

SRI VENKATESWARA INTERNSHIP PROGRAM
FOR RESEARCH IN ACADEMICS
(SRI-VIPRA)

Project Report -2021: SVP-2142

**“STATISTICAL MODELLING: ANALYSIS AND
PREDICTION OF TIME-DEPENDENT EVENTS”**



Sri Venkateswara College

University of Delhi

Dhaura Kuan

New Delhi -110021

SRI VIPRA PROJECT 2021

Name of Mentor: Mr. Akash Varshney
Name of Department: Statistics
Designation: Assistant Professor


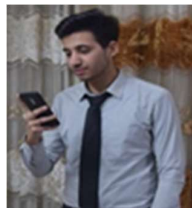








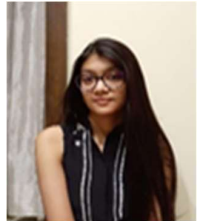


Name of Mentor: Dr. Dipika
Name of Department: Statistics
Designation: Assistant Professor




Title of the Paper — Statistical modelling: Analysis and Prediction of Time-Dependent Events

List of students under the SRI-VIPRA Project

S.No.	Name	Course	Picture
1.	Anuja Bharadwaj	Statistics (H)	
2.	Bhavya Batra	Statistics (H)	
3.	Riya Jindal	Statistics (H)	
4.	Aishwarya Srivastava	Statistics (H)	
5.	Saksham Joshi	Statistics (H)	

6.	Shameek Phukan	Statistics (H)	
7.	Khushi Panjabi	Statistics (H)	
8.	Shruti Vohra	Statistics (H)	
9.	Ananya Sinha	Statistics (H)	
10.	Navya Agarwal	Statistics (H)	
11.	Archisha Singh	Statistics (H)	

12.	Sunny Chaudhary	Statistics (H)	
-----	-----------------	----------------	---



SRI VIPRA
SVP2143

**SRI VENKATESWARA INTERNSHIP PROGRAM
FOR RESEARCH IN ACADEMICS
(SRI-VIPRA)**



PROJECT REPORT OF 2021: SVP2143

**“IS THE THIRD WAVE OF COVID-19 INEVITABLE?”:
A STUDY**

Saving a life that is in jeopardy is the origin of Dharma.

- Mahabharata, Chapter-13, Shloka-598





**IQAC
Sri Venkateswara College
University of Delhi
Dhola Kuan
New Delhi -110021**





SRI -VIPRA PROJECT 2021: SVP2143

Is the Third Wave of COVID-19 Inevitable? : A Study

Name of Mentor: Dr. Veena Budhraj Name of Department: Statistics Designation: Professor	
--	---

List of students under SRI-VIPRA Project

S. No.	Name of the student	Course	Photo
1	Mehak Kohli	B.Sc. (H) Statistics Third Year	
2	Raghav Kaamra	B.Sc. (H) Statistics Third Year	

3	Raunaq Puri	B.Sc. (H) Statistics Third Year	
4	Shubham Snehil	B.Sc. (H) Statistics Second Year	
5	S Skanda	B.Sc. (H) Statistics Second Year	
6	Yashasvi Thanai	B.Sc. (H) Statistics Third Year	



Signature of Mentor

Report
On
**“Field Research Methodology: Statistical Techniques in
Social & Biological Sciences”**

Project No. SVP-2141

Under
Sri Venkateswara Internship Program in Research & Academics
(SRIVIPRA 2021)

Submitted by

Prof. Mukti kanta Sukla
Dr. Chetan
Ms. Parul Saini



**Department of
Statistics Sri
Venkateswara College
(University of Delhi)**
Dhaura Kuan, New Delhi 110021, India

Field Research Methodology: Statistical Techniques in Social & Biological Sciences

(Project No. SVP-2141)

Mentors Details

- 1) Prof. Mukti Kanta Sukla
Department of Statistics, SVC
- 2) Dr Chetan
Assistant Professor,
Department of Statistics, SVC
- 3) Ms Parul Saini
Assistant Professor,
Department of Statistics, SVC

Introduction

The role of research in several domains of applied sciences like Social Sciences and Biological Sciences has been increased sharply in the modern time. The increasingly complex nature of various problems in developing countries, government has focused attention on the use of field research in solving the operational problems. In addition, statistical techniques play an essential and vital role in scientific research, specially field research, and helps in designing experiments, analysing and interpreting data. These techniques also contribute to making appropriate decisions in the light of the researcher's findings from social sciences and biological sciences. Even simple statistical techniques are helpful in providing insights about data under consideration. Such as extreme values, mean, median, standard deviations, interquartile ranges, and distance formulas are useful in exploring, summarizing, and visualizing data. These techniques, though relatively simple, are a good starting point for exploratory data analysis. They are useful in uncovering interesting trends, outliers, and patterns in the data. After identifying areas of interest, researchers can further explore the data using advanced statistical techniques.

Undergraduate research and its knowledge allow students to develop professionally and personally. Research experiences give students an opportunity to gain a deeper knowledge of research techniques and processes, apply classroom learning in real-world contexts, explore academic literature, and form meaningful relationships with faculty members and professional researchers. Therefore, an attempted is made to provide short internship program for meeting the requirement at UG level through the project entitled “Field Research Methodology: Statistical Techniques in Social & Biological Sciences (Project No. SVP-2141)” under the Sri Venkateswara Internship Program in Research & Academics (SRIVIPRA), 2021.

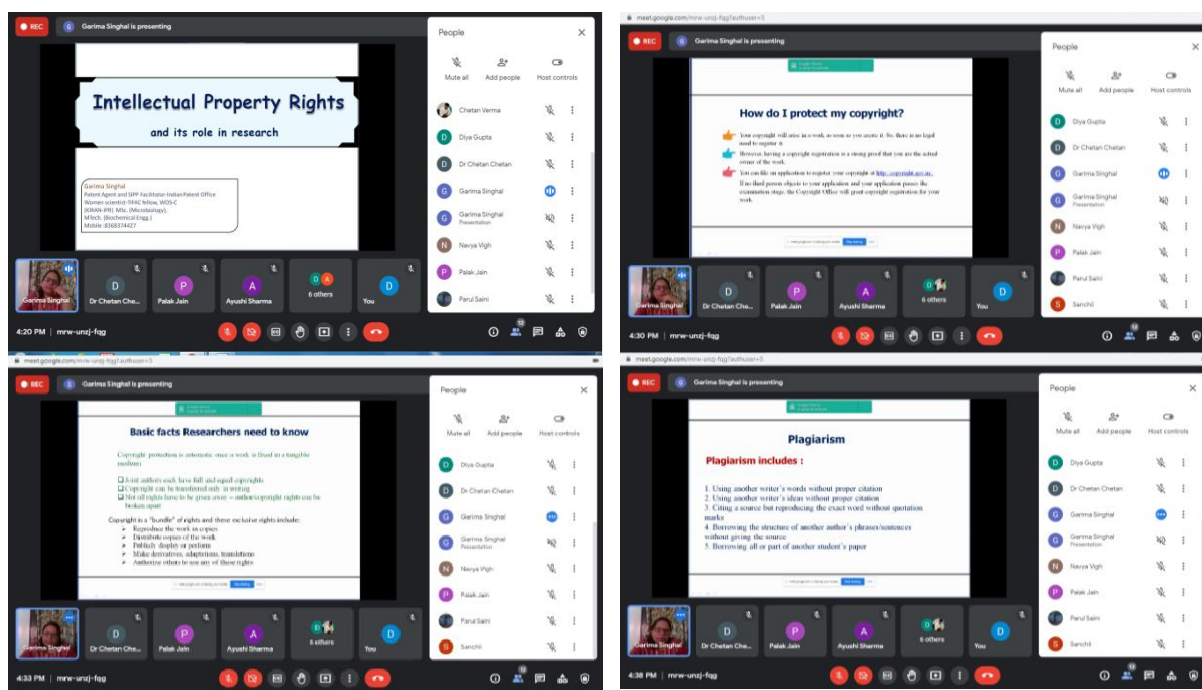
Structure of the Internship Program

The internship program is conducted, under the said title, in such a way that interns may get aware of different aspects of the research and become familiar with it. The entire program was divided in the three expert mentoring sessions, outside expert mentoring session and pilot research program.

The expert mentoring sessions were conducted by the mentors on Introduction General Research Methodology which includes Objective, Motivation, Approach, Significance, Criteria for good research; Defining Research Problem and its necessity research in India; Open Literature Resources; Open Data Collection Resources; Sample and Data collection Techniques Perspective which focused on Sample and Data collection Techniques: Census data, Sample data, Ideal Sample for research, methods (online & offline) for data collection, adoption of appropriate method; Analysis of Data which include Descriptive Analysis of Data, Construction of Statistical Hypothesis for analysis, Statistical Modeling and Analysis of collected data.

The outside expert mentoring session were conducted on Intellectual Property Right (IPR) and its Role in Research by Ms. Garima Singhal, Patent Agent & SIPP Facilitator on August 03, 2021. The mentoring session is based on the aim of general awareness of IPR and focused on the importance of copyright and plagiarism issues in the research.

Glimpses of the Session



In the Pilot Research Program (PRP), all the interns were associated with their own research topics based on their interest. This PRP includes the preparation of objective and sub topics, preparation of questionnaire, and interpretation & report writing for their projects based on their interest areas. These interest areas includes adoption rate in India, relationship between

job satisfaction and salary, enhancement of employees work performance through monetary incentives, lifestyle of students during COVID 19 lockdown, epidemiology of COVID 19 and its variants, human bio-monitoring of mercury exposure, vegetarianism and non-vegetarianism debate and others.

Interns Profile

1. Ms. Aditi, Department of Commerce, SVC
2. Ms. Ananya, Department of Statistics, SVC
3. Ms. Ankita, Department of Mathematics, SVC
4. Ms. Ayushi, Department of Bio Sciences, SVC
5. Ms. Dipsy, Department of Statistics, SVC
6. Ms. Diya, Department of Statistics, SVC
7. Ms. Navya, Department of Statistics, SVC
8. Ms. Palak, Department of Statistics, SVC
9. Ms. Sanchi, Department of Statistics, SVC
10. Mr. Waris, Department of Statistics, SVC

Outcomes of the Program

1. The interns able to understand how to study a phenomenon or new insights of the practical data obtained from the field research.
2. The interns able to understand how to portray accurately the characteristics of a particular individual, situation or a group.
3. The interns able to understand how to test a hypothesis of a causal relationship between the variables under consideration in pilot research program.

Acknowledgement

We would like to express our thanks of gratitude to Sri Venkateswara College for providing this opportunity through Sri Venkateswara Internship Program in Research & Academics (SRIVIPRA), 2021.



(Ms Parul Saini)
Department of Statistics



(Dr Chetan)
Department of Statistics



(Prof. Mukti Kanta Sukla)
Department of Statistics