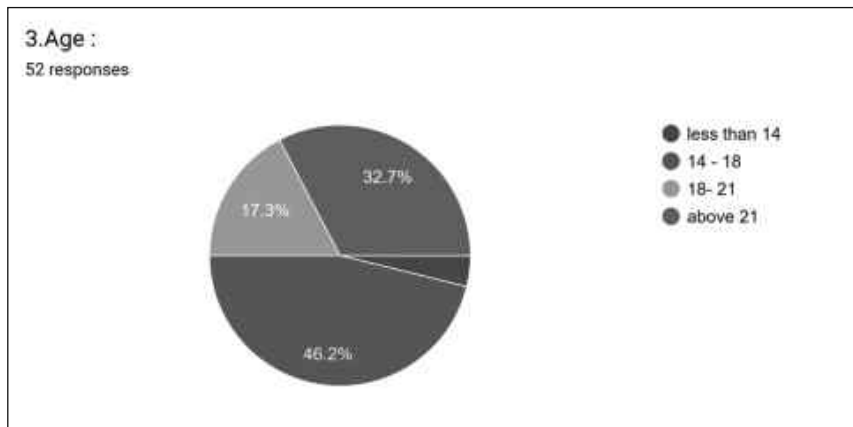
INTERPRETATION:

- 38.5% of respondents are 11th-12th class students.
- 30.8% of respondents are 8th-10th class students.
- 28.8% of respondents are PG class students.
- 1.9% of respondents are UG class students.



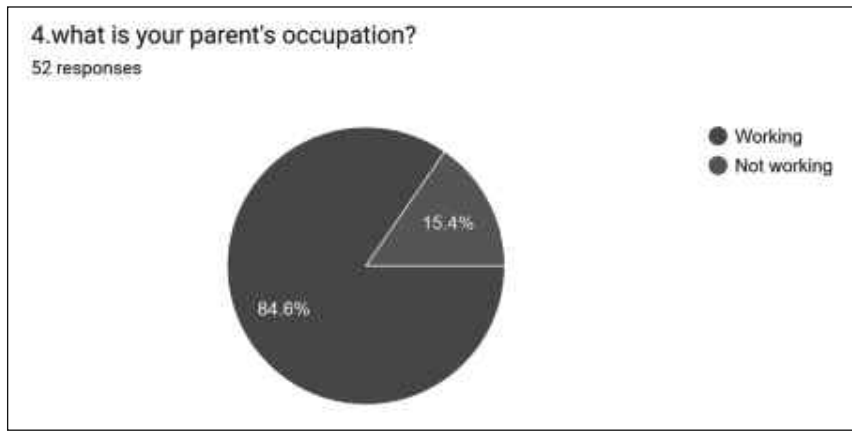
INTERPRETATION:

- Here 55.8% of respondents are female.
- Here 44.2% of respondents are male.

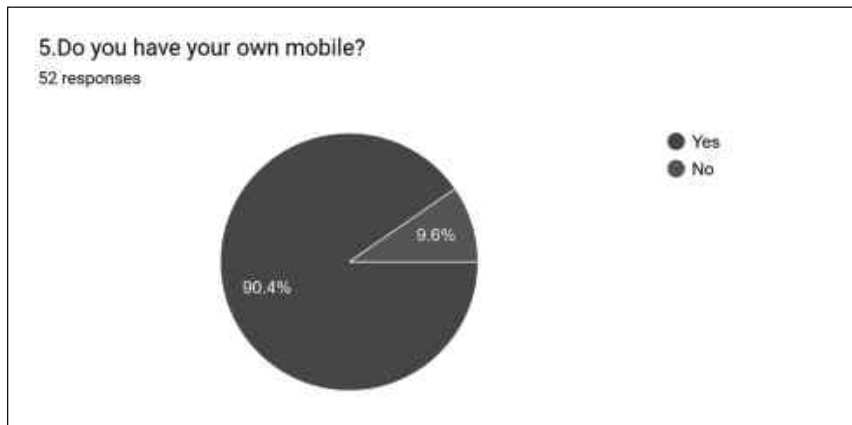


INTERPRETATION:

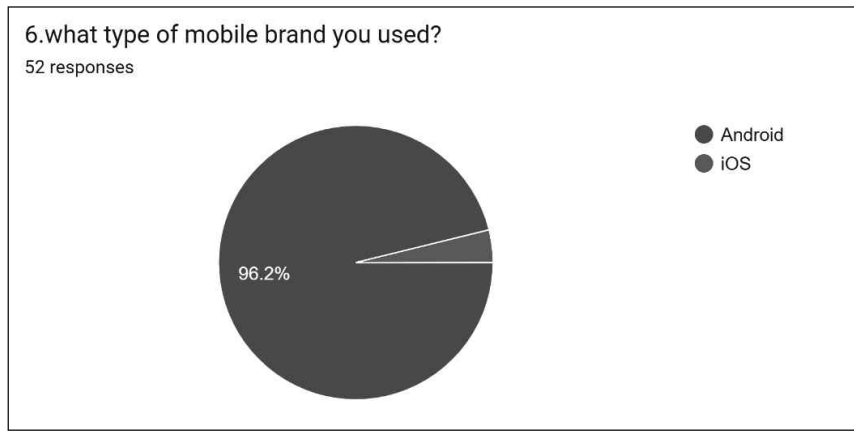
- 46.2% of respondents are in the 14-18 age group.
- 32.7% of respondents are above 21 age.
- 17.3% of respondents are in the 18-21 age group.
- 3.8% of respondents are in the less than 14 age group.

**INTERPRETATION:**

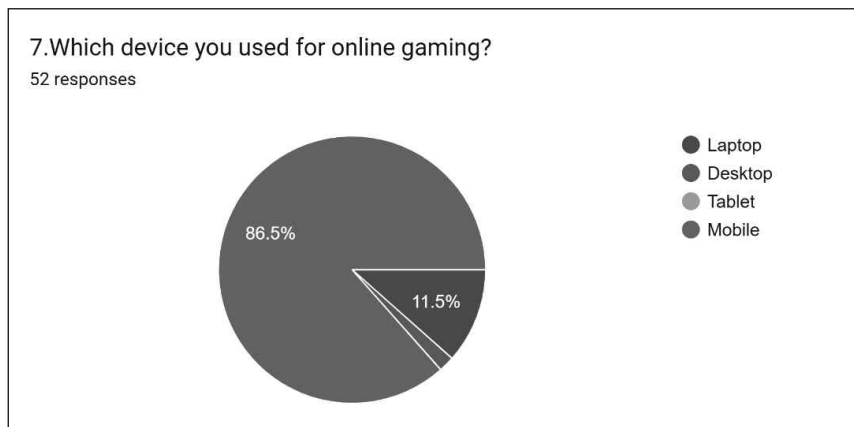
- 84.6% of students' parents are working.
- 15.4% of students' parents are not working.

**INTERPRETATION:**

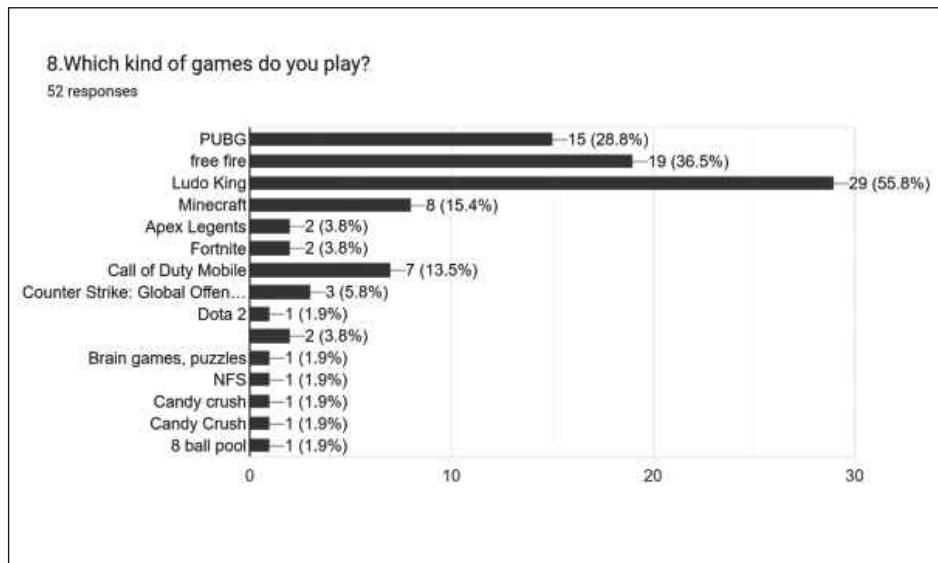
- 90.4% of students have their own mobile.
- 9.6% of students do not have their own mobile.

**INTERPRETATION:**

- 96.2% of people have used Android mobile brands.
- 3.8% of people have used iOS mobile brands.

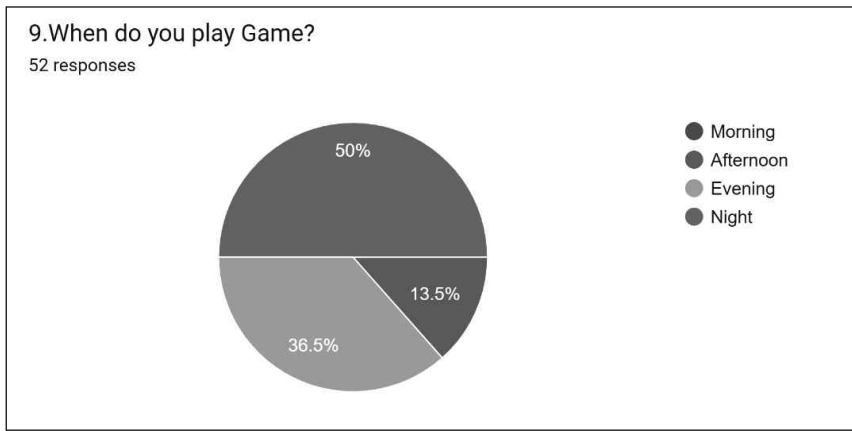
**INTERPRETATION:**

- 86.5% of the students used mobile for online gaming.
- 11.5% of the students used laptops for online gaming.
- 1.9% of the students used Desktops for online gaming.

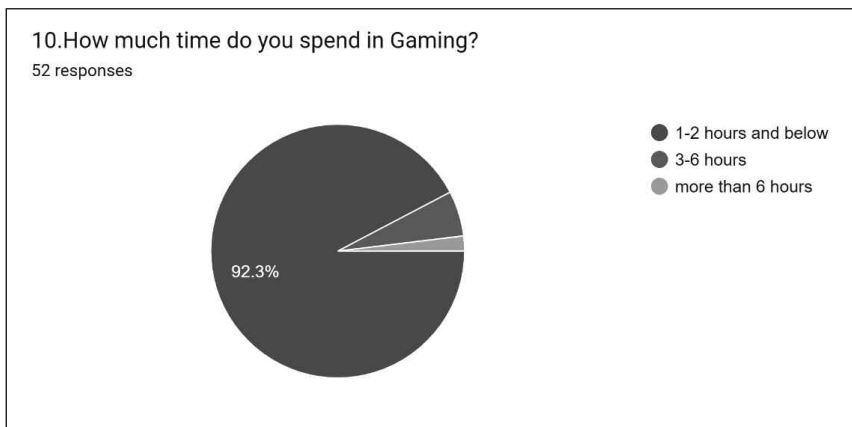


INTERPRETATION:

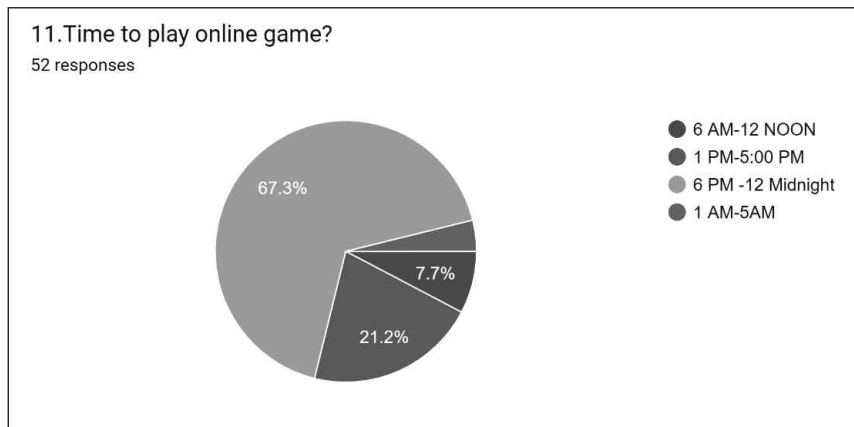
- 55.8% of people prefer to play the Ludo King game.
- 36.5% of people prefer to play the free fire game.
- 28.8% of people prefer to play the PUBG game.
- 15.4% of people prefer to play Minecraft games.
- 13.5% of people prefer to play the Call of Duty Mobile game
- 5.8% of people prefer to play the Counter-Strike: Global Offensive game.
- 3.8% of people prefer to play the Apex Legends game.
- 3.8% of people prefer to play the Fortnite game.
- 1.9% of people prefer to play Brain games, Puzzle games.
- 1.9% of people prefer to play the Dota2 game.
- 1.9% of people prefer to play the NFS game.
- 1.9% of people prefer to play the Candy Crush game.
- 1.9% of people prefer to play the 8ball pool game.

**INTERPRETATION :**

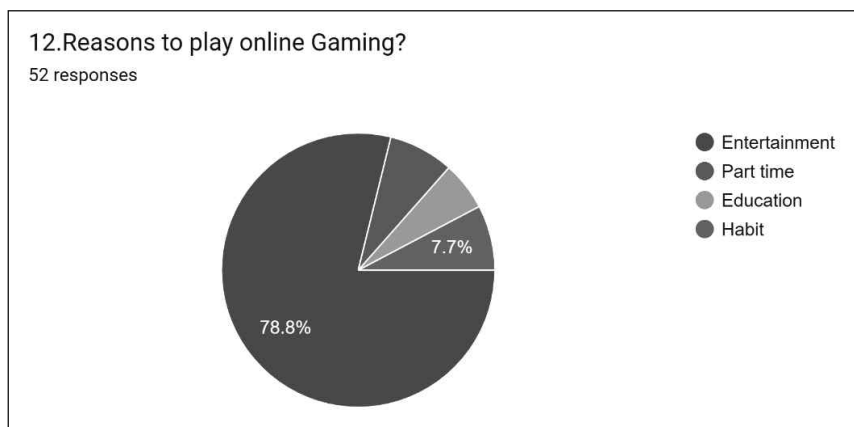
- 50% of the students play online games at night.
- 36.5% of the students play online games in the evening.
- 13.5% of the students play online games in the afternoon.

**INTERPRETATION :**

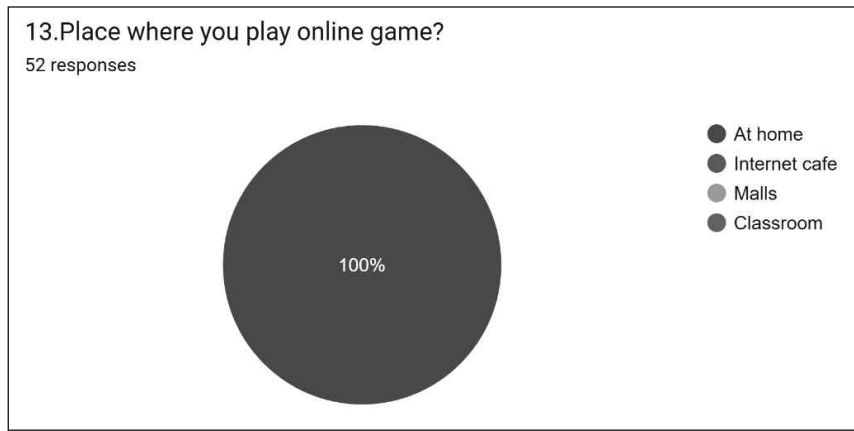
- 92.3% of the students spend 1-2 hours and below the time in online gaming.
- 5.8% of the students spend 3-6 hours time in online gaming.
- 1.9% of the students spend more than 6 hours of time in online gaming.

**INTERPRETATION :**

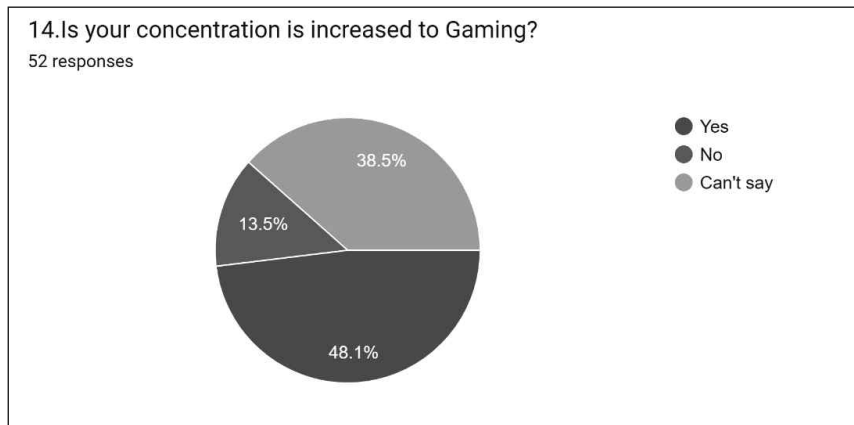
- 67.3% of respondents play the game from 6 PM-12 Midnight.
- 21.2% of respondents play the game from 1 PM-5:00 PM.
- 7.7% of respondents play the game from 6 AM-12 NOON.
- 3.8% of respondents play the game from 1 AM-5 AM.

**INTERPRETATION :**

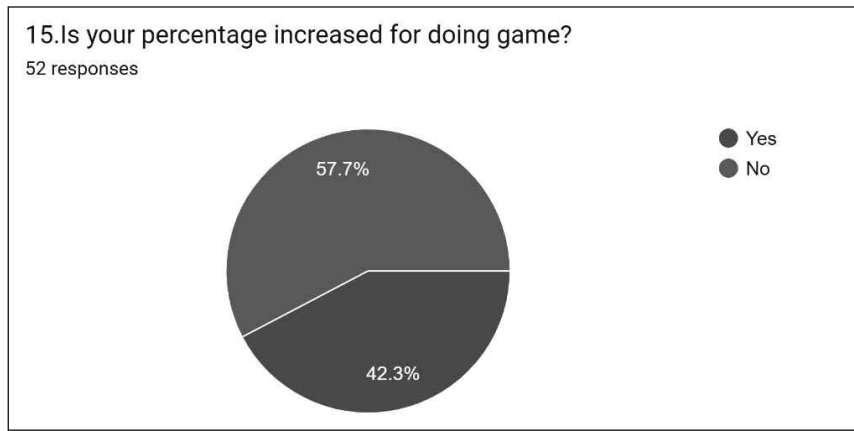
- 78.8% of respondents play games for entertainment purposes.
- 7.7% of respondents play games for habit purposes.
- 7.7% of respondents play games for part-time purposes.
- 5.8% of respondents play games for educational purposes.

**INTERPRETATION:**

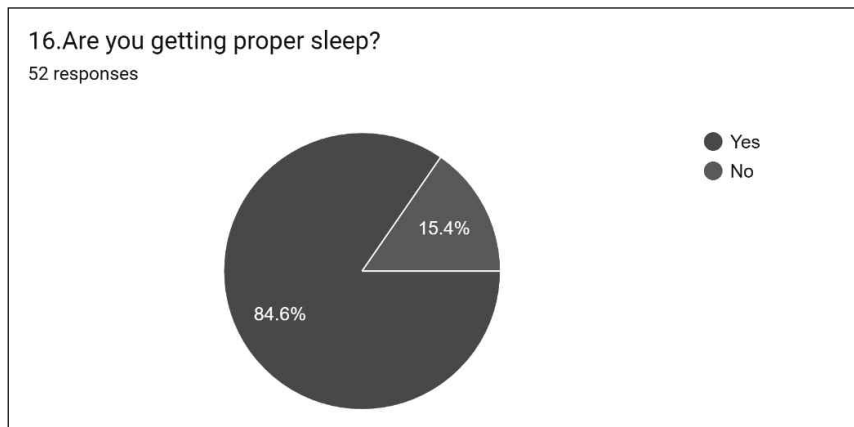
- 100% of respondents play games at home.

**INTERPRETATION:**

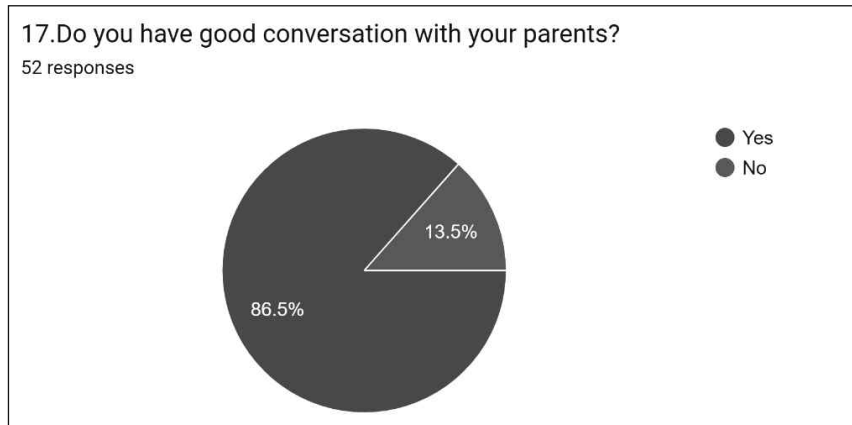
- 48.1% of respondents are saying their concentration level increased for doing the game.
- 38.5% of respondents are saying their concentration level has not increased for doing the game.
- 13.5% of respondents are can't say about concentration increased or not.

**INTERPRETATION:**

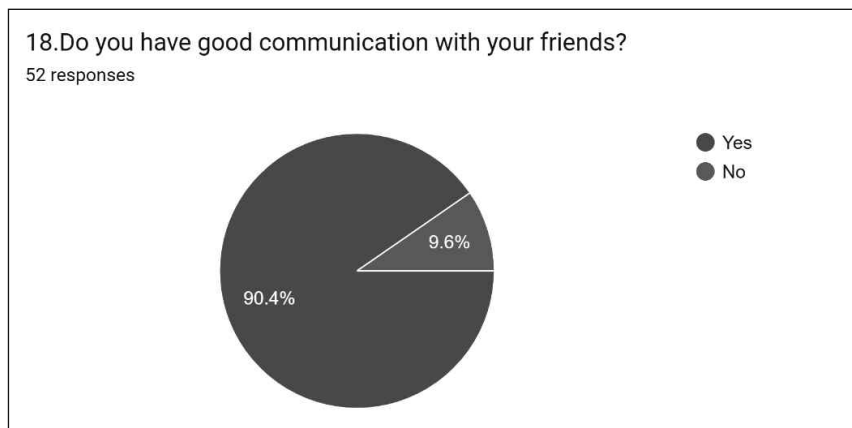
- 57.7% of respondents are saying their percentage is not increased due to doing games.
- 42.3% of respondents are saying their percentage is increased due to doing games.

**INTERPRETATION:**

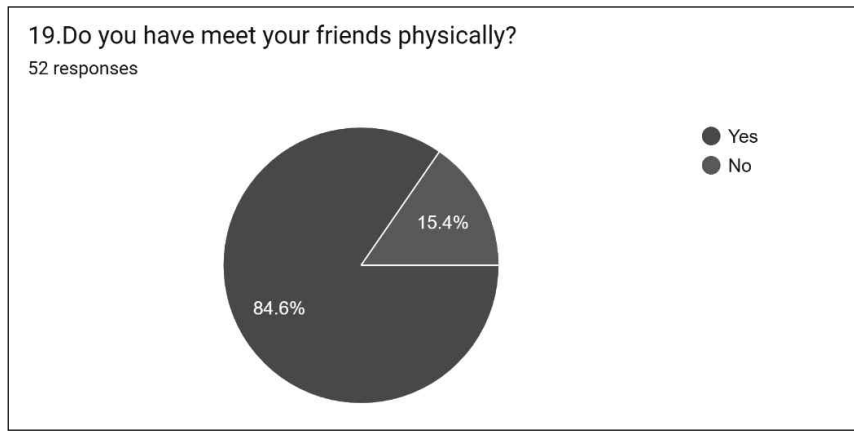
- 84.6% of respondents are saying they get proper sleep.
- 15.4% of respondents are saying they do not get proper sleep due to online gaming.

**INTERPRETATION:**

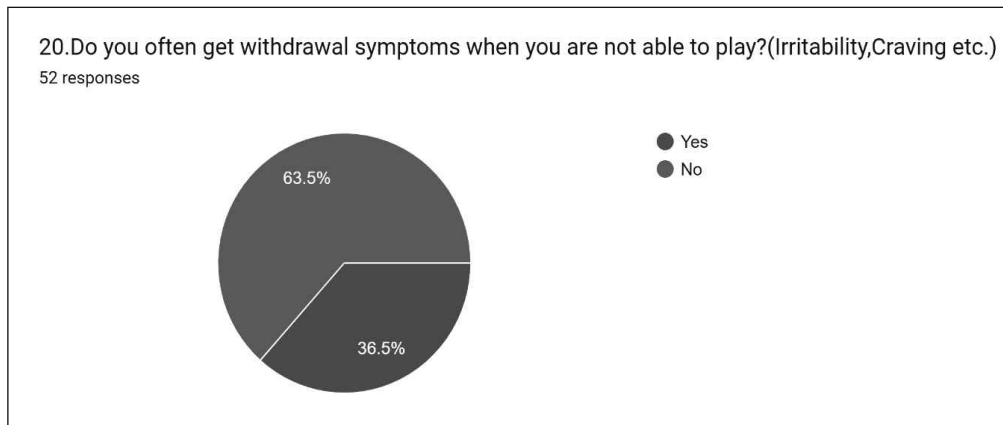
- 86.5% of respondents are saying they have a good conversation with their parents.
- 13.5% of respondents are saying they do not have a good conversations with their parents due to online gaming.

**INTERPRETATION:**

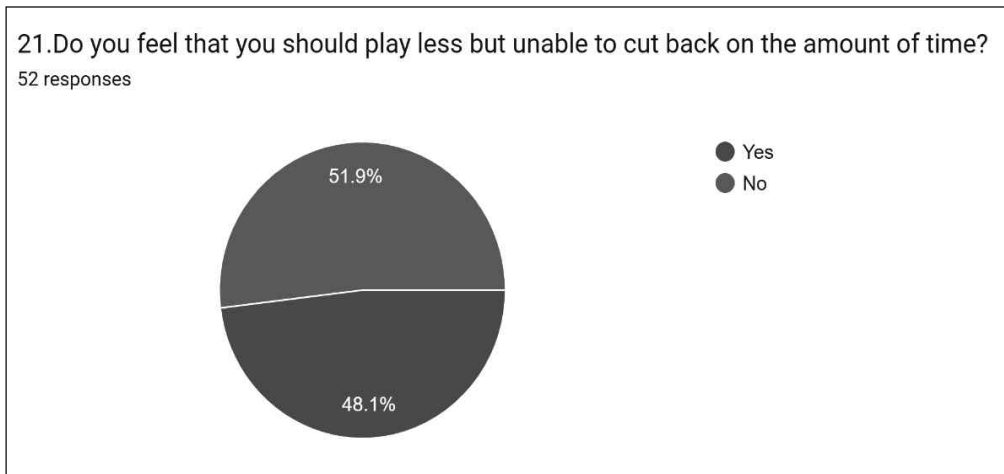
- 90.4% of respondents have good communication with their friends.
- 9.6% of respondents do not have good communication with their friends.

**INTERPRETATION:**

- 84.6% of respondents meet their friends physically.
- 15.4% of respondents do not meet their friends physically.

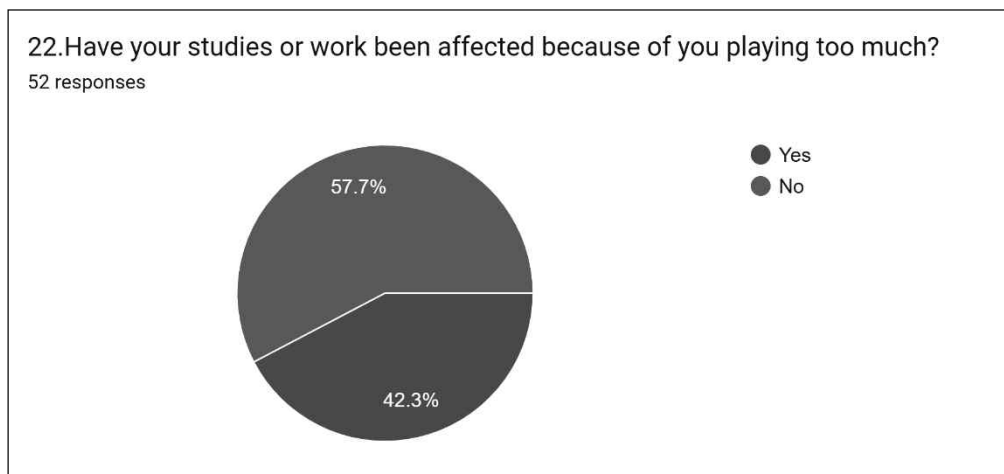
**INTERPRETATION:**

- 63.5% of respondents say they do not get withdrawal symptoms when they are not able to play.
- 36.5% of respondents say they get withdrawal symptoms like irritability, craving, etc. when they are not able to play.



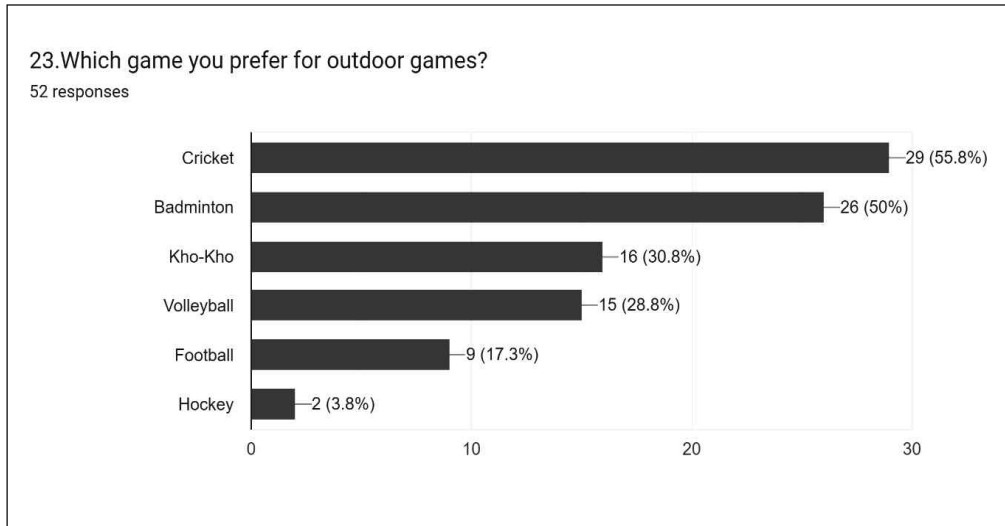
INTERPRETATION:

- 51.9% of respondents feel like they should play less but are able to cut back on the amount of time.
- 48.1% of respondents feel like they should play less but are unable to cut back on the amount of time.



INTERPRETATION:

- 57.7% of respondents are says playing too much game are not affected their studies and work.
- 42.3% of respondents are says playing too many games are affected their studies and work.



INTERPRETATION:

- 55.8% of people prefer to play cricket as an outdoor game.
- 50% of people prefer to play badminton as an outdoor game.
- 30.8% of people prefer to play the kho-kho as an outdoor game.
- 28.8% of people prefer to play volleyball as an outdoor game.
- 17.3% of people prefer to play football as an outdoor game.
- 3.8% of people prefer to play hockey as an outdoor game.

V. RESEARCH HYPOTHESIS

Chi-square Test:

Test 1

Q.3. Age

Q.5. Do you have your own mobile?

H₀: The age and own mobile are independent.

H₁: The age and own mobile are dependent.

Contingency table:

	Yes	No
less than 14	1	1
14-18	20	4
18-21	9	0
above 21	17	0

Chi-square (Observed value)	7.892
Critical value	7.253
DF	3
p-value	0.041
alpha	0.05

Test interpretation:

As the computed p-value is lower than the significance level $\alpha=0.05$, one should reject the null hypothesis H_0 , and accept the alternative hypothesis H_1 .

The age and Own Mobile are dependent.

So we conclude that the age group and own mobile are dependent on each other.

Test 2

Q.3. Age

Q.6. what type of mobile brand did you use?

H0: Age and mobile brands are independent.

H1: Age and mobile brands are dependent.

Contingency table:

	Android	iOS
less than 14	2	0
14-18	22	2
18-21	9	0
above 21	17	0

Chi-square (Observed value)	2.427
Critical value	12.567
DF	3
p-value	0.521
Alpha	0.05

Test interpretation:

As the computed p-value is greater than the significance level $\alpha=0.05$, one cannot reject the null hypothesis H0.

Age and mobile brands are independent.

So we conclude that the age group and mobile brands are not dependent on each other.

Test 3

Q.1. Class

Q.14. Is your concentration increased to Gaming?

H0: The class and concentration level increases are independent.

H1: The class and concentration level increases are dependent.

Contingency table:

	Yes	No	Can't Say
8-10 th	7	3	6
11-12 th	7	2	11
UG	1	0	0
PG	10	2	3

Chi- square (Observed value)	6.198
Critical value	12.452
DF	3
p-value	0.435
Alpha	0.05

Test interpretation:

As the computed p-value is greater than the significance level $\alpha=0.05$, one cannot reject the null hypothesis H0.

The class and concentration level increases are independent. So we conclude that the class and concentration level increases are not dependent to each other.

Test 4

Q.10. How much time do you spend Gaming?

Q.22. Have your studies or work been affected because of you playing too much?

H0: The time to spend in game and studies or work been affected because of playing too much are independent.

H1: The time to spend in game and studies or work been affected because of playing too much are dependent.

Contingency table:

	Yes	No
1-2 hours and below	20	28
3-6 hours	2	1
More than 6 hours	0	1

Chi- square (Observed value)	1.471
Critical value	4.970
DF	2
p-value	0.751
Alpha	0.05

Test interpretation:

As the computed p-value is greater than the significance level $\alpha=0.05$, one cannot reject the null hypothesis H0.

The time to spend on games and studies or work is affected because playing too much is independent.

So we conclude that the time to spend on games and studying or working is affected because playing too much is not dependent on each other.

Test 5

Q.11. Time to play online games?

Q.16. Are you getting proper sleep?

H0: The time to play online games and get proper sleep is independent.

H1: The time to play online games and get proper sleep is dependent.

Contingency table:

	Yes	No
6 AM-12 NOON	3	1
1 PM-5:00 PM	10	1
6 PM -12 Midnight	29	6
1 AM-5 AM	2	0

Chi-square (Observed value)	1.066
Critical value	7.535
DF	3
p-value	0.907
Alpha	0.05

Test interpretation:

As the computed p-value is greater than the significance level $\alpha=0.05$, one cannot reject the null hypothesis H0.

The time to play online games and get proper sleep is independent.

So we conclude that the time to play online games and get proper sleep is not dependent on each other.

Test 6

Q.3. Age

Q.20. Do you often get withdrawal symptoms when you are not able to play? (Irritability, Craving, etc.)

H0: Students who are not able to play are independent.

H1: Students who are not able to play are dependent.

Contingency table:

	Yes	No
less than 14	1	1
14 – 18	7	17
18- 21	5	4
above 21	6	11

Chi-square (Observed value)	2.134
Critical value	7.408
DF	3
p-value	0.572
Alpha	0.05

Test interpretation:

As the computed p-value is greater than the significance level $\alpha=0.05$, one cannot reject the null hypothesis H0.

The age and withdrawal symptoms are getting then they are not able to play independently.

So we conclude that the age and withdrawal symptoms are getting then they are not able to play and not dependent on each other.

VI. RESEARCH FINDINGS

- 38.5% of respondents are 11th-12th class students.
- Here 55.8% of respondents are female.
- 46.2% of respondents are in the 14-18 age group.
- 84.6% of students' parents are working.
- 90.4% of students have their own mobile.
- 96.2% of people have used Android mobile brands.
- 86.5% of the students used mobile for online gaming.
- 55.8% of people prefer to play the Ludo King game.
- 50% of the students play online games at night.
- 92.3% of the students spend 1-2 hours and below the time in online gaming.
- 67.3% of respondents play the game from 6 PM-12 Midnight.
- 78.8% of respondents play games for entertainment purposes.
- 100% of respondents play games at home.
- 48.1% of respondents are saying their concentration level increased for doing the game.
- 57.7% of respondents are saying their percentage is not increased due to doing games.
- 84.6% of respondents are saying they get proper sleep.
- 86.5% of respondents are saying they have a good conversation with their parents.
- 90.4% of respondents have good communication with their friends.
- 84.6% of respondents meet their friends physically.
- 63.5% of respondents say they do not get withdrawal symptoms when they are not able to play.
- 51.9% of respondents feel like they should play less but are able to cut back on the amount of time.
- 57.7% of respondents say playing too much game does not affect their studies and work.
- 55.8% of people prefer to play cricket as an outdoor game.

VII. RECOMMENDATIONS

- Children don't give mobiles to reduce their time on mobile addicted.
- Instead of playing continuously, start tracking your gaming time and setting a limit for yourself. It can be done by choosing games wisely or else going on a gaming detox.
- Avoid extremely violent games like PUBG, because it can trigger aggressive thoughts, emotions, behaviour that ultimately affects the mental health of the player.
- One can also include yoga and meditation in daily routine which is an amazing way for stress relief and also it lend a hand to improve your concentration so that you can reduce your level of addiction.

VIII. CONCLUSION

The majority of the students have their own mobile and it is used for online gaming. The majority of students play games late evening or night and the time spent is 1-2 hours. The purpose of gaming is entertainment. less than 50%of students say that their concentration level an increase & majority of the student say their percentage is not increased due to games. 50% of the respondents feel that they should reduce the play time they are unable to do.

The majority of the student have good communication with their parents and friends & that gaming does not affect their studies & work. They also prefer an outdoor games.

Online gaming has emerged as a popular and successful source of entertainment and is played by people of all ages, especially youth. Its main aim is to entertain people and also indirectly to make them addicted to improving the gaming industry. From this study, we got the information that there is a neutral online gaming effect. It shows the more addictive adventure games like PUBG, Ludo-King, and free-fire among the male & also female categories. Through this study, we also analyzed that continuous playing will cause addiction, and addiction to online games affects various dimensions of health and increases sleeplessness. On the positive side, online games help in enhancing mental development, critical thinking, and stress relief also. As an outcome of the study, it can be concluded that online gaming has positive and little bit negative impacts in the real world.

IX. BIBLIOGRAPHY

- Individual response using Google Forms for primary data.
- Google search for secondary data.

X. QUESTIONNAIRE:

1. Class
 - o 8th - 10th
 - o 11th - 12th
 - o UG
 - o PG
2. Gender
 - o Male
 - o Female
 - o Other
3. Age
 - o less than 14
 - o 14 – 18
 - o 18-21
 - o above 21
4. what is your parent's occupation?
 - o Working
 - o Not working
5. Do you have your own mobile?
 - o Yes
 - o No
6. what type of mobile brand did you use?
 - o Android
 - o iOS
7. Which device have you used for online gaming?
 - o Laptop

- Desktop
 - Tablet
 - Mobile
8. Which kind of games do you play?
- PUBG
 - free fire
 - Ludo King
 - Minecraft
 - Apex Legends
 - Fortnite
 - Call of Duty Mobile
 - Counter-Strike: Global Offensive
 - Dota 2
 - Other...
 - Add option
9. When do you play Games?
- Morning
 - Afternoon
 - Evening
 - Night
10. How much time do you spend Gaming?
- 1-2 hours and below
 - 3-6 hours
 - more than 6 hours
11. Time to play online game?
- 6AM-12 NOON
 - 1 PM-5:00 PM
 - 6 PM -12 Midnight

- 1AM-5AM
12. Reasons to play online Gaming?
- Entertainment
 - Part time
 - Education
 - Habita
13. Place where you play online game?
- At home
 - Internet café
 - Malls
 - Classroom
14. Is your concentration is increased to Gaming?
- Yes
 - No
 - Can't say
15. Is your percentage increased for doing game?
- Yes
 - No
16. Are you getting proper sleep?
- Yes
 - No
17. Do you have good conversation with your parents?
- Yes
 - No
18. Do you have good communication with your friends?
- Yes
 - No
19. Do you have to meet your friends physically?
- Yes

20. Do you often get withdrawal symptoms when you are not able to play?(Irritability,Craving etc.)
- Yes
 - No
21. Do you feel that you should play less but unable to cut back on the amount of time?
- Yes
 - No
22. Have your studies or work been affected because of you playing too much?
- Yes
 - No
23. Which game you prefer for outdoor games?
- Cricket
 - Badminton
 - Kho-Kho
 - Volleyball
 - Football
 - Hockey
 - Other...



USE OF TECHNOLOGY IN AGRICULTURE

Akolkar Pallavi Uttam*

I. ABSTRACT

In agriculture sector where farmers and agribusinesses have to make innumerable decisions every day and intricate complexities involves the various factors influencing them. An essential issue for agricultural planning intention is the accurate yield estimation for the numerous crops involved in the planning. For that better knowledge of technology if farmers have then it will be easy for them to get more income and also increase the percentage of income in our economical Production in GDP.

II. INTRODUCTION

The agriculture sector forms only about 18 percent of India's GDP employing almost 65 percent of the total population. Significant improvement in food production, there are several challenges to tackle as the government aims to increase agricultural production as a share of GDP.

Agriculture in India is largely dependent on nature, but climate and global warming issues make farming unpredictable. The need of the hour is to educate farmers in the use of modern technology and innovative approaches to increase productivity and raise profitability. Technology in agriculture affects many areas of agriculture, such as fertilizers, pesticides, seed technology, etc

Farmers no longer have to apply water, fertilizers, and pesticides across entire fields.

Benefits of technology are

- Higher crop productivity
- Decreased use of water, fertilizer, and pesticides, which in turn keeps food prices down
- Less runoff of chemicals into rivers and groundwater

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Various types of modern agriculture machinery and technology are used in different agricultural operations nowadays. Different levels in crop production include – Primary and secondary level tillage of the soil, Seeding and planting, Cultivation, Fertilizer application and distribution, Pest control, Harvesting, Irrigation, Drainage, Transportation, Storage, Handling the residues of earlier crops etc. Technology in agriculture has transformed and increased production and quality of produces. In modern times, farmers who are doing heavy works on farms using traditional and old agriculture tools are wasting their health and time.

Drip irrigation is the most efficient water and nutrient delivery system for growing crops. It delivers water and nutrients directly to the plant's roots zone, in the right amounts, at the right time, so each plant gets exactly what it needs, when it needs it, to grow optimally. Thanks to drip irrigation, farmers can produce higher yields while saving on water as well as fertilizers, energy and even crop protection products.

How does it work? Water and nutrients are delivered across the field in pipes called dripper lines featuring smaller units known as drippers. Each dripper emits drops containing water and fertilizers, resulting in the uniform application of water and nutrients direct to each plant's root zone, across an entire field.

Why farmers prefers drip Irrigation technology - The reason is simple. Drip Irrigation not only delivers greater ROI compared to other of irrigation methods, it also gives farmers an efficient and simple way to operate their farms.

- Higher consistent quality yields
- Huge water savings: no evaporation, no run off, no waste
- 100% land utilization - drip irrigates uniformly in any topography and soil type
- Energy savings: drip irrigation works on low pressure
- Efficient use of fertilizer and crop protection, with no leaching
- Less dependency on weather, greater stability and lower risks

III. OBJECTIVE OF RESEARCH

- To analyse the agriculture data .
- To understand the major technologies used in agriculture .
- On the basis of that technology what kind crops gives benefits to farmers.

- To observe Sustainably increasing agriculture productivity by use technology.
- To observe technology benefits for farmers.
- To observe technology use help to farmers for increase their income and get good life, health.

IV. RESEARCH DESIGN, DATA ANALYSIS AND INTERPRETATION

This study is an empirical study and used both primary and secondary data. Primary data had been collected from the sample respondents by administering the questionnaire. Secondary data had been collected from the internet to understand the effects of online gaming. A questionnaire had been constructed bearing in mind the objectives of the study. The same was pretested and after which the data was collected. A sample of 61 respondents was selected at random for the purpose of collecting data. The collected questionnaire was checked to validate the responses of the sample respondents, entered in XLSTAT for further analysis, and results were drawn. The study had also been put to reliability analysis and proved reliable.

Population:

Research was carried out in Institute of management studies career development and research, Ahmednagar. Data was collected from management students.

Sample:

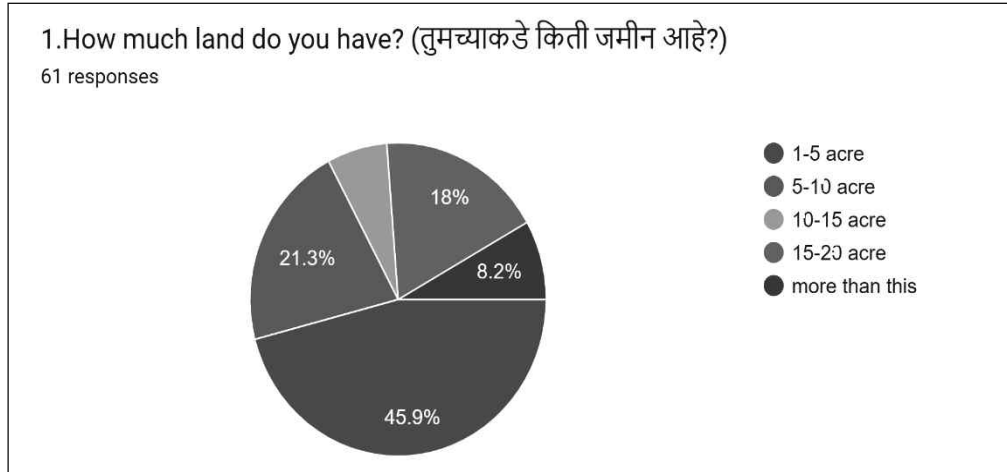
Data was collected from around 61 Farmers.

Method of sampling:

We have used convenience method of sampling.

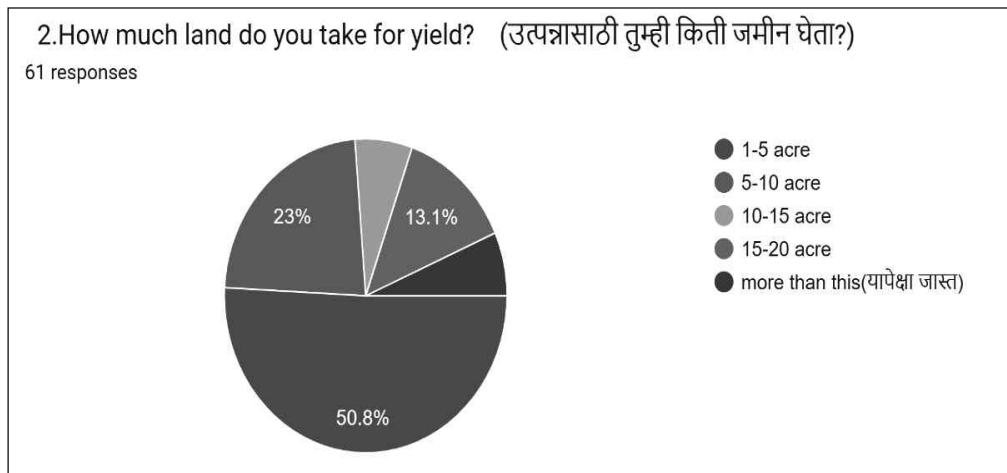
Research instruments: Questionnaire method. **Limitations of study:**

- Time constraint for data collection.
- Less sample size.



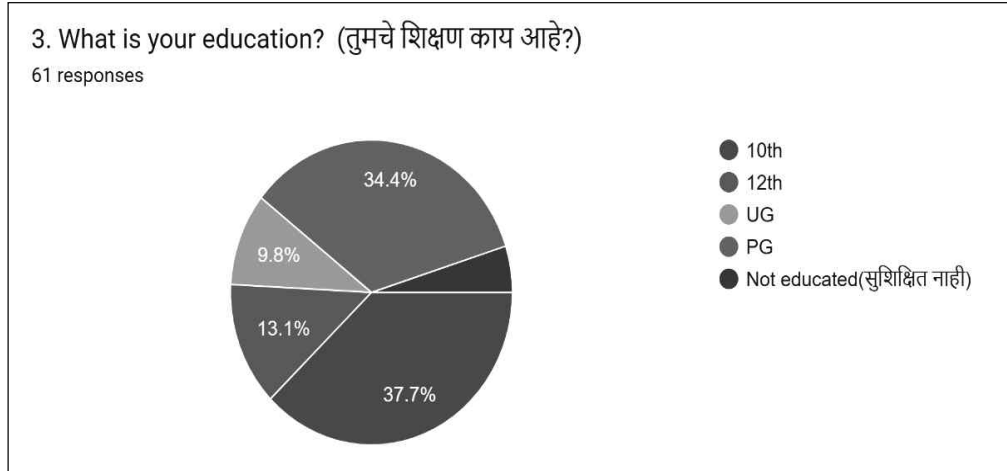
INTERPRETATION –

- 45.9% peoples having land in between 1-5 ACRE.
- 21.3% peoples having land in between 5-10 ACRE.
- 18% peoples having land in between 15-20 ACRE.
- 8.2% peoples having land in more than 20 ACRE.



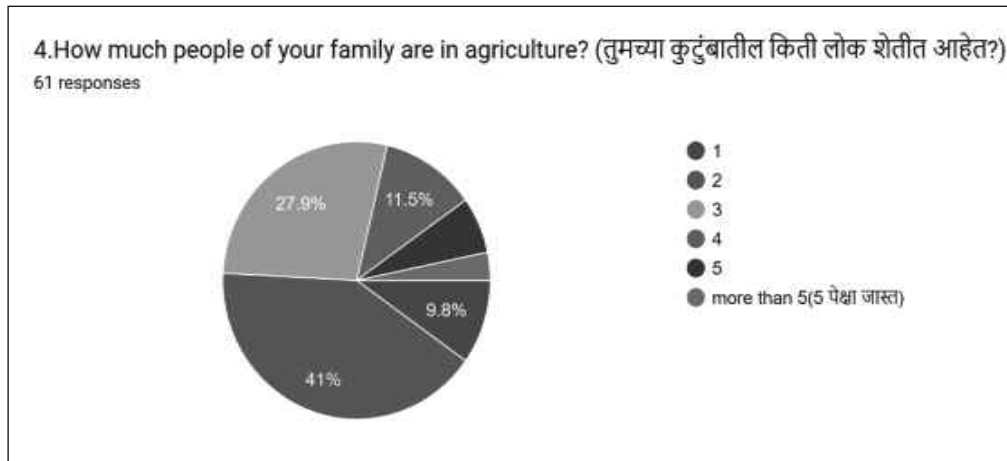
INTERPRETATION –

- 50.8% peoples use their 1-5 ACRE land for agriculture.
- 23% peoples use their 5-10 ACRE land for agriculture.
- 13.1% peoples use their 15-20 ACRE land for agriculture.



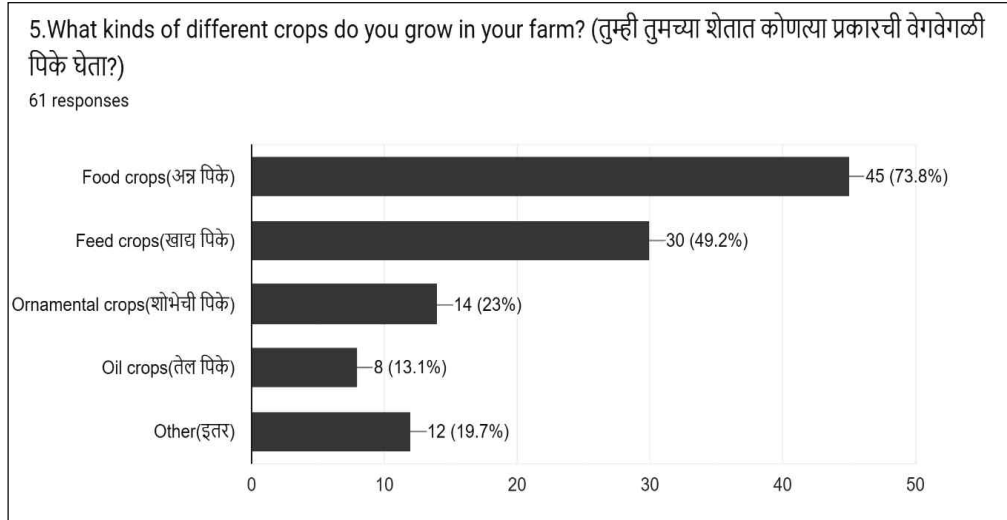
INTERPRETATION –

- 37.7% peoples are completed their education up to 10th.
- 13.1% peoples are completed their education up to 12th.
- 9.8% peoples are completed their education up to UG.
- 34.4% peoples are completed their education up to PG.



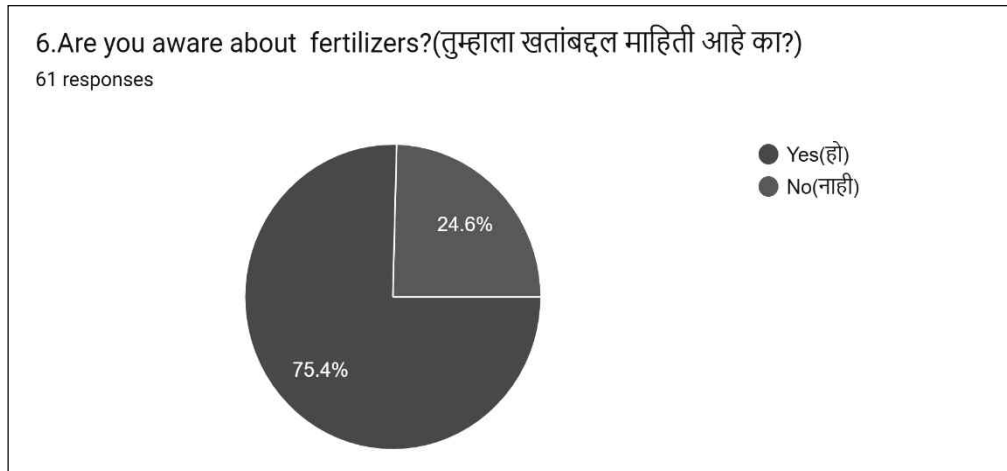
INTERPRETATION –

- 41% having 2 peoples of their family in agriculture.
- 27.9% having 3 peoples of their family in agriculture.
- 11% having 4peoples of their family in agriculture.
- 9.8% having more than 5 peoples of their family in agriculture.



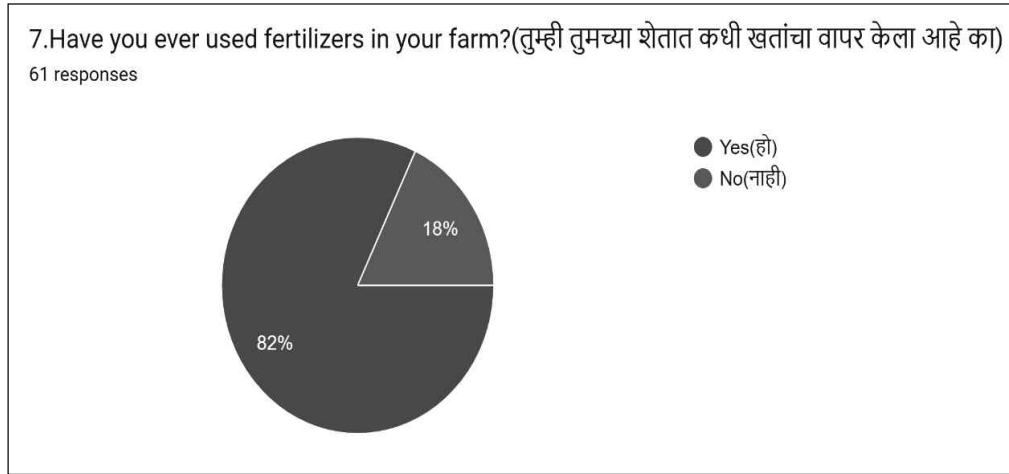
INTERPRETATION –

- 73.8% crops type is a food crops.
- 49.2% crops type is a feed crops.
- 23% crops type is ornamental crops.
- 13.1% crops type is a oil crops.
- 19.7% crops type is a other crops.



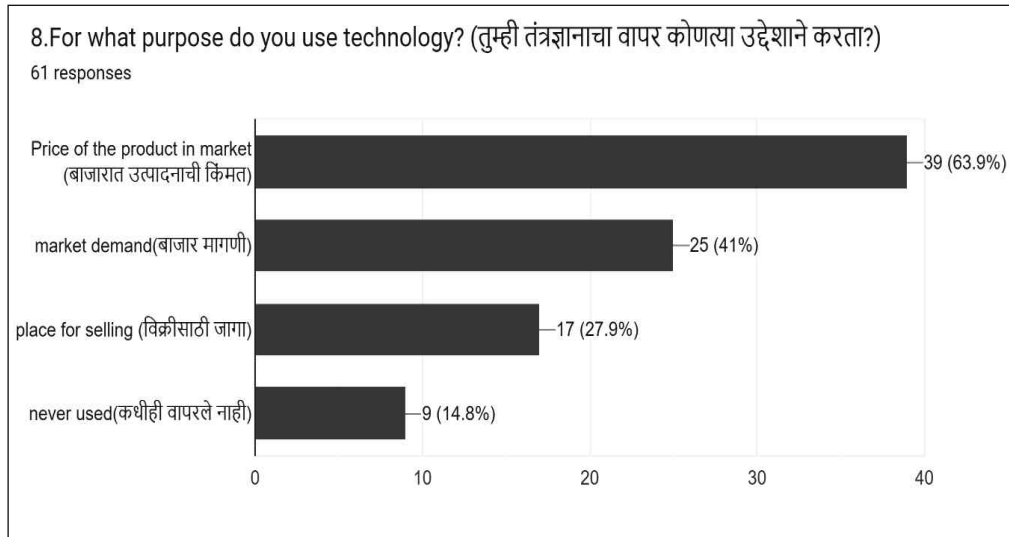
INTERPRETATION –

- 75.4% peoples are aware about fertilizers.
- 24.6% peoples are not aware about fertilizers.



INTERPRETATION –

- 82% peoples have ever used fertilizers.
- 18% peoples have never used fertilizers.

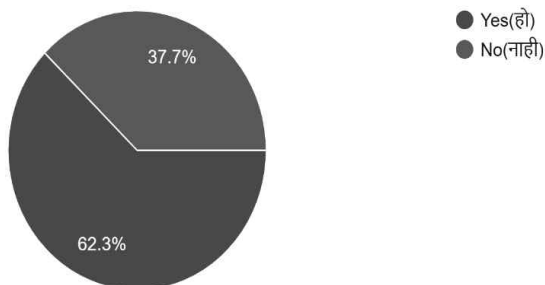


INTERPRETATION –

- 63.9% peoples use technology to know price of the product in market.
- 41% peoples use technology to know market demand.
- 27.9% peoples use technology to know place for selling.
- 14.8% peoples never use technology.

9. Do you make use of mobile application while selling the product/crop? (उत्पादन/पीक विकताना तुम्ही मोबाईल ऍप्लिकेशन वापरता का?)

61 responses

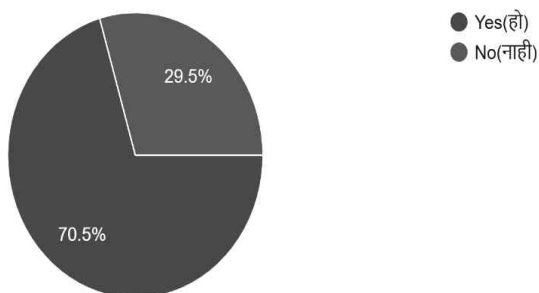


INTERPRETATION –

- 62.3% people use mobile application while selling the product.
- 37.7% people not use mobile application while selling the product.

10. Are you benefitted by using mobile technology? (मोबाईल तंत्रज्ञानाचा वापर करून तुम्हाला फायदा होतो का?)

61 responses

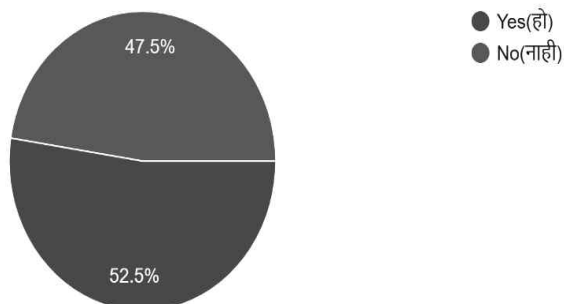


INTERPRETATION –

- 70.5% people are benefitted by using mobile technology.
- 29.5% people are not benefitted by using mobile technology.

11. Do you decide crop type using mobile app? (तुम्ही मोबाईल अॅप वापरून पीक प्रकार ठरवता का?)

61 responses

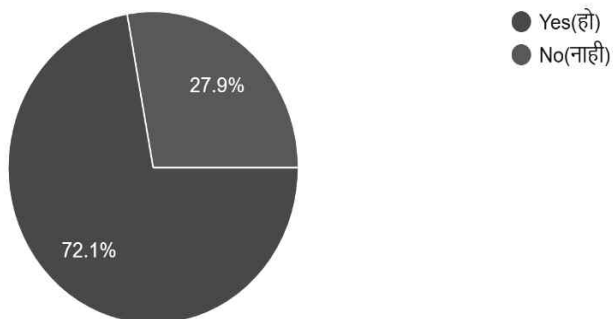


INTERPRETATION –

- 52.5% peoples decide crop type by using mobile technology.
- 47.5% peoples do not decide crop type by using mobile technology

12. Are you using modern water technology? (आपण आधुनिक जल तंत्रज्ञान वापरत आहात?)

61 responses

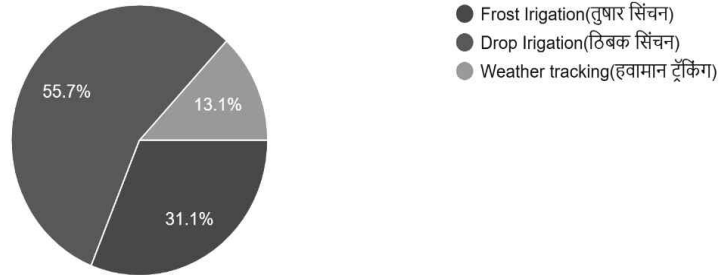


INTERPRETATION –

- 72.1% people are using modern water technology.
- 27.9% people are not using modern water technology.

13. What are modern methods you are using in farming? (तुम्ही शेतीमध्ये कोणत्या आधुनिक पद्धती वापरत आहात?)

61 responses

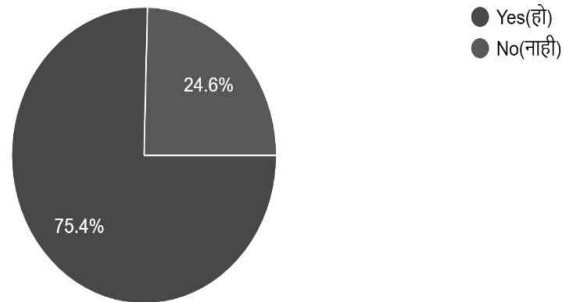


INTERPRETATION –

- 31.1% peoples use frost irrigation method in farming.
- 55.7% peoples use drop irrigation method in farming.
- 13.1% peoples use weather irrigation method in farming.

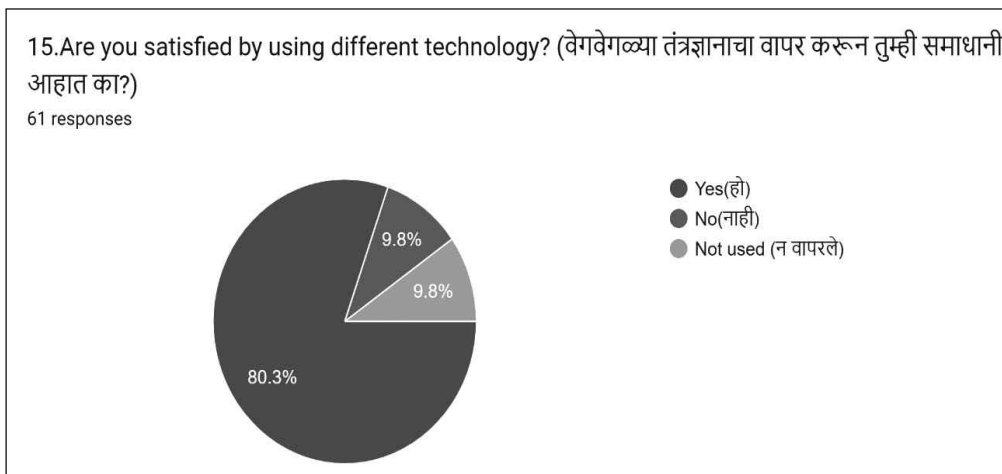
14. Is your income increase due to use of technology? (तंत्रज्ञानाच्या वापरामुळे तुमचे उत्पन्न वाढते का?)

61 responses



INTERPRETATION –

- 75.4% peoples say that their income increase due to use of technology.
- 24.6% peoples say that their income did not increase due to use of technology.



INTERPRETATION –

- 80.3% peoples say that they are satisfied by using different technology.
- 9.8% peoples say that they are not satisfied by using different technology.
- 9.8 peoples did not use technology.

V. RESEARCH HYPOTHESIS AND TESTING OF HYPOTHESIS

Test1

Que 3 What is your education?

and 7 Have you ever used fertilizers in your farm?

H0 : The education and use of fertilizer are independent.

H1: The education and use of fertilizer are dependent.

	YES	NO
10th	20	3
12th	6	3
UG	12	23
PG	16	5

Chi-square (Observed value)	19.232
Chi-square (Critical value)	7.751
DF	3
p-value	<0.0001
alpha	0.05

As the computed p-value is lower than the significance level $\alpha=0.05$, one should reject the null hypothesis H_0 , and accept the alternative hypothesis H_1 .

The education and use of fertilizer are dependent.

So we conclude that 10th and PG make more use of fertilizers than 12th and UG.

Test 2

Que 3 What is your education?

and 9 Do you make use of mobile application while selling the product/crop?

H_0 : The education and use mobile technology are independent.

H_1 : The education and use of mobile technology are dependent.

	YES	NO
10th	21	4
12th	3	5
UG	3	3
PG	11	10

Chi-square (Observed value)	8.441
Critical Value	7.892
DF	3
p-value	0.037
alpha	0.05

As the computed p-value is lower than the significance level $\alpha=0.05$, one should reject the null hypothesis H_0 , and accept the alternative hypothesis H_1 .

The education and use of mobile technology are dependent.

So we conclude that 10th and PG make more use of mobile technology than 12th and UG.

Test 3

Que no6 Are you aware about fertilizers?

7 Have you ever used fertilizers in your farm?

H0 : Awareness about fertilizer and use of fertilizers are independent.

H1: : Awareness about fertilizer and use of fertilizers are dependent.

Contingency Table:

	YES	NO
Yes	49	5
No	5	12

Chi-square (Observed value)	26.705
Chi-square (Critical value)	4.004
DF	1
p-value	<0.0001
alpha	0.05

As the computed p-value is lower than the significance level $\alpha=0.05$, one should reject the null hypothesis H0, and accept the alternative hypothesis H1.

Awareness of use fertilizer and use of fertilizers are dependent.

So we conclude that awareness about fertilizer make more use of fertilizer.

Test 4

Que No. 12 Are you using modern water technology?

13What are modern methods you are using in farming?

H0 : Awareness about technology and use of technology are independent.

H1: Awareness about technology and use of technology are dependent.

Contingency Table:

	YES	NO
Drop	28	9
Frost	17	4
Weather	3	8

Chi-square (Observed value)	11.232
Critical value	6.305
DF	2
p-value	0.005
alpha	0.05

99% confidence interval on the p-value:

]0.003, 0.008[

As the computed p-value is lower than the significance level $\alpha=0.05$, one should reject the null hypothesis H0, and accept the alternative hypothesis H1.

So we conclude that more peoples are aware about technology and in that most used technology is drop irrigation than other frost and weather technology.

VI. RESEARCH FINDINGS

- 45.9% peoples having land in between 1-5 ACRE.
- 50.8% peoples use their 1-5 ACRE land for agriculture.
- 37.7% peoples are completed their education up to 10th.
- 41% having 2 peoples of their family in agriculture.
- 73.8% crops type is a food crops.
- 75.4% peoples are aware about fertilizers.
- 82% peoples have ever used fertilizers.
- 63.9% peoples use technology to know price of the product in market.
- 62.3% people use mobile application while selling the product.
- 70.5% people are benefitted by using mobile technology.
- 52.5% peoples decide crop type by using mobile technology.
- 72.1% people are using modern water technology.
- 31.1% peoples use frost irrigation method in farming.
- 75.4% peoples say that their income increase due to use of technology.
- 80.3% peoples say that they are satisfied by using different technology.

VII. QUESTIONNAIRE:

Use of technology in agriculture.

* Required

1.1. How much land do you have? *

(तुमच्याकडे किती जमीन आहे?) Mark only one oval.

- 1-5 acre
- 5-10 acre
- 10-15 acre
- 15-20 acre
- more than this

2. 2.How much land do you take for yield? *

(तुमचे शिक्षण काय आहे?) Mark only one oval.

- 1-5 acre
- 5-10 acre
- 10-15 acre 15-20 acre more than this (यापे ा जा)

3. 3. What is your education? *

(तुमचे शिक्षण काय आहे?) Mark only one oval.

- 10th
- 12th
- UG PG
- Not educated (सुशिक्षित नाही)

4. 4.How much people of your family are in agriculture? *

(तुमच्या कुटुंबातील किती लोक शेतीत आहेत ?) Mark only one oval.

- 1
- 2
- 3
- 45 more than 5(5 पे ा जा)

5. 5.What kinds of different crops do you grow in your farm? *

(तुम्ही तुमच्या शेतात कोणत्या प्रकारची वेगवेगळी पिके घेता ?)

Check all that apply.

- Food crops (अ पिके)
- Feed crops (खा पिके)
- Ornamental crops (शोभेची पिके)
- Oil crops (तेल पिके) Other (इतर)

6.6.Are you aware about fertilizers? (तुम्हाला खतांबद्दल माहिती आहे का?) *

Mark only one oval.

- Yes (हो)
- No (नाही)

7. 7. Have you ever used fertilizers in your farm?

(तुम्ही तुमच्या शेतात कधी खतांचा वापर केला आहे का?)

Mark only one oval.

Yes (हो)

No (नाही)

8. 8. For what purpose do you use technology? *

(तुम्ही तंत्रज्ञानाचा वापर कोणत्या उद्देशना करता ?)

Check all that apply.

Price of the product in market (बाजारात उत्पादनाची किंमत)

market demand (बाजार मागणी)

place for selling (विक्रीसाठीची जागा)

never used (कधीही वापरने नाही)

9. 9. Do you make use of mobile application while selling the product/crop?

(उत्पादन/पीक विकतांना तुम्ही मोबाईल ॲप्लिकेशनचा वापरता का?)

Mark only one oval.

Yes (हो)

No (नाही)

10. 10. Are you benefitted by using mobile technology? *

(मोबाईल तंत्रज्ञानाचा वापर करून तुम्हाला फायदा होतो का ?)

Mark only one oval.

Yes (हो)

No (नाही)

11. 11. Do you decide crop type using mobile app? *

(तुम्ही मोबाईल ॲप वापरून पीक प्रकार ठरवता का ?)

Mark only one oval.

Yes (हो)

No (नाही)

12. 12.Are you using modern water technology? *
(आपण आधुनिक जल तंत्रज्ञान वापरत आहात का ?)
Mark only one oval.
- Yes (हो)
- No (नाही)
13. 13.What are modern methods you are using in farming? *
(तुम्ही शेतीमध्ये कोणते आधुनिक पध्दती वापरत आहात ?)
Mark only one oval.
- Frost Irrigation (तुषार सिंचन)
- Drop Irrigation (डिबक सिंचन)
- Weather tracking(हवामान टॅकिंग)
- Other:
14. 14. Is your income increase due to use of technology? *
(तंत्रज्ञानाचा वापरामुळे तुमचे उत्पन्न वाढते का ?)
Mark only one oval.
- Yes (हो)
- No (नाही)
15. 15. Are you satisfied by using different technology? *
(वेगवेगळ्या तंत्रज्ञानाचा वापर करतांना तुम्ही सामाधानी आहात का ?)
Mark only one oval.
- Yes (हो)
- No (नाही)
- Not used (न वापरले)



STUDY OF EFFECTS OF BREAKFAST ON YOUTH

Girme Vaishnavi Jagdish*

I. ABSTRACT

This research explores the critical role of breakfast in the lives of young individuals, focusing on its physiological, cognitive, and behavioral effects. Breakfast, as the first meal of the day, provides essential nutrients and energy necessary for optimal functioning. Two main categories of breakfast, healthy and unhealthy, are examined in terms of their respective impacts on physical and mental well-being. A healthy breakfast, comprising nutrient-rich foods like whole grains, fruits, and proteins, offers numerous benefits including sustained energy, support for physical growth, improved concentration, and a positive mood. Conversely, an unhealthy breakfast, characterized by high sugar and low nutrient content, results in quick energy followed by crashes, weight-related issues, difficulty concentrating, and mood swings. Understanding the implications of breakfast choices on youth is vital for promoting healthy lifestyles and enhancing overall well-being.

II. INTRODUCTION

Every person has three basic needs – foods, shelter and cloth. In all these needs food plays an important role in human life. The study of the effects of breakfast on youth is an important area of research that explores how the morning meal influences the health, well-being, and overall performance of young individuals. Breakfast is often considered a crucial aspect of a healthy lifestyle, and its impact on youth can extend beyond just satisfying hunger. This research aims to investigate the various physiological, cognitive, and behavioral effects that breakfast consumption may have on young people.

Breakfast and Types of Breakfast:

Breakfast is the first meal you eat in the morning, breaking the overnight fasting period. It typically includes foods like cereal, toast, eggs, fruit, and yogurt. Having a good breakfast gives your body the energy and nutrients it needs to start the day. It's like fuel for your brain and muscles, helping you concentrate better in school, have

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more energy for activities, and keep your body healthy. This study delves into understanding how this morning meal influences the lives of young individuals.

Breakfast we consume can be divided into Two categories:

i. **Healthy Breakfast –:** A healthy breakfast includes foods that are good for your body and provide essential nutrients. This might include whole grains like oats or whole wheat, fruits, low-fat dairy products like yogurt or milk, and a source of protein, such as eggs or nuts.

✦ **Effects of Healthy Breakfast:**

Having a healthy breakfast has several positive effects on our bodies and minds. When we eat a nutritious morning meal, it gives us the energy we need for the day ahead, helping us stay active and alert. Nutrient-rich foods support our physical growth and development, which is especially important for young people. A healthy breakfast also improves our ability to concentrate, making it easier to focus on tasks at school or work. Additionally, starting the day with nutritious foods contributes to a positive mood and an overall sense of well-being.

Physical Benefits:

- Provides energy: A healthy breakfast gives your body the fuel it needs for the day.
- Supports growth: Nutrient-rich foods help in proper physical development, especially in young people.

Mental Benefits:

- Improved concentration: A nutritious breakfast can enhance focus and attention in school or work.
- Better mood: Eating healthy in the morning may contribute to a positive and alert mindset.

ii. **Unhealthy Breakfast -:** An unhealthy breakfast usually consists of foods high in sugars, fats, and low in essential nutrients. This might include sugary cereals, pastries, and fast food items.

Impact of Unhealthy Breakfast:

- Quick energy, quick crash: Sugary breakfasts may provide a burst of energy, but it's often followed by a rapid drop in energy levels.
- Weight gain: Regular consumption of unhealthy breakfast options can contribute to weight-related issues.

Effects of Unhealthy Breakfast:

- Difficulty concentrating: Foods high in sugar can lead to difficulty focusing and may affect academic or work performance.
- Mood swings: Unstable blood sugar levels from an unhealthy breakfast can contribute to mood swings throughout the day.

III. METHODOLOGY STUDY:**Need and importance of Study –**

The aim of this research is to understand how breakfast affects young people is crucial for their well-being and success. Breakfast is like fuel for the body and brain, providing the energy and nutrients needed to kick-start the day. For youth, who are in a phase of growth and development, a nutritious breakfast is even more important. This study helps us discover how breakfast influences their physical health, mental focus, and overall performance in daily activities, including school. By uncovering the importance of breakfast for youth, we can promote healthier habits, ensuring they have the best start each day, setting them up for a brighter and more successful future.

Objective of Research:

- To Examine Breakfast Habits
- Assess Physiological Impact on youth
- Assess Mental Well-being

IV. RESEARCH DESIGN**Population:**

Research was carried out in IMSCDR, Ahmednagar and some local youth from Ahmednagar

Sample:

Data was collected from around 65 Students.

Method of Sampling:

We have used Convenience method of sampling.

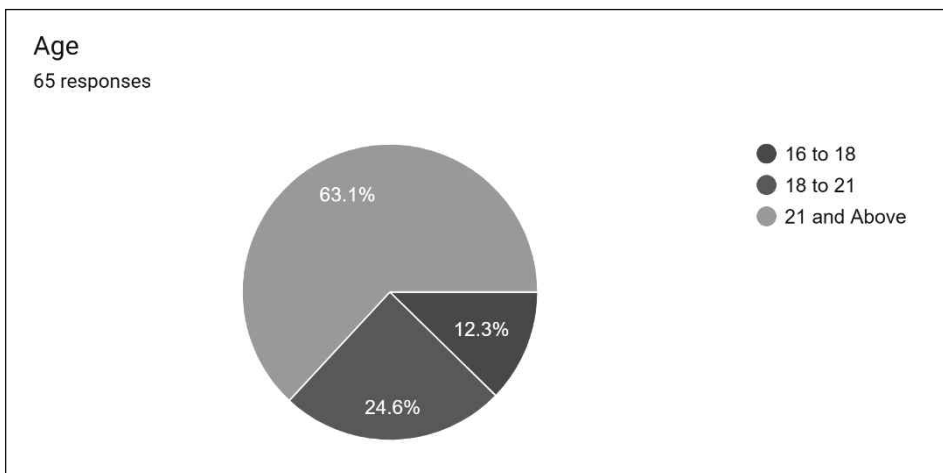
Research Instrument:

Questionnaire method:

Our Questionnaire contains open end questions and close end questions

Limitations of Study:

- Time constraint for data collection.
- Less Sample size.

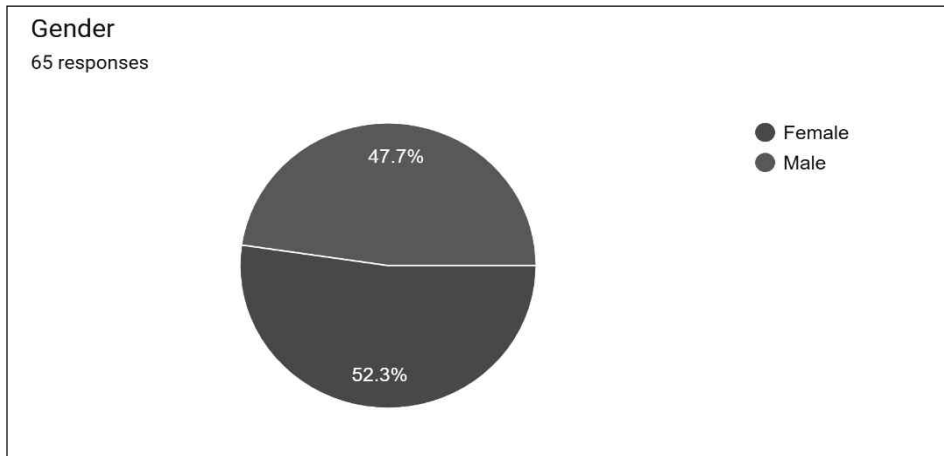
V. DATA ANALYSIS AND INTERPRETATION:**1. Age :****Interpretation:**

63.1% students are from 21 and above age

12.2% students are from 16 to 18

24.6% students are from 18 to 21

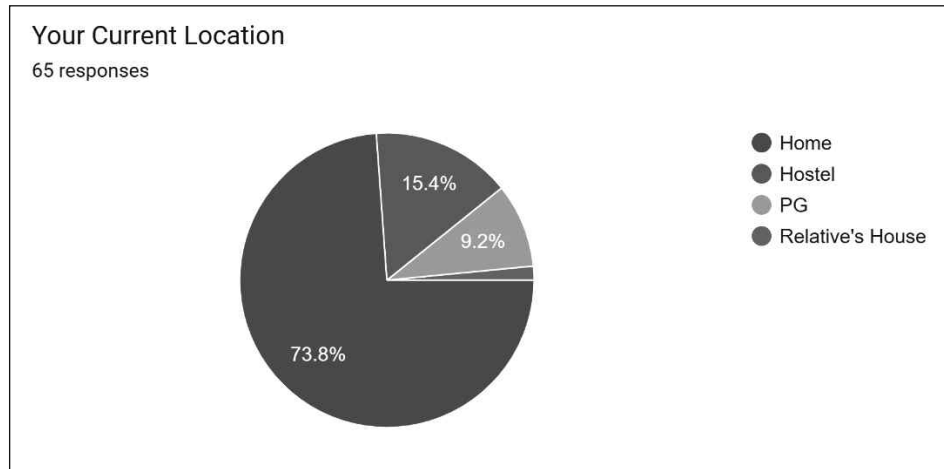
1. Gender :



Interpretation:

52.3 % Female and 47.7% Male have responded.

3. Current Location



Interpretation:

- 73.8% students located in Home
- 15.4% students located in Hostel
- 9.2% students located in PG
- 1.5% students located in Relative's home

VI. TESTING OF HYPOTHESIS:

I have done many tests but due to paper size limitation, I have included few test cases here

Note : We consider here Poha, Tea and Roti, Upma, Idli, Dosa, Fruits, Milk, Eggs, Paratha as Healthy Breakfast and Vada pav, Samosa, Maggi, Pasta as Unhealthy Breakfast.

HO: Locations and Type of Breakfast are independent

Ha: Locations and Type of Breakfast are dependent

	Healthy	Unhealthy
home	34	19
hostel	5	5
pg	2	1
relative's house	1	0

Chi-square (Observed value) 1.352

Critical value 7.010

DF 3

p-value 0.859

alpha 0.05

As the computed p-value is greater than the significance level $\alpha=0.05$, one cannot reject the null hypothesis H_0 .

The risk to reject the null hypothesis H_0 while it is true is 85.9%

Findings:

Locations and Type of Breakfast are independent

HO: Working Mother and Breakfast taken are independent

Ha: Working Mother and Breakfast taken are dependent

Mother working	breakfast taken	breakfast not taken
yes	16	1
no	33	7

Chi-square (Observed value) 1.335

Critical value	3.955
DF	1
p-value	0.410
alpha	0.05

As the computed p-value is greater than the significance level $\alpha=0.05$, one cannot reject the null hypothesis H_0 .

The risk to reject the null hypothesis H_0 while it is true is 41%

Findings:

Working Mother and Breakfast are independent

H_0 : Family income and Breakfast taken are independent

H_a : Family income and Breakfast taken are dependent

Family income	breakfast taken	breakfast not taken
15k to 20k	25	2
20k to 25k	7	0
25k to 30k	7	2
30k and above	16	5

Chi-square (Observed value) 4.282

Critical value	7.697
DF	3
p-value	0.233
alpha	0.05

As the computed p-value is greater than the significance level $\alpha=0.05$, one cannot reject the null hypothesis H_0 .

The risk to reject the null hypothesis H_0 while it is true is 23.3%

Findings: Family income and Breakfast taken are independent

H_0 : feel sad and breakfast taken are independent

H_a : feel sad and breakfast taken are dependent

Feel sad	Breakfast taken (yes)	Breakfast taken (no)
yes	24	1
no	29	8

Chi-square (Observed value) 3.733

Critical value	3.733
DF	1
p-value	0.071
alpha	0.05

As the computed p-value is lower than the significance level $\alpha=0.05$, one should reject the null hypothesis H_0 , and accept the alternative hypothesis H_a .

The risk to reject the null hypothesis H_0 while it is true is 7.1%

Findings: feel sad and breakfast taken are dependent

H_0 : suffer for migraine and breakfast taken are independent

H_a : suffer for migraine and breakfast taken are dependent

	Suffer for Migraine	Breakfast taken (yes)	Breakfast taken (no)
yes		6	1
no		49	8

Chi-square (Observed value) 0.000

Critical value	5.392
DF	1
p-value	1.000
alpha	0.05

As the computed p-value is greater than the significance level $\alpha=0.05$, one cannot reject the null hypothesis H_0 .

The risk to reject the null hypothesis H_0 while it is true is 0%

Findings: suffer for migraine and breakfast taken are independent

H_0 : suffer for bp and breakfast taken are independent

H_a : suffer for bp and breakfast taken are dependent

bp	yes	no
y	0	1
n	52	8

Chi-square (Observed value) 5.874

Critical value	5.874
DF	1
p-value	0.151
alpha	0.05

As the computed p-value is lower than the significance level $\alpha=0.05$, one should reject the null hypothesis H_0 , and accept the alternative hypothesis H_a .

The risk to reject the null hypothesis H_0 while it is true is 15.1%

Findings: suffer for bp and breakfast taken are dependent

H_0 : suffer for anxiety and breakfast taken are independent

H_a : suffer for anxiety and breakfast taken are dependent

anxiety	yes	no
yes	5	1
no	47	7

Chi-square	0.064
Critical value	2.308
DF	1
p-value	1.000
alpha	0.05

As the computed p-value is greater than the significance level $\alpha=0.05$, one cannot reject the null hypothesis H_0 .

The risk to reject the null hypothesis H_0 while it is true is 0%

Findings: suffer for anxiety and breakfast taken are independent

H_0 : suffer for Depression and breakfast taken are independent

H_a : suffer for Depression and breakfast taken are dependent

depression	yes	no
yes	4	7
no	48	6

Chi-square (Observed value) 15.758

Chi-square (Critical value) 3.310

DF 1

p-value <0.0001

alpha 0.05

As the computed p-value is lower than the significance level $\alpha=0.05$, one should reject the null hypothesis H_0 , and accept the alternative hypothesis H_a .

The risk to reject the null hypothesis H_0 while it is true is 0%

Findings: suffer for Depression and breakfast taken are dependent

VII. RESEARCH FINDINGS:

- 86.2 % Students say they take breakfast.
- 73.8% Students located at their home.
- 39.7% Students take breakfast at everyday
- 71% Students take breakfast at mid morning (7A.M. TO 10A.M.)
- 42.6% Students take breakfast from many years
- 81.3% Students say having breakfast affects on mood.
- 64.4% Students say skipping breakfast affects your productivity or concentration
- 57.7% students say breakfast is important for your overall well-being and energy levels
- 57.8% of students say they saw an improvement in cognitive performance after they started eating breakfast regularly
- 58.5% Students say they don't have any challenges or barriers in maintaining a breakfast routine
- Locations and Type of Breakfast are not related
- There is no any relation in Working Mother and Breakfast taken or not.
- Family income and Breakfast taken are not related.
- Gender and Breakfast taken are independent
- Breakfast timing and Breakfast affects on mood are independent.
- Challenges in maintaining a breakfast routine and types of breakfast are independent.

- feel sleepy and types of breakfast are independent.
- feel sad and breakfast taken are dependent.
- suffer for bp and breakfast taken are dependent.
- suffer for Depression and breakfast taken are dependent
- feel acidity and Types of breakfast are independent.
- concentration and Types of breakfast are independent

VIII. CONCLUSION:

Majority students stay home so they take breakfast regularly. 50% students take breakfast from many years everyday. Majority students say that if they take breakfast its affects their mood also productivity and concentration. 50% students say that breakfast is important for your overall well-being and energy levels and say they saw an improvement in cognitive performance after they started eating breakfast regularly. 58.5% Students say they don't have any challenges or barriers in maintaining a breakfast routine

Various demographic factors, such as location, working mothers, family income, and gender, were found to be independent of breakfast habits.

However, dependencies were identified, linking emotions like feeling sad, suffering from high blood pressure, and depression with breakfast patterns. Overall, the research highlights the widespread recognition of breakfast's positive effects on mood, productivity, and well-being among students, while also revealing specific dependencies between emotional well-being and breakfast choices.

IX. RECOMMENDATION:

- To encourage consistent breakfast habits, interventions could focus on promoting awareness about these benefits and addressing specific challenges faced by those who skip breakfast.
- It is essential to tailor strategies considering the independence of factors such as breakfast timing, types of breakfast, and family-related variables.
- Additionally, recognizing the association between feelings of sadness, high blood pressure, depression, and breakfast habits suggests an opportunity for targeted support for individuals experiencing these issues.



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 - a) If it is an article in a Journal,
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 - b) If it is a book,
Sharma, A.B. (1998) Marketing World, U.K : McGraw Hill, Page 26.
 - c) If it is an electronic documents,
<http://www.economicstimes.com/et/daily/2000.html> Accessed on September 26, 2006.
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