JANATA SHIKSHAN SANSTHA'S

KISAN VEE MAHAVIDYALAYA, WAI

DEPARTMENT OF STATISTICS

PROJECT LIST

BSC III

2021-22

Sr. No.	Student Name	Project Title
1	RAJPURE DIPAK SHIVAJI	Impact of online and offline teaching on students
2	CHAVAN SANGRAM SANJAY	A Statistical Study and Public Opinion About COVID-19 Vaccination
3	KONDHALKAR TEJAS SAMPAT	A Statistical Study and Public Opinion About COVID-19 Vaccination
4	BHOSALE ANKITA SUNIL	Parents' Awareness about the usage of Smartphone by their Children and its Impacts
5	CHIKANE ASHLESHA SHANTARAM	Parents' Awareness about the usage of Smartphone by their Children and its Impacts
6	NIKAM PRIYANKA ANNASO	Parents' Awareness about the usage of Smartphone by their Children and its Impacts
7	HOGADE RUPALI SANJAY	Parents' Awareness about the usage of Smartphone by their Children and its Impacts
8	SAWANT HARSHAD VIVEK	Impact of online and offline teaching on students
9	OVAL RUCHIK DASHRATH	Study of Performance Of Online Banking In Comparison With Traditional Banking
10	OTARI OMKAR VIJAYRAO	To study of preference of sim card
11	KOLI RUTUJA SUNIL	A Statistical Study and Public Opinion About COVID-19 Vaccination
12	MULLA SADIYA BASHIRAHAMAD	Impact of online and offline teaching on students
13	RUSHIKESH ABHAY KSHIRSAGAR	Study of Performance Of Online Banking In Comparison With Traditional Banking
14	JAIGUDE TEJASHREE SURESH	Impact of online and offline teaching on students
15	PISAL DIVYA SHAHAJI	To study of preference of sim card
16	BHOSALE PRATIKSHA RAJENDRA	To study of preference of sim card
17	WADKAR KARISHMA AJIT	Impact of online and offline teaching on students
18	GHADAGE SNEHAL ASHOK	To study of preference of sim card
19	PAWAR PRATIKSHA GAJANAN	A Statistical Study and Public Opinion About COVID-19 Vaccination

20	BHOJANE NUTAN VITTHAL	Parents' Awareness about the usage of Smartphone by their Children and its Impacts
21	SONAWANE MANASI MAHENDRA	A Statistical Study and Public Opinion About COVID-19 Vaccination
22	BHOSALE SIDDHIKA VIJAY	Study of Performance Of Online Banking In Comparison With Traditional Banking
23	SHELAR GOURI JAGANNATH	Study of Performance Of Online Banking In Comparison With Traditional Banking
24	SHINDE AKANKSHA CHANDRAKANT	Study of Performance Of Online Banking In Comparison With Traditional Banking
25	TARADE SANI PRAKASH	To study of preference of sim card
26	RASTE SUDHRMA UMESH	To study of preference of sim card

J.S.S. SANSTHA'S WAI Dist.Satara KISAN VEER MAHAVIDYALAYA

Head
Department of Statistics
Kisan Veer Mahavidyalaya, Wai
Dist. Satara - 412803

Janata Shikshan Sanstha's

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4.	RAJPURE DIPAK SHIVAJI
5.	SAWANT HARSHAD VIVEK

have successfully completed their project work in the statistics entitled **" Impact of Online and Offline Teaching on Students"** prescribed by the SHIVAJI UNIVERSITY, KOLHAPUR during academic year 2021-22 in partial fulfilment of requirement of Statistics Practical Examination.

PROJECT GUIDE **EXAMINER** **HEAD, DEPT. OF STATISTICS**

Head
Department of Statistics
Kisan Veer Mahavidyalaya, Wai

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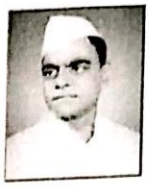

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Gaikwad — **PROJECT GUIDE**

Bemalwekar — **EXAMINER**

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B.Sc. III

Sample Copy of Project

Janata Shikshan Sanstha's

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JANATA SHIKSHAN SANSTHA'S

KISANVEER MAHAVIDYALAYA, WAI

DEPARTMENT OF STATISTICS

"A Statistical Study and Public Opinion About COVID-19 Vaccination"

Submitted by

Name of Students

Ms. Pratiksha G. Pawar
Ms. Rutuja S. Koli
Mr. Tejas S. Kondhalkar
Mr. Sangram S.Chavan
Ms. Mansi M. Sonawane

Guide By

Prof. B.B. Patkure

Prof. R. H. Waliv

Miss A.S. Gaikwad

Mr. G.M. Dhanawade

PREFACE

It gives us a great pleasure of introduce before you report the project entitled.

"Public Opinion About COVID-19 Vaccination"

It was a really great experience while doing this project. We would like to inform the readers this project work is part of curriculum for the students of B.Sc. III. Our contribution in this project is to collect and analyse the data.

We would like to express our deep gratitude towards the all of my teachers for valuable guidance for the successful completion of the project. Also we would like to express our thanks to all my teachers for guiding us and boosting our words from time to time.

Finely we would like to thank those who directly and indirectly lead a hand of help and made this project a grand success.

Acknowledgement

While doing this research, many People gave us various suggestions and opinions while conducting the project. We have tried to incorporate all those suggestions which are really relevant in preparing our final report. We think it is essential to thank all those who have contributed and helped us throughout the project.

We pay our immense gratitude to Mr. PATKURE SIR and Mr. WALIV SIR for their continuous and deliberate discussion on the topic and indeterminable burden taken by them in helping us throughout conducting the project. We would also like to thank our friends who rendered their wholehearted co-operation in the successful completion of the project work.

Finally, we are thankful to all the people who willingly responded to the questionnaire and their contribution has been valuable. This project would not have been completed without their participation.

DECLARATION OF STUDENTS

We hereby declare that the project work entitled *"A Statistical Study and Public Opinion About COVID-19 Vaccination"* is the original work carried out by us from the Dept. of Statistic of "Kisan Veer Mahavidyalaya Wai".

This project has not been carried out previously by any person. So we selected this project for field work.

Place: Wai

Date:

Index

INTRODUTION

A Novel Coronavirus(COVID-19) identified in 2019 in Wuhan,China. This is a new Coronavirus that has not been priviously identified in Humans. Coronavirus are a large family of viruses which may cause illness in Animals or Humans, several Coronaviruses are known to cause respiratory infections ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). The most recently discovered Coronavirus causes Coronavirus Disease COVID-19 - World Health Organization.

The no. of new cases are increasing day by day around the world. This data set as information from the small city and villages. The COVID-19 vaccines are widely credited for their role in reducing the Severity and Death caused by COVID-19. There are two types of vaccine Covishield and Covaccine. COVID vaccine Covishield was developed by Oxford-AstraZeneca, and is being manufactured by the Serum Institute of India. COVAXIN, India's indigenous COVID-19 vaccine by Bharat Biotech is developed in collaboration with the Indian Council of Medical Research (ICMR) - National Institute of Virology.

So we study which Vaccine was mostly provided by Government, So we have decided to study this Topic.

Data Collection

- **ONLINE DATA**

First we created a Google Form then we sent the form to the college's WhatsApp group as well as to the family group friends. Then We Collected the Online Response.

- **OFFLINE DATA**

After Collecting Online Data We Went To People's Home And Collected Information About Their Experience of COVID-19 Vaccination. We took Responses Form People who did not have their own Mobiles.

Objectives

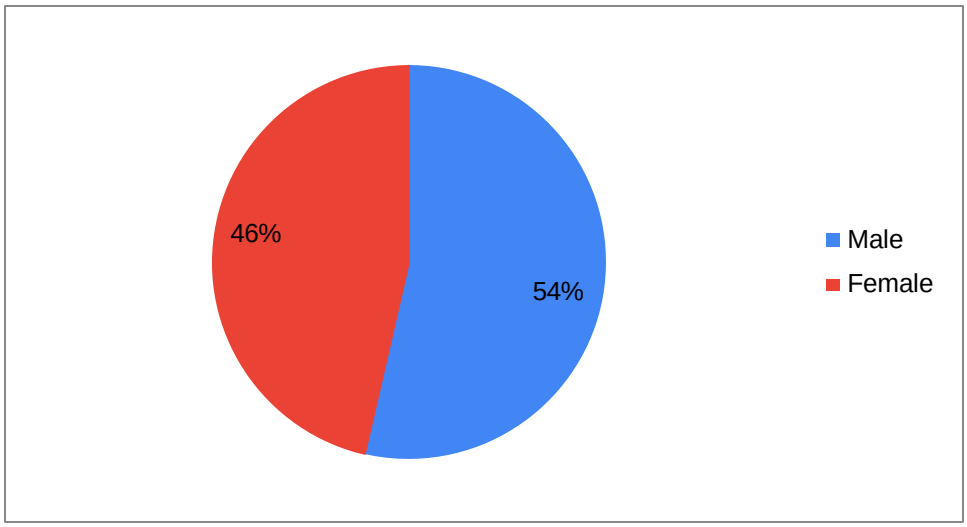
- **TO Study The Attribute Age And Possibility of Covid.**
- **To Study a relation between Gender and Causes**
- **To Study is relation between Departments and Area**
- **To Study the Proportion of Vaccination in Rural and Urban Area**
- **To Study the Proportion of Vaccines and their Causes.**

Gender Basis Analysis

Gender	Count Of Gender
Male	216
Female	187

Gender

403 Responses



Interpretation-

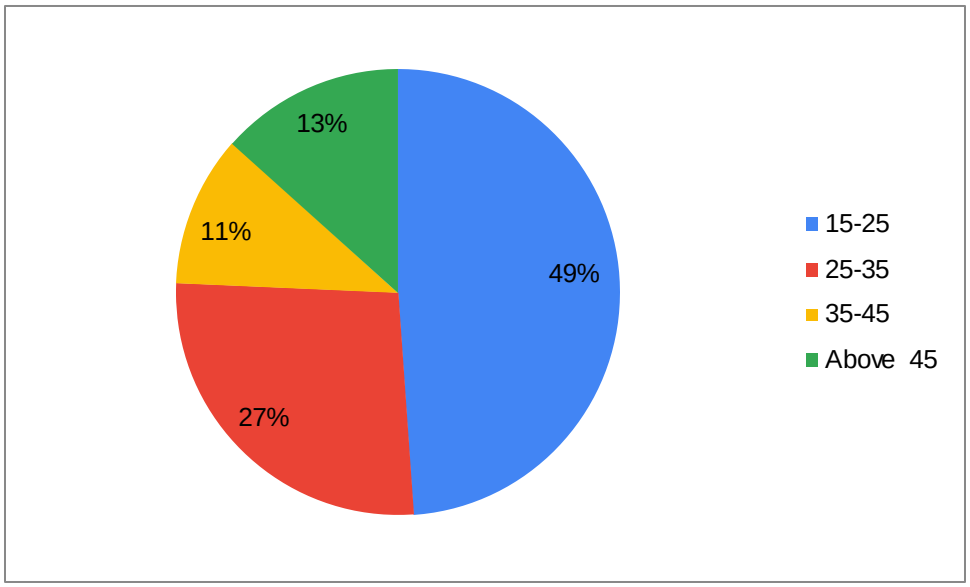
Out of 403 Responses 54% of Males received the Vaccine and 46% of Female received the vaccine. Hence from above Pie chart we conclude that Males received more Vaccine than Females.

Age Group Analysis

Age Group	Count Of Age
15-25	197
25-35	108
35-45	44
Above 45	54

Age

403 Responses



Interpretation-

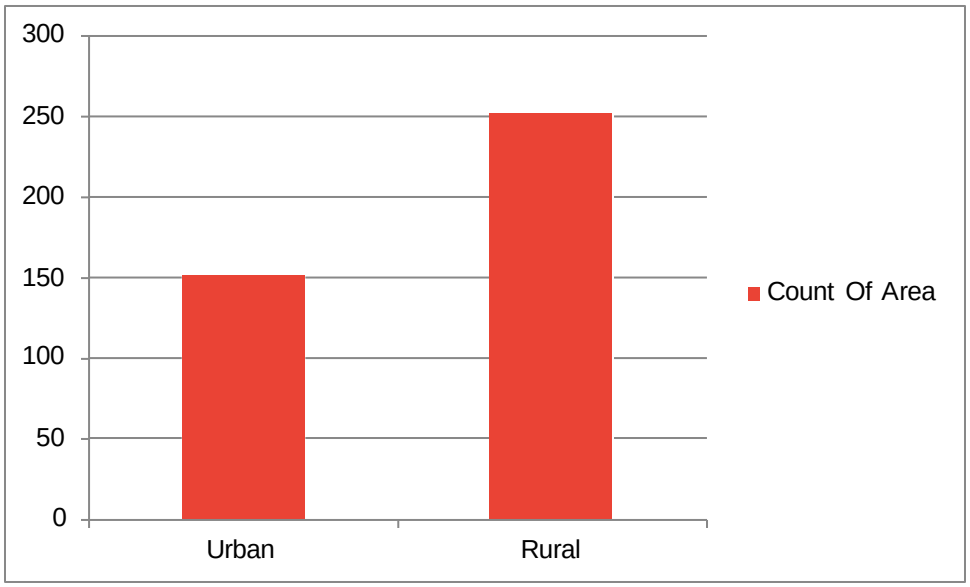
Out of 403 Responses 48% are from 15-25 Age Group. Hence this group is more Vaccinated than other Age Group. His is shows with the help of Pie Chart.

Area Wise Analysis

Area	Count Of Area
Urban	151
Rural	252

Area

403 Responses



Interpretation-

From above Bar Diagram we say that Rural Area's Responses is more than Urban Area.

Test
Chi-Square Test-

Theory-

Pearson's chi-square test is statistical test applied to sets of categorical data to evaluate how likely it is that any observed difference between the sets arose by chance. It is suitable for unpaired data from large samples .Its properties were first investigated by Karl Pearson in 1900.

Class	Yes	No	Total
15-30	33	229	262
30-45	10	76	86
45 above	7	48	55
Total	50	353	403

Hypothesis:

H0: The Attribute Age And Possibility of Covid is not dependent.

H1: The Attribute Age And Possibility of Having Covid is dependent.

Calculation:

Calculated value= 0.061783446

Tabulated value= 5.991464547

Conclusion:

Calculated value < Tabulated value

We accept H0 at 5% level of significance.

Result:

The Attribute Age And Possibility of Having Covid is dependent.

Chi-Square Test-

Theory-

Pearson's chi-square test is statistical test applied to sets of categorical data to evaluate how likely it is that any observed difference between the sets arose by chance. It is suitable for unpaired data from large samples .Its properties were first investigated by Karl Pearson in 1900.

Gender	Fever	Headache	Vomiting	Cough	Bodypain	Dysentery	Other	Not Experienced Any Illness	Total
Male	50	28	9	8	22	3	8	81	209
Female	54	57	9	5	11	8	6	44	194
Total	104	85	18	13	33	11	14	125	403

Hypothesis:

H0: There is a relation between Gender and Causes.

H1: There is no relation between Gender and Causes.

Calculation:

Calculated value = 27.39702266

Tabulated value = 14.06714045

Conclusion:

Calculated value > Tabulated value

We Reject H0 at 5% level of significance.

Result:

There is a relation between Gender and Causes.

Chi-Square Test-

Theory-

Pearson's chi-square test is statistical test applied to sets of categorical data to evaluate how likely it is that any observed difference between the sets arose by chance. It is suitable for unpaired data from large samples .Its properties were first investigated by Karl Pearson in 1900.

Department/Area	Urban	Rural	Total
Government	142	236	378
Private	10	15	25
Total	251	152	430

Hypothesis:

H0: There is relation between Department and Area.

H1: There is no relation between Department and Area

Calculation:

Calculated value= 0.059130507

Tabulated value= 3.841458821

Conclusion:

Calculated value < Tabulated value

We accept H0 at 5% level of significance.

Result:

There is no relation between Department and Area.

Proportion Test

Theory-

The one Sample Proportion Test is used to assess whether population proportion (P1) is significantly different from a Hypothiesized Value (P0). This procedure calculates Samples Size and Statisical power of testing a single proportion using either the exact test or other approximate Z-tests.

Area	Vaccinated	Not Vaccinated	Total
Rural	246	6	252
Urban	148	3	151

Hypothesis:

H0: P1=P2 i.e. The Proportion of Vaccination in Rural And Urban area is Same.

H1: P1≠P2 i.e. The Proportion of Vaccination in Rural And Urban area is Not Same.

Calculation:

Calculated value=4

Tabulated value= 1.64

Conclusion:

Calculated value > Tabulated value

We reject H0 at 5% level of significance.

Result:

The Proportion of Area and Vaccinated People are not dependent on each other.

Proportion Test

Theory-

The one Sample Proportion Test is used to assess whether population proportion (P1) is significantly different from a Hypothiesized Value (P0). This procedure calculates Samples Size and Statisical power of testing a single proportion using either the exact test or other approximate Z-tests.

Vaccines	Yes	No	Total
Covaccine	50	42	92
Covishield	188	123	311

Hypothesis:

H0: P1=P2 i.e. The Proportion of Vaccines and their causes are Same.

H1: P1≠P2 i.e. The Proportion of Vaccines and their causes are Not Same.

Calculation:

Calculated value=3.680

Tabulated value= 1.64

Conclusion:

Calculated value > Tabulated value

We reject H0 at 5% level of significance.

Result:

The Proportion of Vaccines And Their Causes Are not dependent.

Major Finding

- Covishield vaccine was taken in higher doses than Covaccine.
- Causes after vaccination depends on Gender.
- Vaccine administered by the government was mostly taken in rural areas.
- The Proportion of Vaccines And Their Causes Are not dependent.
- The Proportion of Area and Vaccinated People are not dependent on each other.
- The Attribute Age And Possibility of Having Covid is dependent.

References

- Descriptive Statistics(B.SC-lll)
- https://www.kaggle.com
- www.google.com

Statistical Tools

- Ms-Excel
- Ms-World


THANK
YOU