MADRAS CHRISTIAN COLLEGE

PROJECT I

INTERNSHIP RESPONSE ANALYSIS



₩III B.Sc STATISTICS

♣ SAMPLING THEORY

1 I INTRODUCTION

THE RELATIONSHIP OF CHOOSING THE COMPLETION REWARD (INTERNSHIP CERTIFICATE, STIPEND & THE BOTH) ON FINISHING THE INTERNSHIP SUCCESSFULLY BY THE STUDENTS OF DIFFERENT STREAMS (ARTS, SCIENCE & COMMERCE) OF MADRAS CHRISTIAN COLLEGE IS STUDIED HERE BASED ON THE SURVEY CONDUCTED.

2 | MATERIALS & METHODS

THE MATERIAL OR MEDIUM USED TO COLLECT THE RESPONSES FROM THE STUDENTS IS GOOGLE FORMS THROUGH WHICH THE QUESTIONNAIRE IS PREPARED AND PUBLISHED TO EVERY CLASSES OF THE EACH DEPARTMENTS (32 DEPTS) IN THE BOTH MORNING & EVENING SHIFTS OF MADRAS CHRISTIAN COLLEGE OUT OF WHICH A FAIR COUNT OF 424 RESPONSES HAVE BEEN RECORDED FROM THE STUDENTS OF ALL THE STREAMS (ARTS, SCIENCE, COMMERCE) ON 29TH OF OCTOBER 2022.

AS WE DESIRE TO FIND THE RELATIONSHIP BETWEEN THE TWO VARIABLES i.e., STREAM & COMPLETION REWARD AND THEY ALSO CONSIST THE ATTRIBUTES SUCH AS ARTS, SCIENCE & COMMERCE FOR THE VARIABLE STREAM & INTERNSHIP CERTIFICATE, STIPEND & THE BOTH FOR THE VARIABLE COMPLETION REWARD.

WE USE CHISQAURE TEST OF INDEPENDENCE TO STUDY
THESE TWO VARIABLES WITH ATTRIBUTES. HERE THE DATA
OBTAINED ARE CATEGORISED BASED UPON THE ATTRIBUTES AS 3*3
TABLE AS THERE ARE 3 ATTRIBUTES AND THEIR ROW&COLUMN
TOTALS ARE CORRECTLY TALLIED TO THE GRAND TOTAL 424.

WE ASSUME THE HYPOTHESES TO BE THAT

 H_0 : "THERE IS <u>NO</u> RELATIONSHIP BETWEEN THE STREAM ,THE STUDENTS BELONG TO & THE COMPLETION REWARD THEY CHOOSE "

 H_1 : "THERE <u>IS A</u> RELATIONSHIP BETWEEN THE STREAM ,THE STUDENTS BELONG TO & THE COMPLETION REWARD THEY CHOOSE"

COMPLE. REWARD	INTERN	STIPEND	THE BOTH	TOTAL
STREAM	CERT.			
ARTS	6	0	71	77
SCIENCE	16	1	129	146
COMMERCE	32	4	165	201
TOTAL	54	5	365	<u>424</u>

O _i	Ei	(O _i . Ei) ² E _i
		$\mathbf{E_{i}}$
6	9.80	1.47
0	0.90	0.9
71	66.28	0.33

16	18.59	0.36
1	1.72	0.29
129	125.68	0.08
II2	25.59	1.60
4	2.37	1.11
165	173.03	0.37

6.51

3 I RESULTS

THE CALCULATED OR OBSERVED CHISQUARE VALUE IS FOUND TO BE <u>6.51</u> AND THE TABULATED OR EXPECTED CHISQUARE VALUE IS FOUND TO BE <u>9.48</u> FROM THE CHISQUARE TABLE WITH 0.05 AS THE SIGNIFICANCE LEVEL AND m & n ARE CONSIDERED TO BE 3 AS THE NUMBER OF COLUMNS AND ROWS ARE EQUAL TO 3. SO WE HAVE TO FIND THE VALUE OF X²_(0.05,4) (i.e., X ²_{(0.05,(m-1)(n-1))}) AS (m-1)(n-1) IS EQUAL TO 4 AND SO IT IS FOUND TO BE 9.48 FROM THE CHISQUARE TABLE.

4 I DISCUSSION

AS THE CALCULATED VALUE OR THE OBSERVED VALUE IS
GREATER THAN THAT OF THE TABULATED VALUE OR THE EXPECTED

VALUE, WE HAVE TO REJECT THE NULL HYPOTHESIS AND ACCEPT THE ALTERNATIVE HYPOTHESIS.

$$X^{2}_{cal} > X^{2}_{tab}$$

(i.e., $X^{2}_{o} > X^{2}_{e}$)

5 I CONCLUSION

FROM THE ABOVE SURVEY, CALCULATION USING CHISQUARE TEST OF INDEPENDENCE AND DISCUSSION MADE WE COME TO CONCLUDE THAT "THERE IS A RELATIONSHIP BETWEEN THE STREAM, THE STUDENTS BELONG TO & THE COMPLETION REWARD THEY CHOOSE".

REFERENCES:

SURVEY PDF LINK: PROJECT I (1).pdf

CHISQUARE TEST OF INDEPENDENCE LINK: https://youtu.be/6c9u27ViF2Y